



**Muhimbili University of Health and Allied Sciences  
(MUHAS), Dar es Salaam - Tanzania**

**and**

**Tanzania Food and Nutrition Centre (TFNC),  
Dar es Salaam - Tanzania**

**and**

**Harvard School of Public Health (HSPH), Boston, USA**

# **TANZANIA FOOD COMPOSITION TABLES**

**Compiled by:**

**Zohra Lukmanji AND Ellen Hertzmark**

Nicolas Mlingi, Vincent Assey,

Godwin Ndossi, Wafaie Fawzi

**November 2008**





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*First Edition*

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\*September 2023 Update from Authors:  
The Tanzania Food Composition Tables were first launched in 2008. Updated versions of Excel sheets were last uploaded in 2012.  
However, although there has been no further updated version on the WEB, the revision has continued and we hope to have the new version (2nd edition) with more food items, revised and new recipes for local dishes, and revised food portion data base at the beginning of 2024.

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Address

Muhimbili Universty College  
of Health and Allied Sciences  
P.O.BOX 65015  
Dar es Salaam  
Tanzaia

Tanzania Food and Nutrition Center  
P. O.Box 977  
Dar es Salaam  
Tanzania

Department of Nutrition  
Harvard School of Public Health  
667 Huntington Avenue  
Boston  
USA

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The food composition tables may be available on [http/](http://):

<http://www.hsph.harvard.edu/nutritionsource/more/food-tables/index.html>

<http://www.hsph.harvard.edu/nutritionsource/files/tanzania-food-composition-tables.pdf>

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# FOREWORD

Tanzania, like other developing countries in sub-Saharan Africa, is faced with challenges of both under- and overnutrition. Undernutrition comprises of a number of nutritionally related conditions such as protein-energy malnutrition and micronutrient deficiencies, including those of vitamin A, iron, and iodine. Approximately one-fourth of Tanzanian children aged 0 to 59 months are stunted or underweight for their age, and over 60% of all children and about half of all women are anemic. Many Tanzanians also appear to be deficient in energy and unable to sustain their expected level of physical activity.

At the same time, overnutrition-related diseases such as obesity, diabetes, and hypertension are rapidly increasing among the adult population, most conspicuously in urban centers, but also in rural areas. For example, estimates of diabetes prevalence increased from about 1% in the 1980s to about 5% in 2000. Likewise, the prevalence of hypertension in 1993 was estimated to be about 5%, but by 2000 it had reached 27% in rural populations and 39% in urban populations.

These problems cannot be addressed without adequate information on the diets of individuals and populations. This in turn requires reliable data on both the consumption of foods and their nutritional composition. These food composition tables are an essential resource for understanding and analyzing dietary intake data for both individuals and communities, and for developing healthy recipes and food products.

The need for comprehensive food composition tables for Tanzania was recognized in 1993, following the first MUHAS–Harvard collaborative research project, which was conducted at Muhimbili National Hospital. These food composition tables are a result of the combined efforts of MUHAS–Harvard and the Tanzanian Food and Nutrition Centre, and provide information on 47 nutrients in over 400 commonly consumed foods and local dishes. They are supplemented by adult and child food-portion-size databases that will be especially useful when no detailed information is available on the amounts of food consumed by individuals.

These food composition tables will be highly useful not only for nutritionists, but for all professionals interested in knowing the composition of a single food, a mixed meal, or the entire diets of individuals or populations. The food industry will also find this information valuable in developing healthy food products, while the French and Portuguese translations of the names of foods included will ensure the tables' use well beyond Tanzania's borders. The tables are also available electronically, which will ensure that they are continually updated and expanded as new information becomes available and new questions arise.

As someone who has worked on various nutritional problems in Tanzania over the past thirty-five years, I have seen the rapid emergence of several challenges in diet, health, and nutrition. The Tanzania Food Composition Tables represent a major landmark that will be of enormous value in meeting both these challenges and others that will certainly follow. My experience working on nutritional issues in both East and West Africa has led me to conclude that no country has had an adequate set of food composition tables until now. Everyone interested in the issues of nutrition in Africa should be grateful for the efforts of Ellen Hertzmark and Zohra Lukmanji, who led this major project, and to the many other individuals who have made it possible.

Walter Willett  
Chair, Department of Nutrition  
Fredrick John Stare Professor of Epidemiology and Nutrition  
Harvard School of Public Health  
Boston, MA, USA  
June 2008

# PREFACE

The importance of having more complete and detailed food composition tables for Tanzania was recognized in 1993. Such a resource would allow us to analyze the dietary data being collected in the MUHAS–Harvard research studies to assess the impact of nutrition on HIV disease progression and opportunistic infections in both adults and children and in non-HIV and HIV-infected pregnant women. The extensive work on compiling the Tanzanian Food Composition Tables began in 1996. They include information on 47 nutrients in over 400 foods including local dishes. In addition, since children below two years are often fed on rice or ugali (stiff porridge) with broth, a section on the nutrient values of different broths is also included.

The compilation of the food tables was carried out in close collaboration with the Tanzania Food and Nutrition Centre (TFNC).

The MUHAS–Harvard Collaborative project represents a long-standing partnership between Muhimbili University of Health and Allied Sciences<sup>1</sup> (MUHAS, Dar es Salaam) and Harvard University School of Public Health (HSPH, USA). The aim of the MUHAS–Harvard Collaboration is to strengthen Tanzania’s human resource and infrastructure capacity for research and to support the development of operational research, randomized clinical trials and large-scale epidemiological studies in nutrition and infectious diseases, which also included dietary assessments.

In addition HIV and AIDS Care and Treatment Program was launched in 2004, as a collaborative effort between MUHAS, Dar es Salaam City Council and HSPH (MDH) with funding from the President’s Emergency Fund for AIDS Relief (PEPFAR). This program was developed to provide prevention, care, treatment, and support to adults and children with HIV and AIDS in Dar es Salaam, Tanzania. Since its initiation, the program has enrolled more than 50,000 HIV infected adults and children and over 30,000 are receiving antiretroviral therapy.

The Tanzania Food and Nutrition Centre is a government institution under the Ministry of Health and Social Welfare, established in 1973 by an act of Parliament. It is a semi-autonomous institution whose authority is a governing board representing ministries, sectors and institutions that are all stakeholders in the fight against malnutrition. The centre is well known for excelling at building alliances for community-based actions, providing policy guidelines and developing capacity for nutrition research and action. TFNC’s vision is to have a well-nourished nation. Its mission is to provide expert guidance to actors at various levels on the prevention and control of all forms of malnutrition through research, advocacy, education and training. Hence, the centre’s core function is to plan, coordinate, and implement food and nutrition programs, facilitate training, carry out research, and to advise government, institutions and public organizations. It is also responsible for increasing public awareness on the importance of good nutrition for the prevention of nutrition-related diseases

The Tanzania Food Composition Tables are divided into three sections. Section 1 describes how the tables were compiled. Section 2 consists of the food tables themselves. The information in the food tables is presented by food groups (e.g. cereals and cereal-based foods) and contains information on 47 nutrients (macronutrients, vitamins, minerals and amino acids). In addition, a list of recipes of local dishes can be found at the end of the food tables. These recipes were collected from several sources and manually analyzed for nutrient composition.

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<sup>1</sup> Formerly Muhimbili University College of Health Sciences (MUCHS)

The names of all the foods and dishes have also been translated into Kiswahili, French, and Portuguese, to facilitate their wider distribution and in the sub-Saharan countries. These lists can be found at the end of Section 2 along with a list of permitted food additives and preservatives.

Section 3 is devoted to the adult and child food-portion databases. We hope they will be valuable resources for all those involved in dietary assessments and epidemiological research related to diet, nutrition, and health.

We are indebted to the many individuals who at various stages, provided great help on this ten-year project.

Most of the nutritional values are based on foods found in the WorldFood Dietary System, to which we were introduced by Ms Laura Sampson of Harvard School of Public Health (HSPH).

We also acknowledge the excellent assistance and advice of Dr Susan Murphy, University of Hawai, who is one of the pioneers of the WorldFood Dietary Assessment System.

We also wish to thank the staff of the MUHAS–Harvard nutrition unit for their efforts in collecting recipes for the local dishes and their contributions when compiling the adult and children food-portion databases. Our special thanks to Ms. Winnie Okuli, Ms. Mercy Tarimo, Ms. Rosemary Mwaisaka, Ms. Stella Lawrence, Ms. Anne Bush, and Ms. Laureta Lucas.

Invaluable and useful information was provided by colleagues at Beltsville Human Nutrition Research Centre and Food Composition Laboratory on imputing nutrients in foods, sources of recipes, portion-size determination and laboratory analysis of nutrients in foods. Our thanks to Dr. Joanne Holden and Dr. Jim Harnely.

We gratefully acknowledge the support and contributions of colleagues within the Department of Community Health and Nutrition, Tanzania Food and Nutrition Centre, where this database development was initiated in 1997.

The Tanzania Food Composition Tables have been extensively reviewed by experts from both within and outside of Tanzania. We extend our thanks to:  
Dr Eduardo Villamor (HSPH), Ms. Laura Sampson (HSPH), Dr. Ruth Charrondiere and Dr. Babarah Burlingham, (FAO), Dr. Suzanne Murphy (University of Hawai), Dr. Julie Howe (USDA Nutrition Laboratory), Dr. T. N. Malentlema (Child Growth and Promotion Union, Dar es Salaam), Professor Cornelius Nyaruhucha (Sokoine University of Agriculture, Tanzania), Dr Mel Olouch (World Vegetable Centre, Arusha), Ms. Helen Semu, and Dr. Fatma Abdallah (Tanzania Food and Nutrition Centre).

The names of foods and dishes included in the TFCT were translated into French by Mrs. Tasnim Yusufali and into Portuguese by Ms. Armanda Mani (The International baby food action network), UNICEF- Mozambique and Dr Anna Lindsay (HSPH).

We would like to acknowledge the support of Mr. Donald Halstead (HSPH) who has reviewed and edited this text and to Mr. Philemon Kaganda of Desk Top Publishers, Dar es Salaam for designing and production of the tables

## Abbreviations

CGMPU	Child Growth and Promotion Union
CRSP	Child Nutrition Collaborative Research Support Program
DI	dietary intakes
FDB	food database
FFQ	food frequency questionnaire
g	gram
HIV	Human Immunodeficiency Virus
HSPH	Harvard School of Public Health
IML	International MiniList
mg	milligram
L	Litre
mL	mililitres
MMC	Muhimbili Medical Center
MUCHS	Muhimbili University College of Health Science
MUHAS	Muhimbili University of Health and Allied Sciences
PNS	Peri natal Study
HPTN	HIV Prevention Trial Network
RA	Research Assistants
TFNC	Tanzania Food and Nutrition Centre
TOV	trial of vitamins
UC	University of California
UCLA	University of California at Los Angeles
µg	microgram
USDA	United States Department of Agriculture
WFDAP	WorldFood Dietary Assessment Program
WFDAS	WorldFood Dietary Assessment System

# **SECTION 1**

## **BACKGROUND**

# Tanzania Food Composition Tables

## 1.1 Introduction

### 1.1.1 Overview

The Tanzania Food Composition Tables (TFCT) are considered to be an extended version of the food items already available in the TFCT compiled by Marealle in the early 1970s and later reviewed and updated in the 1980s by West et al. (1,2). Other food composition tables in use were the one compiled by Platt (3). While these food composition tables are still in use however, they are limited to raw foods and in terms of the types of foods they list. Hence there was a need to develop comprehensive food composition tables for Tanzania.

The TFCT gives information on 47 nutrients<sup>2</sup> of over 400 commonly consumed foods and local dishes based on recipes collected from several sources in Tanzania. These data are based on the WorldFood Dietary Assessment System (WFDAS) developed<sup>3</sup> at the University of California at Berkeley, in 1994 (4, 5). WFDAS is available on the FAO website and is designed to facilitate rapid dietary assessments (4, 5).

We hope that these food tables will be an important reference for all those involved in assessing energy and nutrient intake, determining the effects of dietary intake on health and disease outcome, developing of dietary guidelines, planning menus for schools, prisons, orphanage centers and hospitals, as well as for nutrition education, counseling and health promotion of communities in Tanzania and neighboring countries. In addition, it will be an excellent guide for food industries when developing new healthy foods.

### 1.1.2 Objectives

The aim of the Tanzania Food Composition Tables, a national comprehensive food database, is to provide values for the amount of energy and nutrients (e.g. protein, fat, vitamins and minerals) that a food item contains and to facilitate scientific research and studies in diet related disease and in developing new healthy foods.

### 1.1.3 Users and Uses

Data on food composition are essential for a variety of purposes in many fields. The following list indicates some of the potential users and uses of TFCT.

- Clinical practice—enable dietitians to analyze diets, develop meals, and plan menus to ensure that patients' nutritional needs are met.
- Agricultural sector—ensure that the foods produced provide sufficient nutrients.
- Health educators and policy-makers—translate nutrient information into messages to the public about foods that promote good health.
- Trade, export and legislation—to ensure that the nutrient content of foods and food products do not carry any health risks and in line with specified regulations of Codex Alimentarius
- Food manufacturers and producers—to calculate nutrient values for food labeling purposes, and to formulate new products to meet specific nutrient composition.

<sup>2</sup> WorldFoods consists of 48 nutrients (Table 1.1)

<sup>3</sup> The system provides totals for 48 nutrients and percents of internationally recommended intakes for 21 nutrients. WorldFood 1 was released in 1994, and WorldFood 2 became available in 1996. The WorldFood program takes user-specified dietary data, analyzes it using the appropriate cross-reference indexes plus the IML, and then generates dietary nutrient totals.

- Researchers —enable the analysis of the diet intake data of individuals and populations in order to determine dietary correlates with diseases and their causes .

## 1.2 Development of the Tanzania Food Composition Tables

### 1.2.1 WorldFood Dietary Assessment System (WFDAS)

TFCT are based on the WFDAS, which include the International Food Composition Tables (the International MiniList or IML) in 1988–1992 at UC Berkeley, which were developed as part of the WorldFood Dietary Assessment Program (WFDAP) (4). This approach was adopted following the Nutrition Collaborative Research Support Program (Nutrition CRSP) in Egypt, Kenya, and Mexico in 1983–86 (5). The IML includes foods from Egypt, Kenya and Mexico as well as Indonesia, India, and Senegal. The IML provides information on a total of 48 nutrients in 195 foods which represent the foods consumed in most developing countries. The nutrient content of each food is per 100 g edible weight (4).

WFDAS is programmed to facilitate: the creation of additional databases by importing foods from the six country databases already within the system; the analysis of individual diets and the recipes, and the addition of foods from other sources.

**Table 1.1. List of Nutrients in IML**

Macronutrients (14)	Vitamins (12)	Minerals (10)	Amino Acids (12)
Energy	Vitamin A	Calcium	Tryptophan
Animal kcal	Animal vitamin A	Phosphorus	Threonine
Total protein	Vitamin D	Magnesium	Isoleucine
Animal protein	Vitamin C	Potassium	Leucine
*MFP protein	Vitamin E	Sodium	Lysine
Total Fat	Thiamine	Iron	Valine
Carbohydrate by difference	Riboflavin	*MFP – iron	Methionine
Sucrose	Niacin	Zinc	Cystine
Saturated fats	Folate	Copper	Tyrosine
Monounsaturated fats	Vitamin B6,	Manganese	Phenylalanine
Polyunsaturated fats	Vitamin B12		Arginine
Cholesterol	Pantothenic Acid		Histidine
Fiber			
Phytic acid			

**\*Meat, Fish and Poultry**

### 1.2.2. Compilation of the Tanzania Food Composition Tables

A floppy diskette of the WorldFood Dietary Assessment Program (WFDAP)<sup>4</sup> was obtained from UCLA and installed on a personal computer. It was accompanied by a manual with instructions on how to install the databases, diet intake analysis of individuals and recipes, and the import foods to create a new database.

<sup>4</sup> WFDAP can now be downloaded from <http://www.fao.org/infoods/software/worldfood.html> (8)

Foods available and consumed in Tanzania and East Africa were identified and imported from IML, and Kenya food database. Any food not found in the Kenya database was imported from one of the other five countries' databases in WFDAP or from other appropriate food composition tables (9,10,11,12).

### 1.3 Food Groups

The foods were categorized into specific food groups, and the food composition tables were organized into eight sections (Table 1.2).

Each food group was assigned food codes of a specific range; for example cereals 1–100, fruit and fruit juices 101–150, and so on. The number of food codes exceeds the total number of foods, so as to accommodate the addition of new foods to any specific food group in the food composition tables. Local dishes are included in the appropriate food group and have been assigned specific food codes (Table 1.3).

The foods within each food group are listed alphabetically, not by food code. Except for animal kcal, all the nutrients shown in Table 1.1 are included in the Tanzania Food Composition Tables.

**Table 1.2. Food groups and food codes in Food Composition Tables**

	<b>Food Group</b>	<b>Food codes assigned</b>
A1	Cereals and cereal products	1–100
A2	Cereal-based local dishes	501–550
B1	Roots, tubers, bananas	351– 400
B2	Roots, tubers, and banana-based local dishes	951–1000
C1	Pulses, nuts, seeds	151–200
C2	Pulse, nut and seeds-based local dishes	651–700
D1	Meat, poultry (including eggs), fish	201–250 and 301–350
D2	Meat, poultry (including eggs), fish-based local dishes	551–600
D3	Milk and milk products	251–300
E	Oils and fats	1101–1150
F1	Fruit and fruit juices	101–150
F2	Fruit-based local dishes	601–650
F3	Vegetables	401–450
F4	Vegetable-based local dishes	751–800
GMI	Miscellaneous	451–500
GM2	Miscellaneous local dishes	
H	Locally prepared broths	851–900



**Table 1.3 Details of the food items in each food group**

	<b>Food Group</b>	<b>Details</b>
A1	Cereals and cereal products	Cereals such as rice, wheat, oat. Cereal products such as bread, biscuits, porridge, breakfast cereals
A2	Cereal-based local dishes	Local dishes prepared with cereals (e.g. porridges, chapatti)
B1	Roots, tubers, and bananas	Foods such as potatoes, cassava, taro and banana
B2	Roots, tubers, and banana-based Local dishes	Local dishes prepared with roots, tubers and bananas (e.g. cassava with coconut, potato chips)
C1	*Pulses, seeds, nuts	Mature and immature legumes, pulses, and foods commonly referred to as nuts and seeds
C2	*Pulses, seeds, and nuts-based local dishes	Local dishes with pulses, nuts and seeds (e.g. pigeon pea relish).
D1	Meat, poultry, fish	Foods commonly referred to as meat, poultry (including eggs) and fish products (e.g. sausages)
D2	Meat, poultry, and fish-based local dishes	Cooked dishes prepared with meat, poultry or fish (e.g. fish or chicken or beef relish)
D3	Milk and milk products	Milk and milk products, including sweetened condensed milk, ice cream, infant formula, yogurt, skim milk (dry or liquid), cheese
E	Oils and fats	Also includes foods concentrated in fats and oils (e.g. coconut)
F1	Fruit and fruit juices	Foods commonly referred to as fruits including avocado, but not tomato or cucumber
F2	Fruit-based local dishes	Fruit jams, juices, fruit salad with citrus fruit such as orange or pulp fruit such as papayas
F3	Vegetables	Foods commonly referred to as vegetables such as carrots, tomatoes, spinach, pumpkin leaves, immature maize, pumpkin
F4	Vegetable-based local dishes	Cooked dishes prepared with vegetables (e.g. spinach relish with oil).
GM1	Miscellaneous	Dried spices, sugar, honey, insects, alcoholic and non alcoholic drinks, water sherbet, sauces, salt
GM2	Miscellaneous local dishes	All beverages such as tea, coffee, local brews. Snacks such as groundnut cluster
H	*Broths	Clear liquids produced by cooking meat, poultry, fish, seafood, or vegetables in water and other ingredients, such as onion, tomatoes, salt, oil

\*An edible seed from a pod (e.g. peas, beans), eaten fresh or dried.

\*Defined as a liquid food made by cooking meat, fish, vegetables or other ingredients in water, milk, or stock

## 1.4 Features of the Tanzanian Food Composition Tables

All food items including the local dishes for each food group have been arranged into 17 groups (Tables 1.2). Table 1.3 also shows the details of the specific food items included in these food groups. Table 1.4 depicts an example of the layout of the food composition tables. Nutrient values are expressed per 100 grams. Each food item is identified by a unique food code.

A missing nutrient value for any food item is indicated by zero (0) in the tables.

All nutrient values are expressed to either the nearest one decimal point (e.g. 20.12 is expressed as 20.1) or to two decimal points (e.g. 0.5645 as 0.56 and 0.677 as 0.68).

The nutrient values of all foods are expressed per 100 g edible portion for raw or cooked foods unless otherwise indicated. Different food codes have been assigned to the same foods listed as raw, cooked, edible portion (EP) and all portion (AP). All the nutrient values were adjusted for moisture and waste in the original IML on which the food composition tables are based.

### 1.4.1 Terms in the Food Composition Tables

**RAW-EP:** Raw or uncooked—edible portion before cooking and is the part of the food that is eaten. Excludes any waste, such as seeds, skin (if not eaten), bones, etc.

**RAW-AP:** Raw or uncooked food—both the edible and inedible components (e.g. seeds, peel, shells, bones).

**COOKED-EP:** Cooked, edible portion—food after cooking of the part that is eaten excluding any waste, such as seeds, skin (if not eaten), bones, etc.

**COOKED-AP:** Cooked, as purchased—food after cooking; includes the waste (e.g. peel, bones).

**Table 1.4. Example of the layout of the Tanzania Food Composition Tables**  
Nutrient values expressed per 100 g of Edible Food Item

Food code	Macronutrients	Energy	Protein	Animal Protein	MFP Protein	FAT	CHO DF
		Kcal	g	g	g	g	g
<b>A1</b>	<b>Cereals and cereal products</b>						
1	Biscuit	434	9.2	0	0	11.8	71.5
2	Bread roll	274	8.8	0	0	3	51.9
3	Bread, white	274	8.8	0	0	3	51.9
5	Buns	274	8.8	0	0	3	51.9
	<b>Local dishes</b>						
<b>A2</b>	<b>Cereal-based local dishes</b>						
513	Chapatti (Dry)	208	5	0	0	4	38
512	Chapatti with oil	372.6	5.9	0	0	19.5	50.6
532	Donut – African	359.7	5.2	0	0	15.5	50.6

## 5. Local Dishes

### 1.5.1 Sources of Recipes of Local Dishes

Also included in the Tanzania Food Composition Tables are recipes of a variety of commonly consumed local dishes which were collected and manually analyzed for nutrient content.

These recipes were obtained from:

- Diet surveys carried out by Tanzania Food and Nutrition Centre (TFNC) staff in different areas of Tanzania using either “weigh and record” or “24 hour diet recall” methods
- Weighed and recorded surveys with MUHAS–Harvard project participants
- Street food vendors
- MUHAS student canteen
- MUHAS–Harvard data entry clerks
- Composition tables of South African foods (9)
- Recipe books and recipe websites (13,14,15)

It must be pointed out that the preparation conditions for recipes, such as cooking temperature and duration, can vary and dramatically affect cooking yields and changes in retention of micronutrients. Foods included in the IML were adjusted for cooking and retention factors, but we did not apply these factors to any of the recipes included here. Our calculations were based on the nutrient values of the raw materials. Therefore, the nutrient values of the cooked dishes are only rough estimates.

### 1.5.2. Analysis of Nutrients in Locally Cooked Dishes

The type and amount of raw ingredients in each recipe were weighed and recorded with diet scales or estimated using household utensils. The total amount that remained after cooking was then weighed or estimated.

The total nutrient composition of each recipe was obtained by calculating the nutrient value of each raw ingredient and then summing all these values. The total nutrient content per 100 g cooked dish A was calculated as follows (e.g. Table 1.4):

$$\frac{100 \text{ g Food A} = \text{Total nutrient content A dish}}{\text{Total amount A dish}} \times 100$$

The cooked dish was then categorized by food group

**Table 1.5 Example of a TFCT Recipe Calculation**

Pancake: Total cooked amount = 2000 g (20 pancakes)						
*Food code	*Ingredient	Amount g	*Energy Kcal/100 g	Total Energy	*Protein g / 100 g	Total Protein g
30	Wheat flour	1000	364	3640	12.3	123
307	Egg, Chicken	300	155	465	12.6	37.8
463	Salt iodized	4	0	0	0	0
1113	Vegetable oil	300	862	2586	0	0
Total per recipe	<i>Water was added but not weighed</i>			6691	24.9	160.8
Per @100 g			334.6		8	—

\*As in FDB

@Total nutrient A x 100/ Total cooked food weight (g).

### 1.5.3 Recipes of Local Cooked Dishes

We collected more than one recipe for several dishes. Nutrients were calculated for each recipe and then the average values for a particular dish were entered in the Tanzania Food Composition Tables. These recipes were not standardized for waste or vitamin loss during cooking. For this information the user may refer to the FAO Food composition tables for use in Africa and the USDA National Nutrient Database for Standard Reference, Release 19 (10, 11), both of which are available online.

Each recipe was assigned a food code. The recipes are listed by their codes at the end of food tables in Section 2. We hope this will enable the users to easily refer to the information on recipes and ingredients.

## 1.6 Nutrients

### 1.6.1 Energy

The energy value of the foods is given in kilocalories (1 kcal = 4.184 joules).

The percentage of energy contributed by the protein, fat, and carbohydrate in a food is based on factors of 4 kcal/g for protein, 9 kcal/g for fat, 4 kcal/g for total carbohydrate (i.e. available carbohydrate plus dietary fiber), and 7 kcal/g for alcohol. The sum of these percentages does not usually add up to 100%.

### 1.6.2 Protein

Total protein value is given as grams per 100 g food. Separate values for total animal protein and total protein of meat, poultry, and fish (MFP protein, excludes milk), already included in total protein, are also given as gram per 100g food.

### 1.6.3. Fat

The total fat value, given as grams per 100 g food, is subdivided into saturated, monounsaturated, and polyunsaturated fatty acids. In addition to fatty acids, the total fat in a food may include non-fatty acid components of phospholipids, unsaponifiable components, such as sterols, and the glycerol component of triglycerides.

#### 1.6.4 Cholesterol

This is given as mg/100g food.

#### 1.6.5 Carbohydrates

The value of “total carbohydrate” is the difference between 100 minus the sum of the figures for protein, fats, ash, water and alcohol when present. It is expressed as grams per 100 g food. Total carbohydrate value includes both the unavailable carbohydrates (dietary fiber) and available carbohydrates (free sugar, dextrin, starch, glycogen and added sugar).

#### 1.6.6 Dietary fiber and Phytate

The fiber content of the food is given as dietary fiber in grams per 100g. Dietary fiber is a substance found in foods that come from plants (whole cereals, fruits and vegetables) and typically cannot be digested. It is also called bulk or roughage.

Phytate or phytic acid is expressed as mg/100 g food. Phytic acid is inositol hexaphosphate. It is found in plant cells, especially in seeds, where it acts as a storage compound for phosphate groups.

#### 1.6.7. Sucrose

This value given in grams per 100 g represents the total amount of naturally occurring sugars in the food, for example, lactose in milk and or fructose in fruits.

#### 1.6.8 Vitamins

Vitamin A values are given in retinol activity equivalents (RAE)<sup>5</sup>.

1 µg RAE = 1µg retinol = 3.33 IU

= 12 µg β carotene = 24 µg of other provitamin A carotenoid.

The total vitamin A value in µg/100 g includes both the plant and animal sources. A separate value for vitamin A from animal sources is also given per 100 g food.

Thiamine, riboflavin, Vitamin B6, Vitamin C, pantothenic acid and niacin are expressed as mg/100 g food. Folate, Vitamin B12, Vitamin E, and Vitamin D are expressed as µg/100 g food.

The term “niacin” includes both nicotinic acid and nicotinamide but not the nicotinic acid that could be contributed by tryptophan. Tryptophan is converted in the body to nicotinic acid with varying efficiency. On average 60 mg tryptophan is equivalent to 1mg niacin.

The values for vitamin C refer to total ascorbic acid; that is reduced plus dehydroascorbic acid, as both forms are active.

Vitamin D is expressed as µg cholecalciferol (1 IU vitamin D = 0.25 µg). The values of vitamin E are for α-tocopherol equivalents (1 IU vitamin E = 0.67 mg α-tocopherol equivalents).

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<sup>5</sup>The Institute of Medicine panel (2001) for Dietary Reference Intakes for Vitamins and Minerals recommended that the factors for activity of provitamin A carotenoids be reduced to one-half of the previous values 1:6 to 1:12 for beta-carotene and from 1:12 to 1:24 for other provitamin A carotenoids. The vitamin A content of all foods in the IML are based on these new factors.

### **1.6.9 Minerals**

Calcium, phosphorus, iron, magnesium, potassium, sodium, zinc, copper and manganese are given in mg/100 g. The total iron value includes iron into animal meat, poultry and fish (excluding milk and eggs). MFP iron values also included in the food tables

The sodium values of most cooked foods and dishes represent the food's natural sodium content (salt not added), except for a few cooked dishes as indicated in the recipes and for purchased and processed foods, such as butter and tomato sauce. Baking powder added to recipes was not considered. (salt considered only where included in the recipe but not where not included

### **1.6.10. Amino Acids**

The 12 amino acids, including the 9 essential ones, are given in mg/100 g food.

## **1.7. Imputation of Nutrients**

Nutrient values obtained by imputation are estimates derived from analytical values of a similar food (e.g. values for peas used for green beans) or for another form of the same food (e.g. values for "boiled" used for "steamed"). They may also be derived by calculation from incomplete or partial analyzes of a food (e.g. carbohydrate or moisture by difference, sodium derived from chloride values or, more commonly, chloride calculated from the value for sodium). Similar calculations can be made by comparing data for different forms of the same food (e.g. "dried" versus "fresh" or "defatted" versus "fresh") (18)

.

**Table 1.6 Field and Measuring Units for Nutrients**

FOOD CODE	This is the food code field, which uniquely identifies each food in the food composition table.
FOOD NAME	This is the field for the food name
<b>MACRONUTRIENTS</b>	
ENERC_KCAL	Energy in kilocalories
PROCNT	Total protein in grams
A_PROTEIN	Protein in grams from animal sources
MFP_PROTEI	Protein in grams from meat, fish, and poultry (does not include milk and eggs)
FAT	Total fat in grams
CHOCDF	Total carbohydrates by difference in grams
SUCS	Total sugar in grams
FASAT	Saturated fatty acids in grams
FAMS	Monounsaturated fatty acids in grams
FAPU	Polyunsaturated fatty acids in grams
CHOLE	Cholesterol in milligrams
FIB	Fiber, method of determination unknown (dietary fiber), in grams
PHYTAC	Phytate in milligrams
<b>VITAMINS</b>	
VITA	Vitamin A in retinol equivalents (micrograms)
A_VITA	Animal source vitamin A in retinol equivalents (micrograms)
VITD	Vitamin D in micrograms
VITE	Vitamin E in tocopherol equivalents
VITC	Vitamin C in milligrams
THIA	Thiamin in milligrams
RIBF	Riboflavin in milligrams
NIA	Niacin, pre-formed in milligrams
VITB6	Vitamin B6 in milligrams
FOL	Folate in micrograms
VITB12	Vitamin B12 in micrograms
PANTAC	Pantothenic acid in milligrams
<b>MINERALS</b>	
CA	Calcium in milligrams
P	Phosphorus in milligrams
MGM	Magnesium in milligrams
K	Potassium in milligrams
NA	Sodium in milligrams
FE	Iron in milligrams
MFP_FE	Iron from meat, fish, and poultry in milligrams (does not include milk or eggs)
ZN	Zinc in milligrams
CU	Copper in milligrams

Table 1.6 continued

AMINO ACIDS	
TRP	Tryptophan
THR	Threonine
ILE	Isoleucine
LEU	Leucine
LYS	Lysine
MET	Methionine
CYS	Cystine
PHE	Phenylalanine
TYR	Tyrosine
VAL	Valine
ARGM	Arginine
HIS	Histidine

## 1.8 Bioavailability of Nutrients

The term bioavailability (biological availability) is defined as the proportion of a nutrient in food that is utilized for normal body function (11). Many nutrients, including iron, calcium, magnesium, zinc, copper, manganese, niacin and folate, are not totally absorbed and utilized. No allowance for this has been made in the Tanzania Food Composition Tables and the values given are the actual values of the raw ingredients.

This should be noted when interpreting the analyzed dietary intake data. The WorldFood Dietary Assessment Program may be used to calculate the available iron and zinc intakes.

## 1.9 Calculating of Nutrient Intakes Using the TFCT

- Choose the item in the tables that corresponds most closely with the foods consumed.
- If the food consumed is not in the tables, then choose a suitable alternative by considering the type of food, general characteristic of the food, and likely nutrition profile. However, the results might not be fully accurate, and other sources of data may be sought (e.g. South African food tables or the USDA National Nutrition database (9,11).
- Once the food has been selected, the nutrient intakes are calculated by multiplying the nutrient figure shown in the tables by the weight of the food consumed (nutrients are expressed per 100 g or 100 mL in case of beverages). For example, if 60 g food has been consumed, multiply the nutrients by 0.6; if 150 g has been consumed, multiplied by 1.5. The results from these calculations, when added, will give the total nutrient intake.
- **Recipes**  
If the sample of food consumed is a cooked dish prepared with a different recipe from those in this book, its nutrients can be calculated using the method given in Table 4.



- **Portion Sizes**

If the weight of food consumed has not been recorded or if an estimate is required, refer to Section 3 for the food-portion databases for adults and children.

#### **1.10 Limitations of Using the Tanzania Food Composition Tables**

- The units and conversion factors used in calculating the nutrient values of foods in these tables may not be comparable with those in other countries or literature reports.
- Estimates of the amount consumed may over- or underestimate the actual amount eaten as compared with the recorded weight.
- The nutrient values of local cooked dishes were not adjusted or standardized for percentage waste and vitamin loss during cooking.

#### **1.11 Possible Sources of Errors**

- Errors will arise if a food is classified incorrectly; for example, if it is assumed that plain rice was consumed when it was in fact rice cooked with coconut.
- In manual coding systems, incorrect food code numbers may be used. In computerized systems, mistakes can occur when entering numbers.
- Errors can occur when measuring and recording food weights, which will affect the calculation of nutrient intakes.

#### **1.12 Vitamin Loss estimation in Foods and Recipe Calculation**

The information on the losses of heat- and water-labile vitamins during cooking is presented in Tables 1.7-1.9<sup>6</sup>.

They have been estimated by assigning a set of factors for percentage vitamin losses to each ingredient in the recipe, according to its food group and the method of cooking. These values should be treated as guidelines only.

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<sup>6</sup> Source: USDA National Nutrient Database for Standard Reference, Release 20 (2007).  
Nutrition Data Laboratory, USDA Agriculture Research Service

**Table 1.7. Typical percentage losses of vitamins in cooking**

Vitamins	Cereals		Eggs	Milk	Meat	
	Boiling	Baking	Fried or omelet	Boiling	Grilled or fried	Other methods
Thiamine	40	25	5	10	20	20
Riboflavin	40	15	20	10	20	20
Niacin	40	5	5	(0)	20	20
Vitamin B6	40	25	15	10	20	20
Folate	50	50	30	20	ND	50
Pantothenic acid	40	25	15	10	20	20
Biotin	40	0	-		10	10
Vitamin C				50	ND	50
Vitamin E				20	20	20
Vitamin B12					20	20
Vitamin A					0	0

*Values in brackets are estimates*

**Table 1.8. Typical percentage losses of vitamins on cooking**

Vitamins	Fish			
	Poaching	Baking	Grilling	Frying
Vitamin A	0	0	0	0
Vitamin D	0	0	0	0
Vitamin E	0	0	0	0
Thiamine	10	30	10	20
Riboflavin	0	20	10	20
Niacin	10	20	10	20
Vitamin B6	0	10	10	20
Vitamin B12	0	10	0	0
Folate	0	20	0	0
Pantothenic acid	20	20	5	20
Biotin	10	10	0	10

**Table 19. Typical percentage losses of vitamins on cooking**

	Vegetables			Fruits
	Boiling	Frying	Cooked dishes	Stewing and Baking
Carotene	ND	ND	0	(0)
Thiamine	35	20	20	25
Riboflavin	20	0	20	25
Niacin	30	0	20	25
Vitamin B6	40	25	20	20
Folate	40	55	50	80
Pantothenic acid	ND	ND	20	25
Biotin	ND	ND	20	25
Vitamin C	45	30	50	25

*Values in brackets are estimates.*

*ND= Not determined*



## **SECTION 2**

# **Tanzania Food Composition Tables**



## **2.1 FOOD COMPOSITION TABLES**

### **A1. Cereals and cereal products**

Cereals such as rice, wheat, oat. Cereal products such as bread, biscuits, porridges, breakfast cereals.

### **A2. Cereal-based local dishes**

All cereals based dishes: local recipes for examples porridges, cooked rice, ugali (stiff porridge), rice bun (*kitumbua*), African donut (*mandazi*)

## A1 Cereal and Cereal products

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
1	Biscuit	434.0	9.2	0.0	0.0	11.8	71.5
2	Bread roll	274.0	8.8	0.0	0.0	3.0	51.9
3	Bread, white	274.0	8.8	0.0	0.0	3.0	51.9
6	Cake	320.0	4.7	2.2	0.0	12.3	48.6
7	Cookie	478.0	5.1	0.0	0.0	21.1	67.9
8	Donut	478.0	5.1	0.0	0.0	21.1	67.9
9	Infant cereal, Cerelac	387.0	14.0	8.5	0.0	1.0	78.1
33	Macaroni or spaghetti	371.0	10.5	0.0	0.0	1.0	77.8
10	Maize, cracked, cooked	119.0	2.7	0.0	0.0	1.2	25.4
11	Maize, dried, raw	362.0	8.1	0.0	0.0	3.6	76.9
12	Maize, flour, dry	362.0	8.1	0.0	0.0	3.6	76.9
13	Maize, green, cooked	246.0	7.5	0.0	0.0	3.0	57.2
14	Maize, on the cob, immature	59.0	1.8	0.0	0.0	0.7	13.8
15	Maize, yellow, flour	362.0	8.1	0.0	0.0	3.6	76.9
16	Millet, bulrush	361.0	11.6	0.0	0.0	5.0	68.7
17	Millet, finger, grain or flour	328.0	6.6	0.0	0.0	1.3	76.2
34	Mixed porridge flour (maize and oil)	414.4	16.9	0.0	0.0	15.6	56.1



## A1 Cereal and Cereal products

Macronutrients		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
1	Biscuit	2.1	6.5	1.8	0.0	2.7	0.4	180.0
2	Bread roll	0.6	1.2	0.7	0.0	2.8	0.1	30.0
3	Bread, white	0.6	1.2	0.7	0.0	2.8	0.1	30.0
6	Cake	3.5	5.3	2.9	50.0	0.6	28.2	68.0
7	Cookie	5.4	11.8	2.7	51.0	0.5	22.0	116.0
8	Donut	5.4	11.8	2.7	51.0	0.5	22.0	116.0
9	Infant cereal, Cerelac	0.5	0.2	0.2	5.0	0.7	0.2	290.0
33	Macaroni or spaghetti	0.2	0.1	0.4	0.0	2.8	0.4	288.0
10	Maize, cracked, cooked	0.2	0.3	0.5	0.0	2.4	0.1	264.0
11	Maize, dried, raw	0.5	0.9	1.6	0.0	7.3	0.3	800.0
12	Maize, flour, dry	0.5	0.9	1.6	0.0	7.3	0.3	800.0
13	Maize, green, cooked	0.5	0.9	1.4	0.0	6.4	3.4	71.0
14	Maize, on the cob, immature	0.1	0.2	0.3	0.0	1.5	0.8	17.0
15	Maize, yellow, flour	0.5	0.9	1.6	0.0	7.3	0.3	800.0
16	Millet, bulrush	0.9	1.1	2.2	0.0	24.7	1.6	870.0
17	Millet, finger, grain or flour	0.3	0.6	0.3	0.0	13.4	0.2	520.0
34	Mixed porridge flour (maize and oil)	2.2	6.2	6.1	0.0	7.0	1.8	1037.2

## A1 Cereal and Cereal products *continued*

	Macronutrients	ENERGY_KC Kcal	PROCNT g	A_PROTEI g	MFP_PROT g	FAT g	CHOCDF g
19	Mixed porridge flour (no maize)	332.2	10.1	0.0	0.0	7.0	62.1
18	Mixed porridge flour (with maize)	382.2	13.8	0.0	0.0	10.2	63.5
20	Porridge, fermented	43.0	1.0	0.0	0.0	0.4	9.2
22	Rice, flour, local	366.0	5.9	0.0	0.0	1.4	80.1
21	Rice, fried and boiled	174.0	2.6	0.0	0.0	7.4	24.6
23	Rice, white, grain, raw	358.0	6.5	0.0	0.0	0.5	79.8
35	Semolina	364.0	10.3	0.0	0.0	1.0	76.3
24	Sorghum	339.0	11.3	0.0	0.0	3.3	74.6
26	Sorghum, flour	339.0	11.3	0.0	0.0	3.3	73.7
27	Vermicelli, uncooked	395.0	13.4	0.0	0.0	2.0	79.2
29	Wheat, flour, whole grain	339.0	13.7	0.0	0.0	1.9	72.6
28	Wheat,dough, deep fried	317.0	7.2	0.0	0.0	7.7	53.4
30	Wheat, flour, 72% extract	364.0	10.3	0.0	0.0	1.0	76.3
31	Wheat, flour, maida	349.0	12.3	0.0	0.0	1.5	74.1

## A1 Cereal and Cereal products *continued*

Macronutrients		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
19	Mixed porridge flour (no maize)	1.0	3.1	2.4	0.0	9.0	0.8	694.0
18	Mixed porridge flour (with maize)	1.5	4.1	4.0	0.0	8.6	1.3	699.0
20	Porridge fermented	0.1	0.1	0.2	0.0	0.9	0.0	96.0
22	Rice, flour, local	0.4	0.4	0.4	0.0	2.4	0.1	353.0
21	Rice, fried and boiled	1.1	1.8	4.3	0.0	1.3	0.1	94.0
23	Rice, white, grain, raw	0.1	0.2	0.1	0.0	0.8	0.3	352.0
35	Semolina	0.2	0.1	0.4	0.0	2.7	0.4	282.0
24	Sorghum	0.5	1.0	1.4	0.0	9.0	0.7	439.0
26	Sorghum, flour	0.5	1.0	1.4	0.0	12.7	0.7	618.0
27	Vermicelli, uncooked	0.3	0.3	0.8	0.0	4.8	0.8	227.0
29	Wheat, flour, whole grain	0.3	0.2	0.8	0.0	12.2	0.4	282.0
28	Wheat,dough, deep fried	1.1	1.7	4.4	0.0	1.9	0.3	197.0
30	Wheat, flour, 72% extract	0.2	0.1	0.4	0.0	2.7	0.4	282.0
31	Wheat, flour, maida	0.3	0.1	0.7	0.0	8.4	0.4	620.0

## A2 Cereal-based local dishes

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
534	Cake (home made)	375.6	4.6	2.1	0.0	21.3	42.4
513	Chapati, dry Indian	207.9	5.2	0.0	0.0	3.5	38.2
512	Chapati with oil	372.6	5.9	0.0	0.0	19.5	43.9
532	Donut-African	316.6	5.2	0.0	0.0	10.5	50.6
525	Maize and kidney bean dish	156.5	3.6	0.0	0.0	7.0	21.4
523	Maize and sorgum ugali (stiff porridge)	110.3	3.0	0.0	0.0	0.9	24.7
531	Maize porridge with margarine and sugar	100.2	1.1	0.0	0.0	0.8	23.1
505	Maize porridge no sugar no milk	36.2	0.8	0.0	0.0	0.4	7.7
506	Maize porridge with sugar	94.0	0.8	0.0	0.0	0.4	22.7
502	Maize porridge with sugar and egg	106.6	4.4	3.7	1.1	3.6	14.4
507	Maize porridge with sugar and milk	129.8	1.2	0.8	0.8	1.0	30.0
519	Maize ugali (stiff porridge)	123.8	2.7	0.0	0.0	1.2	25.6
508	Millet porridge with sugar	91.0	0.7	0.0	0.0	0.1	22.6
509	Mix flour porridge with sugar	130.3	2.2	0.0	0.0	6.7	16.4
514	Pancake	291.4	7.0	1.9	0.0	12.1	383.0
543	Rice biriyani	208.3	9.9	8.1	8.1	10	19.5
516	Rice boiled no Oil	159.1	2.6	0.0	0.0	0.6	34.8
517	Rice boiled with Oil	199.1	2.9	0.0	0.0	3.0	39.2

## A2 Cereal-based local dishes

	Macronutrients	FASAT g	FAMS g	FAPU g	CHOLE mg	FIB g	SUCS g	PHYTAC mg
534	Cake (home made)	12.9	5.7	1.0	115.2	0.7	23.3	67.7
513	Chapati, dry, Indian	2.7	0.2	0.3	0.0	1.3	0.2	141.0
512	Chapati with oil	16.5	1.2	0.6	0.0	1.6	0.2	162.2
532	Donut, African	8.7	0.6	0.4	0.0	1.4	12.3	141
525	Maize and kidney bean dish	5.5	0.5	0.5	0.0	2.8	0.1	311.2
523	Maize and sorghum ugali (stiff porridge)	0.0	0.3	0.4	0.0	4.3	0.2	197.8
531	Maize porridge with margarine and sugar	0.1	0.3	0.3	0.0	1.0	12.7	104.3
505	Maize porridge no sugar no milk	0.1	0.1	0.2	0.0	0.7	0.0	80
506	Maize porridge with sugar	0.1	0.1	0.2	0.0	0.7	14.6	80.0
502	Maize porridge with sugar and egg	1.3	1.2	0.5	88.1	0.7	6.6	80.0
507	Maize porridge with sugar and milk	0.5	0.2	0.1	2.5	0.3	25.0	0.0
519	Maize ugali (stiff porridge)	0.2	0.3	0.5	0.0	2.4	0.2	273
508	Millet porridge with sugar	0.3	0.1	0.0	0.0	1.3	14.5	61.0
509	Mix flour porridge with sugar	1.4	3.1	1.9	0.0	1.9	4.1	157.7
514	Pancake	9.2	1.2	0.6	63.6	1.4	0.2	188.0
543	Rice biriyani	5.3	2.4	1.3	23.7	0.7	0.7	69.0
516	Rice boiled no oil	0.2	0.2	0.1	0.0	1.0	0.0	166.0
517	Rice boiled with oil	2.4	0.3	0.2	0.0	1.2	0.1	179.9

## A2 Cereal-based local dishes *continued*

	Macronutrients	ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
530	Rice bread	239.1	2.2	0.0	0.0	7.5	41.1
524	Rice bun	416.2	4.7	0.0	0.0	11.1	73.7
515	Rice and meat pillau	177.0	7.1	5.2	5.2	5.6	23.6
544	Rice and mung dish with coconut milk	262.8	5.0	0.0	0.0	11.4	36.2
545	Rice and mung dish no coconut milk	124.1	3.3	0.0	0.0	0.2	26.7
533	Rice porridge with coconut no sugar	152.9	2.0	0.0	0.0	8.2	18.5
528	Rice porridge with sugar	94.6	0.6	0.0	0.0	0.1	23.0
521	Rice ugali (stiff porridge)	149.0	2.7	0.0	0.0	0.2	32.8
518	Rice with coconut milk	170.0	2.9	0.0	0.0	1.5	35.5
540	Rice with ground meat	288.4	8.5	4.4	4.4	14.7	30.7
522	Sorghum and millet ugali (stiff porridge)	112.1	3.4	0.0	0.0	0.9	24.7
511	Sorghum porridge with sugar	91.0	1.0	0.0	0.0	0.3	22.0
527	Vermicelli - cooked	209.0	6.7	0.0	0.0	2.3	39.6
535	Vermicelli with coconut milk and sugar	227.6	7.0	0.0	0.0	3.6	41.5
536	Vermicell with oil and sugar	228.2	6.7	0.0	0.0	3.7	41.6
537	Vermicelli with coconut milk and salt	260.4	7.7	0.0	0.0	6.2	43.3
529	Wheat fritter, sweet	318.0	1.9	0.0	0.0	14.2	46.7
542	Wheat porridge	91.9	1.4	0.0	0.0	0.2	22.2

## A2 Cereal-based local dishes *continued*

	Macronutrients	FASAT g	FAMS g	FAPU g	CHOLE mg	FIB g	SUCS g	PHYTAC mg
530	Rice bread	6.3	0.5	0.2	0.0	1.0	13.4	134.7
524	Rice bun	8.9	0.9	0.5	0.0	1.9	9.4	282.4
515	Rice and meat pillau	3.1	1.8	0.3	16.8	0.9	0.2	95.9
544	Rice and mung dish with coconut milk	10.0	0.5	0.2	0.0	4.7	2.5	304.1
545	Rice and mung dish no coconut milk	0.1	0	0.1	0.0	1.5	0.4	168.1
533	Rice porridge with coconut milk no sugar	7.1	0.4	0.2	0.0	1.2	1.1	182
528	Rice porridge with sugar	0.0	0.0	0.0	0.0	0.2	14.5	35.3
521	Rice ugali (stiff porridge)	0.1	0.1	0.1	0.0	0.3	0.1	144.7
518	Rice with coconut milk	1.2	0.1	0.1	0.0	0.7	0.1	166.0
540	Rice with ground meat	8.2	4.1	1.5	14.6	1.7	0.8	252.7
522	Sorghum and millet ugali (stiff porridge)	0.1	0.3	0.4	0.0	4.3	0.2	197.8
511	Sorghum porridge with sugar	0.1	0.1	0.1	0.0	1.3	14.6	44.0
527	Vermicelli - cooked	1.3	0.2	0.4	0.0	2.4	0.4	114
535	Vermicelli with coconut milk and sugar	2.5	0.2	0.4	0.0	2.6	1.8	142.3
536	Vermicell with oil and sugar	2.5	0.3	0.4	0.0	2.4	2.3	114
537	Vermicelli with coconut milk and salt	4.8	0.4	0.5	0.0	2.9	0.7	179
529	Wheat fritter, sweet	2.0	3.3	8.2	0.0	0.5	32.0	51.0
542	Wheat porridge	0.0	0.0	0.1	0.0	1.2	14.6	28.2

## A1 Cereal and Cereal products

Vitamins		VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VITB6 mg	FOL µg	VITB12 µg	PANT mg
1	Biscuit	0.0	0.0	0.0	1.0	0.0	0.1	0.0	1.1	0.0	31.0	0.0	0.5
2	Bread roll	0.0	0.0	0.0	0.0	0.0	0.6	0.2	2.8	0.0	31.0	0.0	0.4
3	Bread, white	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.9	0.0	31.0	0.0	0.4
6	Cake	34.0	34.0	0.0	1.0	0.0	0.0	0.1	0.3	0.0	10.0	0.2	0.3
7	Cookie	27.0	0.0	0.0	3.0	0.0	0.0	0.1	1.0	0.1	12.0	0.1	0.3
8	Donut	27.0	0.0	0.0	3.0	0.0	0.0	0.1	1.0	0.1	12.0	0.1	0.3
9	Infant cereal, Cerelac	3.0	3.0	0.0	0.0	3.0	0.2	0.4	1.2	0.2	18.0	1.0	1.8
33	Macaroni or spaghetti	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Maize, cracked, cooked	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.2	0.1	8.0	0.0	0.1
11	Maize, dried, raw	0.0	0.0	0.0	1.0	0.0	0.4	0.2	3.6	0.3	25.0	0.0	0.4
12	Maize, flour, dry	0.0	0.0	0.0	1.0	0.0	0.4	0.2	3.6	0.3	25.0	0.0	0.4
13	Maize, green, cooked	0.0	0.0	0.0	0.0	14.0	0.5	0.2	3.6	0.1	105.0	0.0	2.0
14	Maize, on the cob, immature	7.0	0.0	0.0	0.0	3.0	0.1	0.0	0.9	0.0	25.0	0.0	0.5
15	Maize, yellow, flour	11.0	0.0	0.0	0.4	0.0	0.4	0.2	3.6	0.3	25.0	0.0	0.4
16	Millet, bulrush	20.0	0.0	0.0	0.0	0.0	0.3	0.2	2.1	0.3	32.0	0.0	0.5
17	Millet, finger, grain or flour	5.0	0.0	0.0	0.0	0.0	0.3	0.1	0.8	0.2	10.0	0.0	0.4
34	Mixed porridge flour (maize and oil)	0.6	0.0	0.0	2.8	0.6	0.3	0.2	2.8	0.2	63.0	0.0	0.8



## A1 Cereal and Cereal products *continued*

Vitamins		VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VIT B6 mg	FOL µg	VIT B12 µg	PANT mg
19	Mixed porridge flour (no maize)	3.5	0.0	0.0	2.3	0.0	0.2	0.1	4.2	0.2	32.9	0.0	0.9
18	Mixed porridge flour (with maize)	2.3	0.0	0.0	1.6	0.3	0.2	0.1	2.8	0.1	39.0	0.0	0.6
20	Porridge, fermented	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.0	3.0	0.0	0.1
22	Rice, flour, local	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.1	0.1	6.0	0.0	1.2
21	Rice, fried and boiled	87.0	0.0	0.0	0.0	19.0	0.1	0.1	0.9	0.1	16.0	0.0	0.5
23	Rice, white, grain, raw	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.1	0.1	6.0	0.0	1.1
35	Semolina	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.1	0.0	18.0	0.0	0.4
24	Sorghum	6.0	0.0	0.0	1.0	0.0	0.2	0.1	2.2	0.2	11.0	0.0	0.8
26	Sorghum, flour	7.0	0.0	0.0	1.0	0.0	0.3	0.1	2.8	0.2	14.0	0.0	0.9
27	Vermicelli, uncooked	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.1	0.1	20.0	0.0	0.3
29	Wheat, flour, whole grain	0.0	0.0	0.0	0.0	0.0	0.4	0.2	6.4	0.3	34.0	0.0	1.0
28	Wheat,dough, deep fried	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.8	0.0	13.0	0.0	0.3
30	Wheat, flour, 72% extract	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.1	0.0	18.0	0.0	0.4
31	Wheat, flour, maida	0.0	0.0	0.0	1.0	0.0	0.3	0.1	3.8	0.2	26.0	0.0	0.7

## A2 Cereal-based local dishes

	Vitamins	VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VITB6 mg	FOL µg	VITB12 µg	PANT mg
534	Cake (home made)	208.3	208.3	0.6	0.8	0.0	0.0	0.1	0.3	0.00	11.2	0.2	0.3
513	Chapati, dry, Indian	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.6	0.0	9.0	0.0	0.2
512	Chapati with oil	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.6	0.0	10.4	0.0	0.2
532	Donut, African	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.6	0.00	9.0	0.0	0.2
525	Maize and kidney bean dish	0.0	0.0	0.0	0.1	0.5	0.1	0.1	1.0	0.1	29.6	0.0	0.2
523	Maize and sorghum ugali (stiff porridge)	2.1	0.0	0.0	0.3	0.0	0.1	0.0	0.8	0.1	4.3	0.0	0.3
531	Maize porridge with margarine and sugar	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.5	0.0	32.6	0.0	0.1
505	Maize porridge without sugar and milk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	3.0	0.0	0.0
506	Maize porridge with sugar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	3.0	0.0	0.0
502	Maize porridge with sugar and egg	53.5	53.5	0.2	0.6	0.2	0.1	0.2	0.4	0.1	13.7	0.3	0.4
507	Maize porridge with sugar and milk	55.0	55.0	0.0	0.0	1.0	0.0	0.2	0.1	0.1	6.0	0.4	0.4
519	Maize ugali (stiff porridge)	0.0	0.0	0.0	0.3	0.0	0.1	0.1	1.2	0.1	11.6	0.0	0.1
508	Millet porridge with sugar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	3.0	0.0	0.0
509	Mix flour porridge with sugar	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.8	0.0	7.6	0.0	0.2
514	Pancake	38.0	38.0	0.2	0.6	0.0	0.1	0.1	0.8	0.1	20.8	0.2	0.5
543	Rice biriyani	16.6	12.9	0.0	0.1	4.9	0.1	0.1	2.1	0.2	9.8	0.1	0.6
516	Rice boiled without oil	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.1	2.6	0.0	0.0
517	Rice boiled with oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	6.3	0.0	0.7

## A2 Cereal-based local dishes *continued*

Vitamins		VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VIT B6 mg	FOL µg	VIT B12 µg	PANT mg
530	Rice bread	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.4	0.1	3.3	0.0	0.4
524	Rice bun	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	4.8	0.0	0.9
515	Rice and meat pillau	14.2	0.0	0.0	0.0	1.2	0.0	0.1	1.1	0.1	5.6	0.4	0.4
544	Rice and mung dish with coconut milk	0.4	0.0	0.0	0.1	0.9	0.1	0.0	0.7	0.1	53.1	0.0	0.5
545	Rice and mung dish without coconut milk	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.1	40.9	0.0	0.4
533	Rice porridge with coconut milk without sugar	0.0	0.0	0.0	0.3	1.0	0.0	0.0	0.4	0.0	9.9	0.0	0.3
528	Rice porridge with sugar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.6	0.0	0.1
521	Rice ugali (stiff porridge)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	2.5	0.0	0.5
518	Rice with coconut milk	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.5	0.1	2.6	0.0	0.5
540	Rice with ground meat	194.2	0.0	0.0	0.8	0.2	0.1	0.1	2.0	0.2	13.6	0.3	0.6
522	Sorghum and millet ugali (stiff porridge)	2.1	0.0	0.0	0.3	0.0	0.1	0.0	0.8	0.1	4.3	0.0	0.3
511	Sorghum porridge with sugar	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.0	0.0	0.1
527	Vermicelli - cooked	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.1	10.0	0.0	0.2
535	Vermicelli with coconut milk and sugar	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.6	0.1	12.3	0.0	0.2
536	Vermicelli with oil and sugar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.1	10.0	0.0	0.2
537	Vermicelli with coconut milk and salt	0.0	0.0	0.0	0.2	0.5	0.0	0.0	0.7	0.1	15.3	0.0	0.2
529	Wheat fritter, sweet	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.2	0.0	3.0	0.0	0.1
542	Wheat porridge	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.8	0.0	0.0

## A1 Cereal and Cereal products

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
1	Biscuit	119.0	105.0	27.0	128.0	1302.0	1.2	0.0	0.8	0.2	0.7
2	Bread roll	120.0	105.0	27.0	113.0	609.0	7.8	0.0	0.9	0.2	0.5
3	Bread, white	10.0	105.0	27.0	113.0	609.0	0.5	0.0	0.9	0.2	0.5
6	Cake	38.0	68.0	9.0	75.0	182.0	0.4	0.0	0.4	0.0	0.2
7	Cookie	21.0	80.0	12.0	63.0	357.0	0.7	0.0	0.4	0.1	0.3
8	Donut	21.0	80.0	12.0	63.0	357.0	0.7	0.0	0.4	0.1	0.3
9	Infant cereal, Cerelac	315.0	338.0	58.0	482.0	130.0	0.5	0.0	1.9	0.1	0.9
33	Macaroni or spaghetti	15.0	110.0	22.0	109.0	2.0	1.2	0.0	0.1	0.1	0.0
10	Maize, cracked, cooked	2.0	80.0	42.0	95.0	12.0	1.2	0.0	0.6	0.1	0.2
11	Maize, dried, raw	6.0	241.0	127.0	287.0	35.0	3.5	0.0	1.8	0.2	5.0
12	Maize, flour, dry	6.0	241.0	127.0	287.0	35.0	3.5	0.0	1.8	0.2	5.0
13	Maize, green, cooked	5.0	235.0	73.0	568.0	39.0	1.4	0.0	1.1	0.1	0.4
14	Maize, on the cob, immature	1.0	57.0	18.0	137.0	9.0	0.3	0.0	0.3	0.0	0.1
15	Maize, yellow, flour	6.0	241.0	127.0	287.0	35.0	3.5	0.0	1.8	0.2	5.0
16	Millet, bulrush	42.0	296.0	137.0	307.0	11.0	8.0	0.0	3.1	1.1	1.2
17	Millet, finger, grain or flour	275.0	283.0	27.0	408.0	11.0	2.7	0.0	1.2	0.5	5.5
34	Mixed porridge flour (maize and oil)	78.0	333.4	147.6	63.1	18.2	5.6	0.0	2.6	0.6	3.1

## A1 Cereal and Cereal products *continued*

Minerals	CA mg	P mg	MG mg	K mg	NA mg	FE mg	MFP_FE mg	ZN mg	CU mg	MN mg
19 Mixed porridge flour (no maize)	55.0	235.3	60.5	263.5	8.2	3.3	0.0	1.4	0.4	1.6
18 Mixed porridge flour (with maize)	11.9	306.8	103.2	513.1	15.0	4.6	0.0	2.0	0.6	2.3
20 Porridge, fermented	1.0	29.0	15.0	34.0	4.0	0.4	0.0	0.2	0.0	0.1
22 Rice, flour, local	8.0	104.0	36.0	81.0	0.0	0.6	0.0	1.1	0.1	1.1
21 Rice, fried and boiled	7.0	50.0	20.0	242.0	9.0	0.6	0.0	0.4	0.1	0.4
23 Rice, white, grain, raw	8.0	103.0	36.0	81.0	0.0	0.6	0.0	1.1	0.1	1.1
35 Semolina	15.0	108.0	22.0	107.0	2.0	1.2	0.0	0.7	0.1	0.7
24 Sorghum	15.0	222.0	34.0	131.0	7.0	4.1	0.0	0.8	0.3	0.9
26 Sorghum, flour	25.0	222.0	171.0	131.0	7.0	4.1	0.0	1.6	0.5	0.8
27 Vermicelli, uncooked	20.0	151.0	50.0	87.0	3.0	1.4	0.0	1.4	0.3	0.8
29 Wheat, flour, whole grain	15.0	108.0	22.0	107.0	2.0	1.2	0.0	0.7	0.1	0.7
28 Wheat,dough, deep fried	11.0	76.0	15.0	75.0	1.0	0.8	0.0	0.5	0.1	0.5
30 Wheat, flour, 72% extract	15.0	108.0	22.0	107.0	2.0	1.2	0.0	0.7	0.1	0.7
31 Wheat, flour, maida	26.0	251.0	92.0	286.0	4.0	2.8	0.0	2.0	0.3	2.6

## A2 Cereal-based local dishes

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
534	Cake (home made)	12.8	63.6	7.0	46.7	72.4	0.5	0.0	0.3	0.0	0.2
513	Chapati, dry, Indian	8.0	54.0	11.0	53.5	1.0	0.6	0.0	0.4	0.1	0.3
512	Chapati with oil	9.9	71.3	16.6	70.6	1.3	0.7	0.0	0.4	0.9	0.4
532	Donut-African	7.6	54.3	11.0	53.8	1.1	0.6	0.0	0.4	0.1	0.3
525	Maize and kidney bean dish	7.5	88.3	38.7	166.1	74.9	1.5	0.0	0.7	0.1	0.3
523	Maize and sorgum ugali (stiff porridge)	29.3	79.0	45.0	66.7	2.6	1.3	0.0	0.5	0.2	0.7
531	Maize porridge with margarine and sugar	0.9	31.6	16.6	37.6	4.6	0.4	0.0	0.2	0.0	0.1
505	Maize porridge without sugar and milk	3.5	24.1	12.7	28.7	3.5	0.4	0.0	0.2	0.0	0.1
506	Maize porridge with sugar	3.7	24.4	12.7	29.0	3.7	0.4	0.0	0.2	0.0	0.1
502	Maize porridge with sugar and egg	43.2	99.9	18.2	98.8	55.9	0.7	0.0	0.6	0.0	0.1
507	Maize porridge with sugar and milk	61.2	70.4	18.2	99.0	31.2	0.4	0.0	0.4	0.0	0.1
519	Maize ugali (stiff porridge)	2.0	81.2	43.4	98.1	11.9	1.2	0.0	0.6	0.1	0.2
508	Millet prridge with sugar	27.7	28.6	2.7	41.1	1.3	0.3	0.0	0.1	0.1	0.6
509	Mix flour porridge with sugar	32.5	52.4	12.9	80.2	2.0	0.5	0.0	0.3	0.1	0.6
514	Pancake	20.2	106.4	16.7	96.6	155.2	1.0	0.0	0.7	0.1	0.4
543	Rice biriyani	22.9	92.9	19.2	179.6	346.3	0.7	0.4	0.8	0.1	0.3
516	Rice boiled without Oil	3.6	46.9	16.2	36.5	0.0	0.2	0.0	0.5	0.1	0.5
517	Rice boiled with Oil	4.1	47.8	18.6	41.7	0.0	0.3	0.0	0.5	0.1	0.5

## A2 Cereal-based local dishes *continued*

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
530	Rice bread	3.4	40.8	13.7	44.3	1.1	0.3	0.0	0.5	0.1	0.5
524	Rice bun	6.5	83.3	28.8	65.0	1.0	0.5	0.0	0.9	0.1	0.8
515	Rice and meat pillau	6.3	76.9	16.8	128.8	98.9	0.6	0.4	1.2	0.1	0.3
544	Rice and mung dish with coconut milk	12.7	106.3	34.3	206.9	136.7	1.6	0.0	1.0	0.2	1.0
545	Rice and mung dish without coconut milk	6.9	58.9	20.3	75.6	111.4	0.6	0.0	0.6	0.1	0.4
533	Rice porridge with coconut without sugar	6.3	59.3	18.2	135.5	6.7	0.9	0.0	0.6	0.2	0.7
528	Rice porridge with sugar	1.0	10.7	3.6	8.4	0.2	0.1	0.0	0.1	0.0	0.1
521	Rice ugali (stiff porridge)	3.3	42.6	14.8	33.2	0.0	0.2	0.0	0.5	0.0	0.4
518	Rice with coconut milk	8.7	91.1	29.4	152.0	6.0	1.0	0.0	0.9	0.2	1.0
540	Rice with ground meat	13.6	101.6	30.3	162.8	294.0	0.9	0.3	1.4	0.2	0.6
522	Sorgum and millet ugali (stiff porridge)	29.3	79.0	45.0	66.7	2.6	1.3	0.0	0.5	0.2	0.7
511	Sorgum porridge with sugar	2.7	22.5	17.1	13.4	0.9	0.4	0.0	0.2	0.1	0.1
527	Vermicelli - cooked	10.1	75.5	25.0	43.5	87.6	0.7	0.0	0.7	0.1	0.4
535	Vermicelli with coconut milk and sugar	11.3	85.6	27.8	75.2	3.3	0.9	0.0	0.8	0.2	0.5
536	Vermicell with oil and sugar	10.0	75.5	25.0	43.5	1.5	0.7	0.0	0.7	0.1	0.4
537	Vermicelli with coconut milk and salt	13.4	100.6	32.4	109.7	177.3	1.2	0.0	0.9	0.2	0.7
529	Wheat fritter, sweet	3.0	20.0	4.0	20.0	0.0	0.2	0.0	0.1	0.0	0.1
542	Wheat porridge	1.6	11.0	2.2	10.9	0.3	0.1	0.0	0.1	0.0	0.1

## A1 Cereal and Cereal products

Amino Acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
1	Biscuit	122.0	256.0	334.0	632.0	258.0	159.0	198.0	452.0	274.0	387.0	366.0	198.0
2	Bread roll	102.0	248.0	338.0	616.0	205.0	158.0	192.0	436.0	250.0	382.0	320.0	191.0
3	Bread, white	102.0	248.0	338.0	616.0	205.0	158.0	192.0	436.0	250.0	382.0	320.0	191.0
6	Cake	58.0	169.0	209.0	365.0	217.0	107.0	92.0	236.0	169.0	237.0	212.0	109.0
7	Cookie	70.0	179.0	230.0	390.0	256.0	110.0	104.0	250.0	175.0	263.0	221.0	112.0
8	Donut	70.0	179.0	230.0	390.0	256.0	110.0	104.0	250.0	175.0	263.0	221.0	112.0
9	Infant cereal, Cerelec	184.0	581.0	752.0	1288.0	873.0	344.0	193.0	705.0	597.0	904.0	763.0	359.0
33	Macaroni or spaghetti	127.0	281.0	357.0	710.0	228.0	183.0	219.0	520.0	312.0	415.0	417.0	230.0
10	Maize, cracked, cooked	171.0	353.0	515.0	913.0	255.0	207.0	375.0	647.0	350.0	568.0	493.0	272.0
11	Maize, dried, raw	19.0	101.0	96.0	329.0	75.0	56.0	48.0	132.0	109.0	136.0	134.0	82.0
12	Maize, flour, dry	57.0	305.0	291.0	996.0	228.0	170.0	146.0	399.0	330.0	411.0	405.0	248.0
13	Maize, green, cooked	57.0	305.0	291.0	996.0	228.0	170.0	146.0	399.0	330.0	411.0	405.0	248.0
14	Maize, on the cob, immature	52.0	303.0	303.0	816.0	321.0	157.0	62.0	85.0	287.0	435.0	308.0	207.0
15	Maize, yellow, flour	13.0	73.0	73.0	197.0	78.0	38.0	15.0	85.0	69.0	105.0	74.0	50.0
16	Millet, bulrush	57.0	305.0	291.0	996.0	228.0	170.0	146.0	399.0	330.0	411.0	405.0	248.0
17	Millet, finger, grain or flour	205.0	446.0	484.0	1395.0	353.0	279.0	205.0	539.0	372.0	614.0	558.0	260.0
34	Mixed porridge flour (maize and oil)	178.0	349.0	448.0	840.0	318.0	200.0	278.0	596.0	365.0	537.0	552.0	282.0



## A1 Cereal and Cereal products *continued*

Amino Acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
19	Mixed porridge flour (no maize)	159.2	514.0	598.0	1251.8	595.3	239.8	185.0	693.8	509.0	707.0	1029.5	348.7
18	Mixed porridge flour (with maize)	94.0	225.0	421.0	727.0	252.0	221.0	131.0	326.0	232.0	505.0	316.0	137.0
20	Porridge, fermented	132.0	419.7	480.1	1203.5	361.6	201.4	172.7	622.2	425.3	606.1	922.9	288.5
22	Rice, flour, local	72.0	217.0	244.0	488.0	207.0	144.0	137.0	317.0	314.0	348.0	516.0	149.0
21	Rice, fried and boiled	192.1	655.3	701.0	1420.8	801.0	258.3	266.4	868.8	654.7	816.2	1438.5	452.6
23	Rice, white, grain, raw	75.0	263.0	281.0	538.0	235.0	153.0	133.0	318.0	217.0	397.0	542.0	153.0
35	Semolina	127.0	281.0	357.0	710.0	228.0	183.0	219.0	520.0	312.0	415.0	417.0	230.0
24	Sorghum	78.0	238.0	288.0	552.0	241.0	157.0	137.0	356.0	224.0	406.0	554.0	157.0
26	Sorghum, flour	78.0	237.0	287.0	550.0	240.0	156.0	137.0	354.0	223.0	405.0	552.0	156.0
27	Vermicelli, uncooked	114.0	346.0	398.0	1372.0	206.0	169.0	132.0	502.0	295.0	516.0	327.0	226.0
29	Wheat, flour, whole grain	212.0	395.0	508.0	926.0	378.0	212.0	317.0	646.0	400.0	618.0	542.0	317.0
28	Wheat,dough, deep fried	124.0	346.0	433.0	1491.0	229.0	169.0	127.0	546.0	321.0	561.0	355.0	246.0
30	Wheat, flour, 72% extract	89.0	197.0	250.0	497.0	160.0	128.0	153.0	364.0	218.0	291.0	292.0	161.0
31	Wheat, flour, maida	127.0	281.0	357.0	710.0	228.0	183.0	219.0	520.0	312.0	415.0	417.0	230.0

## A2 Cereal-based local dishes

Amino Acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
534	Cake (home made)	45.0	140.5	166.3	285.8	178.3	91.0	81.0	190.2	131.9	188.5	115.2	46.1
513	Chapati, dry Indian	63.5	141.0	180.6	312.5	330.7	100.3	47.4	156.9	134.9	430.0	267.4	135.6
512	Chapati with oil	51.2	113.3	143.8	285.8	92.0	73.6	88.0	209.3	125.3	167.3	167.9	92.6
532	Donut-African	44.5	98.5	125.0	248.5	80.0	64.0	76.5	182.0	109.0	145.5	0.0	0.0
525	Maize and kidney bean dish	135.1	308.3	420.3	748.9	283.9	165.9	272.3	526.4	243.6	398.9	383.3	189.0
523	Maize and sorgum ugali (stiff porridge)	38.8	105.3	143.3	433.3	78.3	60.7	42.7	163.7	99.6	182.3	115.1	72.9
531	Maize porridge with margarine and sugar	4.0	21.3	178.5	450.9	114.0	91.5	110.0	260.0	156.0	207.5	208.5	115.0
505	Maize porridge without sugar and milk	7.4	39.8	100.9	181.9	151.2	30.0	28.4	108.0	56.9	122.8	179.2	62.9
506	Maize porridge with sugar	6.0	31.0	20.4	39.7	16.0	11.9	10.2	27.9	23.1	28.8	28.3	17.3
502	Maize porridge with sugar and egg	42.6	152.0	40.0	137.0	21.0	17.0	13.0	50.0	30.0	52.0	33.0	23.0
507	Maize porridge with sugar and milk	19.8	75.7	166.2	315.0	203.8	95.4	73.4	173.6	135.6	194.4	192.0	84.6
519	Maize ugali (stiff porridge)	19.0	95.2	100.7	327.2	138.6	70.5	50.1	135.9	106.3	132.7	311.8	82.8
508	Millet porridge with sugar	16.0	36.0	42.9	71.7	41.7	12.6	10.6	41.1	29.0	46.4	56.7	21.9
509	Mix flour porridge with sugar	13.0	39.3	578.0	1019.0	1123.0	365.0	142.0	501.0	424.0	656.0	836.0	366.0
514	Pancake	67.5	189.1	227.9	409.8	215.6	122.8	120.3	282.2	186.0	260.6	259.3	125.2
543	Rice biriyani	119.5	405.8	490.6	733.8	746.7	256	135.9	399.7	322.8	506.3	625	276.5
516	Rice boiled without oil	36.7	111.9	173.1	360.1	240.0	101.7	63.3	180.4	141.3	216.1	274.3	111.2
517	Rice boiled with oil	34.3	104.6	151.5	282.0	218.0	85.5	63.3	174.3	116.1	203.0	268.1	86.8

## A2 Cereal-based local dishes *continued*

Amino Acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
530	Rice bread	4.2	18.1	17.9	52.1	16.0	9.7	6.1	16.3	13.5	16.7	16.6	10.1
524	Rice bun	5.6	29.6	28.0	96.0	21.6	16.0	14.4	38.4	32.0	39.2	39.2	24.0
515	Rice and meat pillau	67.3	261.4	269.6	485.1	484.3	151.1	70.1	239.5	204.1	295.5	385.7	203.5
544	Rice and mung dish with coconut milk	54.9	180	192.8	366.3	227.1	89.5	78	243	151	259.7	423.7	121.5
545	Rice and mung dish without coconut milk	39.4	130.6	139.5	265.4	165.8	64.4	54	175.9	109.1	182.9	255.7	89
533	Rice porridge with coconut milk without sugar	14.5	48.0	51.0	107.3	54.6	24.8	25.8	66.3	42.7	77.5	192.2	31.9
528	Rice porridge with sugar	7.8	23.8	28.8	55.2	24.1	15.7	13.7	35.6	22.4	40.6	55.4	15.7
521	Rice ugali (stiff porridge)	32.0	97.6	101.8	133.1	123.1	33.7	45.3	94.2	124.2	125.8	281.0	53.2
518	Rice with coconut milk	49.0	151.0	165.0	307.0	153.0	75.0	80.0	202.0	118.0	215.0	279.0	94.0
540	Rice with ground meat	71.6	267.1	276.2	510.9	482.9	142.5	73.3	279.5	213.2	308.1	404.3	210.2
522	Sorgum and millet ugali (stiff porridge)	38.8	105.3	143.3	433.3	78.3	60.7	42.7	163.7	99.6	182.3	115.1	72.9
511	Sorgum porridge with sugar	11.0	35.0	29.0	100.0	23.0	17.0	15.0	40.0	33.0	41.0	41.0	25.0
527	Vermicelli - cooked	67.7	206.0	235.6	775.6	136.0	101.2	82.1	297.8	175.6	311.1	271.5	134.2
535	Vermicelli with coconut milk and sugar	57.0	173.0	199.0	686.0	103.0	84.5	66.0	251.0	147.5	258.0	163.5	113.0
536	Vermicell with oil and sugar	60.5	183.8	210.6	708.0	116.1	90.0	71.9	266.0	156.7	276.0	212.0	119.8
537	Vermicelli with coconut milk and salt	57.0	173.0	199.0	686.0	103.0	84.5	66.0	147.5	258.0	163.5	113.0	67.1
529	Wheat fritter, sweet	23.0	51.0	64.0	128.0	41.0	33.0	39.0	94.0	56.0	75.0	75.0	41.0
542	Wheat porridge	17.1	35.3	51.5	91.3	25.5	20.7	37.5	64.7	35.0	56.8	49.3	27.2



## **B1. Roots, Tubers and Bananas**

Foods such as potatoes, cassava, taro and banana

## B1 Roots, Tubers and Banana

	Macronutrients	ENERGY_KC Kcal	PROCNT g	A_PROTEI g	MFP_PROT g	FAT g	CHOCDF g
352	Banana, cooked	116.0	0.8	0.0	0.0	0.2	31.2
365	Breadfruit, raw	103.0	1.1	0.0	0.0	0.2	27.1
362	Cassava, dried	314.0	2.6	0.0	0.0	0.7	76.6
359	Cassava, dried, flour	314.0	2.6	0.0	0.0	0.7	76.6
358	Cassava, raw	160.0	1.4	0.0	0.0	0.3	38.1
364	Cassava, spicy crisps or chips	288.0	2.4	0.0	0.0	0.7	70.2
367	Edible starch, tapioca or corn	381.0	0.3	0.0	0.0	0.1	91.3
354	Potato, crisps, plain, salted	547.0	6.6	0.0	0.0	37.5	49.7
353	Potato, English, cooked	93.0	2.0	0.0	0.0	0.1	21.6
355	Potato, raw, with skin	58.0	2.6	0.0	0.0	0.1	12.4
357	Squash, fresh-AP	16.0	0.7	0.0	0.0	0.2	3.4
366	Squash, fresh-EP	20.0	0.9	0.0	0.0	0.3	4.3
360	Sweet potato, fresh-AP	74.0	1.2	0.0	0.0	0.1	17.5
361	Sweet potato, fresh-EP	103.0	1.7	0.0	0.0	0.1	24.3
369	Sweet potato, orange	103.0	1.7	0.0	0.0	0.1	24.3
356	Taro, raw	112.0	1.5	0.0	0.0	0.2	26.5
368	Yam, raw	97.0	2.1	0.0	0.0	0.1	22.9

## B1 Roots, Tubers and Banana

Macronutrients		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
352	Banana, cooked	0.1	0.0	0.1	0.0	2.3	3.3	0.0
365	Breadfruit, raw	0.0	0.0	0.1	0.0	4.9	11.0	0.0
362	Cassava, dried	0.2	0.2	0.2	0.0	3.6	2.2	130.0
359	Cassava, dried, flour	0.2	0.2	0.2	0.0	3.6	2.2	130.0
358	Cassava, raw	0.1	0.1	0.0	0.0	1.8	1.7	54.0
364	Cassava, spicy crisps or chips	0.2	0.2	0.2	0.0	3.3	2.0	119.0
367	Edible starch, tapioca or corn	0.0	0.0	0.0	0.0	0.9	0.0	0.0
354	Potato, crisps, plain, salted	11.0	9.8	12.2	0.0	4.4	0.4	147.0
353	Potato, English, cooked	0.0	0.0	0.0	0.0	1.5	0.2	81.0
355	Potato, raw, with skin	0.0	0.0	0.0	0.0	2.5	0.1	147.0
357	Squash, fresh-AP	0.1	0.0	0.1	0.0	1.1	0.2	0.0
366	Squash, fresh-EP	0.1	0.0	0.1	0.0	1.4	0.2	0.0
360	Sweet potato, fresh-AP	0.0	0.0	0.0	0.0	2.2	2.0	7.0
361	Sweet potato, fresh-EP	0.0	0.0	0.0	0.0	3.0	2.8	10.0
369	Sweet potato, orange	0.0	0.0	0.0	0.0	3.0	2.8	10
356	Taro, raw	0.0	0.0	0.1	0.0	4.1	0.4	78.0
368	Yam, raw	0.0	0.0	0.1	0.0	1.2	0.4	50

## B1 Roots, Tubers and Banana

Vitamins		VITA μg RE	A_VITA μg RE	VITD μg	VITE μg	VITC mg	THIA mg	RIBF mg	NIA mg	VITB6 mg	FOL μg	VITB12 μg	PANT mg
FOOD													
352	Banana, cooked	91.0	0.0	0.0	0.0	11.0	0.1	0.1	0.8	0.2	26.0	0.0	0.2
365	Breadfruit, raw	4.0	0.0	0.0	1.0	29.0	0.1	0.0	0.8	0.3	10.0	0.0	0.6
362	Cassava, dried	14.0	0.0	0.0	0.0	72.0	0.3	0.1	1.4	0.7	36.0	0.0	0.7
359	Cassava, dried, flour	14.0	0.0	0.0	0.0	72.0	0.3	0.1	1.4	0.7	36.0	0.0	0.7
358	Cassava, raw	1.0	0.0	0.0	0.2	20.6	0.1	0.0	0.9	0.1	27.0	0.0	0.1
364	Cassava, spicy crisps or chips	13.0	0.0	0.0	0.0	66.0	0.3	0.0	1.3	0.6	33.0	0.0	0.6
367	Edible starch, tapioca or corn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
353	Potato, crisps, plain, salted	0.0	0.0	0.0	0.0	13.0	0.1	0.0	1.4	0.3	9.0	0.0	0.6
354	Potato, English, cooked	0.0	0.0	0.0	6.7	18.6	0.1	0.2	4.2	0.7	75.0	0.0	4.3
355	Potato, raw, with skin	0.0	0.0	0.0	0.0	11.4	0.0	0.4	1.0	0.2	17.0	0.0	0.0
357	Squash, fresh-AP	23.0	0.0	0.0	0.0	5.0	0.0	0.0	0.4	0.1	16.0	0.0	0.1
366	Squash, fresh-EP	29.0	0.0	0.0	0.0	6.0	0.0	0.0	0.5	0.1	20.0	0.0	0.1
360	Sweet potato, fresh-AP	1056.0	0.0	0.0	4.0	18.0	0.1	0.1	0.4	0.2	17.0	0.0	0.5
361	Sweet potato, fresh-EP	1467.0	0.0	0.0	5.0	25.0	0.1	0.1	0.6	0.2	23.0	0.0	0.7
367	Sweet potato, orange	1467.0	0.0	0.0	5.0	25.0	0.1	0.1	0.6	0.2	23.0	0.0	0.7
356	Taro, raw	4.0	0.0	0.0	2.4	4.5	0.1	0.0	0.6	0.3	22.0	0.0	0.3
368	Yam, raw	0.0	0.0	0.0	5.0	12.0	0.10	0.03	0.6	0.23	16	0.0	0.31



## B1 Roots, Tubers and Banana

	Minerals	CA mg	P mg	MG mg	K mg	NA mg	FE mg	MFP_FE mg	ZN mg	CU mg	MN mg
352	Banana, cooked	2.0	28.0	32.0	465.0	5.0	0.6	0.0	0.1	0.1	0.2
365	Breadfruit, raw	17.0	30.0	25.0	490.0	2.0	0.5	0.0	0.1	0.1	0.1
362	Cassava, dried	46.0	168.0	24.0	583.0	5.0	1.9	0.0	0.7	0.1	0.3
359	Cassava, dried, flour	46.0	168.0	24.0	583.0	5.0	1.9	0.0	0.7	0.1	0.3
358	Cassava, raw	16.0	27.0	21.0	271.0	14.0	0.3	0.0	0.3	0.1	0.1
364	Cassava, spicy crisps or chips	42.0	154.0	22.0	535.0	4.0	1.8	0.0	0.7	0.1	0.2
367	Edible starch, tapioca or corn	2.0	13.0	3.0	3.0	9.0	0.5	0.0	0.1	0.1	0.1
354	Potato, crisps, plain, salted	19.0	93.0	34.0	732.0	216.0	0.8	0.0	0.4	0.1	0.2
353	Potato, English, cooked	5.0	50.0	25.0	391.0	5.0	0.4	0.0	0.3	0.2	0.2
355	Potato, raw, with skin	30.0	38.0	23.0	413.0	10.0	3.2	0.0	0.4	0.4	0.6
357	Squash, fresh-AP	22.0	31.0	19.0	154.0	1.0	0.3	0.0	0.3	0.1	0.2
366	Squash, fresh-EP	27.0	39.0	24.0	192.0	1.0	0.4	0.0	0.4	0.1	0.2
360	Sweet potato, fresh-AP	20.0	40.0	14.0	251.0	7.0	0.4	0.0	0.2	0.2	4.0
361	Sweet potato, fresh-EP	28.0	55.0	20.0	348.0	10.0	0.5	0.0	0.3	0.2	0.6
369	Sweet potato, orange	28.0	55.0	20.0	348.0	10.0	0.5	0.0	0.3	0.21	0.56
356	Taro, raw	43.0	84.0	33.0	591.0	11.0	0.1	0.0	0.2	0.2	0.4
368	Yam, raw	8.0	39.0	26.0	303.0	3.0	0.8	0.0	0.5	0.17	0.24

**B1 Roots, Tubers and Banana**

	Amino Acids	TRP mg	THR mg	ILE mg	LEU mg	LYS mg	MET mg	CYS mg	PHE mg	TYR mg	VAL mg	ARG mg	HIS mg
	<b>FOOD</b>												
352	Banana, cooked	116.0	0.8	0.0	0.0	0.2	31.2	0.1	0.0	0.1	0.0	2.3	3.3
365	Breadfruit, raw	107.0	1.7	0.0	0.0	0.5	25.5	0.1	0.0	0.1	0.0	1.5	3.1
362	Cassava, dried	314.0	2.6	0.0	0.0	0.7	76.6	0.2	0.2	0.2	0.0	3.6	2.2
359	Cassava, dried, flour	314.0	2.6	0.0	0.0	0.7	76.6	0.2	0.2	0.2	0.0	3.6	2.2
358	Cassava, raw	131.0	0.0	1.1	0.0	0.0	0.3	31.9	0.1	0.1	0.1	0.0	1.5
364	Cassava, spicy crisps or chips	288.0	2.4	0.0	0.0	0.7	70.2	0.2	0.2	0.2	0.0	3.3	2.0
367	Edible starch, tapioca or corn	1.0	9.0	10.0	36.0	6.0	6.0	6.0	13.0	10.0	14.0	12.0	8.0
354	Potato, crisps, plain, salted	245.0	574.0	642.0	951.0	962.0	250.0	202.0	702.0	588.0	890.0	729.0	347.0
353	Potato, English, cooked	93.0	2.0	0.0	0.0	0.1	21.6	0.0	0.0	0.0	0.0	1.5	0.2
355	Potato, raw, with skin	30.0	71.0	80.0	118.0	119.0	31.0	25.0	87.0	73.0	110.0	90.0	43.0
357	Squash, fresh-AP	6.0	18.0	26.0	42.0	40.0	10.0	8.0	26.0	19.0	33.0	30.0	16.0
366	Squash, fresh-EP	8.0	22.0	33.0	53.0	50.0	13.0	10.0	32.0	24.0	41.0	38.0	20.0
360	Sweet potato, fresh-AP	74.0	1.2	0.0	0.0	0.1	17.5	0.0	0.0	0.0	0.0	2.2	2.0
361	Sweet potato, fresh-EP	103.0	1.7	0.0	0.0	0.1	24.3	0.0	0.0	0.0	0.0	3.0	2.8
369	Sweet potato, orange	21.0	86.0	86.0	126.0	85.0	42.0	14.0	103.0	71.0	112.0	80.0	32.0
356	Taro, raw	23.0	69.0	54.0	111.0	67.0	20.0	32.0	82.0	55.0	82.0	103.0	34.0
368	Yam, raw	12.0	52.0	50.0	94.0	58.0	20.0	18.0	69.0	39.0	60.0	124.0	33.0

## **B2 Root, Tuber and Banana-based local dishes**

All cooked dishes prepared with roots, tubers and bananas for example potato chips, cassava with coconut, banana with meat and so on

## B2 Roots, Tubers and Banana-based local dishes

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
974	Banana porridge, plain	105.3	0.6	0.0	0.0	3.2	21.3
975	Banana porridge with meat	280.5	7.0	6.0	5.6	16.0	29.5
976	Banana porridge with fish	118.7	2.5	1.1	1.1	5.9	15.8
977	Banana porridge with meat and spinach	212.0	8.6	7.8	7.8	13.3	16.5
954	Banana with cashew nut	108.0	2.0	0.0	0.0	2.8	22.2
955	Banana with coconut milk	191.2	1.5	0.0	0.0	10.7	26.1
968	Banana with kidney beans	93.4	3.0	0.0	0.0	1.2	19.5
953	Banana with meat	77.4	2.7	2.5	2.4	3.6	9.4
952	Banana with meat and coconut milk	130.3	1.5	0.6	0.6	2.4	2.9
973	Banana with meat, oil and vegetable	121.8	4.0	3.3	3.3	8.0	9.8
951	Banana with oil (no meat)	112.0	0.7	0.0	0.0	2.7	24.0
969	Banana, boiled	110.0	0.7	0.0	0.0	0.2	29.6
964	Banana, fried	159.1	0.8	0.0	0.0	5.2	31.2
971	Banana, roast	116.0	0.0	0.8	0.0	0.0	0.2
541	Cassava porridge with sugar	85.8	0.4	0.0	0.0	0.1	21.5
526	Cassava stiff porridge	140.0	2.7	0.0	0.0	1.2	30.7
956	Cassava with coconut milk	216.3	1.9	0.0	0.0	11.9	12.9

## B2 Roots, Tubers and Banana-based local dishes

	Macronutrients	FASAT g	FAMS g	FAPU g	CHOLE mg	FIB g	SUCS g	PHYTAC mg
974	Banana porridge, plain	2.7	0.2	0.1	0.0	1.6	2.2	0.3
975	Banana porridge with meat	98.9	96.5	96.4	96.3	98.1	98.7	190.6
976	Banana porridge with fish	4.9	0.4	0.2	2.8	2.1	2.2	5.4
977	Banana porridge with meat and spinach	8.5	3.5	0.4	25.6	1.6	1.8	0.3
954	Banana with cashewnut	0.3	1.7	0.6	0.0	2.1	2.5	1.8
955	Banana with coconut milk	9.4	0.5	0.2	0.0	4.4	2.1	14.6
968	Banana with kidney beans	0.9	0.1	0.2	0.0	3.2	1.6	64.9
953	Banana with meat	2.3	1.1	0.1	8.0	0.7	1.0	0.0
952	Banana with meat and coconut milk	1.8	0.4	0.1	2.2	2.5	2.9	0.0
973	Banana with meat, oil, vegetables	5.9	1.4	0.2	10.5	1.7	0.9	0.0
951	Banana with oil (no meat)	2.3	0.2	0.2	0.0	1.9	2.5	129.1
969	Banana, boiled	0.1	0.0	0.1	0.0	2.2	3.1	121.8
964	Banana, fried	4.4	0.3	0.2	0.0	2.3	3.3	0.0
971	Banana, roast	31.2	0.1	0.0	0.1	0.0	2.3	40.4
541	Cassava porridge with sugar	0.0	0.0	0.0	0.0	0.5	10.0	85.6
526	Cassava stiff porridge	0.2	0.3	0.5	0.0	2.6	0.3	253
956	Cassava with coconut milk	10.3	0.5	0.2	0.0	5.5	2.6	151.1

## B2 Roots, Tubers and Banana-based local dishes *continued*

Macronutrients		ENERGY_KC Kcal	PROCNT g	A_PROTEI g	MFP_PROT g	FAT g	CHOCDF g
965	Cassava, boiled	131.0	1.1	0.0	0.0	0.3	31.9
957	Cassava, fried	346.5	1.1	0.0	0.0	25.2	10.5
978	Kachori (spicy potato balls)	237.6	6.1	0.0	0.0	11.4	28.8
960	Potato chips, fried	249.0	1.7	0.0	0.0	20.1	18.0
959	Potato relish with beef	128.8	2.8	1.0	1.0	5.8	17.1
972	Potato relish with coconut milk	388.0	4.7	0.0	0.0	28.0	34.2
958	Potato relish with oil	75.0	1.3	0.0	0.0	1.7	14.2
961	Potato, boiled	93.0	2.0	0.0	0.0	0.1	21.6
963	Roots and tubers mixed	93.5	0.8	0.0	0.0	0.2	23.2
967	Sweet potato, boiled	97.0	2.1	0.0	0.0	0.1	22.9
966	Sweet potato, fried	146.1	1.7	0.0	0.0	5.1	24.3
970	Taro, cooked, without salt	142.0	0.5	0.0	0.0	0.1	34.6

## B2 Roots, Tubers and Banana-based local dishes *continued*

Macronutrients	FASAT g	FAMS g	FAPU g	CHOLE mg	FIB g	SUCS g	PHYTAC mg
965 Cassava, boiled	0.1	0.1	0.1	0.0	1.5	0.9	54
957 Cassava, fried	21.6	1.5	0.6	0.0	3.3	3.6	54
978 Kachori (spicy potato balls)	8.8	0.9	0.8	0.0	3.4	2.4	248.4
960 Potato chips, fried	17.3	1.2	0.4	0.0	1.2	0.2	67.5
959 Potato relish with beef	4.9	0.6	0.1	3.2	2.1	0.2	17.5
972 Potato relish with coconut milk	24.7	0.1	0.3	0.0	9.0	0.3	81.0
958 Potato relish with oil	0.0	0.1	0.0	0.0	1.0	0.1	391.5
961 Potato, boiled	0.0	0.0	0.0	0.0	1.5	0.2	52.6
963 Roots and tubers mixed	0.1	0.0	0.0	0.0	1.7	1.5	93.8
967 Sweet potato, boiled	0.0	0.0	0.1	0.0	1.2	0.4	50.0
966 Sweet potato, fried	4.3	0.3	0.1	0.0	3.0	2.8	10.0
970 Taro, cooked, without salt	0.0	0.0	0.0	0.0	5.1	0.5	78.0

## B2 Roots, Tubers and Banana-based local dishes

Vitamins		VITA	A_VITA	VITD	VITE	VITC	THIA	RIBF	NIA	VIT B6	FOL	VIT B12	PANT
		µg RE	µg RE	µg	µg	mg	mg	mg	mg	mg	µg	µg	mg
974	Banana porridge, plain	65.6	0.0	0.0	0.0	8.5	0.0	0.0	0.6	0.2	18.5	0.0	0.2
975	Banana porridge with meat	104.7	44.0	0.0	0.1	16.1	0.0	0.0	1.5	0.3	22.3	0.4	0.3
976	Banana porridge with fish	1125.6	0.0	0.0	0.1	9.9	0.1	0.1	0.8	0.2	26.1	0.0	0.2
977	Banana porridge with meat and spinach	220.7	0.0	0.0	0.2	6.8	0.1	0.1	1.5	0.3	33.7	0.6	0.3
954	Banana with cashew nut	30.0	0.0	0.0	0.1	9.0	0.0	0.0	0.5	0.1	11.4	0.2	0.1
955	Banana with coconut milk	84.3	0.0	0.0	0.0	10.7	0.1	0.1	0.8	0.2	25.3	0.0	0.2
968	Banana with kidney beans	69.8	0.0	0.0	0.6	9.1	0.1	0.1	0.7	0.2	21.2	0.0	0.2
953	Banana with meat	86.0	0.0	0.0	0.0	10.4	0.1	0.1	0.8	0.2	24.7	0.0	0.2
952	Banana with meat and coconut milk	91.0	0.0	0.0	0.1	11.0	0.1	0.1	0.8	0.2	26.0	0.0	0.2
973	Banana with meat, oil and vegetable	91.0	0.0	0.0	0.0	11.0	0.1	0.1	0.8	0.2	26.0	0.0	0.2
951	Banana with oil (no meat)	62.7	0.0	0.0	1.2	7.9	0.1	0.1	0.7	0.2	21.0	0.0	0.2
969	Banana, boiled	62.5	0.0	0.0	0.4	3.6	0.1	0.0	0.7	0.1	26.9	0.0	0.2
964	Banana, fried	91.0	0.0	0.0	0.1	11.0	0.1	0.1	0.8	0.2	26.0	0.0	0.2
971	Banana, roast	27.3	0.0	0.0	0.2	8.5	0.0	0.0	0.7	0.1	12.2	0.3	0.2
541	Cassava porridge with sugar	4.3	0.0	0.0	0.2	18.1	0.1	0.0	0.5	0.2	14.5	0.0	0.2
526	Cassava stiff porridge	1.4	0.0	0.0	0.3	7.2	0.1	0.1	1.2	0.2	11.1	0.0	0.2
956	Cassava with coconut milk	4.3	0.0	0.0	0.0	22.6	0.1	0.0	0.7	0.2	20.0	0.0	0.3



## B2 Roots, Tubers and Banana-based local dishes *continued*

Vitamins		VITA	A_VITA	VITD	VITE	VITC	THIA	RIBF	NIA	VITB6	FOL	VITB12	PANT
		µg RE	µg RE	µg	µg	mg	mg	mg	mg	mg	µg	µg	mg
965	Cassava, boiled	6.0	0.0	0.0	0.0	30.0	0.1	0.0	0.6	0.3	15.0	0.0	0.3
957	Cassava, fried	6.0	0.0	0.0	0.3	30.0	0.1	0.0	0.6	0.3	15.0	0.0	0.3
978	Kachori (spicy potato balls)	0.4	0.0	0.0	0.3	11	0.2	0.0	1.4	0.4	4.6	0.0	0.6
960	Potato chips, fried	0.0	0.0	0.0	0.2	10.8	0.1	0.0	1.2	0.2	7.5	0.0	0.5
959	Potato relish with beef	50.4	0.0	0.0	0.3	28.2	0.1	0.0	0.4	0.2	19.0	0.0	0.2
972	Potato relish with coconut milk	0.0	0.0	0.0	0.0	13.0	0.1	0.0	1.4	0.3	9.0	0.0	0.6
958	Potato relish with oil	0.0	0.0	0.0	1.0	13.8	0.2	0.0	1.7	0.1	33.5	0.0	0.8
961	Potato, boiled	5.6	0.0	0.0	0.0	9.6	0.2	0.0	0.9	0.2	6.7	0.0	0.4
963	Roots and tubers mixed	4.5	0.0	0.0	0.1	10.5	0.1	0.0	1.2	0.2	10.8	0.1	0.5
967	Sweet potato, boiled	0.0	0.0	0.0	5.0	12.0	0.1	0.0	0.6	0.2	16.0	0.0	0.3
966	Sweet potato, fried	1467.0	0.0	0.0	5.1	25.0	0.1	0.1	0.6	0.2	23.0	0.0	0.2
970	Taro, cooked, without salt	4.0	0.0	0.0	2.4	5.0	0.1	0.5	1.5	0.3	19.0	0.0	0.3

## B2 Roots, Tubers and Banana-based local dishes

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
974	Banana porridge, plain	2.2	20.8	22.2	326.1	68.5	0.4	0.0	0.1	0.1	0.1
975	Banana porridge with meat	6.1	74.4	30.7	455.1	50.0	1.0	0.3	1.0	0.1	0.2
976	Banana porridge with fish	10.6	96.6	41.5	588.1	123.7	1.5	0.4	1.3	0.2	0.5
977	Banana porridge with meat and spinach	20.5	82.8	34.6	405.5	127.1	1.3	0.5	1.4	0.1	0.2
954	Banana with cashewnut	15.1	45.9	36.7	355.6	4.1	0.6	0.0	0.2	0.1	0.2
955	Banana with coconut milk	6.7	62.7	34.3	149.9	2.3	0.2	0.0	0.1	0.0	0.1
968	Banana with kidney beans	15.1	55.7	27.2	324.2	434.7	1.1	0.0	0.4	0.1	0.2
953	Banana with meat	1.6	226.0	11.4	168.9	118.8	0.3	0.1	0.3	0.0	0.1
952	Banana with meat and coconut milk	3.0	36.1	31.0	449.8	7.0	0.7	0.0	0.2	0.1	0.2
973	Banana with meat, oil and vegetable	2.5	24.2	25.3	374.6	4.7	0.5	0.0	0.1	0.1	0.1
951	Banana with oil (no meat)	3.8	48.6	15.7	216.7	104.4	0.7	0.2	0.7	0.1	0.2
969	Banana, boiled	2.0	28.0	32.0	465.0	5.0	0.6	0.0	0.1	0.1	0.2
964	Banana, fried	2.0	28.0	32.0	465.0	5.0	0.6	0.0	0.1	0.1	0.2
971	Banana, roast	2.0	28.0	32.0	465.0	5.0	0.6	0.0	0.1	0.1	0.2
541	Cassava porridge with sugar	7.0	25.4	3.6	87.7	0.9	0.3	0.0	0.1	0.0	0.0
526	Cassava stiff porridge	6.4	89.1	40.5	144.4	11.0	1.2	0.0	0.6	0.1	0.2
956	Cassava with coconut milk	18.2	89.3	18.8	297.2	8.4	1.4	0.0	0.6	0.2	0.6

## B2 Roots, Tubers and Banana-based local dishes *continued*

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
965	Cassava, boiled	19.0	70.0	10.0	243.0	2.0	0.8	0.0	0.3	0.1	0.1
957	Cassava, fried	19.0	70.0	10.0	243.0	2.0	0.8	0.0	0.3	0.1	0.1
978	Kachori (spicy potato balls)	39.7	148.8	50.4	492.7	86	2.2	0.0	1.2	0.4	0.8
960	Potato chips, fried	4.2	41.7	20.8	325.8	4.2	0.3	0.0	0.2	0.2	0.2
959	Potato relish with beef	15.0	75.0	35.0	574.0	11.0	0.8	0.0	0.4	0.3	0.3
972	Potato relish with coconut milk	16.7	144.0	51.7	687.7	21.7	2.4	0.0	1.2	0.6	1.4
958	Potato relish with oil	3.5	3.4	16.8	266.5	3.8	0.2	0.0	0.2	0.1	0.1
961	Potato, boiled	5.0	50.0	25.0	391.0	5.0	0.4	0.0	0.3	0.2	0.2
963	Roots and tubers mixed	13.1	27.6	10.0	202.8	4.0	0.4	0.0	0.2	0.0	0.1
967	Sweet potato, boiled	8.0	39.0	26.0	303.0	3.0	0.8	0.0	0.5	0.2	0.2
966	Sweet potato, fried	28.0	55.0	20.0	348.0	10.0	0.5	0.0	0.3	0.2	0.6
970	Taro, cooked, without salt	18.0	76.0	30.0	484.0	15.0	0.7	0.0	0.3	0.2	0.4

## B2 Roots, Tubers and Banana-based local dishes

Amino Acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
974	Banana porridge, plain	6.8	15.9	16.8	26.8	27.8	7.3	9.1	20.0	14.9	20.6	49.0	27.2
975	Banana porridge with meat	144.3	237.4	244.6	426.5	444.5	158.5	62.9	214.3	184	266.9	361.1	185.5
976	Banana porridge with fish	24.5	95.1	97.9	164.1	176.7	51.7	25.0	91.5	68.2	111.5	176.8	68.1
977	Banana porridge with meat, spinach	97.5	368.2	381.9	664.2	691.0	211.5	98.2	335.9	286.8	415.8	548.2	295.3
954	Banana with cashewnut	24.4	52.0	1358.0	1970.9	2210.6	719.3	362.1	1053.3	876.1	1313.4	1717.9	797.6
955	Banana with coconut milk	21.2	60.9	35.5	110.8	115.6	32.9	36.7	90.2	57.2	105.6	295.6	46.9
968	Banana with kidney beans	35.2	119.9	128.1	222.9	194.7	43.2	33.8	151.4	81.5	149.3	191.7	88.4
953	Banana with meat	30.9	115.0	118.3	206.5	216.7	66.0	32.3	105.3	89.3	129.4	177.8	96.3
952	Banana with meat and coconut milk	17.1	51.7	54.0	92.5	91.7	27.5	21.2	56.5	43.7	64.5	125.0	59.6
973	Banana with meat, oil and vegetable	45.5	168.6	174.7	306.9	309.1	96.5	50.2	160.3	131.7	197.0	300.3	135.0
951	Banana with oil (no meat)	7.8	18.6	21.8	34.4	19.2	5.7	3.6	18.7	12.9	21.8	21.8	9.7
969	Banana, boiled	8.5	20.0	20.9	34.2	35.1	9.5	11.4	25.6	19.0	26.6	62.7	37.0
964	Banana, fried	9.0	21.0	22.0	36.0	37.0	10.0	12.0	27.0	20.0	28.0	66.0	39.0
971	Banana, roast	9.0	21.0	22.0	36.0	37.0	10.0	12.0	27.0	20.0	28.0	66.0	39.0
541	Cassava porridge with sugar	5.4	8.3	8.0	11.6	12.9	3.3	8.3	7.5	5.1	10.1	39.9	5.7
526	Cassava stiff porridge	20.7	97.0	92.6	306.5	77.0	53.2	49.3	124.7	102.4	130.0	148.1	78.2
956	Cassava with coconut milk	24.7	58.2	60.9	108.7	76.7	28.5	16.4	15.0	10.0	19.9	79.0	11.4

## B2 Roots, Tubers and Banana-based local dishes *continued*

Amino Acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
965	Cassava, boiled	15.0	23.0	22.0	32.0	36.0	9.0	23.0	21.0	14.0	28.0	111.0	16.0
957	Cassava, fried	15.0	23.0	22.0	32.0	36.0	9.0	23.0	21.0	14.0	28.0	111.0	16.0
978	Kachori (spicy potato balls)	126	216	248.8	411.1	387.1	92.5	78.1	308.8	143.3	245.1	552.3	159.3
960	Potato chips, fried	25.0	59.2	411.6	645.0	542.4	235.2	175.2	400.8	307.8	460.2	453.0	178.8
959	Potato relish with beef	37.1	107.6	116.8	190.2	183.6	54.2	37.1	120.1	96.6	149.5	194.3	73.2
972	Potato relish with coconut milk	62.5	172.0	26.8	43.0	410.2	11.6	23.0	28.7	18.5	36.7	127.0	18.2
958	Potato relish with oil	19.7	47.2	131.3	229.5	129.8	38.3	24.0	126.0	87.0	147.0	147.0	65.3
961	Potato, boiled	30.0	71.0	80.0	118.0	119.0	31.0	25.0	87.0	73.0	110.0	90.0	43.0
963	Roots and tubers mixed	8.2	13.1	12.1	19.3	23.2	4.7	10.4	12.7	8.4	15.3	47.1	11.4
967	Sweet potato, boiled	12.0	52.0	50.0	94.0	58.0	20.0	18.0	69.0	39.0	60.0	124.0	33.0
966	Sweet potato, fried	21.0	86.0	86.0	126.0	85.0	42.0	14.0	103.0	71.0	112.0	80.0	32.0
970	Taro, cooked, without salt	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



## **C1. Pulses Seeds, Nuts**

Foods in this group include mature and immature legumes, pulses and foods referred to as nuts and seeds for example, kidney beans, pigeon peas, ground nuts, pumpkin seeds, sesame seeds and so on.

**Nutrients value per 100g**

## C1 Pulses, nuts and seeds

<b>Macronutrients</b>		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
179	Almonds	578.0	21.2	0.0	0.0	50.6	19.7
151	Bambara groundnut, fresh	141.0	12.4	0.0	0.0	6.4	11.1
154	Bean, kidney, green, cooked	166.0	11.4	0.0	0.0	0.7	29.9
155	Bean, mung, dry	116.0	7.7	0.0	0.0	0.5	20.8
156	Bean, mung, raw	306.0	20.3	0.0	0.0	1.3	54.9
153	Beans, kidney, mature, boiled without salt	127.0	8.7	0.0	0.0	0.5	22.8
170	Beans, kidney, mature seeds, raw	333.0	23.6	0.0	0.0	0.8	60.0
157	Cashewnut	589.0	20.0	0.0	0.0	52.2	20.4
158	Chickpea	164.0	8.9	0.0	0.0	2.6	27.4
159	Chickpea flour (besan)	387.0	22.4	0.0	0.0	6.7	57.8
162	Cowpea, green, uncooked	116.0	7.7	0.0	0.0	0.5	20.8
163	Cowpea, uncooked	336.0	23.5	0.0	0.0	1.3	60.0
173	Hyacinth beans (dried)	306.0	20.3	0.0	0.0	1.3	54.9
174	Hyacinth-beans, immature, raw	46.0	2.1	0.0	0.0	0.2	9.2
176	Hyacinth-beans, immature, boiled without salt	50.0	3.0	0.0	0.0	0.3	9.2



<b>Macronutrients</b>		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
179	Almonds	3.9	32.1	12.2	0.0	11.8	4.8	2580.0
151	Bambara groundnut, fresh	0.7	1.2	3.0	0.0	4.2	0.5	270.0
154	Bean, kidney, green, cooked	0.1	0.0	0.4	0.0	8.4	1.3	808.0
155	Bean, mung, dry	0.1	0.0	0.2	0.0	6.5	1.4	358.0
156	Bean, mung, raw	0.3	0.0	0.5	0.0	17.2	3.7	945.0
153	Beans, kidney, mature, boiled without salt	0.1	0.0	0.3	0.0	6.4	0.3	617.0
170	Beans, kidney, mature seeds, raw	0.1	0.1	0.5	0.0	24.9	2.2	1586.0
157	Cashewnut	4.9	33.9	11.0	0.0	10.9	5.0	2580.0
158	Chickpea	0.3	0.6	1.2	0.0	7.5	1.4	293.0
159	Chickpea flour (besan)	0.7	1.5	3.0	0.0	10.8	10.9	938.0
162	Cowpea, green, uncooked	0.1	0.0	0.2	0.0	6.5	1.4	358.0
163	Cowpea, uncooked	0.3	0.1	0.5	0.0	10.6	6.9	945.0
173	Hyacinth beans (dried)	0.3	0.0	0.5	0.0	17.2	3.7	945.0
174	Hyacinth-beans, immature, raw	0.1	0.1	0.0	0.0	7.8	3.4	20.0
176	Hyacinth-beans, immature, boiled without salt	0.1	0.1	0.0	0.0	3.9	3.4	20.0

**C1 Pulses, nuts and seeds** *continued*

	Macronutrients	ENERGY_KC Kcal	PROCNT g	A_PROTEI g	MFP_PROT g	FAT g	CHOCDF g
177	Lentil, cooked	116.0	9.0	0.0	0.0	0.4	20.1
180	Lentil, whole	311.0	24.1	0.0	0.0	1.1	53.9
175	Palm seed	203.0	0.6	0.0	0.0	20.2	6.7
164	Groundnuts	567.0	25.8	0.0	0.0	49.2	16.1
178	Peanut butter, smooth	520.0	25.9	0.0	0.0	34.0	35.7
165	Pigeon peas, cooked	121.0	6.7	0.0	0.0	0.4	19.7
166	Pigeon peas, green	148.0	9.5	0.0	0.0	0.4	27.5
171	Pigeon peas, raw	343.0	21.7	0.0	0.0	1.5	62.8
172	Pumpkin seed	435.0	19.5	0.0	0.0	40.6	7.0
167	Sesame seed	573.0	17.7	0.0	0.0	49.7	23.5
168	Soybean, yellow	415.0	36.5	0.0	0.0	20.0	30.3
169	Sunflower seed	588.0	26.4	0.0	0.0	54.8	9.4

<b>Macronutrients continued</b>		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
177	Lentil, cooked	0.1	0.1	0.2	0.0	7.9	0.7	358
180	Lentil, whole	0.3	0.3	0.5	0.0	21.2	1.9	959
175	Palm seed	16.3	2.4	0.3	0.0	1.7	2.1	8.0
164	Groundnuts	6.8	24.4	15.6	0.0	8.5	3.8	1760.0
178	Peanut butter, smooth	7.4	16.2	10.3	0.0	5.2	7.8	1600.0
165	Pigeon peas, cooked	0.1	0.0	0.2	0.0	5.4	0.7	398.0
166	Pigeon peas, green	0.0	0.0	0.2	0.0	9.7	8.4	49.0
171	Pigeon peas, raw	0.3	0.0	0.8	0.0	15.0	2.0	1154.0
172	Pumpkin seed	5.7	15.3	17.8	0.0	7.5	0.5	3818.0
167	Sesame seed	7.0	18.8	21.8	0.0	16.9	0.7	4710.0
168	Soybean, yellow	3.0	4.5	11.3	0.0	9.3	4.3	1473.0
169	Sunflower seed	7.7	20.7	24.0	0.0	10.1	0.7	5160.0

## C1 Pulses, Nuts and Seeds

Vitamins		VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VITB6 mg	FOL µg	VITB12 µg	PANT mg
179	Almonds	0.0	0.0	0.0	24.0	0.0	0.21	0.78	3.4	0.11	59.0	0.0	0.5
151	Bambara groundnut, fresh	16.0	0.0	0.0	2.0	17.0	0.3	0.2	1.3	0.1	111.0	0.0	0.1
154	Bean, kidney, green, cooked	0.0	0.0	0.0	0.0	1.0	0.2	0.1	0.8	0.2	170.0	0.0	0.3
155	Bean, mung, dry	2.0	0.0	0.0	0.0	0.0	0.2	0.1	0.5	0.1	208.0	0.0	0.4
156	Bean, mung, raw	5.0	0.0	0.0	0.0	0.0	0.5	0.2	1.3	0.3	549.0	0.0	1.1
153	Beans, kidney, mature, bolde without salt	0.0	0.0	0.0	0.0	1.2	0.2	0.1	0.6	0.1	130.0	0.0	0.2
170	Beans, kidney, mature seeds, raw	0.0	0.0	0.0	0.2	4.5	0.5	0.2	2.1	0.4	394.0	0.0	0.8
157	Cashewnut	0.0	0.0	0.0	24.0	1.0	0.2	0.8	3.4	0.1	59.0	0.0	0.5
158	Chickpea	3.0	0.0	0.0	0.0	1.0	0.1	0.1	0.5	0.1	172.0	0.0	0.3
159	Chickpea flour (besan)	2.0	0.0	0.0	0.8	0.0	0.5	0.1	1.8	0.5	437.0	0.0	0.6
162	Cowpea, green, uncooked	1.0	0.0	0.0	0.3	0.4	0.2	0.1	0.5	0.1	208.0	0.0	0.4
163	Cowpea, uncooked	5.0	0.0	0.0	0.0	0.0	0.5	0.2	1.3	0.3	549.0	0.0	1.1
173	Hyacinth beans (dried)	5.0	0.0	0.0	0.0	0.0	0.5	0.2	1.3	0.3	549.0	0.0	1.1
174	Hyacinth-beans, immature, raw	7.0	0.0	0.0	0.0	5.1	0.1	0.1	0.5	0.0	47.0	0.0	0.1
176	Hyacinth-beans, immature, boiled without salt	5.0	0.0	0.0	0.0	12.9	0.1	0.1	0.5	0.0	62.0	0.0	0.1

**C1 Pulses, Nuts and Seeds continued**

Vitamins	VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VITB6 mg	FOL µg	VITB12 µg	PANT mg
177 Lentil, cooked	3.0	0.0	0.0	0.0	5.0	0.5	0.2	2.9	0.5	485.0	0.0	1.7
180 Lentil, whole	0.0	0.0	0.0	5.0	12.0	0.1	0.0	0.6	0.2	16.0	0.0	0.3
175 Palm seed	1002.0	0.0	0.0	0.0	4.0	0.0	0.0	0.1	0.1	9.0	0.0	0.1
164 Groundnuts	0.0	0.0	0.0	9.0	0.0	0.3	0.1	14.3	0.3	126.0	0.0	1.4
178 Peanut butter, smooth	0.0	0.0	0.0	6.7	0.0	0.3	0.1	14.6	0.3	60.0	0.0	0.0
165 Pigeon peas, cooked	2.0	0.0	0.0	0.0	0.0	0.1	0.1	0.7	0.0	111.0	0.0	0.3
166 Pigeon peas, green	106.0	0.0	0.0	0.0	25.0	0.5	0.3	3.5	0.4	111.0	0.0	0.3
171 Pigeon peas, raw	1.0	0.0	0.0	0.0	0.0	0.6	0.2	3.0	0.3	456.0	0.0	1.3
172 Pumpkin seed	5.0	0.0	0.0	1.0	0.0	0.5	0.1	3.5	0.1	71.0	0.0	0.5
167 Sesame seed	1.0	0.0	0.0	2.0	0.0	0.8	0.3	4.5	0.8	97.0	0.0	0.1
168 Soybean, yellow	3.0	0.0	0.0	3.0	3.0	0.4	0.7	1.0	0.2	133.0	0.0	0.4
169 Sunflower seed	7.0	0.0	0.0	2.0	0.0	0.7	0.1	4.7	0.2	96.0	0.0	0.7

## C1 Pulses, Nuts and Seeds

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
179	Almonds	248.0	4.7	275.0	7.3	1.0	4.3	0.0	3.4	1.1	2.5
151	Bambara groundnut, fresh	145.0	158.0	60.0	539.0	14.0	2.5	0.0	0.9	0.1	0.5
154	Bean, kidney, green, cooked	37.0	186.0	59.0	528.0	3.0	3.8	0.0	1.4	0.3	0.6
155	Bean, mung, dry	24.0	156.0	53.0	278.0	4.0	2.5	0.0	1.3	0.3	0.5
156	Bean, mung, raw	63.0	412.0	140.0	734.0	11.0	6.6	0.0	3.4	0.7	1.3
153	Beans, kidney, mature, boiled without salt	28.0	142.0	45.0	403.0	2.0	2.9	0.0	1.1	0.2	0.5
170	Beans, kidney, mature seeds, raw	72.0	365.0	116.0	1036.0	5.0	7.5	0.0	2.8	0.6	1.2
157	Cashewnut	266.0	520.0	296.0	732.0	11.0	3.7	0.0	2.9	0.9	2.3
158	Chickpea	49.0	168.0	48.0	291.0	7.0	2.9	0.0	1.5	0.4	1.0
159	Chickpea flour (besan)	157.0	538.0	154.0	931.0	22.0	9.3	0.0	4.8	1.1	3.3
162	Cowpea, green, uncooked	24.0	156.0	53.0	278.0	4.0	2.5	0.0	1.3	0.3	0.5
163	Cowpea, uncooked	63.0	412.0	140.0	734.0	11.0	6.6	0.0	3.4	0.7	1.3
173	Hyacinth beans (dried)	50.0	412.0	140.0	734.0	11.0	6.6	0.0	3.4	0.7	1.3
174	Hyacinth-beans, immature, raw	50.0	49.0	40.0	252.0	2.0	0.7	0.0	0.4	0.0	0.2
176	Hyacinth-beans, immature, boiled without salt	41.0	49.0	42.0	262.0	2.0	0.8	0.0	0.4	0.0	0.2

**C1 Pulses, Nuts and Seeds *continued***

Minerals	CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
177 Lentil, cooked	51.0	482.0	96.0	989.0	5.0	8.8	0.0	3.5	0.67	1.31
180 Lentil, whole	8.0	39.0	26.0	303.0	3.0	0.8	0.0	0.5	0.17	0.24
175 Palm seed	3.0	14.0	12.0	61.0	0.0	0.2	0.0	0.1	0.1	0.2
164 Groundnuts	92.0	376.0	168.0	705.0	18.0	4.6	0.0	3.3	1.1	1.9
178 Peanut butter, smooth	35.0	369.0	170.0	669.0	540.0	1.9	0.0	2.8	0.6	0.1
165 Pigeon peas, cooked	36.0	125.0	43.0	268.0	5.0	1.5	0.0	1.0	0.3	0.4
166 Pigeon peas, green	48.0	206.0	69.0	477.0	5.0	2.6	0.0	2.1	0.3	0.9
171 Pigeon peas, raw	104.0	363.0	125.0	777.0	15.0	4.4	0.0	2.9	0.8	1.2
172 Pumpkin seed	97.0	574.0	257.0	301.0	30.0	5.8	0.0	7.6	1.1	1.1
167 Sesame seed	975.0	629.0	351.0	468.0	11.0	14.6	0.0	7.8	4.1	2.5
168 Soybean, yellow	278.0	705.0	280.0	1798.0	3.0	15.8	0.0	5.0	1.7	2.5
169 Sunflower seed	131.0	776.0	347.0	407.0	40.0	7.8	0.0	10.3	1.5	1.4

## C1 Pulses, Nuts and Seeds

Amino Acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
179 Almonds		358	739	866	1552	666	227	358	1113	705	1028	2495	558
151 Bambara groundnut, fresh		150.0	492.0	543.0	883.0	739.0	150.0	113.0	559.0	443.0	549.0	994.0	332.0
154 Bean, kidney, green, cooked		135.0	478.0	502.0	908.0	779.0	170.0	123.0	614.0	320.0	595.0	703.0	317.0
155 Bean, mung, dry		95.0	294.0	314.0	592.0	523.0	110.0	85.0	451.0	250.0	368.0	535.0	240.0
156 Bean, mung, raw		251.0	776.0	829.0	1563.0	1381.0	290.0	224.0	1191.0	660.0	972.0	1412.0	634.0
153 Beans, kidney, mature, boiled without salt		140.0	319.0	41.0	736.0	607.0	113.0	81.0	511.0	205.0	500.0	475.0	238.0
170 Beans, kidney, mature seeds, raw		279.0	992.0	1041.0	1882.0	1618.0	355.0	256.0	1275.0	664.0	1233.0	1460.0	656.0
157 Cashewnut		358.0	739.0	866.0	1552.0	666.0	227.0	358.0	1113.0	705.0	1028.0	2495.0	558.0
158 Chickpea		85.0	329.0	380.0	631.0	593.0	116.0	119.0	475.0	220.0	372.0	835.0	244.0
159 Chickpea flour (besan)		272.0	1053.0	1216.0	2019.0	1898.0	371.0	381.0	1520.0	704.0	1190.0	2672.0	781.0
162 Cowpea, gree, uncooked		95.0	294.0	314.0	592.0	523.0	110.0	85.0	451.0	250.0	368.0	535.0	240.0
163 Cowpea, uncooked		95.0	294.0	314.0	592.0	523.0	110.0	85.0	451.0	250.0	368.0	535.0	240.0
173 Hyacinth beans (dried)		251.0	776.0	829.0	1563.0	1381.0	290.0	224.0	1191.0	660.0	972.0	1412.0	634.0
174 Hyacinth-beans, immature, raw		0.0	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1
176 Hyacinth-beans, immature, boiled without salt		26.0	124.0	201.0	307.0	203.0	26.0	26.0	65.0	53.0	318.0	201.0	124.0



**C1 Pulses, Nuts and Seeds *continued***

Amino Acids	TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
177 Lentil, cooked	217.0	866.0	1045.0	1753.0	1688.0	206.0	316.0	1193.0	646.0	1201.0	1868.0	681.0
180 Lentil, whole	12.0	52.0	50.0	94.0	58.0	20.0	18.0	69.0	39.0	60.0	124.0	33.0
175 Palm seed	7.0	23.0	22.0	36.0	31.0	14.0	15.0	26.0	17.0	30.0	59.0	17.0
164 Groundnuts	250.0	883.0	907.0	1672.0	926.0	317.0	387.0	1049.0	1082.0	3085.0	652.0	1025.0
178 Peanut butter, smooth	200.8	706.4	725.6	1337.6	740.8	253.6	309.6	839.2	865.6	2468.0	521.6	820.0
165 Pigeon peas, cooked	250.0	883.0	907.0	1672.0	926.0	317.0	331.0	1337.0	1049.0	1082.0	3085.0	652.0
166 Pigeon peas, green	72.0	270.0	306.0	572.0	486.0	62.0	97.0	321.0	241.0	338.0	702.0	193.0
171 Pigeon peas, raw	209.0	783.0	887.0	1659.0	1409.0	180.0	281.0	931.0	699.0	980.0	2036.0	560.0
172 Pumpkin seed	350.0	873.0	954.0	1591.0	615.0	663.0	387.0	1131.0	833.0	1094.0	2461.0	501.0
167 Sesame seed	65.0	354.0	340.0	563.0	553.0	143.0	56.0	348.0	197.0	408.0	744.0	185.0
168 Soybean, yellow	388.0	736.0	763.0	1358.0	569.0	586.0	358.0	940.0	743.0	990.0	2630.0	522.0
169 Sunflower seed	530.0	1585.0	1770.0	2973.0	2430.0	493.0	588.0	1905.0	1380.0	1820.0	2830.0	985.0



## **C2. Pulses, Seeds, Nut-based local dishes**

Various local dishes prepared with any pulse, seeds or nuts  
for example, kidney beans relish with coconut

## C2 Pulses, nuts and seeds-based local dishes

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
663	Bambara nut relish with coconut milk	127	4.2	0.0	0.0	10.2	6.7
32	Bhajia (chickpea flour fritters)	356	19.2	0.0	0.0	5.6	59.7
664	Chick pea relish with coconut milk	144.2	4.0	0.0	0.0	8.9	13.7
653	Cow pea (dry) relish without oil	59.5	0.5	0.0	0.0	5.85	2.2
654	Cow pea (dry) relish with oil	154.7	7.3	0.0	0.0	6.3	18.9
651	Cow pea (fresh) relish without oil	71.5	4.6	0.0	0.0	0.4	13.0
652	Cow pea relish with coconut milk	120.4	7.4	0.0	0.0	1.8	19.7
657	Kidney bean relish without oil	117.2	6.4	0.0	0.0	2.9	17.1
656	Kidney bean relish with oil	130.6	4.9	0.0	0.0	6.9	13.3
655	Kidney bean relish with coconut milk	83.2	2.8	0.0	0.0	4.8	8.1
662	Mung bean (dry) relish with cocount milk	87.2	2.4	0.0	0.0	5.3	8.7
658	Mung bean (dry, boiled)	43.7	2.8	0.0	0.0	0.2	8.0
659	Pigeon pea (fresh, cooked)	131.0	6.1	0.0	0.0	5.1	16.1
660	Pigeon pea relish with coconut milk	114.0	3.4	0.0	0.0	7.2	10.4
661	Pigeon pea relish with oil	245.0	13.8	0.0	0.0	5.8	36.3

## C2 Pulses, nuts and seeds-based local dishes *continued*

Macronutrients	FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
	g	g	g	mg	g	g	mg
663 Bambara nut relish with coconut milk	7.5	0.7	1.0	0.0	2.9	0.2	130.1
32 Bhajia (chickpea flour fritters)	0.68	1.3	2.6	0.0	16.3	3.1	628.0
664 Chick pea relish with coconut milk	7.2	0.5	0.5	0.0	4.9	0.6	181.8
653 Cow pea (dry) relish without oil	5.0	0.3	0.1	0.0	0.9	0.05	358.0
654 Cow pea (dry) relish with oil	5.2	0.3	0.3	0.0	3.5	2.00	264.3
651 Cow pea (fresh) relish without oil	0.1	0.0	0.1	0.0	4.0	0.8	208.8
652 Cow pea relish with coconut milk	1.3	0.1	0.2	0.0	3.5	2.3	335.3
657 Kidney bean relish without oil	2.2	0.10	0.2	0.0	4.8	0.7	352.0
656 Kidney bean relish with oil	5.8	0.4	0.3	0.0	3.6	0.3	385.6
655 Kidney bean relish with coconut milk	4.2	0.2	0.2	0.0	2.2	0.8	184.9
662 Mung bean (dry) relish with cocount milk	4.6	0.2	0.1	0.0	2.9	0.5	119.4
658 Mung bean (dry, boiled)	0.0	0.0	0.1	0.0	2.4	0.6	108.7
659 Pigeon pea (fresh, cooked)	4.2	0.4	0.3	0.0	4.4	0.0	318.4
660 Pigeon pea relish with coconut milk	6.3	0.3	0.2	0.0	3.8	0.3	211.3
661 Pigeon pea relish with oil	4.5	0.5	0.5	0.0	9.9	1.3	721

## C2 Pulses, nuts and seeds-based local dishes

Vitamins		VITA	A_VITA	VITD	VITE	VITC	THIA	RIBF	NIA	VITB6	FOL	VIT B12	PANT
		µg RE	µg RE	µg	µg	mg	mg	mg	mg	mg	µg	µg	mg
663	Bambara nut relish with coconut	20.9	0.0	0.0	0.8	8.9	0.1	0.1	0.6	0.0	38.3	0.0	0.1
32	Bhajia (chickpea flour fritters)	34.4	0.0	0.0	0.1	21.3	0.2	0.1	1.1	0.3	368.6	0.0	0.6
664	Chick pea relish with coconut milk	1.1	0.0	0.0	0.2	1.2	0.1	0.0	0.3	0.1	68.1	0.0	0.2
653	Cow pea (dry) relish without oil	2.0	0.0	0.0	0.0	0.0	0.2	0.1	0.5	0.1	208.0	0.0	0.4
654	Cow pea (dry) relish with oil	27.2	0.0	0.0	0.0	5.8	0.2	0.1	0.5	0.1	157.5	0.0	0.4
651	Cow pea (fresh) relish without oil	18.6	0.0	0.0	0.0	3.8	0.1	0.0	0.4	0.1	123.6	0.0	0.3
652	Cow pea relish with coconut	1.5	0.0	0.0	0.2	0.7	0.2	0.1	0.5	0.1	169.4	0.0	0.4
657	Kidney bean relish without oil	11.9	0.0	0.0	0.3	3.2	0.1	0.1	0.4	0.1	76.6	0.0	0.1
656	Kidney bean relish with oil	0.0	0.0	0.0	0.1	0.9	0.1	0.0	0.4	0.1	82.1	0.0	0.2
655	Kidney bean relish with coconut milk	14.9	0.0	0.0	0.2	5.4	0.1	0.0	0.3	0.1	35.6	0.0	0.1
662	Mung bean (dry) relish with cocount milk	10.4	0.0	0.0	0.2	3.5	0.1	0.0	0.3	0.1	48.1	0.0	0.2
658	Mung bean (dry, boiled)	0.6	0.0	0.0	0.0	0.2	0.1	0.0	0.2	0.0	63.5	0.0	0.2
659	Pigeon pea (fresh, cooked)	1.6	0.0	0.0	0.0	0.2	0.1	0.1	0.6	0.1	83.8	0.0	0.1
660	Pigeon pea relish with coconut milk	0.7	0.0	0.0	0.2	2.0	0.0	0.0	0.4	0.0	43.0	0.0	0.1
661	Pigeon pea relish with oil	3.8	0.0	0.0	0.1	0.3	0.2	0.2	1.3	0.1	189.6	0.0	0.3

## C2 Pulses, Nuts and Seeds-based local dishes

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
663	Bambara nut relish with coconut milk	44.2	68.0	24.3	254.3	116.6	1.2	0.0	0.5	0.1	0.4
32	Bhajia (chickpea flour fritters)	107.6	363.8	104.6	649.0	15.2	6.3	0.0	3.2	0.7	2.2
664	Chick pea relish with coconut milk	21.6	88.0	25.1	193.7	99.6	1.6	0.0	0.8	0.2	0.7
653	Cow pea (dry) relish without oil	24.0	156.0	53.0	278.0	4.0	2.5	0.0	1.3	0.3	0.5
654	Cow pea (dry) relish with oil	20.1	122.7	275.3	364.4	2.0	0.0	1.0	0.2	0.0	0.1
651	Cow pea (fresh) relish without oil	14.9	95.3	32.9	205.6	4.1	1.6	0.0	0.8	0.2	0.3
652	Cow pea relish with coconut milk	22.0	143.0	47.5	283.1	53.1	2.4	0.0	1.2	0.3	0.6
657	Kidney bean relish without oil	18.7	90.8	28.7	261.2	1.4	1.8	0.0	0.7	0.1	0.3
656	Kidney bean relish with oil	20.9	104.2	33.4	314.2	2.2	2.1	0.0	0.8	0.2	0.3
655	Kidney bean relish with coconut milk	14.5	71.8	23.5	275.5	117.2	2.1	0.5	1.1	0.7	1.1
662	Mung bean (dry) relish with cocount milk	10.0	57.5	19.5	107.9	278.2	0.9	0.0	0.5	0.1	0.2
658	Mung bean (dry, boiled)	6.0	39.0	13.0	70.0	1.0	0.6	0.0	0.3	0.1	0.1
659	Pigeon pea (fresh, cooked)	29.7	101.3	34.8	220.4	81.6	1.2	0.0	0.8	0.2	0.3
660	Pigeon pea relish with coconut milk	16.1	69.1	22.3	172.7	6.0	1.0	0.0	0.6	0.2	0.5
661	Pigeon pea relish with oil	66.3	228.9	78.8	494.9	9.6	2.8	0.0	1.8	0.5	0.8

## C2 Pulses, nuts and seeds-based local dishes

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
663	Bambara nut relish with coconut milk	49.7	161.5	177.4	293.3	236.9	53.5	45.0	188.3	143.7	190.9	374.7	108.0
32	Bhajia (chickpea flour fritters)	184.2	708.0	817.6	1354.5	1274.8	249.3	257.7	1019.0	474.1	799.5	1801.7	524.3
664	Chick pea relish with coconut milk	40.2	147.3	168.3	285.0	248.8	56.5	58.9	210.9	104.1	181.9	433.7	106.1
653	Cow pea (dry) relish without oil	95.0	294.0	314.0	592.0	523.0	110.0	85.0	451.0	250.0	368.0	535.0	240.0
654	Cow pea (dry) relish with oil	28.8	89.0	94.7	175.2	156.6	33.0	27.7	133.0	75.0	109.8	160.9	71.3
651	Cow pea (fresh) relish without oil	56.3	174.7	177.0	349.6	309.5	65.2	51.5	266.0	148.0	217.8	314.5	141.8
652	Cow pea relish with coconut milk	35.5	107.6	116.4	217.1	182.1	42.9	37.8	162.3	93.8	142.7	248.3	84.3
657	Kidney bean relish without oil	24.9	88.0	67.6	129.3	88.4	27.8	22.0	82.6	46.6	85.3	112.4	40.7
656	Kidney bean relish with oil	65.5	230.0	242.1	435.8	375.6	81.9	60.1	295.1	154.4	285.5	345.0	152.5
655	Kidney bean relish with coconut milk	32.7	112.7	146.1	406.2	330.2	103.7	64.7	232.1	164.2	260.3	353.5	134.5
662	Mung bean (dry) relish with coconut milk	28.6	84.5	93.0	168.0	140.0	34.5	31.7	123.4	71.0	114.9	223.0	64.5
658	Mung bean (dry, boiled)	35.0	106.7	114.6	213.9	190.2	39.9	31.6	162.9	91.1	133.0	200.5	86.9
659	Pigeon pea (fresh, cooked)	200.7	707.6	727.3	1339.3	743.2	254.0	265.7	1070.9	840.4	866.7	2474.6	522.4
660	Pigeon pea relish with coconut milk	34.2	122.9	144.2	272.6	135.4	74.9	70.0	178.5	112.3	204.5	330.4	80.8
661	Pigeon pea relish with oil	131.8	491.3	557.1	1039.6	884.3	113.1	177.0	583.9	438.8	614.3	1282.8	351.3



## **D1. Meat, Poultry (include eggs), Fish**

Foods commonly referred to as meat, poultry (include eggs) and fish and their products for example sausages

## D1 Meat, poultry and fish

Macronutrients		ENERGY_KC Kcal	PROCNT g	A_PROTEI g	MFP_PROT g	FAT g	CHOCDF g
205	Beef liver, raw	135.0	20.4	20.4	20.4	3.6	3.9
204	Beef, boneless	267.0	16.9	16.9	16.9	21.6	0.0
201	Beef, liver, cooked	191.0	29.1	29.1	29.1	5.3	5.1
202	Beef, medium fat, cooked	323.0	24.9	24.9	24.9	24.0	0.0
203	Beef, tripe	83.0	14.5	14.5	14.5	2.4	0.0
206	Chicken liver	167.0	24.5	0.0	0.0	6.5	0.9
208	Chicken, raw	200.0	18.8	18.8	18.8	13.2	0.0
306	Egg yolk	278.0	19.2	19.2	0.0	20.7	2.3
307	Egg, chicken	155.0	12.6	12.6	0.0	10.6	1.1
308	Fish, dried, cod	368.0	79.8	79.8	79.8	3.2	0.0
309	Fish, dried, fresh water	335.0	58.6	58.6	58.6	9.4	0.0
220	Fish, fresh	98.0	18.1	18.1	18.1	2.4	0.0
310	Fish, high fat	103.0	10.6	10.6	10.6	6.8	0.0
311	Fish, raw	112.0	21.4	21.4	21.4	2.3	0.0
312	Fish, sardines	112.0	21.4	21.4	21.4	2.3	0.0
313	Fish, small, dried, fresh water	335.0	58.6	58.6	58.6	9.4	0.0
314	Fish, small, fresh, fresh water	84.0	14.8	14.8	14.8	2.3	0.0
319	Fish, smoked, dried-AP	177.0	38.5	38.5	38.5	1.5	0.0
320	Fish, smoked, dried-EP	306.0	66.4	66.4	66.4	2.5	0.0
315	Goat meat	269.0	24.9	24.9	24.9	18.0	0.0
316	Mutton, meat	269.0	24.9	24.9	24.9	18.0	0.0
317	Pork, medium fat, cooked	537.0	19.6	19.6	19.6	50.2	0.0
318	Sausage	369.0	19.7	19.6	19.6	31.2	1.0

## D1 Meat, poultry and fish

	Macronutrients	FASAT g	FAMS g	FAPU g	CHOLE mg	FIB g	SUCS g	PHYTAC mg
205	Beef liver, raw	1.2	0.5	0.5	275.0	0.0	0.0	0.0
204	Beef, boneless	10.4	9.0	0.8	61.0	0.0	0.0	0.0
201	Beef, liver, cooked	1.7	0.6	0.7	396.0	0.0	0.0	0.0
202	Beef, medium fat, cooked	11.4	10.1	0.9	82.0	0.0	0.0	0.0
203	Beef, tripe	0.9	1.0	0.1	35.0	0.0	0.0	0.0
206	Chicken liver	2.1	1.4	1.3	563.0	0.0	0.0	0.0
208	Chicken, raw	3.6	5.0	2.9	55.0	0.0	0.0	0.0
306	Egg yolk	5.6	9.8	1.8	1326.0	0.0	0.0	0.0
307	Egg, chicken	3.3	4.1	1.4	424.0	0.0	0.0	0.0
308	Fish, dried, cod	0.7	0.4	1.1	193.0	0.0	0.0	0.0
309	Fish, dried, fresh water	2.0	3.6	2.0	57.0	0.0	0.0	0.0
220	Fish, fresh	0.5	0.8	0.6	45.0	0.0	0.0	0.0
310	Fish, high fat	1.9	3.1	1.1	26.0	0.0	0.0	0.0
311	Fish, raw	0.3	0.8	0.7	33.0	0.0	0.0	0.0
312	Fish, sardines	0.3	0.8	0.7	33.0	0.0	0.0	0.0
313	Fish, small, dried, fresh water	2.0	3.6	2.0	57.0	0.0	0.0	0.0
314	Fish, small, fresh, fresh water	0.6	0.9	0.5	58.0	0.0	0.0	0.0
319	Fish, smoked, dried-AP	0.3	0.2	0.5	93.0	0.0	0.0	0.0
320	Fish, smoked, dried-EP	0.5	0.4	0.8	160.0	0.0	0.0	0.0
315	Goat meat	8.4	7.6	0.7	75.0	0.0	0.0	0.0
316	Mutton, meat	8.4	7.6	0.7	75.0	0.0	0.0	0.0
317	Pork, medium fat, cooked	19.3	22.5	5.4	101.0	0.0	0.0	0.0
318	Sausage	10.8	13.9	3.8	83.0	0.0	0.3	0.0

## D1 Meat, poultry and fish

Vitamins		VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VIT B6 mg	FOL µg	VIT B12PANT µg
205	Beef liver, raw	4968.0	4968.0	1.0	0.4	1.3	0.2	2.8	13.2	1.1	290.0	59.3
204	Beef, boneless	0.0	0.0	0.0	0.0	0.0	0.1	0.1	2.2	0.2	4.0	1.3
201	Beef, liver, cooked	20357.0	20357.0	1.0	0.0	15.0	0.2	3.6	10.3	0.5	290.0	110.0
202	Beef, medium fat, cooked	0.0	0.0	0.0	0.0	0.0	0.1	0.2	3.2	0.3	6.0	1.9
203	Beef, tripe	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.9	0.2	4.0	1.1
206	Chicken liver	3981.0	3981.0	0.0	0.8	27.9	0.3	2.0	11.0	0.8	578.0	16.9
208	Chicken, raw	27.0	27.0	0.0	0.0	0.0	0.1	0.2	4.1	0.2	4.0	0.2
306	Egg yolk	810.0	810.0	8.0	2.0	0.0	0.2	0.6	0.3	0.4	120.0	8.1
307	Egg, chicken	169.0	169.0	1.0	1.0	0.0	0.1	0.5	0.1	0.1	44.0	1.1
308	Fish, dried, cod	49.0	49.0	4.0	4.0	4.0	0.3	0.3	8.8	1.0	42.0	3.7
309	Fish, dried, fresh water	0.0	0.0	2.0	0.0	0.0	0.1	0.3	8.1	0.4	28.0	12.0
220	Fish, fresh	0.0	0.0	0.0	0.0	17.0	0.1	0.1	0.7	0.5	51.0	0.0
310	Fish, high fat	18.0	18.0	13.0	0.0	0.0	0.0	0.1	2.1	0.3	5.0	5.7
311	Fish, raw	43.0	43.0	12.0	1.0	0.0	0.1	0.1	5.7	0.3	11.0	1.1
312	Fish, sardines	43.0	43.0	12.0	1.0	0.0	0.1	0.1	5.7	0.3	11.0	1.1
313	Fish, small, dried, fresh water	0.0	0.0	2.0	0.0	0.0	0.1	0.3	8.1	0.4	28.0	12.0
314	Fish, small, fresh, fresh water	12.0	12.0	10.0	2.0	1.0	0.2	0.1	1.9	0.1	8.0	2.3
319	Fish, smoked, dried-AP	0.0	0.0	4.0	0.0	0.0	0.1	0.1	7.3	0.8	35.0	3.1
320	Fish, smoked, dried-EP	0.0	0.0	0.0	4.0	0.0	0.0	0.1	0.1	7.3	0.8	35.0
315	Goat meat	0.0	0.0	0.0	0.0	0.0	0.1	0.2	3.2	0.3	6.0	1.9
316	Mutton, meat	0.0	0.0	0.0	0.0	0.0	0.1	0.2	3.2	0.3	6.0	1.9
317	Pork, medium fat, cooked	1.0	1.0	1.0	0.0	0.0	0.6	0.2	3.5	0.3	4.0	0.6
318	Sausage	1.0	1.0	1.0	0.0	2.0	0.7	0.3	4.5	0.3	3.0	1.7

## D1 Meat, poultry and fish

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
205	Beef liver, raw	5.0	387.0	18.0	313.0	69.0	4.9	4.9	4.0	0.8	0.3
204	Beef, boneless	3.0	132.0	15.0	230.0	36.0	1.1	1.1	2.7	0.1	0.0
201	Beef, liver, cooked	6.0	485.0	23.0	351.0	77.0	6.2	6.2	5.2	14.6	0.4
202	Beef, medium fat, cooked	4.0	194.0	23.0	340.0	53.0	1.7	1.7	4.1	0.1	0.0
203	Beef, tripe	3.0	113.0	14.0	198.0	31.0	1.0	1.0	2.4	0.1	0.0
206	Chicken liver	14.0	312.0	21.0	140.0	51.0	8.5	8.5	4.3	0.4	0.3
208	Chicken, raw	9.0	126.0	14.0	127.0	51.0	1.0	1.0	1.3	0.1	0.0
306	Egg yolk	96.0	330.0	26.0	333.0	219.0	5.9	0.0	2.1	0.1	0.1
307	Egg, chicken	50.0	172.0	10.0	126.0	124.0	1.2	0.0	1.1	0.0	0.0
308	Fish, dried, cod	49.0	483.0	147.0	854.0	273.0	1.8	1.8	2.1	0.1	0.1
309	Fish, dried, fresh water	1700.0	1300.0	140.0	953.0	312.0	2.5	2.5	5.2	0.5	2.1
220	Fish, fresh	7.0	69.0	21.0	122.0	39.0	0.3	0.3	0.3	0.0	0.0
310	Fish, high fat	17.0	125.0	17.0	192.0	88.0	0.5	0.5	0.3	0.1	0.0
311	Fish, raw	48.0	228.0	86.0	461.0	55.0	0.9	0.9	0.4	0.0	0.0
312	Fish, sardines	48.0	228.0	86.0	461.0	55.0	0.9	0.9	0.4	0.0	0.0
313	Fish, small, dried, fresh water	1700.0	1300.0	140.0	953.0	312.0	2.5	2.5	5.2	0.5	2.1
314	Fish, small, fresh, fresh water	9.0	243.0	22.0	335.0	40.0	0.3	0.3	0.5	0.0	0.0
319	Fish, smoked, dried-AP	24.0	233.0	71.0	412.0	132.0	0.8	0.8	1.0	0.1	0.0
320	Fish, smoked, dried-EP	41.0	402.0	122.0	710.0	227.0	1.4	1.4	1.7	0.1	0.0
315	Goat meat	4.0	194.0	23.0	340.0	53.0	1.7	1.7	4.1	0.1	0.0
316	Mutton, meat	4.0	194.0	23.0	340.0	53.0	1.7	1.7	4.1	0.1	0.0
317	Pork, medium fat, cooked	18.0	165.0	17.0	251.0	44.0	0.8	0.8	2.1	0.1	0.0
318	Sausage	32.0	184.0	17.0	361.0	1294.0	1.3	1.3	2.5	0.1	0.1

## D1 Meat, poultry and fish

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
205	Beef liver, raw	263.0	869.0	967.0	1910.0	1607.0	543.0	376.0	1084.0	807.0	1260.0	1241.0	629.0
204	Beef, boneless	189.0	736.0	757.0	1331.0	1401.0	431.0	189.0	658.0	566.0	819.0	1065.0	577.0
201	Beef, liver, cooked	351.0	1116.0	1116.0	2294.0	1693.0	616.0	374.0	1299.0	967.0	1506.0	1533.0	667.0
202	Beef, medium fat, cooked	280.0	1089.0	1121.0	1970.0	2074.0	638.0	280.0	974.0	838.0	1213.0	1576.0	854.0
203	Beef, tripe	163.0	633.0	652.0	1146.0	1206.0	371.0	163.0	566.0	487.0	705.0	916.0	497.0
206	Chicken liver	343.0	1083.0	1294.0	2198.0	1843.0	577.0	327.0	1212.0	857.0	1535.0	1493.0	647.0
208	Chicken, raw	211.0	779.0	944.0	1373.0	1538.0	502.0	250.0	732.0	608.0	915.0	1176.0	555.0
306	Egg yolk	390.0	1104.0	897.0	1646.0	1427.0	864.0	428.0	1260.0	920.0	1328.0	1148.0	480.0
307	Egg, chicken	153.0	604.0	686.0	1075.0	904.0	392.0	292.0	668.0	513.0	767.0	755.0	298.0
308	Fish, dried, cod	896.0	3504.0	3682.0	6496.0	7340.0	2366.0	858.0	3119.0	2699.0	4116.0	4781.0	2352.0
309	Fish, dried, fresh water	662.0	2590.0	2722.0	4802.0	5424.0	1750.0	634.0	2306.0	1994.0	3043.0	3535.0	1740.0
220	Fish, fresh	203.0	792.0	832.0	1469.0	1659.0	535.0	193.0	705.0	610.0	931.0	1081.0	532.0
310	Fish, high fat	122.0	479.0	503.0	888.0	1004.0	323.0	117.0	426.0	369.0	563.0	654.0	322.0
311	Fish, raw	239.0	936.0	984.0	1735.0	1961.0	632.0	229.0	834.0	721.0	1100.0	1278.0	629.0
312	Fish, sardines	239.0	936.0	984.0	1735.0	1961.0	632.0	229.0	834.0	721.0	1100.0	1278.0	629.0
313	Fish, small, dried, fresh water	662.0	2590.0	2722.0	4802.0	5424.0	1750.0	634.0	2306.0	1994.0	3043.0	3535.0	1740.0
314	Fish, small, fresh, fresh water	166.0	648.0	681.0	1202.0	1358.0	438.0	158.0	577.0	499.0	762.0	885.0	435.0
319	Fish, smoked, dried-AP	432.0	1690.0	1775.0	3133.0	3539.0	1141.0	414.0	1504.0	1302.0	1985.0	2306.0	1134.0
320	Fish, smoked, dried-EP	745.0	2913.0	3061.0	5401.0	6102.0	1967.0	713.0	2593.0	2244.0	3422.0	3975.0	1956.0
315	Goat meat	280.0	1089.0	1121.0	1970.0	2074.0	638.0	280.0	974.0	838.0	1213.0	1576.0	854.0
316	Mutton, meat	280.0	1089.0	1121.0	1970.0	2074.0	638.0	280.0	974.0	838.0	1213.0	1576.0	854.0
317	Pork, medium fat, cooked	246.0	890.0	911.0	1566.0	1757.0	515.0	249.0	780.0	677.0	1059.0	1225.0	775.0
318	Sausage	157.0	777.0	717.0	1317.0	1494.0	478.0	198.0	657.0	566.0	789.0	1160.0	566.0

## **D2. Meat, Poultry (include eggs), Fish-based local dishes**

Local dishes made with beef, mutton, chicken, any fish, eggs, for example, fried egg or omelet, barbecued meat or fried fish, or chicken relish and so on

## D2 Meat, poultry and fish-based

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
552	Beef relish with coconut milk	143.0	10.2	10.0	10.0	10.2	2.0
578	Beef relish without oil	168.6	12.6	12.3	12.3	11.9	2.2
551	Beef relish with oil	210.7	12.4	12.1	12.1	17.0	1.9
577	Beef, fried	813.2	25.1	24.9	24.9	80.0	2.2
576	Beef, ground, relish	247.8	12.8	12.5	12.5	21.1	1.9
574	Chicken, boiled or roasted	285.0	26.9	26.9	26.9	18.9	0.0
554	Chicken relish without oil	202.3	18.5	18.1	18.1	12.8	2.1
573	Chicken relish with coconut milk	137.2	6.1	5.6	5.5	11.8	2.3
556	Chicken relish with oil	188.9	6.2	4.2	4.2	13.3	13.3
207	Chicken, fried	314.9	18.8	18.8	18.8	26.5	0.0
571	Egg boiled	155.0	12.6	12.6	0.0	10.6	1.1
561	Egg, fried	245.2	11.8	11.8	0.0	21.6	1.0
565	Fish, fresh, stew	85.0	5.4	5.1	5.1	6.6	1.4
566	Fish relish without oil	76.5	8.2	6.9	6.9	4.5	2.4
567	Fish relish with coconut milk	138.4	11.7	10.9	10.9	9.3	2.5
564	Fish relish with oil	253.6	21.2	20.8	20.8	17.9	2.2
569	Fish, fried	230.1	17.8	17.8	17.8	17.8	0.0
563	Fish, fried, relish	183.5	6.5	6.2	6.2	17.5	1.3
579	Liver relish	103.5	13.7	13.6	13.6	69.4	2.8
580	Liver, fried	175.0	26.5	26.5	26.5	4.7	5.2
570	Meat samosa	280.0	11.6	7.5	7.5	11.8	30.5
572	Meat, barbecued	343.0	24.0	15.7	15.7	26.7	0.0
562	Omelet, spanish	274.7	8.0	7.9	0.0	26.6	1.7
575	Omelet, spanish with potato	185.5	5.3	4.5	0.0	14.2	9.7
560	Small dried fish relish with coconut milk	258.4	12.0	10.0	10.0	14.6	9.4
558	Small dried fish relish with okra	98.7	7.8	7.3	7.3	6.8	1.9
557	Small dried fish with tomatoes and oil	100.1	7.7	7.3	7.3	6.9	2.2
559	Small dried fish, fried	449.9	58.6	58.6	22.7	13.5	0.0



## D2 Meat, poultry and fish-based

	Micronutrients	FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
552	Beef relish with coconut milk	5.1	4.1	0.4	32.8	0.2	0.1	14.1
578	Beef relish without oil	5.6	5.0	0.5	40.4	0.4	0.2	1.0
551	Beef relish with oil	10.1	5.2	0.6	39.9	0.3	0.1	1.0
577	Beef, fried	59.9	13.3	1.9	82.0	0.5	0.3	0.0
576	Beef, ground, relish	13.5	5.6	0.7	41.0	0.4	0.1	2.0
574	Chicken, boiled or roasted	5.1	7.2	1.0	79.0	0.0	0.0	0
554	Chicken relish without oil	3.5	4.8	2.8	53.1	0.4	0.2	0.9
573	Chicken relish with coconut milk	8.0	1.9	1.0	16.2	0.6	0.2	29.9
556	Chicken relish with oil	9.5	1.7	1.0	12.2	2.1	1.5	3.0
207	Chicken, fried	15.1	5.8	3.1	55.0	0.0	0.0	0.0
571	Egg boiled	3.3	4.1	1.4	424.0	0.0	0.0	0.0
561	Egg, fried	13.2	4.5	1.5	395.7	0.0	0.0	0.0
565	Fish, fresh, stew	5.1	0.6	0.3	12.9	0.3	0.0	1.9
566	Fish relish without oil	2.9	0.6	0.4	19.0	0.9	0.1	1.5
567	Fish relish with coconut milk	7.1	1.0	0.5	15.4	0.9	1.1	54.9
564	Fish relish with oil	13.2	2.2	1.0	20.9	0.5	0.1	1.6
569	Fish, fried	13.7	2.0	0.9	69.6	0.0	0.0	0.0
563	Fish, fried, relish	14.5	1.3	0.6	24.4	0.7	0.1	15.60
579	Liver relish	1.3	14.5	1.3	0.5	24.4	0.3	2.2
580	Liver, fried	1.5	0.7	0.6	381.0	0.0	0.0	113.0
570	Meat samosa	3.5	3.7	3.9	23.0	1.1	0.2	0.0
572	Meat, barbecued	10.6	11.0	1.0	88.0	0.0	0.0	5.2
562	Omelet, spanish	19.7	3.7	1.3	263.8	0.2	0.2	38.8
575	Omelet, spanish with potato	10.5	2.0	0.7	148.4	0.8	0.4	234.2
560	Small dried fish relish with coconut milk	16.9	1.3	0.6	14.4	5.2	0.1	15.4
558	Small dried fish relish with okra	5.1	0.8	0.4	7.1	0.7	0.3	2.3
557	Small dried fish with tomatoes and oil	5.1	0.8	0.4	7.1	0.5	0.2	0.1
559	Small dried fish, fried	4.4	2.2	5.7	0.0	0.0	0.1	0.0

## D2 Meat, poultry and fish-based local dishes

Vitamin		VITA	A_VITA	VITD	VITE	VITC	THIA	RIBF	NIA	VITB6	FOL	VITB12PANT
		µg RE	µg RE	µg	µg	mg	mg	mg	mg	mg	µg	µg
552	Beef relish with coconut milk	5.2	0.0	0.0	0.0	2.2	0.0	0.1	1.4	0.2	4.7	0.7
578	Beef relish without oil	13.9	0.0	0.0	0.0	3.8	0.1	0.1	1.7	0.2	7.5	0.9
551	Beef relish with oil	13.9	0.0	0.0	0.1	3.8	0.1	0.1	1.7	0.2	7.5	0.9
577	Beef, fried	0.5	0.0	0.0	0.4	9.3	0.1	0.2	3.3	0.4	0.5	1.9
576	Beef, ground, relish	29.6	0.0	0.0	0.1	6.7	0.1	0.1	1.8	0.2	8.7	0.9
574	Chicken, boiled or roasted	39.0	39.0	0.0	0.0	0.0	0.1	0.2	5.8	0.3	5.0	0.2
554	Chicken relish without oil	50.1	37.6	0.0	0.0	1.6	0.1	0.2	5.7	0.3	9.1	0.2
573	Chicken relish with coconut milk	94.6	0.0	0.0	0.2	13.5	0.0	0.0	0.3	0.1	17.0	0.0
556	Chicken relish with oil	53.2	9.8	0.0	0.1	10.1	0.1	0.1	1.7	0.1	10.5	0.1
207	Chicken, fried	27.0	27.0	0.0	0.4	0.0	0.1	0.2	4.1	0.2	4.0	0.2
571	Egg boiled	133.0	133.0	0.7	1.4	0.0	0.1	0.3	0.07	0.1	30.8	0.7
561	Egg, fried	114.0	114.0	0.6	1.3	0.0	0.0	0.3	0.1	0.1	26.4	0.7
565	Fish, fresh, stew	27.6	0.0	0.0	0.1	10.9	0.1	0.0	0.4	0.2	19.4	0.0
566	Fish relish without oil	24.4	2.6	2.2	0.5	7.8	0.1	0.1	0.9	0.1	14.6	0.9
567	Fish relish with coconut milk	38.3	1.3	1.4	0.2	2.4	0.0	0.0	1.7	0.1	11.6	2.2
564	Fish relish with oil	24.3	0.9	1.3	0.3	5.6	0.1	0.1	2.7	0.2	13.9	3.7
569	Fish, fried	1.8	1.8	1.5	1.5	0.2	0.0	0.0	0.3	0.0	1.2	0.3
563	Fish, fried, relish	15.2	0.7	0.6	0.7	3.7	0.0	0.0	0.3	0.0	5.0	0.2
579	Liver relish	11421.5	11309.4	0.6	0.1	14.0	0.1	2.0	5.8	0.3	163.7	61.1
580	Liver, fried	7744.0	7744.0	1.0	0.5	0.7	0.2	3.4	17.5	1.0	260.0	83.1
570	Meat samosa	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.4	0.1	9.0	0.6
572	Meat, barbecued	0.0	0.0	0.0	0.0	0.0	0.1	0.1	2.0	0.2	4.0	1.2
562	Omelet, spanish	133.1	118.2	0.6	1.6	16.9	0.1	0.3	0.2	0.1	32.8	0.7
575	Omelet, spanish with potato	186.3	66.5	0.4	1.0	23.5	0.1	0.2	0.7	0.2	23.5	0.4
560	Small dried fish relish with coconut milk	38.7	0.0	0.9	0.7	3.6	0.1	0.1	2.2	0.1	40.1	2.4
558	Small dried fish relish with okra	11.4	0.0	0.2	0.1	2.1	0.0	0.1	1.2	0.1	10.2	0.4
557	Small dried fish with tomatoes and oil	34.4	0.0	0.6	0.1	4.7	0.1	0.1	2.7	0.2	15.8	3.7
559	Small dried fish, fried	0.0	0.0	2.0	0.1	0.0	0.1	0.3	8.1	0.4	28.0	12.0

## D2 Meat, poultry and fish-based local dishes

Minerals	CA mg	P mg	MG mg	K mg	NA mg	FE mg	MFP_FE mg	ZN mg	CU mg	MN mg
552 Beef relish with coconut milk	1.9	85.6	12.5	186.8	100.1	0.8	0.7	1.7	0.1	0.1
578 Beef relish without oil	5.8	104.3	14.6	225.7	28.0	0.9	0.9	2.1	0.1	0.0
551 Beef relish with oil	5.7	75.5	10.7	170.8	19.8	0.6	0.5	1.4	0.4	0.4
577 Beef, fried	15.3	205.0	26.7	396.7	828.6	1.9	1.7	4.2	0.1	0.1
576 Beef, ground, relish	4.6	106.4	15.6	251.5	107.1	1.0	0.9	2.1	0.1	0.0
574 Chicken, boiled or roasted	13.0	180.0	20.0	182.0	73.0	1.4	1.4	1.8	0.1	0.0
554 Chicken relish without oil	13.9	158.5	19.6	204.2	63.0	1.2	1.2	1.5	0.1	0.1
573 Chicken relish with coconut milk	6.9	55.2	10.8	146.9	249.7	0.7	0.3	0.5	0.1	0.2
556 Chicken relish with oil	7.3	54.2	10.4	155.6	20.5	0.5	0.3	0.5	0.1	0.1
207 Chicken, fried	9.6	126.0	14.0	127.1	567.3	1.0	1.0	1.3	0.1	0.0
571 Egg boiled	50.0	172.0	10.0	126.0	124.0	1.2	0.0	1.1	0.0	0.0
561 Egg, fried	47.3	160.5	9.4	117.7	632.1	1.1	0.0	1.0	0.0	0.0
565 Fish, fresh, stew	3.6	27.4	9.5	105.3	14.0	0.3	0.1	0.1	0.0	0.0
566 Fish relish without oil	59.9	111.7	15.7	185.2	26.6	0.3	0.2	0.4	0.0	0.1
567 Fish relish with coconut milk	272.7	254.3	31.5	273.2	58.8	0.9	0.4	1.1	0.2	0.6
564 Fish relish with oil	500.0	406.1	46.3	374.5	96.6	0.9	0.8	1.6	0.2	0.7
569 Fish, fried	10.8	291.6	26.4	402.0	48.0	0.4	0.4	0.6	0.0	0.0
563 Fish, fried, relish	6.5	113.2	13.2	203.0	19.4	0.4	0.2	0.3	0.0	0.1
579 Liver relish	6.5	228.2	12.9	156.4	43.1	3.8	3.8	3.4	2.5	0.3
580 Liver, fried	6.0	485.0	22.0	351.0	77.0	6.1	6.1	5.2	14.6	6.3
570 Meat samosa	7.0	101.0	16.0	145.0	17.0	1.0	0.5	1.5	0.1	0.3
572 Meat, barbecued	3.0	122.0	14.0	214.0	33.0	1.1	1.1	2.6	0.1	0.0
562 Omelet, spanish	33.8	113.0	8.7	120.1	423.2	0.8	0.0	0.7	0.0	0.0
575 Omelet, spanish with potato	22.1	83.9	15.1	224.7	50.1	0.7	0.0	0.5	0.1	0.1
558 Small dried fish relish with coconut milk	235.8	182.0	23.5	187.8	42.4	0.5	0.3	0.7	0.1	0.3
560 Small dried fish relish with okra	233.9	263.6	41.5	382.3	58.9	1.6	0.4	1.3	0.3	1.0
557 Small dried fish with tomatoes and oil	1139.1	884.0	100.5	771.6	213.0	1.9	1.6	3.5	0.3	1.4
559 Small dried fish, fried	1700.4	1300.0	140.0	953.1	656.2	2.5	2.5	5.2	0.5	2.1

## D2 Meat, poultry and fish-based local dishes

Amino acid		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
552	Beef relish with coconut milk	115.6	445.1	458.8	804.6	843.9	259.4	116.2	401.5	344.0	499.5	652.9	347.5
578	Beef relish without oil	141.7	544.7	562.3	982.5	1036.2	317.1	143.1	488.5	420.2	605.6	805.2	426.1
551	Beef relish with oil	102.7	396.8	156.6	286.8	193.0	66.6	41.0	149.6	98.5	131.9	203.5	95.7
577	Beef, fried	285.9	1099.4	1136.6	1986.5	2096.8	644.1	286.8	987.6	847.8	1228.7	1628.2	862.3
576	Beef, ground, relish	142.8	552.8	569.0	997.3	1049.9	321.8	144.6	495.8	425.3	615.1	801.7	432.2
574	Chicken, boiled or roasted	301.0	1113.0	1348.0	1961.0	2197.0	717.0	357.0	1046.0	869.0	1307.0	1680.0	793.0
554	Chicken relish without oil	293.9	1081.6	1016.0	1491.5	1088.6	549.1	272.9	783.4	665.1	991.6	1319.7	595.2
573	Chicken relish with coconut milk	13.6	80.5	296.5	484.5	97.5	186.4	354.8	21.3	13.5	24.3	50.9	10.7
556	Chicken relish with oil	79.7	2898.0	104.0	355.7	81.4	60.7	52.1	142.6	117.9	146.9	144.7	88.6
207	Chicken, fried	211.0	779.0	944.0	1373.0	1538.0	502.0	250.0	732.0	608.0	915.0	1176.0	555.0
571	Egg boiled	153.0	604.0	686.0	1075.0	904.0	392.0	292.0	668.0	513.0	767.0	755.0	298.0
561	Egg, fried	142.8	563.7	640.3	1003.3	843.7	365.9	272.5	623.5	478.8	715.9	704.7	278.1
565	Fish, fresh, stew	60.1	233.7	244.8	431.0	485.4	155.6	58.8	209.0	179.6	273.8	316.5	156.6
566	Fish relish without oil	88.5	342.4	360.0	632.1	713.7	228.9	86.0	306.0	263.9	1.3	473.7	229.6
567	Fish relish with coconut milk	142.0	547.0	71.6	122.2	73.7	17.3	17.9	75.0	55.5	78.5	132.4	38.8
564	Fish relish with oil	146.0	580.6	271.4	999.4	6915.8	347.8	137.0	484.7	415.4	632.4	556.0	272.2
569	Fish, fried	199.2	777.6	817.2	1442.4	1629.6	525.6	189.6	692.4	598.8	914.4	1062.0	522.0
563	Fish, fried, relish	12.7	44.8	134.4	196.5	214.3	68.7	36.9	101.5	13.8	123.9	170.7	73.7
579	Liver relish	200.0	800.0	900.0	1800.0	1500.0	500.0	300.0	1000.0	700.0	1100.0	1100.0	500.0
580	Liver, fried	300.0	1100.0	1200.0	2400.0	2000.0	700.0	500.0	1400.0	1000.0	1600.0	1600.0	800.0
570	Meat samosa	135.0	439.0	108.0	201.0	90.0	52.0	58.0	148.0	95.0	130.0	125.0	67.0
572	Meat, barbecued	176.0	686.0	706.0	1241.0	1307.0	402.0	176.0	614.0	528.0	764.0	993.0	538.0
562	Omelet, spanish	98.5	384.6	435.6	681.4	574.9	246.8	186.7	423.9	325.3	486.7	487.4	190.6
575	Omelet, spanish with potato	68.3	384.6	435.6	681.4	574.9	246.8	186.7	423.9	325.3	486.7	487.4	190.6
560	Small dried fish relish with coconut milk	151.0	568.4	576.6	1026.4	1074.6	355.6	157.8	52.6	24.2	679.8	991.8	333.4
558	Small dried fish relish with okra	92.9	361.3	69.0	125.7	87.5	32.3	35.5	87.9	56.5	101.6	266.7	61.8
557	Small dried fish with tomatoes and oil	67.5	260.7	175.0	3305.0	777.5	111.0	44.7	151.5	126.0	194.7	229.7	111.7
559	Small dried fish, fried	662.0	2590.0	2722.0	4802.0	5424.0	1750.0	634.0	2306.0	1994.0	3043.0	3535.0	1740.0

## **D3 Milk and Milk Products**

Cream, infant formula, yoghurt, cheese,  
skim milk, tinned milks

### D3 Milk and milk products

	Macronutrients	ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
261	Cheese, cheddar	403.0	24.9	24.9	0.0	33.1	1.3
258	Cheese, cream	349.0	7.6	7.6	0.0	34.9	2.7
259	Cheese, mozzarella	300.0	22.2	22.2	0.0	22.3	2.2
251	Ice cream	126.0	4.9	4.9	0.0	2.5	21.8
252	Infant formula, Lactogen	464.0	21.6	21.6	0.0	19.0	51.6
253	Milk, condensed, sweetened	320.0	7.8	7.8	0.0	8.7	54.5
257	Milk, condensed, evaporated, without vitamin A	134.0	6.8	6.8	0.0	7.6	10.0
260	Milk powder, non-fat, without vitamin A	362.0	36.2	36.2	0.0	0.7	52.0
254	Milk powder, full-cream	496.0	26.3	26.3	0.0	26.7	38.4
255	Milk whole, 3.25% milk fat	60.0	3.2	3.2	0.0	3.3	4.5
256	Yogurt, plain, whole milk	61.0	3.5	3.5	0.0	3.3	4.7

### D3 Milk and milk products

Macronutrients	FASAT g	FAMS g	FAPU g	CHOLE mg	FIB g	SUCS g	PHYTAC mg
261 Cheese, cheddar	21.1	9.4	0.9	105.0	0.0	0.2	0.0
258 Cheese, cream	21.9	9.8	1.3	110.0	0.0	0.0	0.0
259 Cheese, mozzarella	13.2	6.6	0.8	79.0	0.0	0.0	0.0
251 Ice cream	1.6	0.8	0.1	12.0	0.0	10.8	0.0
252 Infant formula, Lactogen	11.7	5.4	0.4	25.0	0.0	12.0	0.0
253 Milk, condensed, sweetened	5.3	2.6	0.2	33.0	0.0	41.6	0.0
257 Milk, condensed, evaporated, without vitamin A	4.6	2.3	0.2	29.0	0.0	10.0	0.0
260 Milk powder, non-fat, without vitamin A	0.5	0.2	0.0	20.0	0.0	52.0	0.0
254 Milk powder, full-cream	16.7	7.9	0.7	97.0	0.0	38.4	0.0
255 Milk whole, 3.25% milk fat	1.9	0.8	0.2	10.0	0.0	5.3	0.0
256 Yogurt, plain, whole milk	2.1	0.9	0.1	13.0	0.0	4.7	0.0

### D3 Milk and milk products

Vitamins		VITA	A_VITA	VITD	VITE	VITC	THIA	RIBF	NIA	VIT B6	FOL	VIT B12	PANT
		μ g RE	μ g RE	μ g	μ g	mg	mg	mg	mg	mg	μ g	μ g	mg
261	Cheese, cheddar	265.0	265.0	0.0	0.3	0.0	0.3	0.4	0.1	0.1	18.0	0.8	0.4
258	Cheese, cream	366.0	366.0	0.0	0.3	0.0	0.0	0.2	0.1	0.0	13.0	0.4	0.3
259	Cheese, mozzarella	179.0	179.0	0.0	0.2	0.0	0.0	0.3	0.1	0.0	7.0	2.3	0.1
251	Ice cream	29.0	59.0	0.0	0.0	0.9	0.1	0.2	0.1	0.0	5.0	0.5	0.4
252	Infant formula, Lactogen	420.0	420.0	7.0	4.0	37.0	0.3	0.6	3.5	0.3	42.0	1.0	2.1
253	Milk, condensed, sweetened	62.0	62.0	0.0	0.0	2.0	0.1	0.4	0.2	0.1	9.0	0.2	0.7
257	Milk, condensed, evaporated, without vitamin A	65.0	65.0	0.0	0.1	1.9	0.0	0.3	0.2	0.1	8.0	0.2	0.6
260	Milk powder, non-fat, without vitamin A	6.0	6.0	0.0	0.0	6.8	0.4	1.6	0.9	0.4	50.0	4.0	3.6
254	Milk powder, full-cream	407.0	407.0	0.0	0.0	7.0	0.3	1.3	0.7	0.4	44.0	3.0	2.6
255	Milk whole, 3.25% milk fat	28.0	28.0	0.0	0.1	0.0	0.0	0.2	0.1	0.0	5.0	0.4	0.4
256	Yogurt, plain, whole milk	27.0	27.0	0.0	0.1	0.5	0.0	0.1	0.1	0.0	7.0	0.4	0.4



### D3 Milk and milk products

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
261	Cheese, cheddar	721.0	512.0	28.0	98.0	621.0	0.7	0.0	3.1	0.0	0.0
258	Cheese, cream	80.0	104.0	6.0	119.0	296.0	1.2	0.0	0.5	0.0	0.0
259	Cheese, mozzarella	505.0	354.0	20.0	76.0	627.0	0.4	0.0	2.9	0.0	0.0
251	Ice cream	124.0	99.0	12.0	151.0	59.0	0.1	0.0	0.4	0.0	0.0
252	Infant formula, Lactogen	770.0	600.0	70.0	970.0	320.0	8.0	0.0	3.5	0.3	33.0
253	Milk, condensed, sweetened	300.0	234.0	28.0	349.0	122.0	0.2	0.0	0.9	0.0	0.0
257	Milk, condensed, evaporated, without vitamin A	261.0	203.0	24.0	303.0	106.0	0.2	0.0	0.8	0.0	0.0
260	Milk powder, non-fat, without vitamin A	1257.0	968.0	110.0	1794.0	535.0	0.3	0.0	4.1	0.0	0.0
254	Milk powder, full-cream	851.0	681.0	81.0	1036.0	407.0	0.7	0.0	3.0	0.0	0.0
255	Milk whole, 3.25% milk fat	115.0	92.0	11.0	140.0	55.0	0.1	0.0	0.4	0.0	0.0
256	Yogurt, plain, whole milk	121.0	95.0	12.0	155.0	0.0	0.0	0.0	0.0	0.0	0.0

### D3 Milk and milk products

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
261	Cheese, cheddar	0.3	0.9	1.5	2.4	2.1	0.7	0.1	1.3	1.2	1.7	0.9	0.9
258	Cheese, cream	0.1	0.3	0.4	0.7	0.7	0.2	0.1	0.4	0.4	0.4	0.3	0.3
259	Cheese, mozzarella	0.5	1.0	1.1	1.8	1.0	0.5	0.1	1.0	1.0	1.3	0.5	0.5
251	Ice cream	50.0	161.0	215.0	348.0	282.0	90.0	32.0	172.0	172.0	238.0	129.0	96.0
252	Infant formula, Lactogen	311.0	1006.0	1343.0	2174.0	1762.0	560.0	203.0	1073.0	1073.0	1485.0	803.0	601.0
253	Milk, condensed, sweetened	110.0	353.0	474.0	767.0	621.0	197.0	72.0	378.0	378.0	524.0	284.0	213.0
257	Milk, condensed, evaporated, without vitamin A	96.0	307.0	412.0	667.0	540.0	171.0	63.0	329.0	329.0	456.0	247.0	185.0
260	Milk powder, non-fat, without vitamin A	510.0	1632.0	2188.0	3542.0	2868.0	907.0	334.0	1746.0	1746.0	2420.0	1309.0	981.0
254	Milk powder, full-cream	340.0	1103.0	1473.0	2383.0	1931.0	614.0	222.0	1177.0	1177.0	1628.0	881.0	659.0
255	Milk whole, 3.25% milk fat	75.0	143.0	165.0	265.0	140.0	75.0	17.0	147.0	152.0	192.0	75.0	75.0
256	Yogurt, plain, whole milk	61.0	319.0	426.0	760.0	660.0	215.0	67.0	401.0	379.0	596.0	240.0	193.0

## **E. Oils and Fats**

Foods which are concentrated in fats and  
oils including coconut

## E Oils and fats

	Macronutrients	ENERGY_KC Kcal	PROCNT g	A_PROTEI g	MFP_PROT g	FAT g	CHOCDF g
1102	Butter refined-ghee	876.0	0.3	0.3	0.3	99.5	0.0
1101	Butter with salt	717.0	0.9	0.9	0.0	81.1	0.0
1105	Coconut cream	330.0	3.6	0.0	0.0	34.7	6.7
1114	Coconut meat, raw	354.0	3.3	0.0	0.0	33.5	15.2
1104	Coconut milk and water	106.0	1.0	0.0	0.0	10.1	4.6
1103	Coconut oil	862.0	0.0	0.0	0.0	100.0	0.0
1115	Coconut water	19.0	0.7	0.0	0.0	0.2	3.7
1107	Margarine	716.0	0.0	0.0	0.0	81.0	0.0
1108	Palm oil	862.0	0.0	0.0	0.0	100.0	0.0
1109	Sesame oil	884.0	0.0	0.0	0.0	100.0	0.0
1110	Vegetable fat	884.0	0.0	0.0	0.0	100.0	0.0
1111	Vegetable fat, Cowboy	884.0	0.0	0.0	0.0	100.0	0.0
1112	Vegetable fat, Kimbo	884.0	0.0	0.0	0.0	100.0	0.0
1113	Vegetable oil	862.0	0.0	0.0	0.0	100.0	0.0

## E Oils and fats

Macronutrients	FASAT g	FAMS g	FAPU g	CHOLE mg	FIB g	SUCS g	PHYTAC mg
1102 Butter refined-ghee	61.9	28.7	3.7	256.0	0.0	0.0	0.0
1101 Butter with salt	51.4	21.0	3.0	215.0	0.0	0.0	0.0
1105 Coconut cream	30.7	1.5	0.4	0.0	2.2	0.0	324.0
1114 Coconut meat, raw	29.7	1.4	0.4	0.0	9.0	6.2	324.0
1104 Coconut milk and water	8.9	0.4	0.1	0.0	2.7	0.0	97.0
1103 Coconut oil	86.9	5.8	1.8	0.0	0.0	0.0	0.0
1115 Coconut water	0.2	0.0	0.0	0.0	1.1	2.6	0.0
1107 Margarine	20.3	36.0	21.1	0.0	0.0	0.0	0.0
1108 Palm oil	81.5	11.4	1.6	0.0	0.0	0.0	0.0
1109 Sesame oil	16.9	46.2	32.0	0.0	0.0	0.0	0.0
1110 Vegetable fat	25.0	44.5	26.1	0.0	0.0	0.0	0.0
1111 Vegetable fat, Cowboy	25.0	44.5	26.1	0.0	0.0	0.0	0.0
1112 Vegetable fat, Kimbo	25.0	44.5	26.1	0.0	0.0	0.0	0.0
1113 Vegetable oil	86.5	5.8	1.8	0.0	0.0	0.0	0.0

## Oils and fats

Vitamins		VITA	A_VITA	VITD	VITE	VITC	THIA	RIBF	NIA	VITB6	FOL	VITB12	PANT
		µg RE	µg RE	µg	µg	mg	mg	mg	mg	mg	µg	µg	mg
1102	Butter refined-ghee	925.0	925.0	2.0	3.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.1
1101	Butter with salt	684.0	684.0	2.0	0.4	0.0	0.0	0.2	0.7	0.0	3.0	0.2	0.0
1105	Coconut cream	0.0	0.0	0.0	1.0	2.8	0.0	0.0	0.9	0.0	23.0	0.0	0.3
1114	Coconut meat, raw	0.0	0.0	0.0	0.2	3.3	0.0	0.0	0.5	0.1	26.0	0.0	0.3
1104	Coconut milk and water	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1103	Coconut oil	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.2	0.0	8.0	0.0	0.1
1115	Coconut water	0.0	0.0	0.0	0.2	2.8	0.0	0.0	0.8	0.0	16.0	0.0	0.2
1107	Margarine	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1108	Palm oil	5000.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1109	Sesame oil	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1110	Vegetable fat	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1111	Vegetable fat, Cowboy	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1112	Vegetable fat, Kimbo	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1113	Vegetable oil	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

## E Oils and fats

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
1102	Butter refined-ghee	8.0	8.0	1.0	9.0	273.0	0.1	0.1	0.0	0.0	0.0
1101	Butter with salt	17.0	24.0	2.0	24.0	576.0	0.0	0.0	0.1	0.0	0.0
1105	Coconut cream	11.0	122.0	28.0	325.0	4.0	2.3	0.0	1.0	0.4	1.3
1114	Coconut meat, raw	14.0	113.0	32.0	356.0	20.0	2.4	0.0	1.1	0.4	1.5
1104	Coconut milk and water	4.0	34.0	10.0	107.0	6.0	0.7	0.0	0.3	0.1	0.5
1103	Coconut oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1115	Coconut water	24.0	20.0	25.0	250.0	105.0	0.3	0.0	0.1	0.0	0.1
1107	Margarine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1108	Palm oil	6.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1109	Sesame oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1110	Vegetable fat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1111	Vegetable fat, Cowboy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1112	Vegetable fat, Kimbo	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1113	Vegetable oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

## E Oils and Fats

	TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
1102 Butter refined-ghee	4.0	13.0	17.0	27.0	22.0	7.0	3.0	14.0	14.0	19.0	10.0	8.0
1101 Butter with salt	12.0	38.0	51.0	83.0	67.0	21.0	8.0	41.0	41.0	57.0	31.0	23.0
1105 Coconut cream	42.0	132.0	142.0	269.0	160.0	68.0	72.0	184.0	112.0	220.0	595.0	83.0
1114 Coconut meat, raw	39.0	121.0	131.0	247.0	147.0	62.0	66.0	169.0	103.0	202.0	546.0	77.0
1104 Coconut milk and water	12.0	36.0	39.0	74.0	44.0	19.0	20.0	51.0	31.0	61.0	164.0	23.0
1103 Coconut oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1115 Coconut water	8.0	26.0	28.0	53.0	32.0	13.0	14.0	37.0	22.0	44.0	118.0	17.0
1107 Margarine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1108 Palm oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1109 Sesame oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1110 Vegetable fat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1111 Vegetable fat, Cowboy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1112 Vegetable fat, Kimbo	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1113 Vegetable oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



## **F1. Fruits**

Foods commonly referred to as fruits including Avocado .

Do not include tomatoes and carrots

## F1 Fruits and Fruit Juice

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
129	Apples, raw, with skin	52.0	0.2	0.0	0.0	0.2	13.8
101	Avocado, raw, all common variety	160.0	2.0	0.0	0.0	14.7	8.5
102	Banana, ripe	89.0	1.1	0.0	0.0	0.3	22.8
103	Baobab, pulp	305.0	4.2	0.0	0.0	1.3	77.8
365	Breadfruit, raw	103.0	1.1	0.0	0.0	0.2	27.1
131	Custard-apple (bullock's heart), raw	101.0	1.7	0.0	0.0	0.6	25.2
133	Date, red, dried	240.0	2.6	0.0	0.0	0.4	63.3
134	Date, yellow	84.0	0.3	0.0	0.0	0.6	21.7
130	Durian	147.0	1.5	0.0	0.0	5.3	27.1
104	Grape	55.0	0.2	0.0	0.0	0.4	14.2
135	Grapefruit	33.0	0.7	0.0	0.0	0.1	8.4
105	Grapes, pale green	59.0	0.2	0.0	0.0	0.4	15.3
106	Guavas, common, raw	68.0	2.6	0.0	0.0	1.0	14.3
107	Jackfruit, raw	94.0	1.5	0.0	0.0	0.3	24.0
109	Lemon, raw, without peel	29.0	1.1	0.0	0.0	0.3	9.3
110	Limes, raw	30.0	0.7	0.0	0.0	0.2	10.5
111	Mango juice	54.0	0.2	0.0	0.0	0.1	14.1
112	Mango, ripe, fresh-EP	65.0	0.5	0.0	0.0	0.3	17.0
113	Mango, unripe	65.0	0.5	0.0	0.0	0.3	17.0

## F1 Fruits and Fruit Juice

Macronutrients		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
129	Apples, raw, with skin	0.0	0.0	0.1	0.0	2.4	10.4	55.0
101	Avocado, raw, all common variety	2.1	9.8	1.8	0.0	6.7	0.7	0.0
102	Banana, ripe	0.1	0.0	0.1	0.0	2.6	12.2	0.0
103	Baobab, pulp	0.4	0.1	0.4	0.0	5.1	0.6	0.0
365	Breadfruit, raw	0.0	0.0	0.1	0.0	4.9	11.0	0.0
131	Custard-apple(bullock's heart), raw	0.0	0.1	0.1	0.0	2.4	9.9	20.0
133	Date, red, dried	0.2	0.0	0.1	0.0	3.2	0.0	0.0
134	Date, yellow	0.1	0.0	0.1	0.0	3.8	4.7	89.0
130	Durian	0.0	0.0	0.0	0.0	3.8	8.1	0.0
104	Grape	0.1	0.0	0.1	0.0	2.5	3.1	59.0
135	Grapefruit	0.0	0.0	0.0	0.0	1.1	7.3	0.0
105	Grapes, pale green	0.1	0.0	0.1	0.0	2.7	3.3	63.0
106	Guavas, common, raw	0.3	0.1	0.4	0.0	5.4	8.9	0.0
107	Jackfruit, raw	0.1	0.0	0.1	0.0	1.6	6.5	0.0
109	Lemon, raw, without peel	0.0	0.0	0.1	0.0	2.8	0.3	0.0
110	Limes, raw	0.0	0.0	0.1	0.0	2.8	1.7	0.0
111	Mango juice	0.0	0.0	0.0	0.0	0.8	11.0	8.0
112	Mango, ripe, fresh-EP	0.1	0.1	0.1	0.0	1.8	9.9	20.0
113	Mango, unripe	0.1	0.1	0.1	0.0	1.8	4.9	20.0

## F1 Fruits and Fruit Juice *continued*

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
108	Orange juice, concentrated, unsweetened	42.0	0.6	0.0	0.0	0.1	9.9
114	Orange, raw-AP	47.0	0.9	0.0	0.0	0.1	11.8
115	Papaya, ripe	39.0	0.6	0.0	0.0	0.1	9.8
116	Papaya, unripe	39.0	0.6	0.0	0.0	0.1	9.8
117	Passion, fruit	43.0	0.7	0.0	0.0	0.1	11.1
127	Peach	39.0	0.6	0.0	0.0	0.1	10.0
118	Pears, raw	58.0	0.4	0.0	0.0	0.1	15.5
120	Pineapple juice	49.0	0.4	0.0	0.0	0.4	12.4
119	Pineapple, raw, all variety	48.0	0.5	0.0	0.0	0.1	12.6
121	Plums, raw	46.0	0.7	0.0	0.0	0.3	11.4
128	Raspberry	52.0	0.7	0.0	0.0	0.4	12.8
132	Soursop, raw	66.0	1.0	0.0	0.0	0.3	16.8
122	Tamarind	270.0	2.9	0.0	0.0	0.5	71.2
123	Tamarind, fruit, fresh	59.0	0.2	0.0	0.0	0.4	15.3
124	Tangerines, raw	53.0	0.8	0.0	0.0	0.3	13.3
125	Watermelon, raw	30.0	0.6	0.0	0.0	0.2	7.6

## F1 Fruits and Fruit Juice *continued*

Macronutrients		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
108	Orange juice, concentrated, unsweetened	0.0	0.0	0.0	0.0	0.2	8.4	0.0
114	Orange, raw - AP	0.0	0.0	0.0	0.0	2.4	4.2	0.0
115	Papaya, ripe	0.0	0.0	0.0	0.0	1.8	1.8	0.0
116	Papaya, unripe	0.0	0.0	0.0	0.0	1.8	1.8	0.0
117	Passion, fruit	0.0	0.0	0.0	0.0	2.0	5.6	0.0
127	Peach	0.0	0.0	0.0	0.0	1.8	5.0	0.0
118	Pears, raw	0.0	0.0	0.0	0.0	3.1	9.8	55.0
120	Pineapple juice	0.0	0.0	0.1	0.0	1.2	3.1	0.0
119	Pineapple, raw, all variety	0.0	0.0	0.0	0.0	1.4	9.3	0.0
121	Plums, raw	0.0	0.1	0.0	0.0	1.4	9.9	63.0
128	Raspberry	0.0	0.0	0.2	0.0	5.0	0.4	0.0
132	Soursop, raw	0.1	0.1	0.1	0.0	3.3	13.5	20.0
122	Tamarind	0.2	0.0	0.1	0.0	3.6	0.0	0.0
123	Tamarind, fruit, fresh	0.1	0.0	0.1	0.0	2.7	3.3	63.0
124	Tangerines, raw	0.0	0.1	0.1	0.0	1.8	10.6	0.0
125	Watermelon, raw	0.0	0.0	0.1	0.0	0.4	7.6	0.0

## F1 Fruits and Fruit Juice

		Vitamins											
		VITA	A_VITA	VTD	VITE	VITC	THIA	RIBF	NIA	VIT B6	FOL	VIT B12	PANT
		µg RE	µg RE	µg	µg	mg	mg	mg	mg	mg	µg	µg	mg
129	Apples, raw, with skin	3.0	0.0	0.0	0.2	4.6	0.0	0.0	0.1	0.0	3.0	0.0	0.1
101	Avocado, raw, all common variety	7.0	0.0	0.0	2.1	10.0	0.1	0.1	1.7	0.3	81.0	0.0	1.4
102	Banana, ripe	3.0	0.0	0.0	0.1	8.7	0.0	0.1	0.7	0.4	20.0	0.0	0.3
103	Baobab, pulp	0.0	0.0	0.0	1.0	201.0	0.0	0.6	3.4	0.1	13.0	0.0	0.5
365	Breadfruit, raw	0.0	0.0	0.0	0.1	29.0	0.1	0.0	0.9	0.1	14.0	0.0	0.5
131	Custard-apple (bullock's heart), raw	2.0	0.0	0.0	0.0	19.2	0.1	0.1	0.5	0.2	0.0	0.0	0.1
133	Date, red, dried	1.0	0.0	0.0	1.0	2.0	0.1	0.1	0.6	0.2	2.0	0.0	0.0
134	Date, yellow	7.0	0.0	0.0	1.0	9.0	0.0	0.0	0.1	0.1	4.0	0.0	0.1
130	Durian	2.0	0.0	0.0	0.0	47.9	0.4	0.2	1.1	0.3	36.0	0.0	0.2
104	Grape	5.0	0.0	0.0	1.0	6.0	0.0	0.0	0.1	0.1	3.0	0.0	0.1
135	Grapefruit	2.0	0.0	0.0	0.1	33.3	0.0	0.0	0.3	0.0	10.0	0.0	0.3
105	Grapes, pale green	5.0	0.0	0.0	1.0	6.0	0.0	0.0	0.1	0.1	3.0	0.0	0.1
106	Guavas, common, raw	31.0	0.0	0.0	0.7	228.3	0.1	0.0	1.1	0.1	49.0	0.0	0.5
107	Jackfruit, raw	15.0	0.0	0.0	0.0	6.7	0.0	0.1	0.4	0.1	14.0	0.0	0.5
109	Lemon, raw, without peel	1.0	0.0	0.0	0.2	53.0	0.0	0.0	0.1	0.1	11.0	0.0	0.2
110	Limes, raw	2.0	0.0	0.0	0.2	29.1	0.0	0.0	0.2	0.0	8.0	0.0	0.2
111	Mango juice	168.0	0.0	0.0	0.0	15.0	0.0	0.0	0.3	0.1	6.0	0.0	0.1
112	Mango, ripe, fresh-EP	38.0	0.0	0.0	1.1	27.7	0.1	0.1	0.6	0.1	14.0	0.0	0.2

## F1 Fruits and Fruit Juice *continued*

Vitamins		VITA	A_VITA	VITD	VITE	VITC	THIA	RIBF	NIA	VITB6	FOL	VIT B12	PANT
		µg RE	µg RE	µg	µg	mg	mg	mg	mg	mg	µg	µg	mg
113	Mango, unripe	10.0	0.0	0.0	1.0	43.0	0.1	0.1	0.6	0.1	5.0	0.0	0.2
108	Orange juice, concentrated, unsweetened	8.0	0.0	0.0	0.0	53.0	0.1	0.0	0.3	0.1	30.0	0.0	0.3
114	Orange, raw-AP	8.0	0.0	0.0	0.0	53.0	0.1	0.0	0.3	0.1	30.0	0.0	0.3
115	Papaya, ripe	135.0	0.0	0.0	1.0	62.0	0.0	0.0	0.3	0.0	38.0	0.0	0.2
116	Papaya, unripe	135.0	0.0	0.0	1.0	62.0	0.0	0.0	0.3	0.0	38.0	0.0	0.2
117	Passion, fruit	54.0	0.0	0.0	1.0	7.0	0.0	0.0	1.0	0.0	3.0	0.0	0.2
127	Peach	49.0	0.0	0.0	1.0	6.0	0.0	0.0	0.9	0.0	3.0	0.0	0.2
118	Pears, raw	1.0	0.0	0.0	0.1	4.2	0.0	0.0	0.2	0.0	7.0	0.0	0.0
120	Pineapple juice	2.0	0.0	0.0	0.0	15.0	0.1	0.0	0.4	0.1	11.0	0.0	0.2
119	Pineapple, raw, all variety	3.0	0.0	0.0	0.0	36.2	0.1	0.0	0.5	0.1	15.0	0.0	0.2
121	Plums, raw	5.0	0.0	0.0	1.0	9.5	0.0	0.0	0.4	0.1	5.0	0.0	0.0
128	Raspberry	16.0	0.0	0.0	1.0	21.0	0.0	0.0	0.4	0.1	34.0	0.0	0.2
132	Soursop, raw	0.0	0.0	0.0	0.1	20.6	0.1	0.1	0.9	0.1	14.0	0.0	0.3
122	Tamarind	1.0	0.0	0.0	1.0	3.0	0.1	0.1	0.7	0.2	3.0	0.0	0.1
123	Tamarind, fruit, fresh	5.0	0.0	0.0	1.0	6.0	0.0	0.0	0.1	0.1	3.0	0.0	0.1
124	Tangerines, raw	34.0	0.0	0.0	0.2	26.7	0.1	0.0	0.4	0.1	16.0	0.0	0.2
125	Watermelon, raw	28.0	0.0	0.0	0.0	8.1	0.0	0.0	0.2	0.0	3.0	0.0	0.2

## F1 Fruits and Fruit juice

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
129	Apples, raw, with skin	6.0	11.0	5.0	107.0	1.0	0.1	0.0	0.0	0.0	0.0
101	Avocado, raw, all common variety	12.0	52.0	29.0	599.0	7.0	0.6	0.0	0.6	0.2	0.1
102	Banana, ripe	5.0	22.0	27.0	358.0	1.0	0.3	0.0	0.2	0.1	0.3
103	Baobab, pulp	36.0	199.0	46.0	1221.0	3.0	1.9	0.0	0.3	0.7	0.3
365	Breadfruit, raw	17.0	30.0	25.0	490.0	2.0	0.5	0.0	0.1	0.1	0.1
131	Custard-apple (bullock's heart), raw	23.0	23.4	60.0	414.0	9.0	0.7	0.0	1.4.	2.4	0.3
133	Date, red, dried	39.0	78.0	26.0	601.0	10.0	1.7	0.0	0.2	0.3	0.3
134	Date, yellow	10.0	10.0	7.0	163.0	0.0	0.3	0.0	0.0	0.1	0.1
130	Durian	6.0	39.0	30.0	436.0	2.0	0.4	0.0	0.3	0.2	0.3
104	Grape	7.0	7.0	5.0	107.0	0.0	0.2	0.0	0.0	0.0	0.1
135	Grapefruit	12.0	8.0	9.0	148.0	0.0	0.06	0.0	0.07	0.05	0.01
105	Grapes, pale green	7.0	7.0	5.0	115.0	0.0	0.2	0.0	0.0	0.0	0.1
106	Guavas, common, raw	18.0	40.0	22.0	417.0	2.0	0.3	0.0	0.2	0.2	0.2
107	Jackfruit, raw	34.0	36.0	37.0	303.0	3.0	0.6	0.0	0.4	0.2	0.2
109	Lemon, raw, without peel	26.0	16.0	8.0	138.0	2.0	0.6	0.0	0.1	0.0	0.0
110	Limes, raw	26.0	16.0	8.0	138.0	2.0	0.6	0.0	0.1	0.0	0.0
111	Mango juice	4.0	5.0	4.0	66.0	1.0	0.0	0.0	0.0	0.1	0.0
112	Mango, ripe, fresh-EP	10.0	11.0	9.0	156.0	2.0	0.1	0.0	0.0	0.1	0.0
113	Mango, unripe	10.0	11.0	9.0	156.0	2.0	0.1	0.0	0.0	0.1	0.0



**F1 Fruits and Fruit juice continued**

	Minerals	CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
108	Orange juice, concentrated, unsweetened	40.0	14.0	10.0	181.0	0.0	0.1	0.0	0.1	0.1	0.0
114	Orange, raw-AP	40.0	14.0	10.0	181.0	0.0	0.1	0.0	0.1	0.1	0.0
115	Papaya, ripe	24.0	5.0	10.0	257.0	3.0	0.1	0.0	0.1	0.0	0.0
116	Papaya, unripe	24.0	5.0	10.0	257.0	3.0	0.1	0.0	0.1	0.0	0.0
117	Passion, fruit	5.0	12.0	7.0	197.0	0.0	0.1	0.0	0.1	0.1	0.1
127	Peach	6.0	20.0	9.0	190.0	0.0	0.2	0.0	0.2	0.1	0.1
118	Pears, raw	9.0	11.0	0.2	119.0	1.0	0.2	0.0	0.1	0.1	0.0
120	Pineapple juice	7.0	7.0	14.0	113.0	1.0	0.4	0.0	0.1	0.1	1.7
119	Pineapple, raw, all variety	7.0	7.0	14.0	113.0	1.0	0.4	0.0	0.1	0.1	1.7
121	Plums, raw	6.0	16.0	7.0	157.0	0.0	0.2	0.0	0.0	0.1	0.1
128	Raspberry	25.0	29.0	22.0	151.0	1.0	0.7	0.0	0.4	0.1	0.7
132	Soursop, raw	14.0	27.0	21.0	278.0	14.0	0.6	0.0	0.1	0.1	0.1
122	Tamarind	44.0	87.0	30.0	676.0	11.0	1.9	0.0	0.3	0.3	0.3
123	Tamarind, fruit, fresh	7.0	7.0	5.0	115.0	0.0	0.2	0.0	0.0	0.0	0.1
124	Tangerines, raw	40.0	14.0	10.0	181.0	0.0	0.1	0.0	0.1	0.1	0.0
125	Watermelon, raw	7.0	11.0	10.0	112.0	1.0	0.2	0.0	0.1	0.1	0.0

## F1 Fruits and Fruit Juice

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
129	Apples, raw, with skin	2.0	6.0	7.0	11.0	11.0	2.0	3.0	4.0	4.0	8.0	5.0	3.0
101	Avocado, raw, all common variety	25.0	73.0	84.0	143.0	132.0	30.0	27.0	232.0	49.0	107.0	88.0	49.0
102	Banana, ripe	9.0	28.0	28.0	68.0	50.0	8.0	9.0	49.0	9.0	49.0	49.0	770.0
103	Baobab, pulp	48.0	145.0	145.0	252.0	222.0	39.0	58.0	135.0	125.0	204.0	135.0	68.0
365	Breadfruit, raw	0.0	52.0	64.0	85.0	37.0	10.0	9.0	26.0	19.0	47.0	0.0	0.0
131	Custard-apple (bullock's heart), raw	7.0	34.0	33.0	123.0	37.0	4.0	17.0	38.0	24.0	47.0	47.0	81.0
133	Date, red, dried	12.0	70.0	19.0	54.0	58.0	86.0	43.0	54.0	46.0	70.0	191.0	94.0
134	Date, yellow	3.0	10.0	11.0	17.0	17.0	3.0	4.0	7.0	6.0	13.0	9.0	4.0
130	Durian	7.0	34.0	33.0	123.0	37.0	37.0	4.0	38.0	24.0	47.0	47.0	81.0
104	Grape	2.0	7.0	7.0	11.0	11.0	2.0	3.0	5.0	4.0	8.0	6.0	3.0
105	Grapefruit	2.0	7.0	8.0	12.0	12.0	2.0	3.0	5.0	4.0	9.0	6.0	3.0
106	Grapes, pale green	7.0	31.0	30.0	55.0	23.0	5.0	0.0	2.0	10.0	28.0	21.0	7.0
135	Guavas, common, raw	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.04	0.01	0.01	0.08	0.01
107	Jackfruit, raw	12.0	34.0	33.0	71.0	48.0	11.0	17.0	38.0	24.0	47.0	47.0	81.0
109	Lemon, raw, without peel	9.0	15.0	25.0	23.0	47.0	20.0	10.0	31.0	16.0	40.0	65.0	18.0
110	Limes, raw	9.0	15.0	25.0	23.0	47.0	20.0	10.0	31.0	16.0	40.0	65.0	18.0
111	Mango juice	3.0	8.0	8.0	13.0	17.0	2.0	0.0	7.0	4.0	11.0	8.0	5.0
112	Mango, ripe, fresh-EP	8.0	19.0	18.0	31.0	41.0	5.0	0.0	17.0	10.0	26.0	19.0	12.0
113	Mango, unripe	8.0	19.0	18.0	31.0	41.0	5.0	4.0	17.0	10.0	26.0	19.0	12.0

## F1 Fruits and Fruit Juice *continued*

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
108	Orange juice, concentrated, unsweetened	2.0	7.0	6.0	11.0	8.0	3.0	4.0	7.0	3.0	4.0	40.0	3.0
114	Orange, raw - AP	9.0	15.0	25.0	23.0	47.0	20.0	10.0	31.0	16.0	40.0	65.0	18.0
115	Papaya, ripe	8.0	11.0	8.0	16.0	25.0	2.0	5.0	9.0	5.0	10.0	10.0	5.0
116	Papaya, unripe	8.0	11.0	8.0	16.0	25.0	2.0	5.0	9.0	5.0	10.0	10.0	5.0
117	Passion, fruit	2.0	27.0	20.0	40.0	23.0	17.0	6.0	22.0	18.0	38.0	18.0	13.0
127	Peach	7.0	27.0	19.0	18.0	62.0	6.0	2.0	15.0	12.0	16.0	59.0	6.0
118	Pears, raw	2.0	24.0	18.0	36.0	21.0	15.0	5.0	20.0	16.0	34.0	16.0	12.0
120	Pineapple juice	5.0	12.0	13.0	19.0	25.0	11.0	2.0	12.0	12.0	16.0	18.0	9.0
119	Pineapple, raw, all variety	5.0	14.0	14.0	24.0	226.0	12.0	14.0	21.0	13.0	24.0	19.0	10.0
121	Plums, raw	5.0	12.0	13.0	19.0	25.0	11.0	2.0	12.0	12.0	16.0	18.0	9.0
128	Raspberry	7.0	19.0	14.0	31.0	25.0	1.0	5.0	18.0	21.0	18.0	26.0	12.0
132	Soursop, raw	11.0	27.0	19.0	18.0	60.0	7.0	2.0	15.0	12.0	16.0	59.0	6.0
122	Tamarind	2.0	7.0	8.0	12.0	12.0	2.0	3.0	5.0	4.0	9.0	6.0	3.0
123	Tamarind, fruit, fresh	14.0	79.0	22.0	61.0	66.0	96.0	49.0	61.0	52.0	79.0	215.0	105.0
124	Tangerines, raw	2.0	7.0	8.0	12.0	12.0	2.0	3.0	5.0	4.0	9.0	6.0	3.0
125	Watermelon, raw	7.0	27.0	19.0	18.0	62.0	6.0	2.0	15.0	12.0	16.0	59.0	6.0



## **F2. Fruit-based local dishes**

Fruit jams, juices, fruit salad with citrus fruits such as orange or pulp fruit such as papaya.

## F2 Fruit-based local dishes

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
603	Apple juice	53.0	0.1	0.0	0.0	0.0	13.3
604	Avocado juice	104.5	0.6	0.0	0.0	5.0	15.9
601	Grape juice	69.9	0.1	0.0	0.0	0.1	18.1
610	Mixed fruit jam	261.0	0.4	0.0	0.0	0.0	69.3
602	Mixed fruit juice	45.0	0.7	0.0	0.0	2.2	6.6
607	Papaya juice	58.3	0.4	0.0	0.0	0.1	14.9
126	Passion juice	110.1	0.3	0.0	0.0	0.0	28.4
606	Watermelon juice	111.8	1.3	0.0	0.0	0.9	16.2

## F2 Fruit-based local dishes

Macronutrients		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
603	Apple juice	0.0	0.0	0.0	0.0	0.1	0.0	55.0
604	Avocado juice	0.8	3.1	0.6	0.0	1.9	13.1	0.0
601	Grape juice	0.0	0.0	0.0	0.0	0.8	13.9	19.7
610	Mixed fruit jam	0.0	0.0	0.0	0.0	0.8	64.1	0.0
602	Mixed fruit juice	0.3	1.4	0.3	0.0	1.9	1.8	0.0
607	Papaya juice	0.0	0.0	0.0	0.0	1.2	9.3	0.0
126	Passion juice	0.0	0.0	0.0	0.0	0.8	25.5	0.0
606	Watermelon juice	0.4	0.2	0.0	0.0	1.1	18.1	0.0

## F2 Fruit-based local dishes

	VITAMINS	VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VIT B6 mg	FOL µg	VIT B12 µg	PANT mg
603	Apple juice	4.0	0.0	0.0	0.5	8.0	0.0	0.0	0.1	0.0	2.0	0.0	0.1
604	Avocado juice	1.9	0.0	0.0	0.3	2.6	0.0	0.0	0.6	0.1	20.1	0.0	0.3
601	Grape juice	1.7	0.0	0.0	0.3	2.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
610	Mixed fruit jam	3.0	0.0	0.2	0.1	7.0	0.0	64.1	0.0	0.0	2.0	0.0	0.0
602	Mixed fruit juice	29.1	0.0	0.0	0.4	26.1	0.0	0.0	0.5	0.1	23.4	0.0	0.3
607	Papaya juice	90.0	0.0	0.0	0.7	41.3	0.0	0.0	0.2	0.0	25.3	0.0	0.2
126	Passion juice	21.6	0.0	0.0	0.4	2.8	0.0	0.0	0.4	0.0	1.2	0.0	0.1
606	Watermelon juice	83.1	0.0	0.0	0.0	22.4	0.2	0.0	0.4	0.3	4.5	0.0	0.5



## F2 Fruit Based

	Minerals	CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
603	Apple juice	2.0	7.0	5.0	90.0	2.0	0.5	0.0	0.2	0.0	0.2
604	Avocado juice	3.7	13.6	12.6	194.5	3.4	0.3	0.0	0.1	0.1	0.1
601	Grape juice	2.5	2.6	1.7	35.9	0.1	0.1	0.0	0.0	0.0	0.0
610	Mixed fruit jam	24.0	16.0	6.0	85.0	15.0	1.0	0.0	0.2	0.2	0.1
602	Mixed fruit juice	16.6	11.2	10.4	190.1	1.9	0.2	0.0	0.1	0.1	0.0
607	Papaya juice	16.1	3.5	6.7	172	2.1	0.1	0.0	0.1	0.0	0.0
126	Passion juice	2.2	5.3	2.8	79.3	0.2	0.1	0.0	0.0	0.0	0.0
606	Watermelon juice	18.0	20.2	24.7	260.4	4.5	0.4	0.0	0.2	0.1	0.1

## F2 Fruit-based local dishes

	Amino acids	TRP mg	THR mg	ILE mg	LEU mg	LYS mg	MET mg	CYS mg	PHE mg	TYR mg	VAL mg	ARG mg	HIS mg
603	Apple juice	53.0	0.1	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0	0.1	0.0
604	Avocado juice	6.8	21.4	23.0	39.9	30.5	12.0	6.8	22.1	15.9	31.5	19.1	9.4
601	Grape juice	0.7	2.3	2.3	3.7	3.7	0.7	1.0	1.7	1.3	2.7	2.0	1.0
610	Mixed fruit jam	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
602	Mixed fruit juice	45.0	0.7	0.0	0.0	2.2	6.6	0.3	1.4	0.3	0.0	1.9	1.8
607	Papaya juice	5.3	7.3	5.3	10.7	16.7	1.3	3.3	6.0	3.3	6.7	6.7	3.3
126	Passion juice	110.1	0.3	0.0	0.0	0.0	28.4	0.0	0.0	0.0	0.0	0.8	25.5
606	Watermelon juice	20.2	33.7	56.1	51.6	105.5	44.9	22.4	69.6	35.9	89.8	145.9	40.4

### **F3. Vegetables**

Foods referred to as vegetables such as carrots, tomatoes, green leaves such as spinach, pumpkin, cassava leaves and so on.

### F3 Vegetables

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
401	Amaranth, leaves, raw	23.0	8.5	0.0	0.0	0.5	8.5
424	Bean, cluster	42.0	2.7	0.0	0.0	0.1	7.8
425	Bean, french	35.0	1.9	0.0	0.0	0.3	7.9
431	Cabbage, chinese, raw	15.0	2.3	0.0	0.0	0.2	2.1
402	Cabbage, cooked	14.0	0.6	0.0	0.0	0.3	2.8
403	Cabbage, raw, green, white	25.0	1.3	0.0	0.0	0.1	5.8
430	Carrot, juice	45.0	1.1	0.0	0.0	0.2	10.5
404	Carrots, raw	41.0	0.9	0.0	0.0	0.2	9.6
409	Cassava leaf	37.0	3.7	0.0	0.0	0.2	7.3
405	Cauliflower, cooked without salt	12.0	0.7	0.0	0.0	0.1	2.6
406	Cauliflower, raw	25.0	2.0	0.0	0.0	0.1	5.3
427	Chili, green	21.0	0.9	0.0	0.0	0.1	5.1
410	Cowpea leaf	37.0	9.3	0.0	0.0	0.8	7.3
407	Cucumber, with peel, raw	15.0	0.7	0.0	0.0	0.1	3.6
408	Egg plant, raw	24.0	1.0	0.0	0.0	0.2	5.7
411	Green medium, leaf	15.0	2.3	0.0	0.0	0.2	2.1
429	Green pepper (capsicum)	19.0	0.0	1.0	0.0	0.0	0.3

## F4 Vegetables

Macronutrients		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
401	Amaranth, leaves, raw	0.1	0.0	0.1	0.0	4.2	0.0	42.0
424	Bean, cluster	0.0	0.0	0.1	0.0	2.8	2.4	14.0
425	Bean, french	0.1	0.0	0.1	0.0	3.2	0.3	91.0
431	Cabbage,, chinese, raw	0.0	0.1	0.0	0.0	2.0	0.0	42.0
402	Cabbage, cooked	0.1	0.0	0.1	0.0	1.8	0.3	0.0
403	Cabbage, raw, green, white	0.0	0.0	0.0	0.0	2.5	3.2	0.0
430	Carrot, juice	0.0	0.0	0.1	0.0	3.3	3.6	9.0
404	Carrots, raw	0.0	0.0	0.1	0.0	2.8	4.7	9.0
409	Cassava leaf	0.0	0.0	0.1	0.0	0.6	0.0	42.0
405	Cauliflower, cooked without salt	0.0	0.0	0.0	0.0	1.1	0.2	0.0
406	Cauliflower, raw	0.0	0.0	0.1	0.0	2.5	2.4	0.0
427	Chili, green	0.0	0.0	0.0	0.0	1.3	3.1	35.0
410	Cowpea leaf	0.0	0.0	0.1	0.0	3.3	0.0	42.0
407	Cucumber, with peel, raw	0.0	0.0	0.0	0.0	0.5	1.7	0.0
408	Egg plant, raw	0.0	0.0	0.1	0.0	3.4	2.4	0.0
411	Green medium, leaf	0.0	0.1	0.0	0.0	2.0	0.0	42.0
429	Green pepper (capsicum)	4.5	0.1	0.1	0.2	0.0	1.5	70.0

### F3 Vegetables *continued*

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
426	Hare lettuce, (mchungu)	10.7	1.0	0.0	0.0	0.3	1.0
414	Lettuce	13.0	1.0	0.0	0.0	0.2	2.1
415	Mushroom	27.0	2.2	0.0	0.0	0.5	5.1
416	Okra, raw	31.0	2.0	0.0	0.0	0.1	7.0
417	Onion, raw	40.0	1.3	0.0	0.0	0.2	9.2
418	Pea, green, fresh	84.0	5.4	0.0	0.0	0.2	15.6
433	Pepper dried or fresh, hot	27.0	1.0	0.0	0.0	0.3	5.8
412	Pumpkin leaf, raw	19.0	7.0	0.0	0.0	0.7	9.0
419	Pumpkin, cooked	20.0	0.5	0.0	0.0	0.3	4.4
432	Salad, green	36.0	3.5	0.0	0.0	0.9	7.1
420	Spinach, cooked	23.0	3.0	0.0	0.0	0.3	3.8
428	Sweet potato leaf	35.0	4.8	0.0	0.0	0.3	6.4
434	Swiss chard, raw	19.0	1.8	0.0	0.0	0.2	3.7
413	Taro leaf, raw	42.0	5.0	0.0	0.0	0.7	6.7
421	Tomato, bitter (African egg plant)	22.0	1.0	0.0	0.0	0.4	4.5
422	Tomato, green	21.0	0.9	0.0	0.0	0.3	4.6
423	Tomato, ripe	21.0	0.9	0.0	0.0	0.3	4.6

### F3 Vegetables *continued*

	Macronutrients	FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
426	Hare lettuce, (mchunga)	0.0	0.1	0.0	0.0	0.4	0.0	42.0
414	Lettuce	0.0	0.0	0.1	0.0	1.4	0.1	0.0
415	Mushroom	0.1	0.0	0.2	0.0	2.2	0.2	0.0
416	Okra, raw	0.0	0.0	0.0	0.0	3.2	1.2	77.0
417	Onion, raw	0.0	0.0	0.1	0.0	1.3	1.2	0.0
418	Pea, green, fresh	0.0	0.0	0.1	0.0	5.5	4.8	28.0
433	Pepper dried or fresh, hot	0.1	0.1	0.1	0.0	1.7	0.1	35.0
412	Pumpkin leaf, raw	0.2	0.1	0.0	0.0	4.4	0.0	42.0
419	Pumpkin, cooked	0.1	0.0	0.2	0.0	1.4	0.1	0.0
432	Salad, green	0.1	0.1	0.4	0.0	4.4	0.4	47.0
420	Spinach, cooked	0.0	0.0	0.1	0.0	2.4	0.0	0.0
428	Sweet potato leaf	0.0	0.1	0.0	0.0	2.0	0.0	42.0
434	Swiss chard, raw	0.0	0.0	0.1	0.0	1.6	1.1	42.0
413	Taro leaf, raw	0.2	0.1	0.3	0.0	3.7	3.0	0.0
421	Tomato, bitter (African egg plant)	0.1	0.0	0.2	0.0	2.8	0.5	6.0
422	Tomato, green	0.0	0.1	0.1	0.0	1.1	0.0	6.0
423	Tomato, ripe	0.0	0.1	0.1	0.0	1.1	0.0	6.0

### F3 Vegetables

Vitamins		VITA	A_VITA	VITD	VITE	VITC	THIA	RIBF	NIA	VITB6	FOL	VITB12PANT
		µg RE	µg RE	µg	µg	mg	mg	mg	mg	mg	µg	µg mg
401	Amaranth, leaves, raw	146.0	0.0	0.0	0.0	44.5	0.5	7.6	0.7	0.2	85.0	0.0 0.1
424	Bean, cluster	30.0	0.0	0.0	0.0	7.0	0.1	0.1	1.0	0.1	32.0	0.0 0.1
425	Bean, french	67.0	0.0	0.0	0.0	0.0	10.0	0.1	0.1	0.1	3.3	0.0 0.1
431	Cabbage, chinese, raw	303.0	0.0	0.0	2.0	25.0	0.0	0.1	0.4	0.1	73.0	0.0 0.0
402	Cabbage, cooked	8.0	0.0	0.0	0.0	13.0	0.0	0.0	0.2	0.1	13.0	0.0 0.1
403	Cabbage, raw, green, white	5.0	0.0	0.0	0.2	36.6	0.1	0.0	0.2	0.1	43.0	0.0 0.2
430	Carrot, juice	1942.0	0.0	0.0	1.0	2.0	0.0	0.1	0.5	0.3	14.0	0.0 0.3
404	Carrots, raw	841.0	0.0	0.0	0.7	5.9	0.1	0.1	1.0	0.1	19.0	0.0 0.3
409	Cassava leaf	519.0	0.0	0.0	0.0	33.0	0.1	0.2	0.9	0.5	104.0	0.0 0.3
405	Cauliflower, cooked without salt	6.0	0.0	0.0	0.0	16.0	0.0	0.0	0.1	0.1	21.0	0.0 0.1
406	Cauliflower, raw	1.0	0.0	0.0	0.1	46.4	0.1	0.1	0.5	0.2	57.0	0.0 0.7
427	Chili, green	39.0	0.0	0.0	1.0	109.0	0.1	0.0	0.7	0.2	22.0	0.0 0.1
410	Cowpea leaf	519.0	0.0	0.0	0.0	32.4	0.1	8.3	0.9	0.5	104.0	0.0 0.3
407	Cucumber, with peel, raw	5.0	0.0	0.0	0.0	2.8	0.0	0.0	0.1	0.0	7.0	0.0 0.3
408	Egg plant, raw	1.0	0.0	0.0	0.3	2.2	0.0	0.0	0.6	0.1	22.0	0.0 0.3
411	Green medium, leaf	303.0	0.0	0.0	2.0	25.0	0.0	0.1	0.4	0.1	73.0	0.0 0.0
429	Green pepper (capsicum)	78.0	0.0	0.0	2.0	218.0	0.1	0.1	1.4	0.4	44.0	0.0 0.1



### F3 Vegetables continued

Vitamins		VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VITB6 mg	FOL µg	VIT B12 µg	PANT mg
426	Hare lettuce, (mchungu)	8.3	0.0	0.0	6.1	16.0	0.0	0.0	0.1	0.1	21.0	0.0	0.1
414	Lettuce	33.0	0.0	0.0	0.0	4.0	0.1	0.0	0.2	0.0	56.0	0.0	0.1
415	Mushroom	0.0	0.0	2.0	0.0	4.0	0.1	0.3	4.5	0.1	18.0	0.0	2.2
416	Okra, raw	19.0	0.0	0.0	0.4	21.1	0.2	0.1	1.0	0.2	88.0	0.0	0.2
417	Onion, raw	0.0	0.0	0.0	0.0	7.4	0.0	0.0	0.1	0.1	19.0	0.0	0.1
418	Pea, green, fresh	60.0	0.0	0.0	0.0	14.0	0.3	0.2	2.0	0.2	63.0	0.0	0.2
433	Pepper dried or fresh, hot	471.0	0.0	0.0	1.0	146.0	0.0	0.0	0.9	0.2	16.0	0.0	0.1
412	Pumpkin leaf, raw	550.0	0.0	0.0	2.0	24.5	0.0	8.5	0.4	0.2	118.0	0.0	0.3
419	Pumpkin, cooked	201.0	0.0	0.0	0.0	5.0	0.1	0.0	0.4	0.0	14.0	0.0	0.2
432	Salad, green	399.0	0.0	0.0	3.0	32.0	0.1	0.1	0.8	0.2	113.0	0.0	0.1
420	Spinach, cooked	819.0	0.0	0.0	1.0	10.0	0.1	0.2	0.5	0.2	146.0	0.0	0.2
428	Sweet potato leaf	303.0	0.0	0.0	2.0	21.8	0.6	3.1	0.4	0.1	73.0	0.0	0.0
434	Swiss chard, raw	306.0	0.0	0.0	1.9	30.0	0.0	0.1	0.4	0.1	14.0	0.0	0.2
413	Taro leaf, raw	241.0	0.0	0.0	2.0	52.0	0.2	0.5	1.5	0.1	126.0	0.0	0.1
421	Tomato, bitter (African egg plant)	13.0	0.0	0.0	0.0	20.0	0.1	0.1	0.3	0.1	20.0	0.0	0.1
422	Tomato, green	87.0	0.0	0.0	0.0	19.0	0.1	0.1	0.6	0.1	15.0	0.0	0.3
423	Tomato, ripe	87.0	0.0	0.0	0.0	19.0	0.1	0.1	0.6	0.1	15.0	0.0	0.3

### F3 Vegetables

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
401	Amaranth, leaves, raw	96.9	50.0	55.0	380.9	6.6	2.3	0.0	0.6	0.2	0.9
424	Bean, cluster	14.0	59.0	20.0	136.0	2.0	0.8	0.0	0.6	0.1	0.3
425	Bean, french	46.0	39.0	25.0	299.0	3.0	1.3	0.0	0.4	0.1	0.3
431	Cabbage, chinese, raw	74.0	41.0	15.0	202.0	16.0	1.1	0.0	0.2	0.1	0.3
402	Cabbage, cooked	20.0	9.0	5.0	61.0	5.0	0.1	0.0	0.1	0.0	0.1
403	Cabbage, raw, green, white	40.0	26.0	12.0	170.0	18.0	0.5	0.0	0.2	0.0	0.2
430	Carrot, juice	31.0	30.0	13.0	227.0	66.0	0.6	0.0	0.3	0.1	0.8
404	Carrots, raw	33.0	35.0	12.0	320.0	69.0	0.3	0.0	0.2	0.0	0.1
409	Cassava leaf	211.0	72.0	62.0	550.0	11.0	3.1	0.0	0.4	0.2	0.1
405	Cauliflower, cooked without salt	23.0	11.0	7.0	121.0	9.0	0.3	0.0	0.1	0.0	0.1
406	Cauliflower, raw	22.0	44.0	15.0	303.0	30.0	0.4	0.0	0.3	0.0	0.2
427	Chili, green	12.0	27.0	11.0	150.0	12.0	0.6	0.0	0.2	0.1	0.1
410	Cowpea leaf	49.7	72.0	62.0	248.0	5.7	0.8	0.0	1.4	0.2	0.1
407	Cucumber, with peel, raw	16.0	21.0	13.0	147.0	2.0	0.3	0.0	0.2	0.0	0.1
408	Egg plant, raw	9.0	25.0	14.0	230.0	2.0	0.4	0.0	0.1	0.1	0.3
411	Green medium, leaf	74.0	41.0	15.0	202.0	16.0	1.1	0.0	0.2	0.1	0.3
429	Green pepper (capsicum)	10.0	23.0	10.0	131.0	10.0	0.5	0.0	0.2	0.0	0.1

### F3 Vegetables *continued*

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
426	Hare lettuce, (mchungu)	66.7	2.8	44.8	21.3	14.5	1.7	0.0	0.2	0.1	0.3
414	Lettuce	19.0	20.0	9.0	158.0	9.0	0.5	0.0	0.2	0.0	0.2
415	Mushroom	3.0	86.0	9.0	318.0	5.0	0.5	0.0	0.5	0.3	0.0
416	Okra, raw	81.0	63.0	57.0	303.0	0.6	0.8	0.0	0.6	0.1	1.0
417	Onion, raw	23.0	29.0	10.0	146.0	4.0	0.2	0.0	0.2	0.0	0.1
418	Pea, green, fresh	27.0	117.0	39.0	271.0	3.0	1.5	0.0	1.2	0.2	0.5
433	Pepper dried or fresh, hot	9.0	19.0	11.0	141.0	15.0	0.4	0.0	0.1	0.4	0.1
412	Pumpkin leaf, raw	114.5	29.0	28.4	203.0	29.0	0.6	0.0	1.1	0.3	0.3
419	Pumpkin, cooked	7.0	10.0	4.0	219.0	1.0	0.2	0.0	0.2	0.1	0.1
432	Salad, green	94.0	17.0	352.0	22.0	1.8	0.0	0.4	0.1	0.1	0.4
420	Spinach, cooked	136.0	56.0	87.0	466.0	70.0	3.6	0.0	0.8	0.2	0.9
428	Sweet potato leaf	59.2	41.0	44.8	315.2	10.6	0.5	0.0	0.2	0.1	0.3
434	Swiss chard, raw	51.0	46.0	81.0	379.0	213.0	1.8	0.0	2.8	0.9	1.6
413	Taro leaf, raw	137.0	29.0	22.0	203.0	29.0	0.8	0.0	0.1	0.3	0.3
421	Tomato, bitter (African egg plant)	31.0	15.0	8.0	97.0	8.0	0.2	0.0	0.1	0.0	0.1
422	Tomato, green	5.0	24.0	11.0	222.0	9.0	0.5	0.0	0.1	0.1	0.1
423	Tomato, ripe	5.0	24.0	11.0	222.0	9.0	0.5	0.0	0.1	0.1	0.1

### F3 Vegetables

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
401	Amaranth, leaves, raw	24.0	130.0	175.0	306.0	173.0	51.0	32.0	168.0	116.0	196.0	196.0	87.0
424	Bean, cluster	19.0	101.0	97.0	160.0	157.0	41.0	16.0	99.0	56.0	116.0	212.0	53.0
425	Bean, french	20.0	82.0	69.0	116.0	91.0	23.0	18.0	69.0	44.0	93.0	76.0	35.0
431	Cabbage, chinese, raw	25.0	60.0	82.0	69.0	103.0	21.0	34.0	60.0	119.0	88.0	165.0	40.0
402	Cabbage, cooked	6.0	22.0	32.0	33.0	30.0	6.0	5.0	20.0	11.0	27.0	36.0	13.0
403	Cabbage, raw, green, white	10.0	35.0	51.0	52.0	47.0	10.0	8.0	32.0	17.0	43.0	57.0	20.0
430	Carrot, juice	12.0	40.0	43.0	46.0	43.0	7.0	9.0	34.0	21.0	46.0	45.0	17.0
404	Carrots, raw	12.0	40.0	43.0	46.0	43.0	7.0	9.0	34.0	21.0	46.0	45.0	17.0
409	Cassava leaf	7.0	24.0	35.0	36.0	33.0	7.0	6.0	22.0	12.0	30.0	40.0	14.0
405	Cauliflower, cooked without salt	15.0	49.0	72.0	73.0	67.0	14.0	12.0	45.0	24.0	61.0	81.0	29.0
406	Cauliflower, raw	12.0	36.0	31.0	50.0	43.0	12.0	19.0	30.0	20.0	41.0	46.0	20.0
427	Chili, green	5.0	19.0	21.0	29.0	29.0	6.0	4.0	19.0	11.0	22.0	44.0	10.0
410	Cowpea leaf	8.0	30.0	36.0	52.0	39.0	9.0	4.0	35.0	22.0	43.0	46.0	19.0
407	Cucumber, with peel, raw	5.0	19.0	21.0	29.0	29.0	6.0	4.0	19.0	11.0	22.0	44.0	10.0
408	Egg plant, raw	24.0	130.0	175.0	306.0	173.0	51.0	32.0	168.0	116.0	196.0	196.0	87.0
411	Green medium, leaf	24.0	130.0	175.0	306.0	173.0	51.0	32.0	168.0	116.0	196.0	196.0	87.0
429	Green pepper (capsicum)	25.0	60.0	82.0	82.0	103.0	21.0	34.0	60.0	119.0	88.0	165.0	40.0

### F3 Vegetables continued

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
426	Hare lettuce, (mchungu)	35.0	60.0	82.0	69.0	228.0	86.0	47.0	60.0	119.0	88.0	165.0	40.0
414	Lettuce	20.0	63.0	59.0	105.0	74.0	26.0	13.0	70.0	44.0	78.0	72.0	28.0
415	Mushroom	25.0	60.0	82.0	69.0	103.0	21.0	34.0	60.0	119.0	88.0	165.0	40.0
416	Okra, raw	20.0	63.0	59.0	105.0	74.0	26.0	13.0	70.0	44.0	78.0	72.0	28.0
417	Onion, raw	8.0	53.0	75.0	70.0	75.0	14.0	14.0	49.0	29.0	62.0	63.0	20.0
418	Pea, green, fresh	51.0	101.0	89.0	137.0	227.0	43.0	6.0	88.0	48.0	103.0	111.0	60.0
433	Pepper dried or fresh, hot	17.0	70.0	59.0	99.0	77.0	20.0	15.0	59.0	37.0	79.0	65.0	30.0
412	Pumpkin leaf, raw	20.0	63.0	59.0	105.0	74.0	26.0	13.0	70.0	44.0	78.0	72.0	28.0
419	Pumpkin, cooked	7.0	14.0	18.0	25.0	17.0	6.0	4.0	18.0	15.0	19.0	25.0	9.0
432	Salad, green	34.0	111.0	124.0	147.0	166.0	36.0	55.0	105.0	152.0	135.0	228.0	61.0
420	Spinach, cooked	40.0	127.0	152.0	231.0	182.0	55.0	35.0	134.0	113.0	168.0	168.0	66.0
428	Sweet potato leaf	35.0	60.0	82.0	69.0	228.0	86.0	47.0	60.0	119.0	88.0	165.0	40.0
434	Swiss chard, raw	17.0	83.0	147.0	130.0	99.0	19.0	0.0	110.0	0.0	110.0	117.0	36.0
413	Taro leaf, raw	23.0	69.0	54.0	111.0	67.0	20.0	32.0	82.0	55.0	82.0	103.0	34.0
421	Tomato, bitter (African egg plant)	10.0	35.0	51.0	52.0	47.0	10.0	8.0	32.0	17.0	43.0	57.0	20.0
422	Tomato, green	6.0	21.0	20.0	31.0	31.0	7.0	11.0	22.0	15.0	22.0	21.0	13.0
423	Tomato, ripe	6.0	21.0	20.0	31.0	31.0	7.0	11.0	22.0	15.0	22.0	21.0	13.0



## **F4. Vegetable-based local dishes**

Cooked dishes prepared locally with any vegetable such as  
spinach, cow pea leaves

#### F4 Vegetable-based local dishes

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
755	Cabbage relish with oil	34.1	0.7	0.1	0.0	2.1	3.5
754	Cabbage, onion salad	27.8	1.2	0.0	0.0	0.3	6.2
756	Cassava leaf relish with groundnuts	113.1	6.4	0	0	6.8	9.9
757	Cassava leaf relish with coconut milk	70.9	2.8	0.0	0.0	4.7	6.7
759	Cow pea leaf relish with coconut milk	80.3	2.5	0.0	0.0	6.0	6.4
779	Cow pea leaf relish with groundnuts	79.3	4.8	0.0	0.0	4.2	8.3
784	Egg plant relish	77.3	1.2	0.0	0.0	4.7	7.9
763	Green leaf, medium, relish with coconut milk	107.7	2.8	0.0	0.0	9.2	5.8
762	Green leaf, medium relish with groundnuts	15.0	1.0	0.0	0.0	0.6	2.0
760	Green leaf, medium, relish without oil	5.3	0.8	0.0	0.0	7.0	0.7
761	Green leaf, medium, relish with oil	86.1	1.0	0.0	0.0	14.5	1.0
766	Green peas relish without oil	63.5	3.9	0.0	0.0	0.2	12.0
767	Green peas relish with oil	82.5	3.8	0.0	0.0	2.6	11.8
778	Green peas relish with oil and coconut milk	125.6	3.6	0.0	0.0	7.8	11.9
782	Green peas relish with coconut milk	120.2	3.7	0.0	0.0	6.6	12.7
786	Hare lettuce (mchunga)	169.6	1.0	0.0	0.0	17.4	4.5
783	Okra relish without oil	16.7	0.9	0.0	0.0	0.2	3.7
775	Okra relish with oil	74.3	0.8	0.1	0.0	6.2	4.7



#### F4 Vegetable-based local dishes

Macronutrients		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
755	Cabbage relish with oil	1.8	0.1	0.1	0.0	1.4	0.6	5.2
754	Cabbage, onion salad	0.1	0.0	0.2	0.0	2.2	0.3	0.3
756	Cassava leaves relish with groundnuts	0.9	3.3	2.2	0.0	2.0	0.8	263.7
757	Cassava leaves relish with coconut milk	4.0	0.2	0.1	0.0	1.6	0.0	70.0
759	Cow pea leaf relish with coconut milk	5.2	0.3	0.1	0.1	1.9	0.0	77.5
779	Cow pea leaf relish with groundnuts	0.5	2.0	1.4	0.0	1.6	0.4	168.4
784	Egg plant relish	2.0	0.6	1.7	0.0	2.2	1.7	16.5
763	Green leaf, medium, relish with coconut milk	8.0	0.5	0.1	0.0	4.1	0.0	121.5
762	Green leaf, medium relish with groundnuts	0.1	0.3	0.2	0.0	0.8	0.0	27.8
760	Green leaf, medium, relish without oil	0.0	0.0	0.0	0.0	0.7	0.0	7.0
761	Green leaf, medium, relish with oil	7.9	0.5	0.1	0.0	0.9	0.0	22.2
766	Green peas relish without oil	0.0	0.0	0.1	0.0	4.1	3.2	20.9
767	Green peas relish with oil	2.0	0.2	0.1	0.0	3.9	3.2	19.8
778	Green peas relish with oil and coconut milk	6.7	0.4	0.3	0.0	4.6	2.4	79.1
782	Green peas relish with coconut milk	5.7	0.3	0.2	0.0	5.1	3.0	69.8
786	Hare lettuce (mchunga)	14.8	1.1	0.4	0	0.9	0.3	14.7
783	Okra relish without oil	0.1	0.0	0.1	0.1	1.9	0.1	39.7
775	Okra relish with oil	5.6	0.4	0.2	0.0	1.3	0.5	24.2

#### F4 Vegetable-based local dishes *continued*

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
765	Okra relish with coconut milk	51.0	1.2	0.0	0.0	3.2	5.7
781	Okra, fried	106.2	1.0	0.0	0.0	10.2	4.5
780	Sweet potato leaf relish with coconut milk	166.1	3.7	0.0	0.0	13.7	10.6
777	Potato leaf relish with milk	67.7	6.5	1.2	0.0	2.6	6.9
764	Potato leaf relish with oil	131.0	3.4	0.0	0.0	11.0	7.4
772	Potato samosa	194.0	3.0	0.0	0.0	9.2	24.4
769	Pumpkin leaf relish without oil	16.8	0.8	0.0	0.0	0.2	3.7
768	Pumpkin leaf relish with oil	63.8	0.7	0.0	0.0	5.7	3.5
770	Spinach relish with groundnut and oil	149.0	1.7	0.0	0.0	15.2	3.7
752	Spinach relish without oil	43.5	3.3	0.0	0.0	0.5	8.8
753	Spinach relish with oil	108.0	2.7	0.0	0.0	9.0	6.1
771	Spinach relish with sesame seeds	61.8	3.2	0.0	0.0	3.8	5.5
785	Tomato relish	34.0	1.1	0.0	0.0	0.3	5.2

#### F4 Vegetable-based local dishes *continued*

Macronutrients		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
765	Okra relish with coconut milk	2.7	0.1	0.1	0.0	0.0	2.0	54.0
781	Okra, fried	8.7	0.6	0.2	0.0	1.5	0.1	38.5
780	Sweet potato leaf relish with coconut milk	11.9	0.6	0.2	0.0	7.1	0.0	188.4
777	Potato leaf relish with milk	1.4	0.8	0.1	8.0	4.0	0.0	53.4
764	Potato leaf relish with oil	9.4	0.5	0.4	0.0	0.7	0.2	84.0
772	Potato samosa	1.3	2.1	5.3	0.0	1.1	0.2	91.0
769	Pumpkin leaf relish without oil	0.0	0.0	0.1	0.0	1.8	0.2	21.2
768	Pumpkin leaf relish with oil	4.9	0.3	0.2	0.0	1.7	0.2	20.0
770	Spinach relish with groundnut and oil	12.5	1.2	0.5	0.0	0.5	0.2	0.6
752	Spinach relish without oil	0.0	0.0	0.1	0.0	1.2	0.1	35.1
753	Spinach relish with oil	7.8	0.5	0.2	0.0	0.6	0.1	30.0
771	Spinach relish with sesame seeds	0.5	1.4	1.7	0.0	1.6	0.1	398.2
785	Tomato relish	0.1	0.1	0.1	0.0	1.7	0.0	20.9

## F4 Vegetable-based local dishes

Vitamins		VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VIT B6 mg	FOL µg	VIT B12 µg	PANT mg
755	Cabbage relish with oil	97.6	0.0	0.0	0.1	11.8	0.0	0.0	0.3	0.1	81.2	0.0	0.1
754	Cabbage, onion salad	18.0	0.0	0.0	0.0	16.5	0.1	0.0	0.3	0.1	19.1	0.0	0.2
757	Cassava leaves relish with groundnuts	330.6	0.0	0.0	0.0	21.4	0.1	0.1	0.7	0.4	69.8	0.0	0.4
756	Cassava leaves relish with coconut milk	360.5	0.0	0.0	1.2	26.9	0.1	0.2	2.6	0.4	93.1	0	0.2
759	Cow pea leaf relish with coconut milk	259.5	0.0	0.0	0.0	17.1	0.1	0.1	0.6	0.3	56.7	0.0	0.2
779	Cow pea leaf relish with groundnuts	345.3	0.0	0.0	0.0	8.8	0.1	0.1	1.9	0.4	80.0	0.0	0.4
784	Egg plant relish	44.2	0.0	0.0	1.1	168.9	0.1	0.0	0.6	0.1	16.8	0.0	0.3
763	Green leaf, medium, relish with coconut milk	245.4	0.0	0.0	1.9	21.1	0.1	0.1	0.5	0.1	66.2	0.0	0.1
762	Green leaf, medium relish with groundnuts	86.7	0.0	0.0	0.5	10.7	0.0	0.0	0.4	0.0	20.4	0.0	0.1
760	Green leaf, medium, relish without oil	106.0	0.0	0.0	0.7	8.8	0.0	0.0	1.4	0.0	25.7	0.0	0.0
761	Green leaf, medium, relish with oil	192.1	0.0	0.0	1.3	15.8	0.0	0.0	0.2	0.1	46.3	0.0	0.0
766	Green peas relish without oil	62.2	0.0	0.0	0.0	14.4	0.2	0.1	1.5	0.2	47.8	0.0	0.2
767	Green peas relish with oil	59.2	0.0	0.0	0.0	13.8	0.2	0.1	1.5	0.2	45.6	0.0	0.2
778	Green peas relish with oil and coconut milk	47.3	0.0	0.0	0.2	10.5	0.2	0.1	1.4	0.2	44.1	0.0	0.2
782	Green peas with coconut milk	42.7	0.0	0.0	0.2	10.5	0.2	0.1	1.4	0.2	44.1	0.0	0.2
786	Hare lettuce (mchunga)	42.2	0	40.4	323.2	34.2	0	0	0.3	0	112	0	0.1
783	Okra relish without oil	202.3	0.0	0.0	0.7	12.0	0.0	0.1	1.2	0.1	38.6	0.0	0.2
775	Okra relish with oil	212.7	0.0	0.0	0.3	27.5	0.0	0.0	0.5	0.1	17.0	0.0	0.1

#### F4 Vegetable-based local dishes *continued*

Vitamins		VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VIT B6 mg	FOL µg	VIT B12/PANT µg
765	Okra relish with coconut milk	43.0	0.0	0.0	0.0	10.0	0.1	0.1	0.5	0.1	16.0	0.0
781	Okra, fried	28.5	0.0	0.0	0.1	5.1	0.0	0.0	0.3	0.0	15.8	0.0
780	Sweet potato leaf relish with coconut milk	770.0	0.0	0.0	3.2	39.0	0.1	0.1	0.8	0.3	175.6	0.0
777	Potato leaf relish with milk	385.6	0.0	0.0	72.7	13.3	0.1	0.1	0.5	0.1	94.2	0.0
764	Potato leaf relish with oil	637.4	31.4	0.0	4.0	21.0	0.1	0.2	0.8	0.3	149.4	0.2
772	Potato samosa	0.0	0.0	0.0	1.0	4.0	0.1	0.0	0.7	0.1	7.0	0.0
769	Pumpkin leaf relish without oil	343.7	0.0	0.0	1.0	16.6	0.0	0.0	0.3	0.1	59.5	0.0
768	Pumpkin leaf relish with oil	324.6	0.0	0.0	1.0	15.7	0.0	0.0	0.3	0.1	56.2	0.0
770	Spinach relish with groundnut and oil	42.3	0.0	0.0	0.1	2.8	0.0	0.0	0.1	0.1	9.6	0.0
752	Spinach relish without oil	43.8	0.0	0.0	0.0	85.8	0.1	0.2	0.9	0.4	88.6	0.0
753	Spinach relish with oil	296.6	0.0	0.0	0.2	23.2	0.1	0.2	0.7	0.4	76.2	0.0
771	Spinach relish with sesame seeds	264.3	0.0	0.0	0.2	7.1	0.1	0.1	0.8	0.3	60.7	0.0
785	Tomato relish	56.0	0.0	0.0	0.0	18.0	0.1	0.1	0.6	0.1	13.0	0.0

## F4 Vegetables Based

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
755	Cabbage relish with oil	14.3	16.5	7.0	89.2	130.7	0.2	0.0	0.1	0.0	0.1
754	Cabbage, onion salad	26.7	24.2	11.1	151.8	6.0	0.3	0.0	0.2	0.0	0.1
756	Cassava leaf relish with groundnuts	159.4	108.9	67.9	531.8	270.3	2.8	0.0	0.8	0.3	0.4
757	Cassava leaf relish with coconut milk	136.2	61.1	44.0	398.1	9.7	2.3	0.0	0.4	0.2	0.3
759	Cow pea leaf relish with coconut milk	107.8	55.8	36.8	337.4	9.0	2.0	0.0	0.4	0.2	0.3
779	Cow pea leaf relish with groundnuts	133.0	57.3	43.4	442.9	10.7	2.1	0.0	0.3	0.2	0.1
784	Egg plant relish	9.4	28.8	13.7	247.2	28.2	0.4	0.0	0.2	0.1	0.2
763	Green leaf, medium, relish with coconut milk	63.7	63.7	20.8	259.7	18.4	1.5	0.0	0.5	0.2	0.6
762	Green leaf, medium relish with groundnuts	17.2	19.2	8.0	114.7	16.0	0.3	0.1	0.1	0.0	0.0
760	Green leaf, medium, relish without oil	26.0	14.4	5.3	71.1	5.6	0.4	0.0	0.1	0.0	0.1
761	Green leaf, medium, relish with oil	35.0	19.5	7.0	96.0	7.5	23.5	0.0	0.1	0.0	6.1
766	Green peas relish without oil	20.8	88.2	30.1	246.4	111.9	1.2	0.0	0.9	0.1	0.4
782	Green peas relish with oil	20.0	94.0	34.2	250.0	99.0	1.4	0.0	1.0	0.2	0.6
767	Green peas relish with oil and coconut milk	20.1	84.1	28.7	236.4	106.1	1.1	0.0	0.8	0.1	0.4
778	Green peas relish with coconut milk	18.0	85.7	28.0	247.9	83.8	1.3	0.0	0.9	0.2	0.7
786	Hare lettuce (mchunga)	26.6	18.4	7.3	141	9.2	0.8	0.0	0.1	0.1	0.1
783	Okra relish without oil	59.4	20.7	14.4	152.5	656.1	0.6	0.0	0.1	0.1	0.2
775	Okra relish with oil	15.1	22.5	10.9	171.6	107.2	0.5	0.0	0.2	0.1	0.2

**F4 Vegetables Based** *continued*

Minerals	CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
765 Okra relish with coconut milk	17.0	30.0	13.0	190.0	6.0	0.7	0.0	0.2	0.1	0.3
781 Okra, fried	22.3	20.5	11.8	145.7	292.3	0.6	0.0	0.2	0.1	0.1
780 Sweet potato leaf relish with coconut milk	109.7	102.6	33.8	425.3	417.6	2.5	0.0	0.7	0.3	1.0
777 Potato leaf relish with milk	213.7	134.5	36.3	484.0	63.4	2.2	0.0	0.5	0.1	0.5
764 Potato leaf relish with oil	96.0	55.0	20.0	270.5	20.6	1.4	0.0	0.3	0.1	0.4
772 Potato samosa	5.0	41.0	13.0	150.0	2.0	0.4	0.0	0.3	0.1	0.2
769 Pumpkin leaf relish without oil	67.6	20.7	13.4	152.4	131.7	0.5	0.0	0.1	0.1	0.2
768 Pumpkin leaf relish with oil	63.8	19.6	12.6	143.9	124.4	0.5	0.0	0.7	0.2	0.3
770 Spinach relish with groundnut and oil	63.2	25.5	19.3	182.2	3.7	0.9	0.0	0.1	0.1	0.1
752 Spinach relish without oil	170.9	68.5	53.8	525.6	12.0	2.6	0.0	0.3	0.1	0.1
753 Spinach relish with oil	152.9	55.2	45.7	68.7	306.4	2.2	0.0	0.3	0.1	0.1
771 Spinach relish with sesame seeds	185.4	87.0	59.6	317.4	6.5	2.7	0.0	0.8	0.4	0.3
785 Tomato relish	10.0	32.0	13.0	250.0	9.0	0.5	0.0	0.1	0.1	0.3

#### F4 Vegetable-based local dishes

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
755	Cabbage relish with oil	7.2	27.2	32.3	40.8	39.1	9.0	6.6	24.8	14.6	30.3	49.3	14.4
754	Cabbage, onion salad	11.9	33.1	45.5	49.1	51.8	10.9	11.9	33.0	21.5	38.9	88.7	19.9
756	Cassava leaf relish with groundnuts	40.9	149.6	165.1	268.4	168.1	51.4	60.7	169.6	161.5	449.5	131.8	152.8
757	Cassava leaf relish with coconut milk	35.0	133.5	122.0	209.0	119.5	43.0	39.7	125.2	81.7	150.0	2277.5	61.7
759	Cow pea leaf relish with coconut milk	70.9	294.0	363.8	654.0	377.1	129.8	108.6	392.4	206.0	404.0	806.7	192.7
779	Cow pea leaf relish with groundnuts	26.1	107.6	129.2	224.8	135.0	40.2	35.5	145.0	107.3	145.3	253.7	74.5
784	Egg plant relish	20.4	54.6	68.8	109.0	74.7	21.4	14.3	64.2	41.2	73.3	85.9	34.1
763	Green leaf, medium, relish with coconut milk	30.8	81.3	101.8	133.1	133.1	123.1	33.7	45.3	94.2	124.2	125.8	281.0
762	Green leaf, medium relish with groundnuts	9.3	19.8	31.0	32.0	40.4	7.1	18.3	23.9	39.7	27.3	49.2	14.3
760	Green leaf, medium, relish without oil	8.4	45.8	61.6	107.8	60.9	17.9	11.2	59.2	40.8	69.0	69.0	30.6
761	Green leaf, medium, relish with oil	11.4	61.8	82.9	120.5	82.3	24.3	15.2	79.8	54.7	46.6	93.2	41.3
766	Green peas relish without oil	27.2	142.2	137.1	225.5	222.2	56.9	25.2	140.4	80.6	163.3	298.4	75.0
767	Green peas relish with oil	35.3	74.0	67.0	100.8	160.3	30.6	7.2	65.5	36.5	76.0	81.1	43.5
778	Green peas relish with oil and coconut milk	36.0	82.3	78.3	126.5	158.3	36.1	17.5	83.7	48.2	98.1	162.1	49.4
782	Green peas relish with coconut milk	30.4	145.4	142.7	241.6	219.2	61.0	33.0	152.9	88.4	179.4	308.7	50.0
786	Hare lettuce (mchunga)	11.4	58.9	76.2	117.6	80.7	21	17.4	69.3	46.6	80.2	80	35.4
783	Okra relish without oil	12.3	44.3	39.3	68.0	50.3	15.3	9.3	43.0	27.0	52.3	45.7	19.3
775	Okra relish with oil	10.8	33.7	31.8	47.1	42.8	10.0	12.9	30.5	20.8	37.0	48.3	17.3



**F4 Vegetable-based local dishes** *continued*

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
765	Okra relish with coconut milk	13.0	41.0	40.0	65.0	51.0	15.0	16.0	43.0	28.0	52.0	92.0	22.0
781	Okra, fried	10.8	38.8	34.9	54.9	45.9	11.3	10.3	33.5	22.4	43.0	53.1	17.5
780	Sweet potato leaf relish with coconut milk	43.6	136.6	135.0	245.8	162.4	61.2	44.6	165.6	102.8	190.0	319.2	70.0
777	Potato leaf relish with milk	51.3	145.1	130.6	236.6	183.6	48.8	39.8	160.7	87.5	16.3	264.9	75.9
764	Potato leaf relish with oil	33.5	79.1	189.1	318.2	359.2	115.4	42.6	153.1	132.5	51.3	232.4	115.2
772	Potato samosa	39.0	88.0	106.0	151.0	157.0	39.0	39.0	111.0	92.0	133.0	158.0	57.0
769	Pumpkin leaf relish without oil	11.8	36.4	31.8	47.1	42.8	10.0	12.9	33.5	22.4	43.0	53.1	17.5
768	Pumpkin leaf relish with oil	11.2	34.4	33.1	55.6	42.5	13.5	9.0	37.6	24.3	41.4	44.6	16.2
770	Spinach relish with groundnut and oil	9.3	19.8	31.0	32.0	40.4	7.1	18.3	23.9	39.7	27.3	49.2	14.3
752	Spinach relish without oil	23.0	113.0	155.0	188.0	150.0	64.0	53.0	173.0	113.0	201.0	307.0	82.0
753	Spinach relish with oil	18.4	94.0	109.6	302.7	106.0	53.0	55.9	138.3	90.7	144.6	164.6	80.7
771	Spinach relish with sesame seeds	45.0	134.3	31.1	137.4	104.5	36.9	35.6	91.5	61.3	106.5	260.0	66.2
785	Tomato relish	11.0	28.0	31.0	40.0	45.0	9.0	6.6	29.0	14.6	27.0	65.0	17.0



## **G1. Miscellaneous**

This section includes dried spices and condiments, sugar, honey, alcoholic and non alcoholic beverages, ice sherbet, sauces, and so on.

## G1 Miscellaneous

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
451	Beer, commercial	41.0	0.3	0.0	0.0	0.0	3.7
452	Beer, local, grain	41.0	0.3	0.0	0.0	0.0	3.7
453	Beer, local, non-specific	41.0	0.3	0.0	0.0	0.0	3.7
454	Blackcurrant, syrup, ribena	338.0	1.1	0.0	0.0	2.3	87.7
455	Candy, chocolate	479.0	4.2	0.0	0.0	30.0	63.1
458	Carbonated, beverage, coca cola	37.0	0.1	0.0	0.0	0.0	9.6
471	Chili powder, red	318.0	12.0	0.0	0.0	17.3	56.6
481	Chili sauce	169.9	0.5	0.1	0.0	0.1	38.3
160	Coconut immature, meat and water	70.0	0.5	0.0	0.0	3.4	10.0
459	Cod liver oil	884.0	0.0	0.0	0.0	100.0	0.0
472	Coffee, instant	200.0	10.0	0.0	0.0	0.0	40.0
460	Cricket	274.0	18.2	18.2	18.2	21.5	2.0
476	Fruit flavored drink, concentrated	27.0	0.0	0.0	0.0	0.0	6.8
477	Garlic, fresh-AP	149.0	6.4	0.0	0.0	0.5	33.1
490	Ginger	66.0	2.1	0.0	0.0	0.3	15.3
461	Honey	304.0	0.3	0.0	0.0	0.0	82.4
491	Ice sherbet	77.4	0.0	0.0	0.0	0.0	19.9
462	Orange drink, concentrated	158.0	0.5	0.0	0.0	1.1	41.0

## G1 Miscellaneous

Macronutrients		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
451	Beer, commercial	0.0	0.0	0.0	0.0	0.2	0.0	0.0
452	Beer, local, grain	0.0	0.0	0.0	0.0	0.2	0.0	0.0
453	Beer, local, non-specific	0.0	0.0	0.0	0.0	0.2	0.0	0.0
454	Blackcurrant, syrup, ribena	0.6	0.0	0.6	0.0	15.5	18.9	361.0
455	Candy, choclolate	17.8	10.0	1.0	0.0	5.9	54.5	84.0
458	Carbonated, beverage, coca cola	0.0	0.0	0.0	0.0	0.0	9.0	0.0
471	Chili powder, red	3.3	2.8	8.4	0.0	25.0	1.1	403.0
481	Chili sauce	0.4	0.0	0.1	0.0	0.6	34.6	4.6
160	Coconut immature, meat and water	3.0	0.1	0.0	0.0	0.9	7.4	32.0
459	Cod liver oil	14.4	23.3	57.9	0.0	0.0	0.0	0.0
472	Coffee, instant	0.0	0.0	0.0	0.0	0.0	0.0	600.0
460	Cricket	7.5	9.6	2.6	75.0	0.0	0.0	0.0
476	Fruit flavored drink, concentrated	0.0	0.0	0.0	0.0	0.0	5.5	0.0
477	Garlic, fresh-AP	0.9	0.0	0.2	0.0	2.1	1.0	0.0
490	Ginger	0.0	0.0	0.2	0.0	2.1	2.0	0.0
461	Honey	0.0	0.0	0.0	0.0	0.0	1.5	0.0
491	Ice sherbet	0.0	0.0	0.0	0.0	0.0	19.9	0.0
462	Orange drink, concentrated	0.3	0.0	0.3	0.0	7.2	8.8	169.0

**G1 Miscellaneous** *continued*

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
463	Salt, iodized	0.0	0.0	0.0	0.0	0.0	0.0
464	Salt, non-iodized	0.0	0.0	0.0	0.0	0.0	0.0
474	Soy sauce	60.0	10.5	0.0	0.0	0.1	5.6
475	Soybean milk, dried	380.0	40.5	0.0	0.0	24.0	9.5
465	Sugar	387.0	0.0	0.0	0.0	0.0	99.9
466	Sugarcane	26.0	0.0	0.0	0.0	0.0	6.8
467	Sugarcane juice	56.0	0.0	0.0	0.0	0.0	14.6
468	Tea leaves	1.0	0.0	0.0	0.0	0.0	0.2
469	Termite	369.0	19.7	19.6	19.6	31.2	1.0
489	Tomato juice	26.0	0.8	0.0	0.0	0.1	5.7
470	Tomato ketchup	101.0	1.0	0.0	0.0	0.3	25.3
478	Tomato paste	63.0	0.0	2.7	0.0	0.0	0.9
480	Vinegar, wine	19.0	0.0	0.0	0.0	0.0	0.3

**G1 Miscellaneous continued**

Macronutrients	FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
	g	g	g	mg	g	g	mg
463 Salt, iodized	0.0	0.0	0.0	0.0	0.0	0.0	0.0
464 Salt, non-iodized	0.0	0.0	0.0	0.0	0.0	0.0	0.0
474 Soy sauce	0.0	0.0	0.0	0.0	0.8	0.0	122.0
475 Soybean milk, dried	3.5	5.5	13.5	0.0	6.0	0.0	1870.0
465 Sugar	0.0	0.0	0.0	0.0	0.0	96.8	0.0
466 Sugarcane	0.0	0.0	0.0	0.0	0.0	5.9	0.0
467 Sugarcane juice	0.0	0.0	0.0	0.0	0.0	12.6	0.0
468 Tea leaves	0.0	0.0	0.0	0.0	0.0	0.0	0.0
469 Termite	10.8	13.9	3.8	83.0	0.0	0.3	0.0
489 Tomato juice	0.0	0.0	0.0	0.0	1.1	0.0	7.0
470 Tomato ketchup	0.0	0.1	0.1	0.0	1.3	19.4	7.0
478 Tomato paste	13.8	0.0	0.3	0.3	0.0	3.3	18.0
480 Vinegar, wine	0.0	0.0	0.0	0.0	0.0	0.0	0.0

## G1 Miscellaneous

Vitamins		VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VITB6 mg	FOL µg	VITB12 µg	PANT mg
451	Beer, commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	6.0	0.0	0.1
452	Beer, local, grain	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	6.0	0.0	0.1
453	Beer, local, non-specific	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	6.0	0.0	0.1
454	Blackcurrant, syrup, ribena	29.0	0.0	0.0	6.0	34.0	0.1	0.1	0.6	0.3	17.0	0.0	0.3
455	Candy, chocolate	0.0	0.0	0.0	0.3	0.0	0.1	0.1	0.4	0.0	13.0	0.0	0.1
458	Carbonated, beverage, coca cola	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
471	Chili powder, red	4161.0	0.0	0.0	1.0	76.0	0.3	0.9	8.7	1.9	88.0	0.0	0.4
481	Chili sauce	31.2	0.0	0.0	0.1	14.6	0.0	0.0	0.3	0.0	7.1	0.0	0.1
160	Coconut immature, meat and water	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.2	0.0	8.0	0.0	0.1
459	Cod liver oil	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
472	Coffee, instant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
460	Cricket	1.0	1.0	1.0	0.0	2.0	0.7	0.2	4.1	0.3	3.0	1.6	0.7
476	Fruit flavored drink, concentrated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
477	Garlic, fresh-AP	0.0	0.0	0.0	0.0	31.2	0.2	0.1	0.7	1.2	3.0	0.0	0.6
490	Ginger	0.0	0.0	0.0	0.0	8.0	0.1	0.0	0.3	0.2	23.0	0.0	0.2
461	Honey	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.1	0.0	2.0	0.0	0.1
491	Ice sherbet	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
462	Orange drink, concentrated	13.0	0.0	0.0	3.0	16.0	0.1	0.0	0.3	0.1	8.0	0.0	0.2



G1 **Miscellaneous continued**

Vitamins		VITA	A_VITA	VITD	VITE	VITC	THIA	RIBF	NIA	VITB6	FOL	VITB12PANT
		µg RE	µg RE	µg	µg	mg	mg	mg	mg	mg	µg	µg
463	Salt, iodized	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
464	Salt, non-iodized	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
474	Soy sauce	0.0	0.0	0.0	0.0	0.0	0.1	0.2	4.0	0.2	18.0	0.0
475	Soybean milk, dried	0.0	0.0	0.0	0.0	0.0	0.4	0.3	1.0	0.3	75.0	0.0
465	Sugar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
466	Sugarcane	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
467	Sugarcane juice	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
468	Tea leaves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
469	Termite	1.0	1.0	1.0	0.0	2.0	0.7	0.3	4.5	0.3	3.0	1.7
489	Tomato juice	80.0	0.0	0.0	0.3	26.0	0.1	0.0	1.0	0.2	28.0	0.0
470	Tomato ketchup	100.0	0.0	0.0	0.0	22.0	0.1	0.1	0.7	0.1	17.0	0.0
478	Tomato paste	261.0	0.0	0.0	0.0	57.0	0.2	0.2	1.8	0.2	45.0	0.0
480	Vinegar, wine	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0	1.0	0.0

## G1 Miscellaneous

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
451	Beer, commercial	5.0	12.0	6.0	25.0	5.0	0.0	0.0	0.0	0.0	0.0
452	Beer, local, grain	5.0	12.0	6.0	25.0	5.0	0.0	0.0	0.0	0.0	0.0
453	Beer, local, non-specific	5.0	12.0	6.0	25.0	5.0	0.0	0.0	0.0	0.0	0.0
454	Blackcurrant, syrup, ribena	40.0	40.0	29.0	659.0	0.0	1.1	0.0	0.0	0.2	0.3
455	Candy, choclalte	32.0	132.0	115.0	365.0	11.0	3.1	0.0	1.6	0.7	0.8
458	Carbonated, beverage, coca cola	3.0	12.0	1.0	1.0	4.0	0.0	0.0	0.0	0.0	0.0
471	Chili powder, red	148.0	293.0	152.0	2014.0	30.0	7.8	0.0	2.5	0.4	2.0
481	Chili sauce	6.9	17.5	8.4	129.0	283.8	0.4	0.0	0.1	0.0	0.1
160	Coconut immature, meat and water	126.0	48.0	3.0	66.0	5.0	0.4	0.0	0.1	0.1	0.2
459	Cod liver oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
472	Coffee, instant	300.0	300.0	400.0	3600.0	300.0	10.0	0.0	0.0	1.0	2.0
460	Cricket	90.0	424.0	62.0	545.0	55.0	2.5	2.5	8.4	3.0	1.5
476	Fruit flavored drink, concentrated	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
477	Garlic, fresh-AP	181.0	143.0	25.0	401.0	17.0	1.7	0.0	1.2	0.3	1.7
490	Ginger	33.0	53.0	17.0	249.0	5.0	0.3	0.0	0.3	0.1	0.2
461	Honey	6.0	4.0	2.0	52.0	4.0	0.4	0.0	0.2	0.0	0.1
491	Ice sherbet	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
462	Orange drink, concentrated	19.0	19.0	13.0	308.0	0.0	0.5	0.0	0.0	0.1	0.1

**G1 Miscellaneous continued**

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
463	Salt, iodized	45.0	0.0	2.0	8.0	38724.0	0.1	0.0	0.0	0.0	0.0
464	Salt, non-iodized	45.0	0.0	2.0	8.0	38724.0	0.1	0.0	0.0	0.0	0.0
474	Soy sauce	20.0	130.0	40.0	212.0	5586.0	2.4	0.0	0.4	0.1	0.5
475	Soybean milk, dried	525.0	485.0	515.0	605.0	35.0	27.0	0.0	4.0	1.0	3.1
465	Sugar	1.0	2.0	0.0	2.0	1.0	0.1	0.0	0.0	0.0	0.0
466	Sugarcane	6.0	2.0	2.0	24.0	3.0	0.1	0.0	0.0	0.0	0.0
467	Sugarcane juice	13.0	3.0	4.0	52.0	6.0	0.3	0.0	0.0	0.1	0.1
468	Tea leaves	2.0	1.0	2.0	20.0	3.0	0.0	0.0	0.0	0.0	0.2
469	Termite	32.0	184.0	17.0	361.0	1294.0	1.3	1.3	2.5	0.1	0.1
489	Tomato juice	5.0	1.0	11.0	235.0	26.0	0.9	0.0	0.7	0.6	0.2
470	Tomato ketchup	456.0	28.0	33.0	335.0	387250.0	1.6	0.0	0.1	0.4	0.1
478	Tomato paste	15.0	72.0	33.0	666.0	27.0	1.5	0.0	0.3	0.2	0.3
480	Vinegar, wine	8.0	14.0	10.0	89.0	8.0	0.4	0.0	0.1	0.0	0.2

**G1 Miscellaneous**

	Amino Acid	TRP mg	THR mg	ILE mg	LEU mg	LYS mg	MET mg	CYS mg	PHE mg	TYR mg	VAL mg	ARG mg	HIS mg
451	Beer, commercial	3.0	5.0	5.0	6.0	7.0	1.0	3.0	6.0	15.0	9.0	9.0	5.0
452	Beer, local, grain	3.0	5.0	5.0	6.0	7.0	1.0	3.0	6.0	15.0	9.0	9.0	5.0
453	Beer, local, non-specific	3.0	5.0	5.0	6.0	7.0	1.0	3.0	6.0	15.0	9.0	9.0	5.0
454	Blackcurrant, syrup, ribena	11.0	40.0	46.0	69.0	69.0	11.0	17.0	29.0	23.0	52.0	34.0	17.0
455	Candy, chodate	63.0	168.0	164.0	257.0	212.0	44.0	52.0	204.0	159.0	254.0	240.0	73.0
458	Carbonated, beverage, coca cola	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
471	Chili powder, red	156.0	444.0	390.0	630.0	534.0	144.0	228.0	372.0	252.0	504.0	576.0	246.0
481	Chili sauce	4.2	12.4	12.2	18.0	18.2	4.1	6.8	12.3	8.8	13.1	20.0	7.5
160	Coconut immature, meat and water	6.0	20.0	23.0	39.0	29.0	8.0	11.0	23.0	15.0	31.0	62.0	12.0
459	Cod liver oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
472	Coffee, instant	0.0	100.0	200.0	500.0	100.0	0.0	200.0	300.0	200.0	300.0	100.0	200.0
460	Cricket	141.0	699.0	645.0	1185.0	1345.0	430.0	178.0	591.0	509.0	710.0	1044.0	509.0
476	Fruit flavored drink, concentrated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
477	Garlic, fresh-AP	66.0	157.0	217.0	308.0	273.0	76.0	65.0	183.0	81.0	291.0	634.0	113.0
490	Ginger	30.0	50.0	72.0	72.0	98.0	17.0	36.0	53.0	51.0	47.0	275.0	33.0
461	Honey	4.0	4.0	8.0	10.0	8.0	1.0	3.0	11.0	8.0	9.0	5.0	1.0
491	Ice sherbet	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
462	Orange drink, concentrated	5.0	19.0	21.0	32.0	32.0	5.0	8.0	13.0	11.0	24.0	16.0	8.0

G1 **Miscellaneous** *continued*

	Amino Acids	TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
463	Salt, iodized	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
464	Salt, non-iodized	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
474	Soy sauce	181.0	407.0	487.0	735.0	731.0	167.0	107.0	534.0	342.0	524.0	405.0	215.0
475	Soybean milk, dried	630.0	1650.0	2000.0	3070.0	2660.0	515.0	560.0	1965.0	1350.0	2040.0	2690.0	1175.0
465	Sugar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
466	Sugarcane	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
467	Sugarcane juice	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
468	Tea leaves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
469	Termite	157.0	777.0	717.0	1317.0	1494.0	478.0	198.0	657.0	566.0	789.0	1160.0	566.0
489	Tomato juice	5.0	17.0	15.0	21.0	22.0	4.0	2.0	16.0	12.0	15.0	15.0	12.0
470	Tomato ketchup	7.0	24.0	23.0	36.0	36.0	8.0	13.0	25.0	17.0	25.0	24.0	15.0
478	Tomato paste	18.0	63.0	60.0	93.0	93.0	21.0	33.0	66.0	45.0	66.0	63.0	39.0
480	Vinegar, wine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



## **G2. Miscellaneous – Local dishes**

All locally prepared beverages such as tea, local brew and snacks such as the ground nut cluster.

## G2 Miscellaneous -local dishes

Macronutrients		ENERGY_KC Kcal	PROCNT g	A_PROTEI g	MFP_PROT g	FAT g	CHOCDF g
1006	Coffee with milk, without sugar	11.5	1.3	1.3	0.0	1.6	0.2
1004	Coffee without milk, with sugar,	35.4	0.0	0.0	0.0	0.0	9.1
1005	Coffee with milk and sugar	31.5	1.3	1.3	0.0	1.6	3.1
1008	Groundnut cluster	616.6	17.3	0.0	0.0	30.7	76.0
1007	Halwa	511.7	1.7	0.0	0.1	30.7	59.9
1003	Tea with milk, without sugar	11.0	1.3	1.3	0.0	1.6	0.2
1001	Tea without milk, with sugar	35.4	0.0	0.0	0.0	0.0	9.1
1002	Tea with milk and sugar	31.0	1.3	1.3	0.0	1.6	3.0



## G2 Miscellaneous -local dishes

	Macronutrients	FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
1006	Coffee with milk, without sugar	1.0	0.5	0.0	5.8	0.0	0.0	1.7
1004	Coffee without milk, with sugar,	0.0	0.0	0.0	0.0	0.0	9.5	0.0
1005	Coffee with milk and sugar	1.0	0.5	0.0	5.8	0.0	1.0	1.7
1008	Groundnut cluster	4.3	15.2	9.8	0.0	5.6	57.3	1129.6
1007	Halwa	16.9	10.4	1.9	68.3	1.1	39.1	206.4
1003	Tea with milk, without sugar	1.0	0.5	0.0	5.8	0.0	0.0	0.0
1001	Tea without milk, with sugar	0.0	0.0	0.0	0.0	0.0	9.5	0.0
1002	Tea with milk and sugar	1.0	0.5	0.0	5.8	0.0	1.0	0.0

## G2 Miscellaneous-local dishes

	VITAMINS	VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VITB6 mg	FOL µg	VITB12 µg	PANT mg
1006	Coffee with milk, without sugar	22.6	22.6	0.0	0.0	0.4	0.0	0.1	0.0	0.0	2.4	0.2	0.1
1004	Coffee without milk, with sugar,	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1005	Coffee with milk and sugar	22.6	22.6	0.0	0.0	0.4	0.0	0.1	0.0	0.0	2.4	0.2	0.1
1008	Groundnut cluster	0.0	0.0	0.0	5.6	0.0	0.2	0.06	9.03	0.2	80.6	0.0	0.9
1007	Halwa	246.7	246.7	0.5	2.7	0.1	0.0	0.1	0.3	0.0	5.0	0.0	0.1
1003	Tea with milk, without sugar	22.6	22.6	0.0	0.0	0.4	0.0	0.1	0.0	0.0	2.4	0.2	0.1
1001	Tea without milk, with sugar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1002	Tea with milk and sugar	22.6	22.6	0.0	0.0	0.4	0.0	0.1	0.0	0.0	2.4	0.2	0.1

## G2 Miscellaneous-local dishes

Minerals	CA mg	P mg	MG mg	K mg	NA mg	FE mg	MFP_FE mg	ZN mg	CU mg	MN mg
1006 Coffee with milk, without sugar	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
1004 Coffee without milk, with sugar,	0.2	0.2	0.0	0.3	1.8	0.0	0.0	0.0	0.0	0.0
1005 Coffee with milk and sugar	48.1	38.7	5.6	67.6	23.5	0.1	0.0	0.2	0.0	0.0
1008 Groundnut cluster	59.6	248.3	107.2	452.9	12.0	3.1	0.0	2.1	0.7	1.3
1007 Halwa	24.2	47.1	24.5	62.4	75.9	0.5	0.0	0.1	0.1	0.2
1003 Tea with milk, without sugar	0.2	0.2	0.0	0.3	1.8	0.0	0.0	0.0	0.0	0.0
1001 Tea without milk, with sugar	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
1002 Tea with milk and sugar	47.3	37.9	4.5	57.6	22.6	0.0	0.0	0.2	0.0	0.0

## G2 Miscellaneous-local dishes

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
1006	Coffee with milk, without sugar	18.9	61.6	82.4	133.8	107.6	34.1	12.9	66.2	65.9	91.3	49.2	0.6
1004	Coffee without milk, with sugar,	0.0	1.0	2.0	5.0	1.0	0.0	2.0	3.0	2.0	3.0	1.0	2.0
1005	Coffee with milk and sugar	18.9	61.6	82.4	133.8	107.6	34.1	12.9	66.2	65.9	91.3	49.2	0.6
1008	Groundnut cluster	166.4	573.5	594.9	1101.1	595.7	212.9	259.5	697.2	699.9	1955.1	441.4	657.5
1007	Halwa	29.9	64.4	75.8	138.6	60.3	21.2	30.6	95.4	62.1	90.1	204.7	48.4
1003	Tea with milk, without sugar	18.9	61.3	81.8	132.4	107.3	34.1	12.3	65.4	65.4	90.4	48.9	0.0
1001	Tea without milk, with sugar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1002	Tea with milk and sugar	18.9	61.3	81.8	132.4	107.3	34.1	12.3	65.4	65.4	90.4	48.9	0.0

## H. Local Broths

These are referred to clear liquid produced by cooking meat, poultry, fish, seafood or vegetables in water and other ingredients such as onion, tomatoes, salt, oil and then removing it.

A broth can be clear soup, or gravy or sauce of any relish

The nutrient composition is based on the recipe of the relishes found in other sections

## H Local Broths

Macronutrients		ENERGY_KC	PROCNT	A_PROTEI	MFP_PROT	FAT	CHOCDF
		Kcal	g	g	g	g	g
853	Beef broth without oil	44.0	3.9	3.7	3.7	2.7	0.8
854	Beef broth with oil	88.0	3.9	3.7	3.7	7.7	0.8
855	Cabbage broth without oil	29.0	1.5	0.0	0.0	0.3	6.3
856	Cabbage broth with oil	50.0	0.2	0.0	0.0	5.1	1.3
859	Cassava leaf broth without oil	8.0	0.6	0.0	0.0	0.0	1.6
858	Cassava leaf broth with coconut milk	21.0	0.5	0.0	0.0	1.4	1.9
860	Cassava leaf broth with oil	48.0	0.5	0.0	0.0	5.0	1.0
862	Chicken broth without oil	91.0	4.2	4.0	4.0	7.9	0.8
861	Chicken broth with oil	46.0	4.2	4.0	4.0	2.9	0.8
865	Cow pea broth without oil	40.0	2.3	0.0	0.0	0.2	7.9
863	Cow pea broth with coconut milk	102.0	2.6	0.0	0.0	6.8	8.8
864	Cow pea broth with oil	87.0	2.0	0.0	0.0	6.4	5.8
881	Cow pea leaf broth without oil	8.0	0.6	0.0	0.0	0.0	1.6
866	Cow pea leaf broth with coconut milk	15.0	0.7	0.0	0.0	0.3	2.8
867	Cow pea leaf broth with oil	42.0	0.5	0.0	0.0	4.1	1.5
869	Fish broth without oil	12.0	1.7	1.5	1.5	0.2	0.9
884	Fish broth with coconut milk	25.0	2.3	2.2	2.2	1.5	0.7

## Local Broths

Macronutrients		FASAT	FAMS	FAPU	CHOLE	FIB	SUCS	PHYTAC
		g	g	g	mg	g	g	mg
853	Beef broth without oil	1.3	1.1	0.1	11.0	0.1	0.1	0.0
854	Beef broth with oil	2.5	3.4	1.4	11.0	0.1	0.1	0.0
855	Cabbage broth without oil	0.0	0.0	0.1	0.0	2.5	0.6	0.0
856	Cabbage broth with oil	1.3	2.2	1.3	0.0	0.4	0.1	0.0
859	Cassava leaf broth without oil	0.0	0.0	0.0	0.0	0.3	0.1	4.0
858	Cassava leaf broth with coconut milk	1.3	0.1	0.0	0.0	0.5	0.1	17.0
860	Cassava leaf broth with oil	4.3	0.3	0.1	0.0	0.2	0.0	4.0
862	Chicken broth without oil	2.0	3.3	1.9	12.0	0.1	0.1	0.0
861	Chicken broth with oil	0.8	1.1	0.6	12.0	0.1	0.1	0.0
865	Cow pea broth without oil	0.0	0.0	0.1	0.0	1.8	0.6	129.0
863	Cow pea broth with coconut milk	6.0	0.3	0.2	0.0	3.3	0.3	194.0
864	Cow pea broth with oil	0.9	1.5	3.7	0.0	1.5	0.3	129.0
881	Cow pea leaf broth without oil	0.0	0.0	0.0	0.0	0.3	0.1	4.0
866	Cow pea leaf broth with coconut milk	0.3	0.0	0.0	0.0	0.4	0.8	8.0
867	Cow pea leaf broth with oil	3.5	0.2	0.1	0.0	0.2	0.1	3.0
869	Fish broth without oil	0.1	0.1	0.1	6.0	0.2	0.1	0.0
884	Fish broth with coconut milk	1.1	0.2	0.1	3.0	0.3	0.1	11.0

## H Local Broths *continued*

Macronutrients		ENERGY_KC Kcal	PROCNT g	A_PROTEI g	MFP_PROT g	FAT g	CHOCDF g
868	Fish broth with oil	55.0	1.7	1.5	1.5	5.2	0.9
870	Green pea broth without oil	17.0	1.1	0.0	0.0	0.0	3.1
880	Green pea broth with coconut milk	32.9	0.9	0.0	0.0	2.0	3.1
871	Green Pea Broth with oil	61.0	1.1	0.0	0.0	5.0	3.1
882	Ground beef relish broth	35.4	1.8	1.8	1.8	3.0	0.3
873	Kidney bean broth without oil	31.0	2.0	0.0	0.0	0.1	0.0
872	Kidney bean broth with coconut milk	101.0	2.6	0.0	0.0	6.8	8.7
874	Kidney bean broth with oil	48.0	2.0	0.0	0.0	2.1	5.9
883	Liver relish broth	12.9	1.7	1.7	1.7	8.6	0.4
878	Pumpkin leaf broth without oil	3.0	0.2	0.0	0.0	0.0	0.7
877	Pumpkin leaf broth with oil	46.0	0.2	0.0	0.0	5.0	0.7
879	Small dried fish broth with oil	78.0	5.9	5.9	5.9	5.9	0.0
851	Spinach broth without oil	6.0	0.4	0.0	0.0	0.1	1.3
852	Spinach broth with oil	25.0	0.4	0.0	0.0	5.1	1.3



## Local Broths *continued*

	Macronutrients	FASAT g	FAMS g	FAPU g	CHOLE mg	FIB g	SUCS g	PHYTAC mg
868	Fish broth with oil	4.4	0.4	0.2	6.0	0.2	0.1	0.0
870	Green pea broth without oil	0.0	0.0	0.0	0.0	1.1	1.0	6.0
880	Green pea broth with coconut milk	1.7	0.1	0.1	0.0	1.2	0.5	18.2
871	Green pea broth with oil	1.3	2.2	1.3	0.0	1.1	1.0	6.0
882	Ground beef relish broth	1.9	0.8	0.1	5.9	0.1	0.0	0.3
873	Kidney bean broth without oil	0.0	0.0	0.1	0.0	1.5	0.3	129.0
872	Kidney bean broth with coconut milk	6.0	0.3	0.2	0.0	3.3	0.3	189.0
874	Kidney bean broth with oil	0.0	0.0	0.1	0.0	1.5	0.3	0.27
883	Liver relish broth	0.3	0.1	0.1	27.0	0.0	0.4	129.0
878	Pumpkin leaf broth without oil	0.0	0.0	0.0	0.0	0.4	0.0	4.0
877	Pumpkin leaf broth with oil	4.3	0.3	0.1	0.0	0.4	0.0	35.0
879	Small dried fish broth with oil	1.5	2.6	1.5	6.0	0.0	0.0	0.0
851	Spinach broth without oil	0.0	0.0	0.0	0.0	0.4	0.1	0.0
852	Spinach broth with oil	1.3	2.2	1.3	0.0	0.4	0.1	0.0

## H Local Broths

Vitamins		VITA µg RE	A_VITA µg RE	VITD µg	VITE µg	VITC mg	THIA mg	RIBF mg	NIA mg	VITB6 mg	FOL µg RE	VITB12 µg RE	PANT mg
853	Beef broth without oil	6.0	0.0	0.0	0.0	2.0	0.0	0.0	0.5	0.1	3.0	0.3	0.1
854	Beef broth with oil	6.0	0.0	0.0	0.0	2.0	0.0	0.0	0.5	0.1	3.0	0.3	0.1
855	Cabbage broth without oil	20.0	0.0	0.0	0.0	34.0	0.1	0.1	0.4	0.1	45.0	0.0	0.2
856	Cabbage broth with oil	20.0	0.0	0.0	0.0	34.0	0.1	0.1	0.4	0.1	45.0	0.0	0.2
859	Cassava leaf broth without oil	58.0	0.0	0.0	0.0	4.0	0.0	0.0	0.1	0.1	12.0	0.0	0.1
858	Cassava leaf broth with coconut milk	43.0	0.0	0.0	0.0	3.0	0.0	0.0	0.1	0.1	11.0	0.0	0.0
860	Cassava leaf broth with oil	58.0	0.0	0.0	0.0	4.0	0.0	0.0	0.1	0.1	11.0	0.0	0.1
861	Chicken broth without oil	12.0	6.0	0.0	0.0	2.0	0.0	0.0	0.9	0.1	2.0	0.0	0.1
862	Chicken broth with oil	12.0	6.0	0.0	0.0	2.0	0.0	0.0	0.9	0.1	2.0	0.0	0.1
865	Cow pea broth without oil	7.0	0.0	0.0	0.0	3.0	0.1	0.0	0.2	0.1	32.0	0.0	0.1
863	Cow pea broth with coconut milk	7.0	0.0	0.0	0.0	3.0	0.1	0.0	0.3	0.1	34.0	0.0	0.1
864	Cow pea broth with oil	7.0	0.0	0.0	0.0	2.0	0.0	0.0	0.2	0.0	29.0	0.0	0.1
881	Cow pea leaf broth without oil	58.0	0.0	0.0	0.0	4.0	0.0	0.0	0.1	0.1	12.0	0.0	0.1
866	Cow pea leaf broth with coconut milk	61.0	0.0	0.0	0.0	5.0	0.0	0.0	0.2	0.1	13.0	0.0	0.1
867	Cow pea leaf broth with oil	49.0	0.0	0.0	0.0	4.0	0.0	0.0	0.1	0.1	11.0	0.0	0.1
869	Fish broth without oil	7.0	1.0	1.0	0.0	1.0	0.0	0.0	0.2	0.0	3.0	0.2	0.1
884	Fish broth with coconut milk	7.6	0.3	0.3	0.0	0.5	0.0	0.0	0.3	0.02	2.3	0.50	0.1

## H Local Broths *continued*

Vitamins		VITA	A_VITA	VITD	VITE	VITC	THIA	RIBF	NIA	VIT B6	FOL	VIT B12	PANT
		µg RE	µg RE	µg	µg	mg	mg	mg	mg	mg	µg RE	µg RE	mg
868	Fish broth with oil	7.0	1.0	1.0	0.0	1.0	0.0	0.0	0.2	0.0	3.0	0.2	0.1
870	Green pea broth without oil	12.0	0.0	0.0	0.0	3.0	0.1	0.0	0.4	0.0	13.0	0.0	0.0
880	Green pea broth with coconut milk	12.4	0.0	0.0	0.1	3.0	0.1	0.0	0.3	0.0	10.5	0.0	0.1
871	Green pea broth with oil	12.0	0.0	0.0	0.0	3.0	0.1	0.0	0.4	0.0	13.0	0.0	0.0
882	Ground beef relish broth	4.2	0.0	0.0	0.0	1.0	0.0	0.0	0.3	0.0	1.2	0.1	0.0
873	Kidney bean broth without oil	7.0	0.0	0.0	0.0	2.0	0.0	0.0	0.2	0.0	29.0	0.0	0.1
872	Kidney bean broth with coconut milk	7.0	0.0	0.0	0.0	3.0	0.1	0.0	0.3	0.1	33.0	0.0	0.1
874	Kidney bean broth with oil	7.0	0.0	0.0	0.0	2.0	0.0	0.0	0.2	0.0	29.0	0.0	0.1
883	Liver relish broth	0.9	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.01	3.60	0.00	0.0
878	Pumpkin leaf broth without oil	61.0	0.0	0.0	0.0	4.0	0.1	0.1	0.4	0.2	13.0	0.0	0.3
877	Pumpkin leaf broth with oil	61.0	0.0	0.0	2.0	4.0	0.1	0.1	0.4	0.2	13.0	0.0	0.3
879	Small dried fish broth with oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	3.0	1.2	0.2
851	Spinach broth without oil	89.0	0.0	0.0	0.0	3.0	0.0	0.0	0.1	0.0	17.0	0.0	0.0
852	Spinach broth with oil	89.0	0.0	0.0	1.0	3.0	0.0	0.0	0.1	0.0	17.0	0.0	0.0

## H Local Broths

Minerals		CA	P	MG	K	NA	FE	MFP_FE	ZN	CU	MN
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
853	Beef broth without oil	2.0	32.0	5.0	74.0	9.0	0.3	0.3	0.6	0.0	0.0
854	Beef broth with oil	2.0	32.0	5.0	74.0	9.0	0.3	0.3	0.6	0.0	0.0
855	Cabbage broth without oil	5.0	5.0	2.0	36.0	2.0	0.1	0.0	0.0	0.0	0.0
856	Cabbage broth with oil	5.0	5.0	2.0	36.0	2.0	0.1	0.0	0.0	0.0	0.0
859	Cassava leaf broth without oil	22.0	11.0	8.0	81.0	2.0	0.4	0.0	0.1	0.0	0.0
858	Cassava leaf broth with coconut milk	20.0	13.0	7.0	71.0	2.0	0.4	0.0	0.1	0.0	0.1
860	Cassava leaf broth with oil	21.0	9.0	7.0	71.0	2.0	0.4	0.0	0.1	0.0	0.0
862	Chicken broth without oil	3.0	30.0	4.0	50.0	12.0	0.3	0.2	0.3	0.0	0.0
861	Chicken broth with oil	3.0	30.0	4.0	50.0	12.0	0.3	0.2	0.3	0.0	0.0
865	Cow pea broth without oil	12.0	41.0	13.0	147.0	2.0	0.7	0.0	0.3	0.1	0.2
863	Cow pea broth with coconut milk	10.0	56.0	17.0	183.0	5.0	1.1	0.0	0.5	0.2	0.4
864	Cow pea broth with oil	8.0	34.0	11.0	113.0	1.0	0.7	0.0	0.2	0.1	0.1
881	Cow pea leaf broth without oil	22.0	11.0	8.0	81.0	2.0	0.4	0.0	0.1	0.0	0.0
866	Cow pea leaf broth with coconut milk	36.0	16.0	8.0	93.0	3.0	0.4	0.0	0.1	0.0	0.1
867	Cow pea leaf broth with oil	19.0	10.0	7.0	70.0	2.0	0.3	0.0	0.1	0.0	0.0
869	Fish broth without oil	2.0	28.0	4.0	60.0	5.0	0.1	0.0	0.1	0.0	0.0

## H Local Broths *continued*

	Minerals	CA mg	P mg	MG mg	K mg	NA mg	FE mg	MFP_FE mg	ZN mg	CU mg	MN mg
884	Fish broth with coconut milk	54.5	50.9	6.3	54.6	11.8	0.2	0.4	0.2	0.0	0.1
868	Fish broth with oil	2.0	28.0	4.0	60.0	5.0	0.1	0.0	0.1	0.0	0.0
870	Green pea broth without oil	5.0	23.0	8.0	54.0	1.0	0.3	0.0	0.2	0.0	0.1
880	Green pea broth with coconut milk	4.3	22.3	7.3	64.7	1.7	0.3	0.0	0.2	0.1	0.2
871	Green pea broth with oil	5.0	23.0	8.0	54.0	1.0	0.3	0.0	0.2	0.0	0.1
882	Ground beef relish broth	0.7	15.2	2.2	35.9	15.3	0.1	0.1	0.3	0.0	0.0
873	Kidney bean broth without oil	8.0	34.0	11.0	113.0	1.0	0.7	0.0	0.2	0.1	0.1
872	Kidney bean broth with coconut milk	10.0	55.0	17.0	181.0	5.0	1.1	0.0	0.5	0.2	0.4
874	Kidney bean broth with oil	8.0	34.0	11.0	113.0	1.0	0.7	0.0	0.2	0.1	0.1
883	Liver relish broth	0.8	28.5	1.6	19.6	5.4	0.5	0.5	0.4	0.3	0.0
878	Pumpkin leaf broth without oil	14.0	5.0	3.0	36.0	4.0	0.1	0.0	0.0	0.0	0.0
877	Pumpkin leaf broth with oil	14.0	5.0	3.0	36.0	4.0	0.1	0.0	0.0	0.0	0.0
879	Small dried fish broth with oil	170.0	130.0	14.0	95.0	31.0	0.3	0.3	0.5	0.1	0.2
851	Spinach broth without oil	15.0	9.0	10.0	73.0	8.0	0.4	0.0	0.1	0.0	0.1
852	Spinach broth with oil	15.0	9.0	10.0	73.0	8.0	0.4	0.0	0.1	0.0	0.1

## H Local Broths

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
853	Beef broth without oil	43.0	166.0	172.0	300.0	316.0	97.0	44.0	149.0	128.0	185.0	247.0	130.0
854	Beef broth with oil	43.0	166.0	9.0	10.0	10.0	2.0	3.0	7.0	5.0	8.0	17.0	4.0
855	Cabbage broth without oil	2.0	7.0	9.0	10.0	10.0	2.0	3.0	7.0	5.0	8.0	17.0	4.0
856	Cabbage broth with oil	2.0	7.0	24.0	39.0	24.0	8.0	7.0	23.0	16.0	27.0	50.0	11.0
859	Cassava leaf broth without oil	3.0	16.0	19.0	33.0	19.0	5.0	4.0	19.0	13.0	22.0	21.0	10.0
858	Cassava leaf broth with coconut milk	5.0	18.0	22.0	36.0	23.0	6.0	6.0	21.0	15.0	24.0	33.0	11.0
860	Cassava leaf broth with oil	2.0	14.0	206.0	299.0	335.0	109.0	55.0	160.0	133.0	199.0	263.0	121.0
861	Chicken broth without oil	47.0	170.0	110.0	199.0	160.0	41.0	35.0	135.0	75.0	138.0	234.0	68.0
862	Chicken broth with oil	47.0	170.0	206.0	299.0	335.0	109.0	55.0	160.0	133.0	199.0	263.0	121.0
865	Cow pea broth without oil	27.0	87.0	25.0	41.0	27.0	8.0	6.0	23.0	18.0	27.0	38.0	12.0
863	Cow pea broth with coconut milk	31.0	104.0	84.0	150.0	130.0	28.0	22.0	102.0	54.0	98.0	125.0	53.0
864	Cow pea broth with oil	0.0	80.0	94.0	160.0	144.0	31.0	27.0	109.0	61.0	105.0	163.0	57.0
881	Cow pea leaf broth without oil	3.0	16.0	72.0	125.0	142.0	45.0	19.0	62.0	53.0	80.0	102.0	46.0
866	Cow pea leaf broth with coconut milk	31.0	19.0	19.0	30.0	20.0	5.0	5.0	17.0	13.0	19.0	27.0	9.0
867	Cow pea leaf broth with oil	3.0	14.0	22.0	36.0	23.0	6.0	6.0	21.0	15.0	24.0	33.0	11.0
869	Fish broth without oil	18.0	68.0	39.0	64.0	63.0	16.0	6.0	40.0	22.0	46.0	85.0	21.0
884	Fish broth with coconut milk	30.0	109.0	14.3	24.5	14.5	3.4	3.5	15.0	11.1	15.7	26.4	7.7

## H Local Broths *continued*

Amino acids		TRP	THR	ILE	LEU	LYS	MET	CYS	PHE	TYR	VAL	ARG	HIS
		mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
868	Fish broth with oil	18.0	68.0	72.0	125.0	142.0	45.0	19.0	62.0	53.0	80.0	102.0	46.0
870	Green pea broth without oil	7.0	40.0	39.0	64.0	63.0	16.0	6.0	40.0	22.0	46.0	85.0	21.0
880	Green pea broth with coconut milk	7.2	33.9	33.4	56.2	51.2	14.1	8.0	35.6	20.7	41.7	84.0	18.4
871	Green pea broth with oil	7.0	40.0	108.0	194.0	155.0	40.0	35.0	132.0	73.0	135.0	231.0	66.0
882	Ground beef relish broth	23.0	80.0	7.0	13.0	9.0	3.0	2.0	9.0	5.0	10.0	8.0	4.0
873	Kidney bean broth without oil	30.0	101.0	84.0	150.0	130.0	28.0	22.0	102.0	54.0	98.0	125.0	53.0
872	Kidney bean broth with coconut milk	23.0	80.0	84.0	150.0	130.0	28.0	22.0	102.0	54.0	98.0	125.0	53.0
874	Kidney bean broth with oil	20.4	79.0	81.3	142.5	150.0	46.0	20.7	70.8	60.8	87.9	114.5	61.7
883	Liver relish broth	25.0	100.0	112.5	225.0	187.5	62.5	37.5	125.0	87.5	137.5	137.5	62.5
878	Pumpkin leaf broth without oil	2.0	7.0	272.0	480.0	542.0	175.0	63.0	231.0	199.0	304.0	354.0	174.0
877	Pumpkin leaf broth with oil	2.0	7.0	7.0	13.0	9.0	3.0	2.0	9.0	5.0	10.0	8.0	4.0
879	Small dried fish broth with oil	66.0	259.0	479.0	875.0	713.0	264.0	172.0	500.0	376.0	530.0	640.0	348.0
851	Spinach broth without oil	5.0	16.0	19.0	28.0	24.0	7.0	6.0	17.0	14.0	20.0	28.0	9.0
852	Spinach broth with oil	5.0	16.0	172.0	300.0	316.0	97.0	44.0	149.0	128.0	185.0	247.0	130.0

**Table 2.2 Foods Names: English and Kiswahili**

	Foods – names in English	Majina ya vyakula kwa kiswahili
<b>A1</b>	<b>Cereal and Cereal products</b>	<b>Nafaka na bidhaa za nafaka</b>
1	Biscuit	Biskuti
2	Bread roll	Mkate wa miviringo
3	Bread, white	Mkate
6	Cake	Keki
7	Cookie	Biskuti
8	Donut	Mandazi
9	Infant cereal, Cerelac	Cerelac (chakula cha mtoto)
33	Macaroni or spaghetti	Tambi
10	Maize, cracked, cooked	Mahindi ya kukobolewa yaliyopikwa
11	Maize, dried, raw	Mahindi makavu
12	Maize flour, dry	Unga wa mahindi
13	Maize green., cooked	Mahindi ya kuchemsha
14	Maize, on the cob, immature	Mahindi machanga
15	Maize, yellow, flour	Unga wa mahindi ya njano
16	Millet, bulrush	Uwele
17	Millet, finger, grain or flour	Ulezi, Unga wa ulezi
34	Mixed porridge flour (maize and oil)	Unga wa uji mchanganyiko (mahinidi na mafuta)
18	Mixed porridge flour (maize)	Unga wa uji mchanganyiko na mahindi
19	Mixed porridge flour (no maize)	Unga wa uji mchanganyiko bila mahinidi)
20	Porridge, fermented	Uji uliochachuka
22	Rice flour, local	Mchele au unga wa mchele wa kenyeji
21	Rice, fried and boiled	Wali wa kukaanga na kuchemsha
23	Rice, white grain, raw	Mchele
35	Semolina	Semolina
24	Sorghum	Mtama
26	Sorghum, flour	Unga wa mtama
27	Vermicelli, uncooked	Tambi zisizopikwa
28	Wheat, dough, deep fried	Half keik ya ngano
29	Wheat flour	Unga wa ngano usiokobolewa
30	Wheat flour, 72% extract	Unga wa ngano wa chapati za kihindi – uliokobolewa
31	Wheat, flour, maida	Unga wa ngano mweupe
<b>A2</b>	<b>Cereal-based local dishes</b>	<b>Vyakula vyenye asili ya nafaka</b>
534	Cake (home made)	Keki ya kutengeneza nyumbani
513	Chapati (dry)	Chapati bila mafuta
512	Chapati with oil	Chapati yenye mafuta
532	Donut- african	Mandazi
525	Maize and kidney bean dish	Makande



523	Maize and sorgum ugali (stiff porridge)	Ugali wa mahindi na mtama
531	Maize porridge with margarine and sugar	Uji wa mahindi yenye marjarine na sukari
505	Maize porridge without sugar no milk	Uji wa mahindi bila sukari na maziwa
506	Maize porridge with sugar	Uji wa mahindi wenye sukari
502	Maize porridge with sugar and egg	Uji wa mahindi wenye sukari na yai
507	Maize porridge with sugar and milk	Uji wa mahindi wenye sukari na maziwa
519	Maize ugali (stiff porridge)	Ugali wa mahindi
508	Millet Porridge with sugar	Uji wa ulezi wenye sukari
509	Mix Flour Porridge with sugar	Uji wa unga mchanganyiko wenye sukari
514	Pancake	Chapati maji
543	Rice biriyani	Biriani
516	Rice boiled without oil	Wali bila mafuta
517	Rice boiled with oil	Wali wenye mafuta
530	Rice bread	Mikate kumimina
524	Rice bun	Kitumbua
515	Rice and meat pillau	Pilau
544	Rice and mung dish with coconut milk	Mseto wenye tui la nazi
545	Rice and mung dish without coconut milk	Mseto bila tui la nazi
533	Rice poridge with coconut without sugar	Uji wa mchele wenye tui la nazi bila sukari
528	Rice porridge with sugar	Uji wa mchele wenye sukari
521	Rice ugali (stiff porridge)	Ugali wa mchele
518	Rice with coconut milk	Wali wenye tui la nazi
540	Rice with ground meat	Wali na supu ya nyama ya kusaga
522	Sorgum and millet ugali (stiff porridge)	Ugali wa mtama na ulezi
511	Sorgum porridge with sugar	Uji wa mtama wenye sukari
527	Vermicelli - cooked	Tambi za kupika
535	Vermicelli with coconut milk and sugar	Tambi zenye tui la nazi na sukari
536	Vermicelli with oil and sugar	Tambi zenye mafuta na sukari
537	Vermicelli with coconut milk and salt	Tambi zenye tui la nazi na chumvi
529	Wheat fritter sweet	Visheti
542	Wheat porridge	Uji wa ngano
<b>B1</b>	<b>Roots, Tubers and Bananas</b>	<b>Mizizi, Viazi na Ndizi</b>
352	Banana, cooked	Ndizi ya kupika
365	Breadfruit, unripe	Sheli sheli mbichi
362	Cassava, dried	Mhogo mkavu
359	Cassava, dried flour	Unga wa mhogo mkavu
358	Cassava, raw	Mhogo mbichi
364	Cassava, spicy crisp or chips	Chips za mihogo
367	Edible starch, tapioca or corn	Wanga (mahindi/magimbi)
354	Potato, crisps, plain, salted	Crisps/chipsi

353	Potato, English, cooked	Viazi viringo vilivyopikwa
357	Squash, summer, fresh –AP	Mung'unya na maganda
366	Squash, summer, fresh,-EP	Mung'unya bila maganda
369	Sweet potato, red-orange	Viazi vitamu ya nyekundi -njano
361	Sweet potato, fresh –EP	Viazi vitamu bila maganda
360	Sweet, potato, fresh – AP	Viazi vitamu na maganda
356	Taro , raw	Magimbi ya kupikwa
368	Yam	Viazi vikuu
<b>B2</b>	<b>Roots, Tubers and Banana-based local dishes</b>	<b>Asili ya Mizizi, Viazi na Ndizi</b>
974	Banana porridge, plain	Mtori – wa kawaida
975	Banana porridge with meat	Mtori – wa nyamai
976	Banana porridge with fish	Mtori –wa samaki
977	Banana Porridge with meat, spinach	Mtori wenye nyama na spinachi
954	Banana with cashew nut	Ndizi za kupika zenye korosho
955	Banana with coconut milk	Ndizi za kupika zenye tui la nazi
968	Banana with kidney beans	Ndizi za kupika zenye maharage
953	Banana with meat	Ndizi za kupika zenye nyama
952	Banana with meat and coconut milk	Ndizi za kupika zenye nyama na tui la nazi
973	Banana with meat, oil, vegetable,	Ndizi ya kupika yenye nyama,,mafuta,mboga
951	Banana with oil ( without meat )	Ndizi ya kupika yenye mafuta (bila nyama)
969	Banana, boiled	Ndizi ya kuchemsha
964	Banana, fried	Ndizi ya kukaanga
971	Banana, roast	Ndizi ya kuchoma
541	Cassava porridge with sugar	Uji wa mihogo wenye sukari
526	Cassava stiff porridge	Ugali wa mihogo
956	Cassava with coconut milk	Mihogo yenye tui la nazi
965	Cassava, boiled	Mihogo ya kuchemsha
957	Cassava, fried	Mihogo ya kukaanga
978	Kachori (spicy potato balls)	Kachori
960	Potato chips	Chipsi
959	Potato relish with beef	Mchuzi wa viazi vyenye nyama
972	Potato relish with coconut milk	Mchuzi wa viazi vyenye tui la nazi
958	Potato relish with oil	Mchuzi wa viazi vyenye mafuta
961	Potato, boiled	Viazi vya kuchemsha
963	Roots and tubers mixed (futari)	Futari
967	Sweet potato, boiled	Viazi vitamu vya kuchemsha
966	Sweet potato, fried	Viazi vitamu vya kukaanga
970	Taro, cooked, without salt	Magimbi ya kuchemsha bila chumvi

<b>C1</b>	<b>Pulses, Nuts and Seeds</b>	<b>Jamii ya maharage,njugu na mbegu</b>
179	Almonds	Lozi
151	Bambara groundnut, fresh	Njugu mawe mbichi
154	Bean, kidney, green, cooked	Maharage mabichi yaliyopikwa
170	Bean, kidney, mature seeds, raw	Maharage mabichi yasiyopikwa
153	Bean, kidney, mature, boiled without salt	Maharage makavu yaliyopikwa
155	Bean, mung, dry	Choroko kavu
156	Bean, mung, raw	Choroko mbichi
157	Cashewnut	Korosho
158	Chickpea	Dengu
159	Chickpea flour (besan)	Unga wa dengu
162	Cowpea, green, uncooked	Kunde changa mbichi zisizopikwa
163	Cowpea, uncooked	Kunde kavu zisizopikwa
164	Groundnuts	Karanga
173	Hyacinth beans (dried)	Fiwi kavu
174	Hyacinth beans, immature, raw	Fiwi mchanga mbichi
176	Hyacinth beans, immature, boiled without salt	Fiwi changa zilizopikwa
180	Lentils, whole	Adesi
177	Lentils, cooked	Adesi zilizopikwa
175	Palm seed	Mbegu za mawese
178	Peanut butter, smooth	Siagi ya karanga
165	Pigeon peas, cooked	Mbaazi uliyopikwa
166	Pigeon peas, green	Mbaazi mchanga mbichi
171	Pigeon peas, raw	Mbaazi kavu hazijapikwai
172	Pumpkin seed	Mbegu za boga
167	Sesame seed	Ufuta
168	Soybean, yellow	Maharage ya soya ya njano
169	Sunflower seeds	Mbegu za alizeti

<b>C2</b>	<b>Pulses, nuts, seeds-based local dishes</b>	<b>Asili ya kunde, ndugu na mbegu</b>
663	Bambara ground nut relish with coconut milk	Mchuzi wa njugu mawe wenye tui la nazi
32	Bhajia (chickpea flour fritters)	Bhajia
664	Chick pea relish with coconut milk	Mchuzi wa dengu wenye tui la nazi
653	Cow pea (dry) relish without oil	Mchuzi wa kunde bila mafuta
654	Cow pea (dry) relish with oil	Mchuzi wa kunde wenye mafuta
651	Cow pea (fresh) relish without oil	Mchuzi wa kunde mbichi bila mafuta
652	Cow pea relish with coconut milk	Mchuzi wa kunde wenye tui la nazi
657	Kidney bean relish without oil	Mchuzi wa maharage bila mafuta
656	Kidney bean relish with oil	Mchuzi wa maharage wenye mafuta
655	Kidney bean relish with coconut milk	Mchuzi wa maharage wenye tui la nazi
662	Mung bean (dry) relish with coconut milk	Mchuzi wa chorok wenye mafuta
658	Mung bean (dry, boiled)	Choroko zilizopikwa
659	Pigeon pea (fresh, cooked)	Mbaazi mbichi zilizopikwa
660	Pigeon pea relish with coconut milk	Mchuzi wa mbaazi wenye tui la nazi
661	Pigeon peas relish with oil	Mchuzi wa mbaazi wenye mafuta

<b>D1</b>	<b>Meat, Poultry, Fish</b>	<b>Nyama, Kuku, Samaki</b>
205	Beef liver, raw	Maini mabichi
204	Beef, boneless	Nyama bila mifupa, steki
201	Beef, liver, cooked	Maini ya kupikwa
202	Beef, medium fat, cooked	Nyama yenye mafuta kiasi iliyopikwa
203	Beef, tripe	Utumbo
206	Chicken, liver	Maini ya kuku
208	Chicken, raw	Nyama ya kuku mbichi
306	Egg yolk	Kiini cha yai
307	Egg, chicken	Yai la kuku
308	Fish, dried, cod	Samaki mkavu
309	Fish, dried, fresh water	Samaki mkavu wa ziwani
220	Fish, fresh	Samaki mbich
310	Fish, high fat	Samaki wa mafuta mengi
311	Fish, raw	Samaki
312	Fish, sardines	Dagaa
313	Fish, small, dried, fresh water	Samaki wadogo wakavu wa ziwani/mtoni
314	Fish, small, fresh, fresh water	Samaki wadogo wabichi wa ziwani/mtoni
319	Fish, smoked, dried-AP	Samaki wa kukausha kwa moshi
320	Fish, smoked, dried – EP	Minofu ya samaki iliyokaushwa kwa moshi (EP)
315	Goat meat	Nyama ya mbuzi
316	Mutton, meat	Nyama ya kondoo
317	Pork, medium fat, cooked	Nyama ya nguruwe ya kupikwa (mafuta kiasi)
318	Sausage	Soseji

<b>D2</b>	<b>Meat, Poultry, Fish-based local dishes</b>	<b>Asili ya wanyama, ndege na samaki</b>
552	Beef relish with coconut milk	Mchuzi wa nyama wenye tui la nazi
578	Beef relish without oil	Mchuzi wa nyama bila mafuta
551	Beef relish with oil	Mchuzi wa nyama wenye mafuta
577	Beef, fried	Nyama ya kukaanga
576	Beef, ground relish	Mchuzi wa nyama ya kusaga
574	Chicken boiled or roasted	Kuku wa kuchemsha/choma
554	Chicken relish without oil	Mchuzi wa kuku bila mafuta
573	Chicken relish with coconut milk	Mchuzi wa kuku wenye tui la nazi
556	Chicken relish with oil	Mchuzi wa kuku wenye mafuta
207	Chicken, fried	Kuku wa kukaanga
571	Egg boiled	Yai la kuchemsha
561	Egg, fried	Yai la kukaanga
565	Fish fresh stew	Mchuzi wa samaki wa kuchemsha
566	Fish relish without oil	Mchuzi wa samaki bila mafuta
567	Fish relish with coconut milk	Mchuzi wa samaki wenye tui la nazi

564	Fish relish with oil	Mchuzi wa samaki wenye mafuta
569	Fish, fried	Samaki wa kukaanga
563	Fish, fried relish	Supu wa samaki wa kukaanga
580	Liver relish	Mchuzi wa maini
579	Liver, fried	Mailni ya kukaanga
570	Meat samosa	Sambusa
572	Meat, barbecued	Mishikaki
562	Omelet, spanish	Spanish omelet
575	Omelet, spanish with potato	Spanish omelet na viazi
560	Small dried fish relish with coconut	Mchuzi wa dagaa wenye tul la nazi
558	Small dried fish relish with okra	Mchuzi wa dagaa wenye bamia
557	Small dried fish with tomatoes and oil	Mchuzi wa dagaa wenye nyanya na mafuta
559	Small dried fish, fried	Dagaa wa kukaanga
<b>D3</b>	<b>Milk and Milk products</b>	<b>Maziwa na bidhaa za maziwa</b>
261	Cheese, cheddar	Jibini cheddar
258	Cheese, cream	Kimu yoa jibini
259	Cheese, mozzarella	Jibini mozzarella
251	Ice cream	Icekrimu
252	Infant formula, Lactogen	Maziwa ya watoto wachanga (Lactogen)
253	Milk, condensed, sweetened	Maziwa yai ya kopo yenye sukari
257	Milk, condensed, evaporated, without vitamin A	Maziwa ya maji ya kopo bila vitamin A
260	Milk powder, non-fat without vitamin A	Maziwa ya unga bila mafuta na vitmmin A
254	Milk powder, full-cream	Maziwa ya unga namafuta
255	Milk, cow, whole	Maziwa ya ng'ombe halisi
256	Yogurt , plain whole milk	Maziwa mtindi/magando
<b>E</b>	<b>Oils and Fats</b>	<b>Mafuta na bidhaa ya mafuta</b>
1102	Butter refined – ghee	Samli
1101	Butter with salt	Siagi
1105	Coconut cream	Tui la nazi
1114	Coconut meat, raw	Nyama ya nazi
1104	Coconut milk and water	Tui la nazi na maji
1115	Coconut water	Maji ya nazi
1103	Coconut oil	Mafuta ya nazi
1107	Margarine	Marjarine (siagi)
1108	Red palm oil	Mafuta ya mawese
1109	Sesame oil	Mafuta ya ufuta
1110	Vegetable fat	Mafuta ya mimea (kama blueband, tanbondi)
1111	Vegetable fat, cowboy	Mafuta ya cowboy
1112	Vegetable fat, kimbo	Mafuta ya kimbo
1113	Vegetable oil	Mafuta ya mimea (ya maji)

<b>F1</b>	<b>Fruits and Fruit juice</b>	<b>Matunda na Juisi</b>
129	Apple, raw with skin	Apple
101	Avocado, raw all common variety	Parachichi
102	Banana, ripe	Ndizi mbivu
103	Baobab, pulp	Ubuyu (bila mbegu)
131	Custard apple (bullock's heart) raw	Sitafeli
133	Date, red, dried	Tende ulyokaushiwa
134	Date, yellow	Tende mbichi
130	Durian	Duriani
135	Grapefruit	Dalansi
105	Grapes, pale green	Zabibu, rangi kijani
106	Guavas, common, raw	Mapera
107	Jackfruit, raw	Fenesi
109	Lemon, raw, without peel	Limao
110	Lime, raw	Ndimu
111	Mango juice	Juisi ya embe
112	Mango, ripe-fresh EP	Embe mbivu (EP)
113	Mango, unripe	Embe mbichi
108	Orange juice, concentrated, unsweetened	Juisi ya machungwa
114	Orange, raw - AP	Chungwa
115	Papaya, ripe	Papai bivu
116	Papaya, unripe	Papai bichi
117	Passion, fruit	Tunda la Pasheni
127	Peach	Peach
118	Pear	Peasi
120	Pineapple juice	Juisi ya nananasi
119	Pineapple, raw, all variety	Nanasi
121	Plums, raw	Matunda damu
128	Raspberry	Rasiberi
132	Soursop, raw	Staferi
122	Tamarind	Ukwaju
123	Tamarind, fruit, fresh	Ukwaju mbichi
124	Tangerine, raw	Machenza
125	Watermelon, raw	Tikiti maji
<b>F2</b>	<b>Fruits based-local dishes</b>	<b>Juisi zenye asii ya matunda</b>
603	Apple juice	Juisi ya apple
604	Avocado juice	Juisi ya parachichi
601	Grape juice	Juisi ya zabibu
610	Mixed fruit jam	Jam ya matunda
602	Mixed fruit juice	Juisi ya matunda

607	Papaya juice	Juisi ya papai
126	Passion juice	Juisi ya pesheni
606	Water melon juice	Juisi ya tikiti maji
<b>F3</b>	<b>Vegetables</b>	<b>Mboga</b>
421	African egg plant	Nyanya chungu
401	Amaranth, raw	Mchicha mbichi
424	Bean, cluster	Guar
425	Bean, fresh	Maharage machanga
431	Cabbage, Chinese, raw	Kabichi Chinese
402	Cabbage, cooked	Kabichi ya kupika
403	Cabbage, green or white, raw	Kabichi nyeupe
430	Carrot, juice	Juisi ya karoti
404	Carrot, raw	Karoti isiyopikwa
409	Cassava, leaf	Kisamvu (Majani ya mhogo)
405	Cauliflower, cooked without salt	Kaoliflower
406	Cauliflower, raw	Kaoliflower mbichi
427	Chilli, green	Pilipili za kijani
410	Cowpea leaf	Majani ya kunde
407	Cucumber, with peel, raw	Tango
408	Eggplant, raw	Biringanya
411	Green medium, leaf	Mboga za majani
429	Green pepper (capsicum)	Pilipili hoho
426	Hare lettuce (mchungu)	Mchungu
414	Lettuce	Mboga ya majani
415	Mushroom	Uyoga
416	Okra, raw	Bamia
417	Onion, raw	Kitungu
418	Pea, green, fresh	Njegere mbichi
433	Pepper, dried or fresh, hot	Pilipili kavu au mbichi kali
412	Pumpkin leaf, raw	Majani ya maboga
419	Pumpkin, cooked	Boga la kupikwa
432	Salad, green	Saladi
420	Spinach, cooked	Spinachi iliyopikwa
428	Sweet potato leaf	Matembele
413	Taro leaf, raw	Majani ya maghimbi
422	Tomato green	Nyanya mbichi
423	Tomato, ripe	Nyanya mbivu

<b>F4</b>	<b>Vegetable-based local dishes</b>	<b>Asili ya mboga</b>
755	Cabbage relish with oil	Mchuzi wa mboga ya kabeji na mafuta
754	Cabbage and onion salad	Kachambari ya kabeji na kitungu
757	Cassava leaf relish with coconut milk	Mchuzi wa kisamvu na tui la nazi
759	Cow pea leaf relish with coconut milk	Mchuzi wa majani ya kunde na tui la nazi
779	Cow pea leaf relish with groundnuts	Mchuzi wa majani ya kunde na karanga
784	Egg plant relish	Mchuzi wa mboga ya biringanya
763	Green leaf, medium, relish with coconut milk	Mchuzi wa mboga ya majani na tui la nazi
762	Green leaf, medium, relish with groundnuts	Mchuzi wa mboga ya majani na karanga
761	Green leaf, medium, relish without oil	Mchuzi wa mboga ya majani bila mafuta
760	Green leaf, medium, relish with oil	Mchuzi wa mboga ya majani na mafuta
766	Green pea relish without oil	Mchuzi wa njegere bila mafuta
782	Green pea relish with oil	Mchuzi wa njegere na tui la nazi
767	Green pea relish with oil and coconut milk	Mchuzi wa njegere na mafuta
778	Green pea relish with coconut milk	Mchuzi wa njegere na mafuta na nazi
786	Hare lettuce (mchungu) relish with oil	Mchuzi wa mchungu na mafuta
783	Okra relish without oil	Mchuzi wa bamia bila mafuta
775	Okra relish with oil	Mchuzi wa bamia na mafuta
765	Okra relish with coconut milk	Mchuzi wa bamia na nazi
781	Okra, fried	Bamia iliyokaangwa
780	Potato leaf relish with coconut milk	Mchuzi wa matembele na tui la nazi
777	Potato leaf relish with milk	Mchuzi wa matembele na maziwa
764	Potato leaf relish with oil	Mchuzi wa matembele na mafuta
772	Potato samosa	Sambusa ya viazi
769	Pumpkin leaf relish without oil	Mchuzi wa majani ya maboga bila mafuta
768	Pumpkin leaf relish with oil	Mchuzi wa majani ya maboga na mafuta
770	Spinach relish with groundnut and oil	Mchuzi wa spinachi, karanga na mafuta
752	Spinach relish without oil	Mchuzi wa spinachi bila mafuta
753	Spinach relish with oil	Mchuzi wa spinachi na mafuta
771	Spinach relish with sesame seeds	Mchuzi wa spinachi na ufuta
785	Tomato relish	Mchuzi wa mboga ya nyanya
<b>GMI</b>	<b>Miscellaneous</b>	<b>Mchanganyiko/Vingineno</b>
451	Beer, commercial	Bia
452	Beer, local, grain	Pombe ya kienyeji
453	Beer, local non-specific	Gongo
454	Black currant, syrup, ribena	Juisi ya black currant, ribena
455	Candy, chocolate	Pipi, Chocolate
458	Carbonated drink, non-alcohol	Vinywaji baridi (Soda)
471	Chilli powder, red	Pilipili ya unga, nyekundu
481	Chilli sauce	Sausi ya pilipili



160	Coconut, immature meat and water	Maji na nyama ya dafu
459	Cod liver oil	Mafuta ya ini la samaki
472	Coffee, instatnt	Kahawa laini uliosagwa
460	Cricket or locust	Senene or Nzige
476	Fruit flavored drink, concentrated	Kinywaji cha ladha ya tunda lo lote
477	Garlic, fresh-AP	Kitunguu saumu
490	Ginger	Tangawizi
461	Honey	Asali
491	Ice sherbet	Icekrimu barafu
462	Orange drink, concentrated	Maji ya machungwa kwenye chupa
463	Salt, iodized	Chumvi yenye madini ya iodine
464	Salt, non-iodized	Chumvi bila madini ya iodine
474	Soy sauce	Sausi ya soya
475	Soybean, milk, dried	Maziwa ya soya ya unga
465	Sugar	Sukari
466	Sugarcane	Miwa
467	Sugarcane juice	Juisi ya Miwa
468	Tea leaves	Majani ya chai
469	Termite	Kumbikumbi
489	Tomato juice	Juisi ya nyanya
470	Tomato ketchup	Sausi ya nyanya
478	Tomato paste	Paste ya nyanya
480	Vinegar, wine	Siki
<b>GM2</b>	<b>Miscellaneous-local dishes</b>	<b>Mengineyo</b>
1006	Coffee with milk, without sugar	Kahawa yenye maziwa, bila sukari
1004	Coffee without milk, with sugar	Kahawa bila maziwa, yenye sukari
1005	Coffee with sugar and milk	Kahawa yenye sukari na maziwa
1007	Halwa	Halua
1008	Groundnut cluster	Kashata
1003	Tea without sugar with milk	Chai yenye maziwa bila sukari
1002	Tea with sugar and milk	Chai yenye sukari na maziwa
1001	Tea with sugar without milk	Chai yenye sukari bila maziwa
<b>H</b>	<b>Local Broths</b>	<b>Supu</b>
853	Beef broth without oil	Supu ya nyama bila mafuta
854	Beef broth with oil	Suu ya nyama yenye mafuta
855	Cabbage broth without oil	Supu ya kabichi bila mafuta
856	Cabbage broth with oil	Supu ya kabichi yenye mafuta
859	Cassava leaf broth without oil	Supu ya kisamvu bila mafuta
858	Cassava leaf broth with coconut milk	Supu ya kisamvu yenye tui la nazi
860	Cassava leaf broth with oil	Kisamvu yenye mafuta
862	Chicken broth with oil	Supu ya kuku yenye mafuta

861	Chicken broth without oil	Supu ya kuku bila mafuta
865	Cow pea broth without oil	Supu ya kunde bila mafuta
863	Cow pea broth with coconut milk	Supu ya kunde yenye tui la nazi
864	Cow pea broth with oil	Supu ya kunde yenye mafuta
881	Cow pea leaf broth without oil	Supu ya majani ya kunde bila mafuta
866	Cow pea leaf broth with coconut milk	Supu ya majani ya kundey yenye tui la nazi
867	Cow pea leaf broth with oil	Supu ya majani ya kunde yenye mafuta
869	Fish broth without oil	Supu ya samaki bila mafuta
884	Fish broth with coconut milk	Supu ya samaki yenye tui la nazi
868	Fish broth with oil	Supu ya samaki yenye mafuta
870	Green pea broth without oil	Supu ya njegere bila mafuta
880	Green pea broth with coconut milk	Supu ya njegere yenye tui la nazi
871	Green pea broth with oil	Supu ya njegere yenye mafuta
882	Ground beef relish broth	Supu ya nyama ya kusaga
873	Kidney bean broth without oil	Supu ya maharage bila mafuta
872	Kidney bean broth with coconut milk	Supu ya maharage yenye tui la nazi
874	Kidney bean broth with oil	Supu ya maharage yenye mafuta
883	Liver relish broth	Supu ya maini
878	Pumpkin leaf broth without oil	Supu ya majani ya maboga bila mafuta
877	Pumpkin leaf broth with oil	Supu ya majani ya maboga yenye mafuta
879	Small dried fish broth with oil	Supu ya dagaay yenye mafuta
851	Spinach broth without oil	Supu ya spinachi bila mafuta
852	Spinach broth with oil	Supu ya spinachi yenye mafuta

Table 2.3 Foods Names: English and French

	<b>Foods - names in English</b>	<b>Les alimentations</b>
<b>A1</b>	<b>Cereal and Cereal products</b>	<b>les céréals et leur produits.</b>
1	Biscuit	Le biscuit
2	Bread roll	Le pain rond
3	Bread, white	Le pain blanc
6	Cake	le gateau
7	Cookie	le cookie
8	Donut	le beignet
9	Infant cereal, Cerelac	le céréal de bebe, Cerelac
33	Macaroni or spaghetti	le macaroni ou le spagetti
10	Maize, cracked, cooked	le maïs cuit
11	Maize, dried, raw	le maïs sec cru
12	Maize flour, dry	la farine de maïs,sec
13	Maize green, cooked	le maïs vert,cuit
14	Maize, on the cob, immature	l'épi de maïs
15	Maize, yellow, flour	la farine de maïs jaune
16	Millet, bulrush	le millet bulrush
17	Millet, finger, grain or flour	l'épi ou la farine de millet
34	Mixed porridge flour (maize and oil)	le porridge avec farine de maïs et de l'huile
19	Mixed porridge flour (no maize)	le porridge de farine avec le maïs
18	Mixed porridge flour (maize)	le porridge de farine sans maïs
20	Porridge, fermented	le porridge fermenté
22	Rice, flour, local	le riz local les grains ou la farine
21	Rice, fried and boiled	le riz frite et bouillé
23	Rice, white, grain, raw	le riz cru
35	Semolina	la semoule
24	Sorghum	le sorgho
26	Sorghum, flour	la farine de sorgho
27	Vermicelli, uncooked	les vermicelles non cuit
28	Wheat, dough, deep fried	la farine du blé 72% extrait
29	Wheat flour, whole grain	la pâte du blé,frit
30	Wheat flour, 72% extract	la farine du blé
31	Wheat, flour, maida	la farine
<b>A2</b>	<b>Cereal-based local dishes</b>	<b>les Céréals</b>
534	Cake (home made)	le gâteau fait a la maison
513	Chapati (dry)	les galettes seches
512	Chapati with oil	les galettes avec de l'huile
532	Donut- African	le beignet africain
525	Maize and kidney bean dish	le plat de maïs et de haricots

523	Maize and sorgum ugali (stiff porridge)	le porridge ferme de sorgho et mais
531	Maize porridge with margarine and sugar	le porridge de mais avec du margerine et du sucre
505	Maize porridge without sugar without milk	le porridge de mais sans sucre et lait
506	Maize porridge with sugar	le porridge de mais avec du sucre
502	Maize porridge with sugar and egg	le porridge de mais avec du sucre et des oeufs
507	Maize porridge with sugar and milk	le porridge de mais avec du sucre et du lait
519	Maize ugali (stiff porridge)	le porridge ferme de mais
508	Millet Porridge with sugar	le porridge de millet sans sucre
509	Mix Flour prridge with sugar	le porridge des farines mixe avec du sucre
514	Pancake	la crêpe
543	Rice biriyani	le biriani
516	Rice boiled without oil	du riz bouilli sans huile
517	Rice boiled with oil	du riz bouilli avec de l'huile
530	Rice bread	le pain du riz
524	Rice bun	la brioche de riz
515	Rice and meat pillau	le pilaf du riz et de la vinade
544	Rice and mung dish with coconut milk	du riz avec mungo a la noix de coco
545	Rice and mung dish without coconut milk	du riz avec mungo sans la noix de coco
533	Rice porridge with coconut milk without sugar	le porridge du riz avec la noix de coco sans sucre
528	Rice porridge with sugar	le porridge du riz avec la noix de coco avec du sucre
521	Rice ugali (stiff porridge)	le porridge du riz ferme
518	Rice with coconut milk	du riz au noix de coco
540	Rice with ground meat	du riz à la viande haché
522	Sorgum and millet ugali (stiff porridge)	le porridge ferme au sorgho et millet
511	Sorgum porridge with sugar	le porridge au sorgho avec du sucre
527	Vermicelli, cooked	les vermicelles cuites
535	Vermicelli with coconut milk and sugar	les vermicelles a la noix de coco et sucre
536	Vermicelli with oil and sugar	les vermicelles avec de l'huile et du sucre
537	Vermicelli with coconut milk and salt	les vermicelles avec la noix de coco et du sel
529	Wheat fritter, sweet	les beignets doux de farine
542	Wheat Porridge	le porridge de farine
<b>B1</b>	<b>Roots, Tubers and Bananas</b>	<b>les racines et les tubers</b>
352	Banana , cooked	la banane cuite
365	Breadfruit, unripe	le fruit a pain mûr
362	Cassava, dried	le manioc sec
359	Cassava, dried, flour	la farine de manioc
358	Cassava, raw	le manioc cru
364	Cassava, spicy crisp or chips	le chips de manioc épicé
367	Edible starch, tapioca or corn	l'amidon comestible
353	Potato, english, cooked	la pomme de terre anglaise cuite

354	Potato, crisps, salted	Les chips sales
357	Squash, summer, fresh- AP	la courge d'été fraîche AP
366	Squash, summer, fresh-EP	la courge d'été fraîche EP
369	Sweet potato, red-orange	La patate douce rouge-orange
361	Sweet potato, fresh-EP	la patate douce, fraîche EP
360	Sweet potato, fresh-AP	la patate douce, fraîche AP
356	Taro – raw	le taro , cru
368	Yam	la patate douce

<b>B2</b>	<b>Roots, Tubers and Banana-based local dishes</b>	<b>les racines et les tubercule</b>
974	Banana porridge, plain	le porridge de banana
975	Banana porridge with meat	le porridge de banana
976	Banana porridge with fish	le porridge de banana
977	Banana porridge with meat, spinach	le porridge de banane avec de la viande et de l'épinard
954	Banana with cashew nut	la banane avec la noix de cajou
955	Banana with coconut milk	la banane avec la noix de coco
968	Banana with kidney beans	la banane avec les haricots rouge
953	Banana with meat	la banane avec la viande
952	Banana with meat and coconut milk	la banane avec la viande et la noix de coco
973	Banana with meat, oil, vegetable	la banane avec la viande , la noix de coco et de l'huile vegetale
951	Banana with oil ( without meat )	la banane avec l'huile sans viande
969	Banana, boiled	la banane bouilli
964	Banana, fried	la banane frite
971	Banana, roast	la banane rôtie
541	Cassava porridge with sugar	le porridge de manioc avec le sucre
526	Cassava ugali (stiff porridge)	le porridge ferme de manioc
956	Cassava with coconut milk	le manioc avec la noix de coco
965	Cassava, boiled	le manioc bouilli
957	Cassava, fried	le manioc frit
978	Kachori (spicy potato balls)	Le kachori
960	Potato chips	les chips de pomme de terre
959	Potato relish with beef	la sauce de de pomme de terre aux boeuf
972	Potato relish with coconut milk	la sauce de pomme de terre avec la noix de coco
958	Potato relish with oil	la sauce de pomme de terre avec l'huile
961	Potato, boiled	la pomme de terre bouilli
963	Roots and tubers mixed (futari)	les racines et les tubercule melangés
967	Sweet potato, boiled	la patate douce bouilli
966	Sweet potato, fried	la patate douce frite
970	Taro, cooked, without salt	Le taro cruite, sans sel

<b>C1</b>	<b>Pulses, Nuts and Seeds</b>	<b>Les lentilles les grains et les noix</b>
179	Almonds	les amandes
151	Bambara groundnut, fresh	l'arachide fraîche
154	Bean, kidney, green, cooked	les haricots, verts cuits
170	Bean, kidney, dried, raw	les haricots secs crus
153	Bean, kidney, dried, cooked	les haricot rouge sec, cuit
155	Bean, mung, dry	les lentilles vertes seché
156	Bean, mung, raw	les lentilles vertes crues
157	Cashew nut	la noix de cajou
158	Chickpea	les pois chiches
159	Chickpea, mashed or flour	la farine de pois chiches
162	Cowpea, green, uncooked	le dolic vert non cuit
163	Cowpea, uncooked	le dolic non cuit
164	Groundnuts	la cacahuète
173	Hyacinth beans (dried)	les haricots de jacinthe sec
174	Hyacinth beans, immature seeds, raw	les haricots de jacinthe frais
176	Hyacinth beans, immature, boiled without salt	les haricots de jacinthe cuit
180	Lentils, whole	les lentilles
177	Lentils, cooked	les lentilles cuit
175	Palm seed	la graine de palme
178	Peanut butter, smooth	le beurre de cacahuètes homogène.
165	Pigeon peas, cooked	le pois cuit
166	Pigeon peas, green	le pois vert
171	Pigeon peas, raw	le pois cru
172	Pumpkin seed	la calicoba
167	Sesame seed	la graine de sesame
168	Soybean, yellow	la grain de soja jaune
169	Sunflower seed	la graine de tournesol
<b>C2</b>	<b>Pulses, Nuts and Seeds-based local dishes</b>	<b>Les légumes les lentilles les noix et les grains</b>
663	Bambra groundnut relish with coconut milk	la noix de bambra
32	Bhajia (chickpea flour fritters)	les frites de farine de pois chiches
664	Chickpea with coconut milk	les pois chiches aux noix de coco
653	Cow pea (dry) relish without oil	le dolic sec sans huile
654	Cow pea (dry) relish with oil	le dolic sec avec de l'huile
651	Cow pea (fresh) relish without oil	la sauce fraîche de dolic sans huile
652	Cow pea relish with coconut milk	le dolic avec la noix de coco

<b>D2</b>	<b>Meat, Poultry, Fish-based local dishes</b>	<b>le viande, le poulet les poissons</b>
552	Beef relish with coconut milk	le codiment de boeuf avec la noix de coco
578	Beef relish without oil	le codiment de boeuf sans huile
551	Beef relish with Oil	le codiment de boeuf avec de l'huile
577	Beef, fried	le boeuf frit
576	Beef, ground relish	le codiment de boeuf haché
574	Chicken boiled or roasted	le poulet bouilli ou rôti
554	Chicken relish without oil	le codiment de poulet sans huile
573	Chicken relish with coconut milk	le codiment de poulet avec la noix de coco
556	Chicken relish with oil	le codiment de poulet avec de l'huile
207	Chicken, fried	le poulet frit
571	Egg boiled	les oeufs bouilli
561	Egg, fried	les oeufs poêlé
565	Fish, fresh, stew	le ragoût de poisson frais
566	Fish relish without oil	le codiment de poisson sanss huile
567	Fish relish with coconut milk	le codiment de poisson avec la noix de coco
564	Fish relish with oil	le codiment de poisson avec de l'huile
569	Fish, fried	le poisson frit
563	Fish fried relish	le codiment de poisson frit
580	Liver relish	le codiment au foie
579	Liver, fried	le foie frit
570	Meat samosa	le samosa à la viande
572	Meat, barbecued	la viande grille
562	Omelet, Spanish	l'omelette a l'espagnole
575	Omelet, Spanish with potato	l'omelette a l'espagnole avec la pomme de terre
560	Small dried fish relish with coconut milk	le codiment des sardines avec la noix de coco
558	Small dried fish relish with okra	le codiment des sardines avec le gombo
557	Small dried fish relish with tomatoes and oil	le codiment des sardines avec la tomate et de l'huile
559	Small dried fish, fried	les sardines frits
<b>D3</b>	<b>Milk and Milk products</b>	<b>le lait et les produits de lait</b>
261	Cheese, cheddar	le cheddar
258	Cheese, cream	Le fromage frais
259	Cheese mozzarella	La mozzarella
251	Ice cream	la glace
252	Infant formula, Lactogen	la bouille
260	Milk powder, non-fat without vitamin A	le lait en poudre dan matiere gras et san vitamin A
253	Milk, condensed, sweetened	le lait concentré,sucré
257	Milk, condensed, evaporated, without vitamin A	le lait condensé sans vitamine A

254	Milk powder, full cream	lait en poudre, plein de crème
255	Milk, cow, whole	le lait de vache
256	Yogurt , plain whole milk	le yaourt

<b>E</b>	<b>Oils and Fats</b>	<b>les huiles et les graisses</b>
1102	Butter refined-ghee	le beurre clarifié
1101	Butter without salt	le beurre
1105	Coconut cream	la crème de coco
1114	Coconut meat, raw	le coco
1104	Coconut, milk and water	le lait de coco avec de l'eau
1114	Coconut water	l'eau de coco
1103	Coconut oil	l'huile de coco
1107	Margarine	le margarine
1108	Red palm oil	l'huile de palme
1109	Sesame oil	l'huile de sesame
1110	Vegetable fat	la graisse vegetale
1111	Vegetable fat, cowboy	le beurre vegetal- cowboy
1112	Vegetable fat, kimbo	le beurre vegetal – kimbo
1113	Vegetable oil	l'huile vegetale

<b>F1</b>	<b>Fruits and Fruit juice</b>	<b>les fruits et leur jus</b>
129	Apple, raw with skin	la pomme
101	Avocado, raw, all common variety	l'avocat
102	Banana, ripe	la banane mûr
103	Baobab, pulp	la pulpe de baobab
131	Custard apple (bullock's heart) raw	l'anone
133	Date, red, dried	la datte rouge seche
134	Date, yellow	la datte jaune
130	Durian	le durion
135	Grapefruit	le pamplemousse
105	Grapes, pale green	les raisin blanc pâle
106	Guavas, common raw	la goyave
107	Jackfruit, raw	le jaque
109	Lemon, raw, without peel	le citron
110	Limes, raw	le citron vert
111	Mango juice	le jus de mangue
112	Mango, ripe, fresh EP	la mangue mûre-fraîche
113	Mango, unripe	la mangue,verte
108	Orange juice, concentrate, unsweetened	le jus d'orange
114	Orange, raw AP	l'orange
115	Papaya, ripe	La sesame mûre
116	Papaya, unripe	la sesame verte



117	Passion fruit	la fruit de la Passion
127	Peach	la pêche
118	Pear	la poivre
120	Pineapple juice	le jus'annanas
119	Pineapple, raw, all variety	l'annanas
121	Plums, raw	la prune
128	Raspberry	la framboise
132	Soursop, raw	le corossol
122	Tamarind	le tamarin
123	Tamarind, fruit, fresh	le fruit de tamarin, frais
124	Tangerine	la mandarine
125	Watermelon, raw	la pastèque
<b>F2</b>	<b>Fruit-based local dishes</b>	<b>les jus de fruits</b>
603	Apple juice	le jus de pomme
604	Avocado juice	le jus de avoact
601	Grape Juice	le jus de raisin
610	Mixed fruit jam	la confiture des fruits assortis
602	Mixed fruit Juice	le jus des fruits assortis
607	Papaya Juice	le jus de papaya
126	Passion Juice	le jus de fruit de la Passion
606	Water melon juice	le jus de pastèque
<b>F3</b>	<b>Vegetables</b>	<b>Les Legumes</b>
421	African egg plant	la tomate amer
401	Amaranth, raw	l'amarante cru
424	Bean, cluster	les haricots
425	Bean, French	les haricots-vert
431	Cabbage, Chinese, raw	le chou chinois cru
402	Cabbage, cooked	le chou cuit
403	Cabbage, green or white, raw	le chou blanc
430	Carrot juice	le jus de carotte
404	Carrot, raw	la carotte crue
409	Cassava leaf	les feuille de manioc
405	Cauliflower, cooked without salt	le chou-fleur
406	Cauliflower, raw	lew chou-fleur cru
427	Chilli, green	le pimet
410	Cowpea leaf	les feuille de dolic
407	Cucumber, with peel, raw	le concombre
408	Eggplant	l'aubergene
411	Green, medium leaf	les petites feuilles
429	Green pepper (capsicum)	le poivron

426	Hare lettuce (mchungu)	la laitue amère
414	Lettuce	la laitue
415	Mushroom	le champignon
416	Okra, raw	le gombo
417	Onion, raw	l'oignon
418	Pea, green, fresh	les petits-pois vert, frais
433	Pepper dried or fresh, hot	le poivre sec ou frais épicé
412	Pumpkin leaf	les feuilles de citrouille
419	Pumpkin, cooked	la citrouille cuite
432	Salad green	la salade
420	Spinach, cooked	les épinards cuits
428	Sweet potato leaf	les feuilles de patate douce
413	Taro leaf	les feuilles de taro
422	Tomato, green	la tomate verte
423	Tomato, ripe	la tomate mûre
<b>F4</b>	<b>Vegetable-based local dishes</b>	<b>les plats végétals</b>
755	Cabbage relish with oil	la sauce au chou avec de l'huile
754	Cabbage and onion salad	la salade d'oignon et du chou
757	Cassava leaf relish with coconut milk	la sauce aux feuilles de manioc avec la noix de coco
759	Cow pea leaf relish with coconut milk	la sauce aux feuilles de dolic avec la noix de coco
779	Cow pea leaf relish with groundnuts	la sauce aux feuilles de dolic avec de l'arachide
784	Egg plant relish	la sauce d'aubergine
763	Green leaf, medium, relish with coconut milk	le codiment des feuilles vertes avec de la noix de coco
762	Green leaf, medium, relish with groundnuts	la sauce des feuilles moyennes avec des arachides
761	Green leaf, medium, relish without oil	la sauce des feuilles moyenne sans huile
760	Green leaf, medium, relish with oil	la sauce des feuilles moyennes avec de l'huile
766	Green Pea Relish without Oil	la sauce de petit-pois sans huile
767	Green Pea Relish with Oil	la sauce de petit-pois avec de l'huile
782	Green pea with oil	les petits-pois avec de la noix de coco
778	Green pea relish with coconut milk	la sauce de petit-pois avec de l'huile et la noix de coco
786	Hare lettuce with oil	Launea cornuta-- avec de l'huile
783	Okra relish without oil	la sauce de gombo sans huile
775	Okra relish with oil	la sauce de gombo avec de l'huile
765	Okra relish with coconut milk	la sauce de gombo avec la noix de coco
781	Okra, fried	le gombo frite
780	Potato leaf relish with coconut milk	la sauce des feuilles de patate avec la noix de coco
777	Potato leaf relish with milk	la sauce des feuilles de patate avec du lait
764	Potato leaf relish with oil	la sauce des feuilles de patate avec de l'huile
772	Potato samosa	le samosa de pomme de terre
769	Pumpkin leaf relish without oil	la sauce aux feuilles de citrouille sans huile

768	Pumpkin leaf relish with oil	la sauce aux feuilles de citrouille avec de l'huile
770	Spinach relish with groundnut and oil	la sauce aux epinard a l'huile de arachide
752	Spinach relish without oil	la sauce aux epinard sans de l'huile
753	Spinach relish with oil	la sauce aux epinard avec de l'huile
771	Spinach relish with sesame seeds	la sauce aux epinard avec les grains de sésame
785	Tomato Relish	la sauce de tomate
<b>GM1</b>	<b>Miscellaneous</b>	<b>Misc.</b>
451	Beer, commercial	le bière commercial
452	Beer, local, grain	le bière local
453	Beer, local, non-specific	le bière local pas spécifié
454	Black currant syrup, ribena	le sirop de cassis- RIBENA
455	Candy, chocolate	le bonbon. Le chocolat
458	Carbonated drink, non-alcohol	le boisson gazeuses sans alcool
471	Chilli powder, red	le chilli
481	Chilli sauce	la sauce aux piments
160	Coconut immature, meat and water	la noix de coco immature, l'eau et..
459	Cod liver oil	l'huile de morue
472	Coffee, instant	le café instanté
460	Cricket or locust	le grillon
476	Fruit flavored drink, concentrated	la boisson aux fruits
477	Garlic fresh AP	l'ail frais
490	Ginger	le gingeemore
461	Honey	le mile
491	Ice sherbet	ice sorbet
462	Orange drink concentrated	le jus d'orange concentré
463	Salt, iodized	le sel iodé
488	Salt, local	le sel local
464	Salt, non-iodized	le sel sans l'iode
474	Soy sauce	le sauce de soja
475	Soybean milk, dried	le lait de soja sec
465	Sugar	le sucre
466	Sugarcane	le canne à sucre
467	Sugarcane juice	le jus de canne à sucre
468	Tea leaves	les feuilles de thé
469	Termite	le termite
489	Tomato juice	le jus de tomate
470	Tomato ketchup	le ketchup
478	Tomato paste	la pureé de tomate
480	Vinegar	le vinaigre

<b>GM2</b>	<b>Miscellaneous-local</b>	<b>Misc.-Les plats locaux</b>
1006	Coffee with milk, without sugar	le café au lait sans sucre
1004	Coffee without milk, with sugar	le café avec sucre
1005	Coffee with sugar and milk	le café au lait avec sucre
1007	Halwa	le halva
1008	Ground nut cluster	le cookiede la cacahuète
1003	Tea without sugar with milk	le thé avec du lait sans sucre
1002	Tea with sugar and milk	le thé avec du lait et du sucre
1001	Tea with sugar without milk	le thé sans lait avec du sucre
<b>H</b>	<b>Local Broths</b>	<b>les bouillons locaux</b>
853	Beef broth without oil	le bouillon de boeuf sans huile
854	Beef broth with oil	le bouillon de boeuf avec de l'huile
855	Cabbage broth without oil	le bouillon de chou sans huile
856	Cabbage broth with oil	le bouillon de chou avec de l'huile
859	Cassava leaf broth without oil	la bouillon des feuilles de manioc sans huile
858	Cassava leaf broth with coconut milk	le bouillon des feuilles de manioc avec la noix de coco
860	Cassava leaf broth with oil	le bouillon de manioc avec de l'huile
862	Chicken broth with oil	le bouillon de poulet avec de l'huile
861	Chicken broth without oil	le bouillon de poulet sans huile
865	Cow pea broth without oil	le bouillon de dolic sans huile
863	Cow pea broth with coconut milk	le bouillon de dolic avec la noix de coco
864	Cow pea broth with oil	le bouillon de dolic avec de l'huile
881	Cow pea leaf broth without oil	le bouillon des feuilles de dolic sans huile
866	Cow pea leaf broth with coconut	le bouillon des feuilles de dolic avec la noix de coco
867	Cow pea leaf broth with oil	le bouillon des feuilles de dolic sans huile
869	Fish broth without oil	le bouillon de poisson sans huile
884	Fish broth with coconut	le bouillon de poisson avec la noix de coco
868	Fish broth with oil	le bouillon de poisson avec de l'huile
870	Green pea broth without oil	le bouillon de petits- pois sans huile
880	Green pea broth with coconut	le bouillon de petits- pois avec la noix de coco
871	Green pea broth with oil	le bouillon de petits- pois avec de l'huile
882	Ground beef relish broth	le bouillon de boeuf haché
873	Kidney bean broth without oil	le bouillon des haricots rouge sans huile
872	Kidney bean broth with coconut	le bouillon des haricots rouge avec le noix de coco
874	Kidney bean broth with oil	le bouillon de haricots rouge avec de l'huile
883	Liver relish broth	le bouillon du codiment de foie
878	Pumpkin leaf broth without oil	le bouillon des feuilles de citrouille sans huile
877	Pumpkin leaf broth with oil	le bouillon des feuilles de citrouille avec de l'huile
879	Small dried fish broth with oil	le bouillon des sardines secs avec de l' huile
851	Spinach broth without oil	le bouillon d'épinard sans huile
852	Spinach broth with oil	le bouillon d'épinard avec de l'huile

**Table 2.4 Foods Names: English and Portuguese**

	<b>Foods - names in English</b>	<b>Nomes de Alimentos em Português</b>
<b>A1</b>	<b>Cereal and Cereal Products</b>	<b>Cereais e produtos à base de cereais</b>
1	Biscuit	Bolacha
2	Bread roll	Pãozinho
3	Bread, white	Pão branco
6	Cake	Bolo
7	Cookie	Bolinho
8	Donuts	Argolas
9	Infant cereal, Cerelac	Cereal infantil, Cerelac
33	Macaroni or spaghetti	Macarrão ou esparguete
10	Maize, cracked, cooked	Milho, seco, cozido
11	Maize, dried, raw	Milho, seco, cru
12	Maize flour, dry	Milho, farinha, seco
13	Maize green, cooked	Milho, verde, cozido
14	Maize, on the cob, immature	Milho, na espiga, imaturo
15	Maize, yellow, flour	Milho, amarelo, farinha
16	Millet, bulrush	Milho miúdo, Junco
17	Millet, finger, grain or flour	Milho miúdo, dedo, grão ou farinha
34	Mixed porridge flour (maize and oil)	Farinha de papa misturada (farinha and óleo)
19	Mixed porridge flour (no maize)	Farinha de papa misturada (sem milho)
18	Mixed porridge flour (maize)	Farinha de papa misturada (com milho)
20	Porridge, fermented	Papa, fermentada
21	Rice, fried and boiled	Arroz, refogado and cozido
22	Rice, grain or flour, local	Arroz, grão ou farinha, local
23	Rice, raw	Arroz, cru
35	Semolina	Semolina
24	Sorghum	Mapira
26	Sorghum, flour	Mapira, Farinha
27	Vermicelli, uncooked	Aletria, não cozida
28	Wheat, dough, deep fried	Trigo, Farinha amassada, Frito
29	Wheat flour	Trigo, Farinha
30	Wheat flour, 72% extract	Trigo, Farinha, 72% Extrato
31	Wheat, flour, maida	Trigo, Farinha, -Branca
<b>A2</b>	<b>Cereal-based local dishes</b>	<b>Derivados de Cereais</b>
534	Cake (home made)	Bolo (caseiro)
513	Chapati (dry)	Apa (seca)
512	Chapati with oil	Apa com óleo
532	Donut- African	Argola Africana frita

525	Maize and kidney bean dish	Prato de Milho e Feijão Vulgar de grão pequeno
523	Maize and sorgum ugali (stiff porridge)	Milho e massa dura de mapira
531	Maize porridge with margarine and sugar	Papa de milho com margarina e açúcar
505	Maize porridge without sugar without milk	Papa de milho sem açúcar e sem leite
506	Maize porridge with sugar	Papa de milho com açúcar
502	Maize porridge with sugar and egg	Papa de milho com açúcar e ovo
507	Maize porridge with sugar and milk	Papa de milho com açúcar e leite
519	Maize ugali (stiff porridge)	Papa dura de milho
508	Millet porridge with sugar	Papa de milho miúdo com açúcar
509	Mix flour porridge with sugar	Mistura de farinha de papa com açúcar
514	Pancake	Panqueca
543	Rice biriyani	Biriyani de arroz
516	Rice boiled without Oil	Arroz cozido sem óleo
517	Rice boiled with Oil	Arroz cozido com óleo
530	Rice bread	Pão de arroz
524	Rice bun	Bolo de arroz
515	Rice and meat pillau	Arroz e Pulau de Carne
544	Rice and mung dish with coconut	Arroz e Feijão – Da –China com coco
545	Rice and mung dish without coconut	Arroz e Feijão – Da –China sem coco
533	Rice poridge with coconut milk without sugar	Papa de arroz com coco sem açúcar
528	Rice porridge with sugar	Papa de arroz com açúcar
521	Rice ugali (stiff porridge)	Papa dura de arroz
518	Rice with coconut milk	Arroz com coco
540	Rice with ground meat	Arroz com Carne Moída
522	Sorgum and millet ugali (stiff porridge)	Mapira e massa dura de milho miúdo
511	Sorgum porridge with sugar	Papa de Mapira com açúcar
527	Vermicelli, cooked	Aletria-cozida
535	Vermicelli with coconut and sugar	Aletria com Coco e açúcar
536	Vermicelli with oil and sugar	Aletria com Óleo e Açúcar
537	Vermicelli with coconut and salt	Aletria com Coco e Sal
529	Wheat Fritter, sweet	Fritos de trigo Doce
542	Wheat Porridge	Papa de trigo
<b>B1</b>	<b>Roots, Tubers and Bananas</b>	<b>Raízes, Tubérculos, Banana</b>
352	Banana, cooked	Banana para cozer
365	Breadfruit, raw	Fruta Pão (Não-madura)
362	Cassava, dried	Mandioca, Seca
359	Cassava, dried, flour	Mandioca, Seca, Farinha
358	Cassava, raw	Mandioca, Crua
364	Cassava, spicy crisp or chips	Mandioca, temperada quebradiça ou pedaços
367	Edible starch, tapioca or corn	Tapioca ou milho

354	Potato crisps, salted	Batata,
353	Potato, English, cooked	Batata, Inglesa, Cozida
355	Potato, raw, with skin	Batata, crua, com pele
357	Squash, summer, fresh-AP	Polpa, Verão, Fresco-Toda a porção
366	Squash, summer, fresh-EP	Polpa, Verão, Fresco- Parte comestível
360	Sweet potato, fresh-AP	Batata doce, Fresca Toda a porção
361	Sweet potato, fresh-EP	Batata doce, -Fresca Parte comestível
368	Sweet potato, orange	Batata doce, laranja
356	Taro, raw	Taro/Inhame
369	Yam, raw	Inhame, cru

<b>Roots, Tubers and Banana-based</b>		
<b>B2</b>	<b>local dishes</b>	<b>Derivados de Raízes, Tubérculos, Banana</b>
974	Banana porridge, plain	Papa de banana
975	Banana porridge with meat	Papa de banana
976	Banana porridge with fish	Papa de banana
977	Banana porridge with meat and spinach	Papa de banana com carne, Espinafre
954	Banana with cashewnut	Banana com castanha de cajú
955	Banana with coconut	Banana com coco
968	Banana with kidney beans	Banana com Feijão Vulgar Pequeno
953	Banana with meat	Banana com carne
952	Banana with meat and coconut	Banana com carne e coco
973	Banana with meat, coconut, oil, vegetables	Banana com carne, coco, leo, vegetal
951	Banana with oil without meat	Banana com oleo (sem carne)
969	Banana, boiled	Banana, cozida
964	Banana, fried	Banana frita
971	Banana, roast	Banana, assada
541	Cassava porridge with sugar	Papa de mandioca com açúcar
526	Cassava ugali (stiff porridge)	Papa de mandioca consistente
956	Cassava with coconut	Mandioca com coco
965	Cassava, boiled	Mandioca, cozida
957	Cassava, fried	Mandioca, frita
978	Kachori (spicy potato balls)	Kachori (bolinhas de batata picante)
960	Potato Chips, fried	Palitos de batata, frita
959	Potato relish with beef	Caril de carne de vaca com batata
972	Potato relish with coconut milk	Caril de bata com Coco
958	Potato relish with oil	Caril de batata com óleo
961	Potato, boiled	Batata, cozida
963	Roots and tubers mixed (futari)	Raízes e tubérculos, misturados
967	Sweet potato, boiled	Batata doce, cozida
966	Sweet potato, fried	Batata doce, frita
980	Taro, cooked, without salt	Belembe, cozido, sem sal

<b>C1</b>	<b>Pulses, Nuts and Seeds</b>	<b>Leguminosas, Sementes, Amêndoas</b>
179	Almonds	Amendoas
151	Bambara groundnut, fresh	Feijão Jugo, Amendoim , Fresco
154	Bean, kidney, green, cooked	Feijão, Feijão Vulgar de grão pequeno, Verde, Cozido
170	Bean, kidney, dried, raw	Feijão, Feijão Vulgar de grão pequeno, Seco, Crú
153	Bean, kidney, dried, cooked	Feijão, Feijão Vulgar de grão pequeno, Seco, Cozido
155	Bean, mung, dry	Feijão, Feijão Holoco, Seco
156	Bean, mung, raw	Feijão, Crú
157	Cashewnuts	Castanha de cajú
158	Chickpea	Grão-de bico
159	Chickpea, mashed or flour	Grão-de bico, Amassado ou Farinha
162	Cowpea, green, uncooked	Feijão nhemba, Verde, Não-cozido
163	Cowpea, uncooked	Feijão nhemba, Não-cozido
164	Groundnuts	Amendoin
173	Hyacinth beans (dried)	Lab lab purpureus (Seco)
174	Hyacinth beans fresh, immature	Lab lab purpureus- (Fresco, Imaturo)
176	Hyacinth beans,immature, boiled without salt	Lab lab purpureus (Imaturo) cozido
177	Lentil, cooked	Lentilha, cozinhada
180	Lentil, whole	Lentilha, inteira
175	Palm seed	Semente de palma
178	Peanut butter, smooth	Pasta de amendoim
165	Pigeon peas, cooked	Feijão Boer, Cozida
166	Pigeon peas, green	Feijão Boer, Verde
171	Pigeon peas, raw	Feijão Boer, Crua
172	Pumpkin seed	Sementes de abóbora
167	Sesame seed	Sementes de gergelim
168	Soybean, yellow	Soja, Amarelo
169	Sunflower seeds	Sementes de girassol
<b>C2</b>	<b>Pulses, Nuts and Seeds-based local dishes</b>	<b>Derivados de Leguminosas,Sementes, Amêndoas</b>
663	Bambra Nut with Coconut milk	Amêndoa de Feijão Jugo com Coco
32	Bhajia (Chickpea Flour Fritters)	Bagia (Fritos de Farinha de Grão-de-Bico)
664	Chick Pea with Coconut milk	Grão-de-Bico com Coco
653	Cow Pea (dry) without Oil	Feijão nhemba (seco) sem leo
654	Cow Pea (dry) with Oil	Feijão nhemba (seco) com óleo
651	Cow Pea (fresh) Relish without Oil	Molho de FeijãoNhemba (fresco) sem óleo
652	Cow Pea with Coconut milk	Feijão nhemba com Coco
657	Kidney Bean without Oil	Feijão Vulgar Pequeno sem Óleo
656	Kidney Bean Relish with Oil	Molho de Feijão Vulgar Pequeno com Óleo
655	Kidney Bean with Coconut milk	Feijão Vulgar Pequeno com Coco
662	Mung Bean (dry) with Cocount	Feijão Holoco (seco) com Coco
658	Mung bean (dry, boiled)	Feijão Holoco (seco, fervido)
659	Pigeon Pea (fresh, cooked)	Feijão Boer (fresco, cozido)
660	Pigeon Pea Relish with Coconut milk	Caril Feijão Boer com Coco
661	Pigeon Peas with Oil	Feijão Boer com Óleo



<b>D1</b>	<b>Meat, Poultry, Fish</b>	<b>Carnes, Aves, Peixe</b>
205	Beef liver, raw	Bife de figado, cru
204	Beef , boneless	Bife, sem osso
201	Beef, liver, cooked	Carne de vaca, Fígado, Cozido
202	Beef, medium fat, cooked	Carne de vaca, Meio gorda, Cozida
203	Beef, tripe	Carne de vaca, Dobrada
206	Chicken, liver	Galinha, Fígado
208	Chicken, raw	Galinha, Crua
306	Egg yolk	Gema de ovo
307	Egg, chicken	Ovo, Galinha
308	Fish, dried, cod	Peixe, Seco, Bacalhau
309	Fish, dried, fresh water	Peixe, Seco, Água doce
220	Fish, fresh	Peixe, Fresco
310	Fish, high fat	Peixe, Gorduroso
311	Fish, raw	Peixe, Crú
312	Fish, sardines	Peixe, Sardinha
313	Fish, small, dried, fresh water	Peixe, Pequeno, Seco, Água doce
314	Fish, small, fresh, fresh water	Peixe, Pequeno, Fresco, Água doce
319	Fish smoked, dried AP	Peixe, Fumado, Seco , toda a porcao
320	Fish, smoked, dried EP	Peixe, Fumado, Seco Parte comestível
315	Goat, meat	Cabra, Carne
316	Mutton, meat	Carneiro, Carne
317	Pork, medium fat, cooked	Porco, Meio gordo, Cozido
318	Sausage	Salsicha

<b>D2</b>	<b>Meat, Poultry, Fish-based local dishes</b>	<b>Derivados de Carnes, Aves e Peixe</b>
552	Beef relish with coconut milk	Caril de carne da vaca com Coco
578	Beef relish with without oil	Caril de carne da vaca sem Óleo
551	Beef relish with oil	Caril de carne da vaca com Óleo
577	Beef, fried	Carne de vaca, frita
576	Beef, ground Relish	Caril de carne de vaca moída
574	Chicken boiled or roasted	Galinha cozida/assada
554	Chicken Relish without oil	Caril de galinha sem Óleo

<b>D3</b>	<b>Meat, Poultry, Fish-based local dishes</b>	<b>Derivados de Carnes, Aves e Peixe</b>
573	Chicken relish with coconut milk	Caril de galinha com Coco
556	Chicken relish with oil	Caril de galinha com Óleo
207	Chicken, fried	Galinha, frita
571	Egg boiled	Ovo cozido
561	Egg, fried	Ovo, frito
565	Fish fresh stew	Refogado de peixe fresco

566	Fish Relish without Oil	Caril de peixe sem Óleo
567	Fish Relish with coconut milk	Caril de Peixe com Coco
564	Fish Relish with Oil	Caril de Peixe com Óleo
569	Fish, fried	Peixe, frito
563	Fish, fried relish	Molho de peixe frito
580	Liver relish	Pasta (ou pate) de figado
579	Liver, fried	Figado, seco
570	Meat samosa	Chamusa de carne
572	Meat, barbecued	Carne, espetada
562	Omelet, Spanish	Omolete, Espanhola
575	Omelet, Spanish with potato	Omolete, Espanhola com batata
560	Small dried fish relish with coconut milk	Caril de Sardinhas com Coco
558	Small dried fish relish with okra	Caril de Sardinas com Quiabo
557	Small dried fish relish with tomato and oil	Caril de Sardinas com tomate e Oleo
559	Small dried fish, fried	Sardinhas, fritas
<b>D3</b>	<b>Milk and milk products</b>	<b>Leite e Derivados de Leite</b>
261	Cheese, cheddar	Queijo, cheddar
258	Cheese, cream	Queijo cremoso
259	Cheese mozzarella	Queijo mozzarella
251	Ice cream	Sorvete
252	Infant formula, lactogen	Fórmula Infantil, Lactogen
253	Milk, condensed, sweetened	Leite, Condensado, adoçado
257	Milk, condensed, evaporated, without vitamin A	Leite, em po sem vit A
260	Milk powder, non-fat without vitamin A	Leite em po, sem gordura e sem vitamina A
254	Milk powder, full cream	Leite em Pó, Gordo
255	Milk, cow, whole	Leite, Vaca, Inteiro
256	Yogurt	Yogurte
<b>E</b>	<b>Oils and Fats</b>	<b>Óleos e Gorduras</b>
1102	Butter refined – ghee	Manteiga
1101	Butter with salt	Manteiga
1105	Coconut cream	Crema de coco
1114	Coconut meat, raw	Coco, cru
1104	Coconut milk and water	Leite de coco e agua
1115	Coconut water	Agua de coco
1103	Coconut oil	Óleo de coco
1107	Margarine	Margarina
1108	Red palm oil	Óleo de Palma
1109	Sesame oil	Óleo de Gergelim
1110	Vegetable fat	Gordura de origem vegetal
1111	Vegetable fat, cowboy	Gordura de origem vegetal, Vaqueiro
1112	Vegetable fat, kimbo	Gordura de origem vegetal, KIMBO-----
1113	Vegetable oil	Óleo de origem vegetal

<b>F1</b>	<b>Fruits and Fruit juice</b>	<b>Fruta e sumo de fruta</b>
129	Apple, raw with skin	Maçã
101	Avocado, raw all common variety	Pera abacate
102	Banana, ripe	Banana, Madura
103	Baobab, pulp	Embondeiro, Polpa
131	Custard apple (bullock's heart) raw	Custarda de maçã
133	Date, red, dried	Tâmara, Vermelha, Seca
134	Date, yellow	Tâmara, Amarela
130	Durian	Durião
135	Grapefruit	Uva
105	Grapes, pale green	Uvas, Verde Pálido
106	Guavas, common raw	Goiaba
107	Jackfruit	Fruta Pão
109	Lemon	Limão
110	Lime	Lima
111	Mango juice	Sumo de manga
112	Mango, ripe-fresh ep	Manga, Madura-EP Fresca
113	Mango, unripe	Manga-não madura
108	Orange juice	Sumo de laranja
114	Orange	Laranja
115	Papaya, ripe	Papaia, Madura
116	Papaya, unripe	Papaia, não-madura
117	Passion fruit	Maracujá
127	Peach	Pêssego
118	Pear	Pera
119	Pineapple, raw, all variety	Ananás
120	Pineapple juice	Sumo de ananás
121	Plums	Ameixas
128	Raspberry	Framboesa
132	Soursop	Araticu
122	Tamarind	Tamarino
123	Tamarind, fruit, fresh	Tamarino, Fruta, Fresca
124	Tangerine, raw	Tangerina
125	Watermelon, raw	Melancia
<b>F2</b>	<b>Fruit-based local dishes</b>	<b>Derivados de Frutas</b>
603	Apple juice	Sumo de maçã
604	Avocado juice	Sumo de pêra-abacate
601	Grape juice	Sumo de uvas
610	Mixed fruit jam	Jam de mistura de frutas
602	Mixed fruit juice	Sumo de mistura de frutas

607	Papaya juice	Sumo de papaia
126	Passion juice	Sumo de maracujá
605	Tamarind juice	Sumo de tamarino
606	Water melon juice	Sumo de melancia
<b>F3</b>	<b>Vegetables</b>	<b>Vegetais</b>
421	African egg plant	Beringela Africana
401	Amaranth, raw	Amarantus, Crú
424	Bean, cluster	Feijão, agrupar
425	Bean, Fresh	Feijão, Francês
431	Cabbage, Chinese, raw	Repolho, Chinês, Crú
402	Cabbage, cooked	Repolho, Cozido
403	Cabbage, green, white, raw	Repolho, Branco, Crú
430	Carrot juice	Sumo de cenoura
404	Carrot, raw	Cenoura, Crua
409	Cassava leaf	Folha de mandioca
405	Cauliflower, cooked without salt	Couve flor
406	Cauliflower, raw	Couve flor, Crua
427	Chilli, green	Piri-piri, Verde
410	Cowpea leaf	Folha de feijão nhemba
407	Cucumber, with peel, raw	Pepino
408	Eggplant, raw	Beringela
411	Green medium leaf	Folha meio verde
429	Green pepper (capsicum)	Pimento
426	Hare lettuce	Hare (Launaea cornuta) alface
414	Lettuce	Alface
415	Mushroom	Cogumenlo
416	Okra, raw	Quiabo
417	Onion, raw	Cebola
418	Pea, green, fresh	Ervilha, verde, fresca
433	Pepper dried or fresh, hot	Pimenta seca ou fresca, picante
412	Pumpkin leaf	Folha de abóbora
419	Pumpkin, cooked	Abóbora cozida
432	Salad green	Salada verde
420	Spinach, cooked	Espinafre cozida
428	Sweet potato leaf	Folhas de batata doce cozidas
413	Taro leaf	Folha de taro
422	Tomato, green	Tomate, verde
423	Tomato, ripe	Tomate, maduro

<b>F4</b>	<b>Vegetable-based local dishes</b>	<b>Derivados de Vegetais</b>
755	Cabbage relish with oil	Caril de repolho com óleo
754	Cabbage, onion salad	Repolho, salada de cebola
757	Cassava leaf relish with coconut milk	Caril de folhas de mandioca com coco
759	Cow pea leaf relish with coconut milk	Caril de folhas de Feijão Nhemba com coco
779	Cow pea leaf relish with groundnuts	Caril de Feijão Nhemba com Amendoim
784	Egg plant relish	Caril de Beringela
763	Green leaf, medium, relish with coconut milk	Folhas verdes, média, caril de coco
762	Green leaf, medium, relish with groundnuts	Folhas verdes, média, caril de amendoim
761	Green leaf, medium, relish without oil	Folhas verdes, média, caril sem óleo
760	Green leaf, medium, relish with oil	Folhas verdes, média, caril com óleo
766	Green pea relish without oil	Caril de ervilha verde sem óleo
782	Green pea with coconut milk	Ervilha verde com coco
767	Green pea relish with oil	Caril de ervilha verde com óleo
778	Green pea relish with oil and coconut milk	Caril de ervilha verde com óleo e coco
786	Hare lettuce with oil	Launea cornuta--com óleo
783	Okra relish without oil	Caril de quiabo sem óleo
775	Okra relish with oil	Caril de quiabo com óleo
765	Okra relish with coconut milk	Caril de quiabo com coco
781	Okra, fried	Quiabo, frito
780	Potato leaf relish with coconut milk	Caril de folhas de bataat com coco
777	Potato leaf relish with milk	Caril de folhas de batata com leite
764	Potato leaf relish with oil	Caril de folhas de bataata com óleo
772	Potato samosa	Cahmossa de Batata(enrolada)
769	Pumpkin leaf relish without oil	Caril de flas de abóbora sem óleo
768	Pumpkin leaf relish with oil	Caril de flas de abóbora com óleo
770	Spinach relish with groundnut and oil	Caril de espinafre com amendoim e óleo
752	Spinach relish without oil	Caril de espinafre sem óleo
753	Spinach relish with oil	Caril de espinafre com óleo
771	Spinach relish with sesame seeds	Caril de espinafre com sementes de gergelim
785	Tomato relish	Caril de tomate
<b>GM1</b>	<b>Miscellaneous</b>	<b>Miscelânea/Diversos</b>
451	Beer, commercial	Cerveja, commercial
452	Beer, local, grain	Cerveja, local, grão
453	Beer, local, non-specific	Cerveja, Local, não-especifica
454	Black currant syrup, ribena	Xarope de groselha preta,(RIBENA) ----
455	Candy, chocolate	Caramelo, Chocolate
458	Carbonated drink, non-alcohol	Bebida Carbonada, Não-alcólica
471	Chilli powder, red	Piripiri em pó, Vermelho
481	Chilli sauce	Molho de Piripiri

160	Coconut, immature, meat and water	Polpa de coco imaturo and Água
459	Cod liver oil	Óleo de Fígado de Bacalhau
472	Coffee, instatnt	Cafe instaneo
460	Cricket or locust	Grilo ou gafanhoto
476	Fruit flavored drink, concentrated	Bebida com sabor a frutas
477	Garlic, fresh-AP	Alho fresco
490	Ginger	Gengibre
461	Honey	Mel
491	Ice sherbet	Gelado de frutas
462	Orange drink, concentrated	Bebida concentrada de laranja
463	Salt, iodized	Sal, iodado
464	Salt, non-iodized	Sal nao-iodado
474	Soy sauce	Molho de soja
475	Soybean, milk, dried	Leite de soja, desidratado
465	Sugar	Açúcar
466	Sugarcane	Cana-de-açúcar
467	Sugarcane juice	Sumo de cana-de-açúcar
468	Tea leaves	Folhas de cha
469	Termite	Termite
489	Tomato juice	Sumo de tomate
470	Tomato ketchup	Molho de tomate
478	Tomato paste	Mass de tomate
480	Vinegar, wine	Vinagre

<b>GM2</b>	<b>Miscellaneous– Local dishes</b>	<b>Miscelania/Deversos</b>
1006	Coffee with milk without sugar	Café sem açúcar com leite
1004	Coffee without milk with sugar	Café com açúcar
1005	Coffee with sugar and milk	Café com açúcar e leite
1007	Halwa	Halua
1008	Groundnut cluster	Bolinho de amend oim
1003	Tea without sugar with milk	Chá sem açúcar com leite
1002	Tea with sugar and milk	Chá com açúcar e leite
1001	Tea with sugar without milk	Chá com açúcar sem leite
<b>H</b>	<b>LOCAL BROTHS</b>	<b>CALDOS</b>
853	Beef broth without oil	Caldo de carne sem óleo
854	Beef broth with oil	Caldo de carne com óleo
855	Cabbage broth without oil	Caldo de repolho sem óleo
856	Cabbage broth with oil	Caldo de repolho com óleo
859	Cassava leaf broth without oil	Caldo de folha de cassava sem óleo
858	Cassava leaf broth with coconut milk	Caldo de folha de cassava com leite de coco
860	Cassava leaf broth with oil	Caldo de folha de cassava com óleo

862	Chicken broth with oil	Caldo de galinha com óleo
861	Chicken broth without oil	Caldo de galinha sem óleo
865	Cow pea broth without oil	Caldo de Feijão nhemba sem óleo
863	Cow pea broth with coconut milk	Caldo de Feijão nhemba com leite de coco
864	Cow pea broth with oil	Caldo de Feijão nhemba com óleo
881	Cow pea leaf broth without oil	Caldo de folha de Feijão nhemba sem óleo
866	Cow pea leaf broth with coconut milk	Caldo de folha de Feijão nhemba com leite de coco
867	Cow pea leaf broth with oil	Caldo de folha de Feijão nhemba com óleo
869	Fish broth without oil	Caldo de peixe sem óleo
884	Fish broth with coconut milk	Caldo de peixe com leite de coco
868	Fish broth with oil	Caldo de peixe com óleo
870	Green pea broth without oil	Caldo de ervilha verde sem óleo
880	Green pea broth with coconut milk	Caldo de ervilha verde com leite de coco
871	Green pea broth with oil	Caldo de ervilha verde com óleo
882	Ground beef relish broth	Caldo de carne moída
873	Kidney bean broth without oil	Caldo de feijão vulgar pequeno sem óleo
872	Kidney bean broth with coconut milk	Caldo de feijão vulgar pequeno com leite de coco
874	Kidney bean broth with oil	Caldo de feijão vulgar pequeno com óleo
883	Liver relish broth	Caldo de carne de fígado
878	Pumpkin leaf broth without oil	Caldo de folha de abóbora sem óleo
877	Pumpkin leaf broth with oil	Caldo de folha de abóbora com óleo
879	Small dried fish broth with oil	Caldo de peixe, pequeno, seco com óleo
851	Spinach broth without oil	Caldo de carne com espinafre sem óleo
852	Spinach broth with oil	Caldo de carne com espinafre com óleo

## 2.5 List of Recipes

Recipes of all the local dishes included in the Tanzania Food Composition Tables are presented in this section.

Some ingredients of dishes which had more than one recipe were summed up and divided by the number of entries.

The amount of water is not included for any recipe and therefore, the weight of the total cooked amount is indicated at the end of each recipe as "Total"

Recipes are listed by the assigned food code in the TFCT to enable the user to find it easily.

### 18. Mixed porridge flour (with maize)

1 kg maize flour	500 g rice flour
1 kg millet flour	500 g sorghum flour
500 g yellow soybeans	
<i>Total = 4 kg</i>	

### 19. Mixed porridge flour (no maize)

1 kg rice flour	2.5 kg sorghum flour
500 g millet flour	500 g groundnut
<i>Total = 5 kg</i>	

### 32. Bhajia (chick pea fritters)

1 kg chickpea flour	150 g onion
500 mg chilli powder	350 g vegetable oil
<i>Total = 2 kg</i>	

### 34. Mixed porridge flour (with maize and groundnuts)

500 g rice flour	1 kg maize flour
500 g yellow soybeans	500 g groundnut
<i>Total = 2.5 kg</i>	

### 207. Fried Chicken

750 g chicken	100 g vegetable oil
250 mg salt	60 g lime
<i>Total = 750 g</i>	

### 481. Chilli sauce

60 g green chilli	5 g salt
260 g tomato	250 g sugar
35 g onion	200 g vinegar
<i>Total = 700 g</i>	

### 502. Maize porridge with milk, egg and sugar

30 g maize flour	15 g sugar
50 g egg	100 g milk
<i>Total = 300 g</i>	



- 505 **Maize porridge (no sugar or milk)**  
 10 g maize flour  
*Total = 100 g*
- 506 **Maize porridge with sugar**  
 10 g maize flour  
 15 g sugar  
*Total = 100 g*
- 507 **Maize porridge with milk and sugar**  
 10 g maize flour                      50 g milk  
 50 g sugar  
*Total = 100 g*
- 508 **Millet porridge with sugar**  
 10 g millet flour  
 15 g sugar  
*Total = 100 g*
- 509 **Mixed flour porridge with groundnuts**  
 10 g millet flour                      5 g groundnut  
 5 g rice flour                          4 g vegetable oil  
 4 g sugar  
*Total = 100 g*
- 511 **Sorghum flour porridge**  
 10 g sorghum  
 15 g sugar  
*Total = 100 g*
- 512 **Chapati**  
 500 g wheat flour                      250 mg salt  
 190 g vegetable oil  
*Total = 1.1 kg*
- 513 **Chapati (dry with less oil)**  
 500 g wheat flour  
 30 g vegetable oil  
*Total = 1 kg*
- 514 **Pancake**  
 1 kg plain flour                      200 g cooking oil  
 300 g egg                              5 g salt  
*Total = 2 kg*

- 515 **Pillau**  
 1 kg rice 100 g garlic  
 915 g mutton (goat's meat) 100 g green peas  
 100 g onion 50 g carrot  
 100 g vegetable oil  
*Total = 3.8 kg*
- 516 **Rice cooked (plain)**  
 1 kg rice  
*Total = 2 kg*
- 517 **Rice cooked with oil**  
 1 kg rice  
 50 g oil  
*Total = 800g*
- 518 **Rice cooked with coconut milk**  
 350 g rice  
 100 g coconut milk  
*Total = 2 kg*
- 519 **Stiff maize porridge (ugali)**  
 450 g maize flour  
*Total = 1.4 kg*
- 521 **Stiff rice porridge**  
 40 g rice flour  
*Total = 100 g*
- 522 **Stiff sorghum and millet porridge**  
 75 g sorghum flour  
 25 g millet flour  
*Total = 300 g*
- 524 **Rice buns (Vitumbua)**  
 1 kg rice flour 125 g vegetable oil  
 120 g sugar  
*Total = 1.25 kg*
- 525 **Maize and kidney dish (Makande)**  
 2 kg maize 5 g salt  
 500 g cooked kidney beans 300 mL coconut milk  
 80 g oil  
*Total = 2 kg*
- 527 **Vermicelli, plain**  
 225 g vermicelli 3 g salt  
 6 g oil  
*Total = 3 kg*

- 528 **Rice porridge with sugar**  
 10 g rice flour  
 15 g sugar  
*Total = 100 g*
- 530 **Rice bread**  
 2.75 kg rice flour                      875 g sugar  
 100 g vegetable oil                      2.25 L coconut milk  
 10 g yeast  
*Total = 8 kg*
- 531 **Maize porridge with margarine and sugar**  
 150 g maize flour                      4 g margarine  
 150 g sugar  
*Total = 1.15 kg*
- 532 **Donut – African (Mandazi)**  
 1 kg plain flour                      150 g vegetable oil  
 250 g sugar  
*Total = 2 kg*
- 534 **Cake**  
 240 g plain flour                      150 g egg  
 240 g sugar                      10 g baking powder  
 240 g butter  
*Total = 1 kg*
- 535 **Vermicelli with coconut milk and sugar**  
 225 g vermicelli                      40 g coconut milk  
 6 g sugar  
*Total = 400 g*
- 536 **Vermicelli with oil and sugar**  
 225 g vermicelli                      12 g vegetable oil  
 9 g sugar  
*Total = 450 g*
- 537 **Vermicelli with coconut milk and salt**  
 120 g vermicelli                      1 g salt  
 40 g coconut milk  
*Total = 225 g*
- 540 **Rice with ground beef**  
 250 g rice                      125 g ground beef  
 5 g salt                      45 g vegetable oil  
 70 g carrot                      50 g groundnut  
*Total = 700 g*

- 543 **Rice and chicken biriyani**  
 500 g chicken                      50 g tomato  
 200 g rice                            50 g oil  
 300 g onion                         10 g salt  
 150 g potato                        20 g garlic  
 75 g yogurt                         10 g ginger  
*Total = 1.2 kg*
- 544 **Rice with mung bean and coconut milk (Mseto with coconut milk)**  
 200 g rice                            200 g coconut milk  
 50 g mung beans (green gram) 2 g salt  
*Total = 600 g*
- 545 **Rice with mung beans (Mseto)**  
 \ 200 g rice                            2 g salt  
 50 g mung beans (green gram)  
*Total = 700 g*
- 551 **Beef relish with oil**  
 450 g boneless beef                525 g tomato  
 35 g vegetable oil                 55 g onion  
 250 mg salt  
*Total = 800 g*
- 552 **Beef relish with coconut milk**  
 2 kg boneless beef                 350 g potato  
 300 g tomato                        125 mL coconut milk  
 40 g onion                            10 g salt  
*Total = 5 kg*
- 554 **Chicken relish with no oil**  
 100 g cooked chicken               25 g tomato  
 150 g onion                         250 mg salt  
*Total = 250 g*
- 556 **Chicken relish with oil**  
 100 g cooked chicken               200 g tomato  
 50 g onion                            45 g vegetable oil  
 250 mg salt  
*Total = 450 g*
- 557 **Small dried fish (Dagaa) relish with oil**  
 100 g small dried fish               250 g tomato  
 50 g onion                            45 g vegetable oil  
*Total = 800 g*

- 559 **Fried Small dried fish (dagaa)**  
 2.25 kg small dried fish 20 g salt  
 300 g vegetable oil  
*Total = 2.25 kg*
- 561 **Fried Egg**  
 140 g egg 200 mg salt  
 20 g vegetable oil  
*Total = 150 g*
- 562 **Spanish omelet, plain**  
 140 g egg 15 g green pepper  
 25 g onion 45 g vegetable oil  
 25 g tomato 500 mg salt  
*Total = 225 g*
- 563 **Fried fish relish**  
 200 g fried fish (recipe 569) 75 g coconut milk  
 35 g onion 60 g vegetable oil  
 100 g tomato 250 mg salt  
*Total = 550g*
- 564 **Fish relish with oil**  
 140 g fish 25 g onion  
 40 g vegetable oil 170 g tomato  
 200 mg salt  
*Total = 500 g*
- 566 **Fish relish with no oil**  
 65 g fish 40 g onion  
 30 g tomato 200 mg salt  
*Total = 180 g*
- 567 **Fish relish with coconut milk**  
 120 g fish 300 g coconut milk  
 15 g onion 200 mg salt  
*Total = 530 g*
- 569 **Fried fish**  
 120 g fish  
 15 g vegetable oil  
*Total = 100 g*

- 573 **Chicken relish with oil and coconut milk**  
 750 g fried chicken (recipe 270) 85 g green pepper (capsicum)  
 550 g onion 85 g carrot  
 800 g tomato 200 g coconut milk  
 30 g vegetable oil 500 mg salt  
*Total = 2.55 kg*
- 575 **Spanish omelet with potato**  
 480 g potato 100 g green pepper (capsicum)  
 420 g egg 125 g oil  
 70 g onion 200 mg salt  
*Total = 2.5 kg*
- 576 **Ground beef relish**  
 500 g ground beef 40 g onion  
 90 g oil 500 mg salt  
 340 g tomato  
*Total = 1 kg*
- 577 **Fried Beef**  
 500 g beef 50 g ginger  
 5 g salt 360 g oil  
 10 g garlic 75 g lime  
*Total = 1.5 kg*
- 602 **Mixed Fruit juice**  
 400 g orange 215 g avocado  
 100 g passion fruit 200 g papaya  
*Total = 1.5 kg*
- 604 **Avocado juice**  
 450 g avocado 150 g sugar  
*Total = 1.5 kg*
- 606 **Watermelon juice**  
 3 kg whole melon (with peel)  
*Total = 2 kg*
- 608 **Passion fruit juice**  
 100 g passion fruit 60 g sugar  
*Total = 250 g*
- 651 **Fresh cowpea relish**  
 60 g fresh cowpea 100 mg salt  
 20 g tomato  
*Total = 100 g*

- 652 **Cowpea relish with coconut milk**  
 750 g dried cowpeas                      100 g coconut milk  
 400 g onion                                  300 mg salt  
*Total = 2.5 kg*
- 655 **Kidney bean relish with coconut milk**  
 460 g dried kidney bean                  1 g salt  
 250 g coconut milk                          60 g tomato  
 60 g onion                                    10 g carrot  
 1 g salt  
*Total = 1.3 kg*
- 656 **Kidney bean relish with oil**  
 300 g dried kidney bean, cooked      35 g onion  
 30 g vegetable oil                          10 g tomato  
 200 mg salt  
*Total = 500 g*
- 657 **Kidney bean relish with no oil**  
 160 g dried kidney beans, cooked      200 mg salt  
 25 g tomato  
*Total = 200 g*
- 658 **Mung relish, plain**  
 250 g dry mung bean                      500 mg salt  
 40 g onion  
*Total = 700 g*
- 660 **Pigeon peas with coconut milk**  
 36 g pigeon peas, cooked                  20 g coconut milk  
 10 g onion  
*Total = 100 g*
- 661 **Pigeon peas relish with oil**  
 2 kg pigeon peas, cooked                  120 g cooking oil  
 100 g onion                                    500 mg salt  
*Total = 2.5 kg*
- 662 **Mung relish with coconut milk**  
 250 g dry mung beans                      50 g vegetable oil  
 40 g onion                                      300 g coconut milk  
 340 g tomato                                  500 mg salt  
*Total = 1.3 kg*

- 752 **Spinach relish with no oil**  
 280 g spinach leaves, raw      220 g tomato  
 40 g onion      200 mg salt  
*Total = 400 g*
- 753 **Spinach relish with oil**  
 320 g spinach leaves, raw      15 g tomato  
 30 g onion      55 g vegetable oil  
 200 mg salt  
*Total = 490 g*
- 754 **Cabbage and onion salad (Kachumbari)**  
 300 g cabbage      200 g cucumber  
 150 g onion      30 g lime  
 30 g tomato      100 mg salt  
*Total = 600 g*
- 755 **Cabbage relish with oil**  
 2 kg cabbage      250 g onion  
 250 g carrot      700 g tomato  
 300 g green peas      120 g vegetable oil  
 250 g pepper      20 g salt  
*Total = 6.25 kg*
- 756 **Cassava leaf relish with groundnut**  
 500 g cassava leaves      175 g onion  
 125 g tomato      1 g salt  
 100 g roasted groundnut  
*Total = 750 g*
- 757 **Cassava leaf relish with coconut milk**  
 65 g cassava leave      200 mg salt  
 45 g coconut milk  
*Total = 100 g*
- 789 **Cowpea leaf with coconut milk**  
 100 g cowpea leaves      200 mg salt  
 115 g coconut milk  
*Total = 100 g*
- 763 **Green leaf relish with coconut milk**  
 100 g medium green leaves (any)      200 mg salt  
 27 g coconut milk  
*Total = 100 g*



- 764 **Sweet potato leaf relish with oil**  
 700 g sweet potato leaves      60 g vegetable oil  
 50 g onion      200 mg salt  
*Total = 550 g*
- 766 **Green pea relish, plain**  
 1.25 kg green peas      425 g tomato  
 85 g onion      5 g salt  
*Total = 1.8 kg*
- 768 **Pumpkin leaf relish with oil**  
 400 g pumpkin leaves      40 g onion  
 50 g vegetable oil      30 g carrot  
 160 g tomato      1.5 g salt  
*Total = 900 g*
- 770 **Spinach relish with oil and groundnuts**  
 100 g spinach leaves      6 g groundnut  
 50 g vegetable oil      200 mg salt  
 50 g onion  
*Total = 100 g*
- 771 **Spinach relish with sesame seed**  
 200 g spinach leaves      100 mg salt  
 8 g sesame seeds  
*Total = 100 g*
- 775 **Okra relish with oil**  
 200 g okra      40 g green pepper  
 170 g tomato      90 g vegetable oil  
 60 g onion      500 mg salt  
 40 g carrot  
*Total = 600 g*
- 776 **Eggplant relish**  
 450 g eggplant      150 g onion  
 300 g tomato      35 g vegetable oil  
 150 g potato      1 g salt  
*Total = 900 g*
- 777 **Sweet potato leaf with milk**  
 700 g sweet potato leaves      200 mg salt  
 200 g milk  
*Total = 350 g*

- 778 **Green pea relish with coconut milk and oil**  
 1.25 kg green peas                      440 g tomato  
 400 g coconut milk                      45 g vegetable oil  
 100 g onion                                500 mg salt  
*Total = 2.4 kg*
- 779 **Cowpea leaf relish with groundnut**  
 60 g cowpea leaves                      30 g tomato  
 100 g coconut milk                      10 g groundnut  
*Total = 200 g*
- 782 **Green pea relish with coconut milk**  
 1.25 kg green peas                      100 g onion  
 400 g coconut milk                      390 g tomato  
 5 g salt  
*Total = 2.5 kg*
- 783 **Okra relish, plain**  
 100 g okra                                 500 mg salt  
 100 g pumpkin leaves  
*Total = 300 g*
- 951 **Banana with oil, tomato and onion**  
 1.5 kg banana                            50 g onion  
 200 g tomato                            50 g vegetable oil  
 1 g salt  
*Total = 2 kg*
- 952 **Banana with meat and coconut milk**  
  
 2.5 kg banana                            100 g tomato  
 125 g coconut milk                      50 g onion  
 100 g boneless beef                      1 g salt  
*Total = 2.8 kg*
- 954 **Banana with cashew nuts**  
  
 350 g banana                            25 g cashew nuts  
 10 g tomato                              500 mg salt  
 10 g onion  
*Total = 500 g*
- 955 **Banana with coconut milk**  
 245 g banana                            200 mg salt  
 230 g coconut milk  
*Total = 535 g*

- 956 **Cassava with coconut milk**  
 1.28 kg cassava 500 mg salt  
 125 g coconut milk  
*Total = 1.6 kg*
- 957 **Fried Cassava**  
 1 kg cassava with peel 200 mg salt  
 250 g vegetable oil  
*Total = 1 kg*
- 958 **Potato relish with oil**  
 2 kg potato 200 g tomato  
 50 g vegetable oil 1 g salt  
*Total = 3.1 kg*
- 959 **Potato relish with beef**  
 1.8 kg potato 300 g coconut milk  
 100 g beef or mutton 25 g vegetable oil  
 45 g tomato paste 6 g salt  
 25 g onion  
*Total = 2.6 kg*
- 960 **Potato chips**  
 1 kg potato  
 240 g vegetable oil  
*Total = 1.2 kg*
- 968 **Banana with kidney beans**  
 1.7 kg banana 40 g vegetable oil  
 500 g kidney beans, dried, cooked 300 g tomato  
*Total = 4.5 kg*
- 972 **Potato relish with coconut milk**  
 300 g potato 200 mg salt  
 250 g coconut milk  
*Total = 300 g*
- 973 **Banana with meat, oil and vegetables**  
 600 g banana 25 g vegetable oil  
 200 g beef or goat's meat (mutton) 900 g beef broth  
 25 g onion 50 g green pepper (capsicum)  
 50 g tomato 1 g salt  
*Total = 2.5 kg*

- 974 **Banana porridge (Mtori)**  
 2 kg banana                      170 g tomato  
 90g oil                              800 g potato  
 70 g onion                        1 g salt  
*Total = 3 kg*
- 975 **Banana porridge (Mtori) with meat**  
 500 g banana                      170 g tomato  
 200 g beef or mutton              400 g coconut milk  
 800 g potato                        200 g green pepper  
 340 g carrot                        180 g oil  
 70 g onion                         5 g salt  
*Total = 4.5 kg*
- 976 **Banana porridge (Mtori) with fish**  
 300 g banana                      30 g carrot  
 50 g dried fish                      125 g green peas  
 70 g onion                         45 g oil  
 85 g tomato                        1 g salt  
*Total = 800 g*
- 977 **Banana porridge (Mtori) with ground meat**  
 400 g banana                      2 g salt  
 250 g ground beef                45 g oil  
 30 g carrot  
*Total = 800 g*
- 978 **Kachori (spicy potato balls)**  
 750 g potato                        20 g lime juice  
 10 g ginger                        2 g salt  
 10 g garlic                         200 g chickpea flour  
 100 g vegetable oil  
*Total = 1 kg*
- 1107 **Halwa**  
 150 g edible starch                225 g clarified butter (ghee)  
 500 g sugar  
*Total = 1 kg*

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#### **Mexico**

INCAP-ICNND Food Composition Table for Use in Latin America, 1961.

#### **Egypt**

Food Composition Tables for the Near East, FAO and U.S. Dept. of Agriculture, 1982.

#### **India**

Nutritive Value of Indian Foods, C. Gopalan, B.V. Rama Sastri, and S.C. Balasubramanian, 1991.

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Many scientific names were already given with the database provided.

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#### **Indonesia**

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## 2.8 Food additives and preservatives

### 2.8.1 Definition

**Food additives** are substances added to food to preserve flavor or improve its taste and appearance. Some additives have been used for centuries; for example, preserving food by pickling (with vinegar), salting, as with bacon, preserving sweets or using sulfur dioxide as in some wines. With the advent of processed foods in the second half of the 20th century, many more additives have been introduced, of both natural and artificial origin.

Food additives have been used for centuries. Salt, sugar and vinegar were among the first and used to preserve foods. In the past 30 years, however, with the advent of processed foods, there has been a massive explosion in the chemical adulteration of foods with additives. Considerable controversy has been associated with the potential threats and possible benefits of food additives

### 2.8.2 Numbering

To regulate these additives, and inform consumers, each additive is assigned a unique number. Initially these were the “E numbers” used in Europe for all approved additives. This numbering scheme has now been adopted and extended by the Codex Alimentarius Committee to internationally identify all additives, regardless of whether they are approved for use.

E numbers are all prefixed by “E”, but countries outside Europe use only the number, whether the additive is approved in Europe or not. For example, acetic acid is written as E260 on products sold in Europe, but is simply known as additive 260 in some countries. Additive 103, alkanet, is not approved for use in Europe so does not have an E number, although it is approved for use in Australia and New Zealand. Since 1987 Australia has had an approved system of labelling for additives in packaged foods. Each food additive has to be named or numbered. The numbers are the same as in Europe, but without the prefix ‘E’.

### 2.8.3 Categories

Food additives can be divided into several groups, although there is some overlap between them.

**Acids:** Food acids are added to make flavors “sharper”, and also act as preservatives and antioxidants. Common food acids include vinegar, citric acid, tartaric acid, malic acid, fumaric acid, lactic acid.

**Acidity regulators:** are used to change or otherwise control the acidity and alkalinity of foods.

**Anticaking agents:** keep powders such as milk powder from caking or sticking.

**Antifoaming agents:** reduce or prevent foaming in foods.

**Antioxidants:** such as vitamin C act as preservatives by inhibiting the effects of oxygen on food, and can be beneficial to health.

**Bulking agents:** such as starch are additives that increase the bulk of a food without affecting its nutritional value.

**Food coloring:** are added to food to replace colors lost during preparation, or to make food look more attractive.

**Color retention agents:** In contrast to colorings, color retention agents are used to preserve a food's existing color.

**Emulsifiers:** allow water and oils to remain mixed together in an emulsion, as in mayonnaise, ice cream, and homogenized milk.

**Flavors:** are additives that give food a particular taste or smell, and may be derived from natural ingredients or created artificially.

**Flavor enhancers:** enhance a food's existing flavors. They may be extracted from natural sources (through distillation, solvent extraction, maceration, among other methods) or created artificially.

**Flour treatment agents:** are added to flour to improve its color or its use in baking.

**Humectants:** prevent foods from drying out.

**Tracer gas:** allow for package integrity testing to prevent foods from being exposed to atmosphere, thus guaranteeing shelf life.

**Preservatives:** prevent or inhibit spoilage of food due to fungi, bacteria and other microorganisms.

**Stabilizers:** thickeners and gelling agents, like agar or pectin (used in jam for example) give foods a firmer texture. While they are not true emulsifiers, they help to stabilize emulsions.

**Sweeteners:** are added to foods for flavoring. Sweeteners other than sugar are added to keep the food energy (calories) low, or because they have beneficial effects for diabetes mellitus and tooth decay and diarrhea.

**Thickeners:** are substances which, when added to the mixture, increase its viscosity without substantially modifying its other properties.

## Appendix: Food additive index

Updated up to the 30th Session of the Codex Alimentarius Commission (2007)

### A

- Acesulfame Potassium (950)
- Acetic Acid (Glacial) (260)
- Acetic and Fatty Acid Esters of Glycerol (472a)
- Acetylated Distarch Adipate (1422)
- Acetylated Distarch Phosphate (1414)
- Acetylated Oxidized Starch (1451)
- Acid Treated Starch (1401)
- Agar (406)
- Alginate (400)
- Alitame (956)
- Alkaline Treated Starch (1402)
- Allura Red AC (129)
- Aluminium Ammonium Sulphate (523)
- Aluminium Silicate (559)
- Amaranth (123)
- Ammonium Acetate (264)
- Ammonium Alginate (403)
- Ammonium Carbonate (503(i))
- Ammonium Chloride (510)
- Ammonium Hydrogen Carbonate (503(ii))
- Ammonium Hydroxide (527)
- Ammonium Lactate (328)
- Ammonium Salts of Phosphatidic Acid (442)
- Amylase (*Aspergillus oryzae* var.), Alpha- (1100)
- Amylase (*Bacillus Megaterium* expressed in *Bacillus Subtilis*), Alpha- (1100)
- Amylase (*Bacillus Stearothermophilus*), Alpha- (1100)
- Amylase (*Bacillus Stearothermophilus* expressed in *Bacillus Subtilis*), Alpha- (1100)
- Amylase (*Bacillus subtilis*), Alpha- (1100)
- Amylase (Carbohydrase) (*Bacillus licheniformis*), Alpha- (1100)
- Annatto Extracts (160b)
- Ascorbic Acid (L-) (300)
- Aspartame (951)
- Aspartame-Acesulfame Salt (962)
- Azodicarbonamide (927a)
- Azorubine (Carmoisine) (122)

### B

- Beeswax (901)
- Beet Red (162)
- Benzoyl Peroxide (928)
- Bleached Starch (1403)

- Brilliant Black (Black PN) (151)
- Brilliant Blue FCF (133)
- Bromelain (1101(iii))
- Brown HT (155)
- Butylated Hydroxyanisole (320)
- Butylated Hydroxytoluene (321)

### C

- Calcium 5'-Guanylate, (629)
- Calcium 5'-Inosinate, (633)
- Calcium 5'-Ribonucleotides, (634)
- Calcium Acetate (263)
- Calcium Alginate (404)
- Calcium Aluminium Silicate (556)
- Calcium Ascorbate (302)
- Calcium Carbonate (170(i))
- Calcium Chloride (509)
- Calcium Gluconate (578)
- Calcium Glutamate (D, L-) (623)
- Calcium Hydroxide (526)
- Calcium Lactate (327)
- Calcium Malate (D, L-) (352(ii))
- Calcium Oxide (529)
- Calcium Propionate (282)
- Calcium Silicate (552)
- Calcium Sulphate (516)
- Candelilla Wax (902)
- Canthaxanthin (161g)
- Caramel II - Caustic Sulphate Process (150b)
- Caramel III - Ammonia Process (150c)
- Caramel I - Plain (150a)
- Caramel IV - Sulphite Ammonia Process (150d)
- Carbon Dioxide (290)
- Carmines (120)
- Carnauba Wax (903)
- Carob Bean Gum (410)
- Carotenes, beta (Vegetable) (160a(ii))
- Carrageenan and its Na, K, NH<sub>4</sub>, Ca and Mg Salts (Includes Furcelleran) (407)
- Castor Oil (1503)
- Chlorine (925)
- Chlorine Dioxide (926)
- Chlorophyll (140)
- Citric Acid (330)
- Citric and Fatty Acid Esters of Glycerol (472c)
- Cross-linked Carboxymethyl Cellulose (Cross-

- linked Cellulose Gum) (468)
- Curcumin (100(i))
- Curdlan (424)
- Cyclamic Acid (and Na, K, Ca Salts) (952)
- Cyclodextrin, Alpha- (457)
- Cyclodextrin, Beta- (459)
- Cyclodextrin, Gamma- (458)

## D

- Dextrins, Roasted Starch, (1400)
- Diacetyltartaric and Fatty Acid Esters of Glycerol (472e)
- Dimethyl Dicarboxylate (242)
- Dioctyl Sodium Sulphosuccinate (480)
- Diphenyl (230)
- Dipotassium 5'-Guanylate, (628)
- Disodium 5'-Guanylate, (627)
- Disodium 5'-Inosinate, (631) \
- Disodium 5'-Ribonucleotides, (635)
- Distarch Phosphate (1412)

## E

- Erythritol (968)
- Erythrosine (127)
- Ethyl Cellulose (462)
- Ethyl Hydroxyethyl Cellulose (467)
- Ethyl Maltol (637)

## F

- Fast Green FCF (143)
- Ferric Ammonium Citrate (381)
- Ferrous Gluconate (579)
- Ferrous Lactate (585)
- Formic Acid (236)
- Fumaric Acid (297)

## G

- Gellan Gum (418)
- Glucono Delta-Lactone (575)
- Glucose Oxidase (*Aspergillus niger* var.) (1102)
- Glutamic Acid, (L(+)-) (620)
- Glycerol (422)
- Glycerol Esters of Wood Rosin (445)
- Grape Skin Extract (163(ii))
- Guaiac Resin (314)
- Guanylic Acid, 5'- (626)
- Guar Gum (412)
- Gum Arabic (Acacia Gum) (414)

## H

- Hexamethylene Tetramine (239)
- Hydrochloric Acid (507)
- Hydrogenated Poly-Decenes (907)
- Hydroxypropyl Cellulose (463)
- Hydroxypropyl Distarch Phosphate (1442)
- Hydroxypropyl Methyl Cellulose (464)
- Hydroxypropyl Starch (1440)

## I

- Indigotine (Indigo Carmine) (132)
- Inosinic Acid (630)
- Invertase (*Saccharomyces cerevisiae*) (1103)
- Isoascorbic acid (Erythorbic Acid) (315)
- Isomalt (Isomaltitol) (953)
- Isopropyl Citrates (384)

## K

- Karaya Gum (416)
- Konjac Flour (425)

## L

- Lactic Acid, (L-, D- and DL-) (270)
- Lactic and Fatty Acid Esters of Glycerol (472b)
- Lactitol (966)
- Lecithin (322(ii))
- Lipase (Animal Sources) (1104)
- Lipase (*Aspergillus Oryzae* var.) (1104)
- Lutein from *Tagetes erecta* (161b(ii))
- Lysozyme (1105)

## M

- Magnesium Carbonate (504(i))
- Magnesium Chloride (511)
- Magnesium Gluconate (580)
- Magnesium Glutamate (625)
- Magnesium Hydrogen Carbonate (504(ii))
- Magnesium Hydroxide (528)
- Magnesium Lactate (DL-) (329)
- Magnesium Oxide (530)
- Magnesium Silicate (553(ii))
- Malic Acid, (DL-) (296)
- Maltitol and Maltitol Syrup (965)
- Maltol (636)
- Mannitol (421)
- Methyl Cellulose (461)
- Methyl Ethyl Cellulose (465)
- Microcrystalline Cellulose (460(i))

- Microcrystalline Wax (905c(i))
- Mineral Oil, High Viscosity (905d)
- Mineral Oil, Medium and Low Viscosity (Class I) (905e)
- Monoammonium Glutamate (624)
- Mono- and Di-Glycerides of Fatty Acids (471)
- Monopotassium Glutamate (622)
- Monosodium Glutamate (621)
- Monostarch Phosphate (1410)

## N

- Neotame (961)
- Nisin (234)
- Nitrogen (941)
- Nitrous Oxide (942)

## O

- Oxidized Starch (1404)
- Oxystearin (387)

## P

- Papain (1101(ii))
- Pectins (440)
- Phosphated Distarch Phosphate (1413)
- Pimaricin (Natamycin) (235)
- Polydextroses A and N (1200)
- Polydimethylsiloxane (900a)
- Polyethylene Glycol (1521)
- Polyglycerol Esters of Fatty Acids (475)
- Polyglycerol Esters of Interesterified Ricinoleic Acid (476)
- Polyglycitol Syrup (964)
- Polyvinyl Alcohol (1203)
- Polyvinylpyrrolidone (1201)
- Polyvinylpyrrolidone (Insoluble) (1202)
- Ponceau 4R (Cochineal Red A) (124)
- Potassium Acetates (261)
- Potassium Alginate (402)
- Potassium Ascorbate (303)
- Potassium Carbonate (501(i))
- Potassium Chloride (508)
- Potassium Dihydrogen Citrate (332(ii))
- Potassium Gluconate (577)
- Potassium Hydrogen Carbonate (501(ii))
- Potassium Hydrogen Malate (351(i))
- Potassium Hydroxide (525)
- Potassium Inosinate (632)
- Potassium Lactate (326)

- Potassium Malate (351(ii))
- Potassium Propionate (283)
- Potassium Sulphates (515)
- Powdered Cellulose (460(ii))
- Processed Eucheuma Seaweed (PES) (407a)
- Propane (944)
- Propionic Acid (280)
- Propylene Glycol (1520)
- Propylene Glycol Alginate (405)
- Propylene Glycol Esters of Fatty Acids (477)
- Propyl Gallate (310)
- Protease (*Aspergillus oryzae* var.) (1101(i))
- Pullulan (1204)

## Q

- Quinoline Yellow (104)

## R

- Red 2G (128)

## S

- Saccharin (and Na, K, Ca Salts) (954)
- Salts of Myristic, Palmitic and Stearic Acids with Ammonia, Calcium, Potassium and Sodium (470(i))
- Salts of Oleic Acid with Calcium, Potassium and Sodium (470(ii))
- Shellac (904)
- Silicon Dioxide, Amorphous (551)
- Sodium Acetate (262(i))
- Sodium Alginate (401)
- Sodium Ascorbate (301)
- Sodium Carbonate (500(i))
- Sodium Carboxymethyl Cellulose, Enzymatically Hydrolysed (469)
- Sodium Carboxymethyl Cellulose (Cellulose Gum) (466)
- Sodium Diacetate (262(ii))
- Sodium Dihydrogen Citrate (331(i))
- Sodium Fumarates (365)
- Sodium Gluconate (576)
- Sodium Hydrogen Carbonate (500(ii))
- Sodium Hydrogen Malate (350(i))
- Sodium Hydroxide (524)
- Sodium Isoascorbate (316)
- Sodium Lactate (325)
- Sodium Malate (350(ii))
- Sodium Propionate (281)

- Sodium Sesquicarbonate (500(iii))
- Sodium Sulphates (514)
- Sorbitol and Sorbitol Syrup (420)
- Stannous Chloride (512)
- Starch Acetate (1420)
- Starches, Enzyme Treated (1405)
- Starch Sodium Octenyl Succinate (1450)
- Stearyl Citrate (484)
- Stearyl Tartrate (483)
- Sucralose (Trichlorogalactosucrose) (955)
- Sucroglycerides (474)
- Sucrose Acetate Isobutyrate (444)
- Sucrose Esters of Fatty Acids (473)
- Sunset Yellow FCF (110)
- T
- Talc (553(iii))
- Tannic Acid (Tannins, Food Grade) (181)
- Tara Gum (417)
- Tartrazine (102)
- Tertiary Butylhydroquinone (319)
- Thaumatin (957)
- Thermally Oxidized Soya Bean Oil with Mono- and Di-Glycerides of Fatty Acids (TOSOM) (479)
- Titanium Dioxide (171)
- Tragacanth Gum (413)
- Triacetin (1518)
- Triammonium Citrate (380)
- Tricalcium Citrate (333(iii))
- Triethyl Citrate (1505)
- Tripotassium Citrate (332(ii))
- Trisodium Citrate (331(iii))
- X
- Xanthan Gum (415)
- Xylitol (967)
- Z Zeaxanthin (synthetic) (161h(i))
- 
- 
- <http://www.codexalimentarius.net/gsfaonline/additives/details.html>(accessed 2007)
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# **SECTION 3**

## **Food portion size databases**

### 3 Adult and child food portion databases

These databases are based on the foods included in the food composition tables and are listed by their assigned food codes.

#### 3.1 Objectives: The databases aim to:

- provide estimates on the average portion size of foods commonly consumed by Tanzanian adults and children based on information gathered from several sources. The average portion size was calculated after weighing different amounts of the same food consumed by a number of different people. This information is particularly useful when no other information is available on how much of a food is normally consumed.
- provide weights of food items using different commonly available domestic utensils.
- provide information on the average weights of “countable foods” such as oranges, maandazi, chapatti etc.

#### 3.2 Sources of information for average amount of foods consumed

The different food items presented in these databases were measured using the same utensils shown in illustration 3.1 and indicated in table 3.1 during the dietary assessments of the study participants. Three or more samples of all the foods were obtained from the medical students' canteen at MUHAS, the staff canteen at TFNC, or from vendors, markets and staff households.

The foods were transferred to the utensils and then removed and weighed. The recorded weights were entered into the adult and child food-portion databases. The countable foods were also categorized as small, medium and large.

**Table 3.1. Utensils used**

Utensil code	Utensil - Type	Volume of water (ml)
1	Bowl	350
2	Glass	250
3	Cup	200
4	Plate	500
5	Tablespoon	15
6	Teaspoon	5
7	Saucer	150



**Illustration 3.1 Utensils to measure amounts**

### 3.3 Information sources for average portion size.

The 10 column in the adult database represents the mean or average amount in grams of a specific food consumed. These servings were derived by dividing the total amounts by the number of entries for that specific food.

#### For adults: (15 years and above)

- Served in the TFNC and Muhimbili University students canteens (weighed all items included in a meal)
- Served in the general staff cafeteria at Muhimbili National Hospital
- Sold by street vendors; e.g. fruits, and breakfast foods such as *vitumbua* (rice bun) *maandazi* (African donut)
- Snacks purchased by data clerks working for MUHAS–Harvard group, which were weighed, then recorded over a period of 7 days
- Sold by women vendors; e.g. cooked dishes such as rice and beans
- Through the household (HH) diet surveys by the weigh and record method carried out in different areas in Tanzania by TFNC. We recorded the foods consumed for 3-5 days by each individual
- Weighed and recorded by the study subjects. The subjects weighed and recorded for 3 days the food they cooked and ate in their homes under close supervision. All signed informed consent forms. They were provided with food weighing scales, standard spoon, glass, measuring jug along with a standard form to record the diet.

*for children: (below five years)*

- Through the household diet surveys carried out in different areas in Tanzania (as describe above for adults)
- Through the diet intake assessments by 24-hour diet recall and by weigh and record method
  - Of children under five selected among those participating in the MUHAS–Harvard studies. Wherever possible, we also recorded the diet intake of their siblings if under 5 years was also recorded
  - The children under five years of MUHAS–Harvard staff

The information on food intake was stratified by the child's age group: 6-12 months, 13-36 months, and 37 and over.

Recipes of different dishes were also collected during the household diet surveys.

### **3.3 Compilation of Portion size databases**

The information on the amounts of different foods consumed were entered MS Excel. Each food has several entries for "amounts consumed".

*For adults:* The mean intake by weight of each specific food was calculated and then entered into the database.

Table 3.2 **Adults Food Portion data base**

VS = Very small S= Small size; M = Medium size; L = Large; VL = Very Large; Std = Standard; A = Adult average portion

Food code	Name	Name	Size	u1	u2	u3	u4	u5	u6	u7	u8	10
	Kiswahili	English	.	bowl	glass	cup	plate	tbsp	tsp	saucer	unit	Average
10	mahindi yaliyokobolewa	Maize dehulled	Std	.	.	.	450	.	.	150	.	.
13	mahindi mabichi	Maize green	S	.	.	.	.	.	.	.	100	.
13	mahindi mabichi	Maize green	M	.	.	.	.	.	.	.	350	.
13	mahindi mabichi	Maize green	A	.	.	.	.	.	.	.	.	225
14	mahindi kwenye gunzi	Maize on cob	S	.	.	.	.	.	.	.	100	.
14	mahindi kwenye gunzi	Maize on cob	M	.	.	.	.	.	.	.	350	.
14	mahindi kwenye gunzi	Maize on cob	A	.	.	.	.	.	.	.	.	225
21	wali	Rice cooked	Std	.	.	.	450	.	.	175	.	.
21	wali	Rice cooked	A	.	.	.	.	.	.	.	.	315
101	parachichi	Avocado	S	.	.	.	.	.	.	.	150	.
101	parachichi	Avocado	M	.	.	.	.	.	.	.	200	.
101	parachichi	Avocado	L	.	.	.	.	.	.	.	500	.
101	parachichi	Avocado	A	.	.	.	.	.	.	.	.	150
102	ndizimbivu	Banana ripe	S	.	.	.	.	.	.	.	50	.
102	ndizimbivu	Banana ripe	M	.	.	.	.	.	.	.	115	.
102	ndizimbivu	Banana ripe	L	.	.	.	.	.	.	.	175	.
102	ndizimbivu	Banana ripe	A	.	.	.	.	.	.	.	.	100
103	ubuuyu	Baobab fruit	Std	.	.	150	.	.	.	10	.	.
103	ubuuyu	Baobab fruit	A	.	.	.	.	.	.	.	.	50
104	zabibu	Grape	A	.	.	.	.	.	.	.	.	150
106	mapera	Guava	S	.	.	.	.	.	.	.	60	.
106	mapera	Guava	M	.	.	.	.	.	.	.	100	.
106	mapera	Guava	L	.	.	.	.	.	.	.	150	.

VS = Very small S= Small size; M = Medium size; L = Large; VL = Very Large; Std = Standard; A = Adult average portion

food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	Average
106	mapera	Guava	A									100
107	mafenesi	Jack fruit	S	.	.	.	.	.	.	.	50	
107	mafenesi	Jack fruit	M	.	.	.	.	.	.	.	150	
107	mafenesi	Jack fruit	L	.	.	.	.	.	.	.	250	
107	mafenesi	Jack fruit	A									150
108	juisi ya chungwa	Orange juice	Std	.	200	.	.	.	.	.	.	
108	Juisi ya chungwa	Orange juice	A									200
109	ndimu	Lemon	Std								70	
109	ndimu	Lemon	A									15
110	limau	Lime	Std	.	.	.	.	.	.	.	30	
110	limau	Lime	A									15
111	juisi ya embe	Mango juice	Std	200								
111	juisi ya embe	Mango juice	A									200
112	embe	Mango	S	.	.	.	.	.	.	.	120	
112	embe	Mango	M	.	.	.	.	.	.	.	155	
112	embe	Mango	L	.	.	.	.	.	.	.	270	
112	embe	Mango	A									200
113	embe mbichi	Mango unripe	A									100
114	chungwa	Orange	S	.	.	.	.	.	.	.	120	
114	chungwa	Orange	M	.	.	.	.	.	.	.	170	
114	chungwa	Orange	L	.	.	.	.	.	.	.	200	
114	chungwa	Orange	A									160
115	papai	Pawpaw	S	.	.	.	.	.	.	.	250	
115	papai	Pawpaw	M	.	.	.	.	.	.	.	300	
115	papai	Pawpaw	L	.	.	.	.	.	.	.	650	
115	papai	Pawpaw	A									400

VS = Very small S= Small size; M = Medium size;L = Large; VL = Very Large; Std = Standard; A = Adult average portion

food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	Average
116	papai bichi	Pawpaw unripe	A									200
117	pesheni	Passion fruit	Std	.	.	.	.	.	.	.	60	150
117	pesheni	Passion fruit	A									
118	mapeasi	Pears standard	Std	.	.	.	.	.	.	.	275	275
118	mapeasi	Pears standard	A									
119	nanasi	Pineapple	S	.	.	.	.	.	.	.	100	275
119	nanasi	Pineapple	M	.	.	.	.	.	.	.	190	
119	nanasi	Pineapple	L	.	.	.	.	.	.	.	550	
119	nanasi	Pineapple	A									400
120	juisi ya nanasi	Pineapple juice	Std	.	200	.	.	.	.	.	.	
120	juisi ya nanasi	Pineapple juice	A									200
121	matunda damu	Plums	Std	.	200	.	.	.	.	.	.	
121	matunda damu	Plums	A									125
122	ukwaju - kavu	Tamarind - dry	Std	.	.	150	.	30	.	.	.	
122	ukwaju - kavu	Tamarind - dry	A									60
123	ukwaju - mbichi	Tamarind fresh	Std								20	
123	ukwaju - mbichi	Tamarind fresh	A									60
124	machenza	Tangerine	S	.	.	.	.	.	.	.	40	
124	machenza	Tangerine	M	.	.	.	.	.	.	.	70	
124	machenza	Tangerine	L	.	.	.	.	.	.	.	100	
124	machenza	Tangerine	A	.	.	.	.	.	.	.		70
125	tikiti maji	Water melon	S	.	.	.	.	.	.	.	100	
125	tikiti maji	Water melon	M	.	.	.	.	.	.	.	200	
125	tikiti maji	Water melon	L	.	.	.	.	.	.	.	400	
125	tikiti maji	Water melon	A	.	.	.	.	.	.	.		230
126	jusi ya pensheni	Passion Juice	Std	.	200	.	.	.	.	.	.	

VS = Very small S= Small size; M = Medium size; L = Large; VL = Very Large; Std = Standard; A = Adult average portion

food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	Average
126	jusi ya pensheni	Passion Juice	A									200
127	pichi	Peaches	S	.	.	.	.	.	.	.	60	
127	pichi	Peaches	M	.	.	.	.	.	.	.	80	
127	pichi	Peaches	L	.	.	.	.	.	.	.	150	
127	pichi	Peaches	A									100
128	rasiberi	Raspberry	A									100
129	tofaa	Apple	A									100
157	korosho	Cashewnuts	Std								100	100
157	korosho	Cashewnuts	A									
160	maji ya madafu	Coconut water immature	A									300
164	karanga kiungio	Groundnuts in indiv dish	Std	.	.	.	.	.	.	.	20	
164	karanga tupu	Groundnuts as snack	Std								50	
164	karanga tupu	Groundnuts as snack	A									50
165	mbaazi	Pigeon peas	Std	500	.	.	.	.	.	200	.	
165	mbaazi	Pigeon peas	A									200
166	mbaazi mbichi	Pigeon peas-green	Std	400						200		
166	mbaazi mbichi	Pigeon peas-green	A									200
169	mbegu ya alizeti	Sunflower seeds	A									10
201	kipande cha maini	Liver piece	S	.	.	.	.	.	.	.	50	
201	kipande cha maini	Liver piece	M	.	.	.	.	.	.	.	80	
201	kipande cha maini	Liver piece	L	.	.	.	.	.	.	.	180	
201	kipande cha maini	Liver piece	A									100
202	kipande nyama ya ngombe	Beef - piece	S		.	.	.	.	.	.	12	
202	kipande nyama ya ngombe	Beef - piece	M		.	.	.	.	.	.	25	
202	kipande nyama ya ngombe	Beef - piece	L	.	.	.	.	.	.	.	50	
202	kipande cha nyama ya ngombe	Beef - piece	A									30



VS = Very small S= Small size; M = Medium size; L = Large; VL = Very Large; Std = Standard; A = Adult average portion

food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
206	maini ya kuku	Chicken liver	Std								60	
206	maini ya kuku	Chicken liver	A									60
207	kuku wa kukaanga	Chicken fried	S								50	
207	kuku wa kukaanga	Chicken fried	M								100	
207	kuku wa kukaanga	Chicken fried	L								200	
207	kuku wa kukaanga	Chicken fried	A									120
251	aiskrimu	Icecream	Std	.	.	.	.	.	.	.	100	
251	aiskrimu	Icecream	A									100
253	maziwa mazito ya kopo yenye sukari	Milk condensed	A									15
254	maziwa ya unga	Milk powder	A									10
255	maziwa yasiyoenguliwa	Whole Milk	Std	200	.	150	.	.	.	.	.	
255	maziwa yasiyoenguliwa	Whole Milk	A									150
307	mayai	Egg	Std	.	.	.	.	.	.	.	70	
307	mayai	Egg	A									70
308	samaki wa kukausha	Fish dried	A									200
313	dagaa	Small dried fish	Std	200	.	100	.	.	.	70		
313	dagaa	Small dried fish	A									70
315	nyama ya mbuzi	Goat meat	S	.	.	.	.	.	.	.	12	
315	nyama ya mbuzi	Goat meat	M	.	.	.	.	.	.	.	25	
315	nyama ya mbuzi	Goat meat	L	.	.	.	.	.	.	.	50	
315	nyama ya mbuzi	Goat meat	A									150
317	nyama ya nguruwe	Pork	S	.	.	.	.	.	.	.	12	
317	nyama ya nguruwe	Pork	M	.	.	.	.	.	.	.	25	
317	nyama ya nguruwe	Pork	L	.	.	.	.	.	.	.	50	
318	soseji	Sausage	A									100

VS = Very small S= Small size; M = Medium size; L = Large; VL = Very Large; Std = Standard; A = Adult average portion

Food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
319	samaki wa kukausha kwa moshi	Fish smoked	A									200
353	viazi mviringo	Potato	S	.	.	.	300	.	.	150	.	.
353	viazi mviringo	Potato	M								25	
353	viazi mviringo	Potato	L								50	
353	viazi mviringo	Potato	VL								100	
353	viazi mviringo	Potato	A									150
356	maghimbibi	Taro	Std				400			200		
356	maghimbibi	Taro	A									150
361	viazi vitamu	Sweet potato	Std	.	.	.	400	.	.	200		
361	viazi vitamu	Sweet potato	A	.	.	.	.	.	.	.		150
403	kabichi nyeupe	Cabbage raw white	Std								60	
403	kabichi nyeupe	Cabbage raw white	A									60
404	karoti	Carrot	S	.	.	.	.	.	.	.	70	
404	karoti	Carrot	M	.	.	.	.	.	.	.	85	
404	karoti	Carrot	L	.	.	.	.	.	.	.	110	
404	karoti	Carrot	A									50
407	matango	Cucumber	S	.	.	.	.	.	.	.	50	
407	matango	Cucumber	M	.	.	.	.	.	.	.	100	
407	matango	Cucumber	L	.	.	.	.	.	.	.	150	
407	matango	Cucumber	A									100
408	biringanya	Egg plant	Std	250	.	.	.	.	.	125	.	
408	biringanya	Egg plant	A									125
415	uyoga	Mushroom	Std							20		
415	uyoga	Mushroom	A									20

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food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
416	bamia	Okra	S	.	.	.	.	.	.	.	15	
416	bamia	Okra	M	225						175		
416	bamia	Okra	A									235
416	mchuzi wa bamia na matuta	Okra relish with oil	Std	225						175		
416	mchuzi wa bamia na matuta	Okra relish with oil	A									235
417	kitunguu	Onion	S	.	.	.	.	.	.	.	25	
417	kitunguu	Onion	M	.	.	.	.	.	.	.	40	
417	kitunguu	Onion	L	.	.	.	.	.	.	.	70	
417	kitunguu	Onion	VL	.	.	.	.	.	.	.	100	
417	kitunguu	Onion	A									30
418	njegere	Green peas	Std	400			.	.	.	200		
418	njegere	Green peas	A									150
419	boga	Pumpkin	Std	.	.	.	400	.	.	200	.	
419	boga	Pumpkin	A	.	.	.	.	.	.	.	80	150
421	nyanya chungu	African eggplant	S	.	.	.	.	.	.	100		
421	nyanya chungu	African eggplant	A									75
423	nyanya	Tomato	VS	.	.	.	.	.	.	.	35	
423	nyanya	Tomato	S	.	.	.	.	.	.	.	60	
423	nyanya	Tomato	M	.	.	.	.	.	.	.	100	
423	nyanya	Tomato	L	.	.	.	.	.	.	.	200	
423	nyanya	Tomato	A									65
429	pilipili hoho	Green pepper	S	.	.	.	.	.	.	.	60	
429	pilipili hoho	Green pepper	M	.	.	.	.	.	.	.	100	
429	pilipili hoho	Green pepper	L	.	.	.	.	.	.	.	150	
430	pilipili hoho	Green pepper	A									50

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food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	u9 Average	u10 Average
432	saladi	Salad green	A										30
451	bia	Beer	Std	.	0.25	0.2	.	.	.	.			
451	bia	Beer	Std	.	.	.	.	.	.	.	0.5		
451	bia	Beer	A										500
452	pombe ya kienyeji	Local brew	A										500
455	chocolate	Candy chocolate	A										40
458	soda	Carbonated drink	Std	.	.	.	.	.	.	.	350		
458	soda	Carbonated drink	Std	.	.	.	.	.	.	.	500		
458	soda	Carbonated drink	A										250
460	senene	Cricket	Std	100									
460	senene	Cricket	A										100
461	asali	Honey	A	.	.	.	.	.	.	.	.		10
462	maji ya matunda yoyote	Any fruit juice	Std	.	250	.	.	.	.	.			
462	maji ya matunda yoyote	Any fruit juice	A										250
463	chumvi	Salt	Std	.	.	.	.	10	5	.	.		
463	chumvi	Salt	A										7.5
464	chumvi bila madini joto	Salt non iodized	Std					10	5				
464	chumvi bila madini joto	Salt non iodized	A										7.5
465	sukari	Sugar	Std	.	.	.	.	15	5	.	.		
465	sukari	Sugar	Std										20
466	miwa	Sugar cane	A										400
467	jusi ya miwa	Sugar cane juice	A										250
470	sosi ya nyanya	Tomato ketchup	A										20
474	sosi ya soya	Soy sauce	A										10

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food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
475	kinywaji cha soya	Soya drink	Std	200	.	150	.	.	.	.	.	.
475	kinywaji cha soya	Soya drink	A									200
476	juisi ya stroberi	Strawberry juice	A									200
479	jamu ya matunda	Mixed fruit jam	A									15
481	sosi ya pilipili	Chili sauce	A									10
482	tangawizi	Ginger	A									5
488	chumvi yenye madini joto	Salt iodized	Std					10	5			
488	chumvi yenye madini joto	Salt iodized	A									7.5
491	barafu ya maji (sharubati)	Ice sherbet										
502	uji wa mahindi na sukari na yai	Maize porridge with sugar and egg	Std	400	200	200						
502	uji wa mahindi na sukari na yai	Maize porridge with sugar and egg	A									300
505	uji wa mahindi bila sukari na maziwa	Maize porridge, no sugar no milk	std	400	200	200						
505	uji wa mahindi bila sukari na maziwa	Maize porridge, no sugar no milk	a									300
506	uji wa mahindi na sukari bila maziwa	Maize porridge+sugar no milk	std	400	200	200						
506	uji wa mahindi na sukari bila maziwa	Maize porridge+sugar no milk	a									300
507	uji wa mahindi na sukari na maziwa	Maize porridge+sugar+milk	Std	400	200	200						
507	uji wa mahindi na sukari na maziwa	Maize porridge+sugar+milk	A									300
508	uji wa mtama na sukari	Millet porridge + sugar	Std	400	200	200						
508	uji wa mtama na sukari	Millet porridge + sugar	A									300
509	uji wa unga mchanganyiko na sukari	Mix flour porridge+sugar	Std	400	200	200						

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food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
509	uji wa ungamchanganyiko na sukari	Mix flour porridge+sugar	A									300
511	uji wa ulezi na sukari	Sorghum porridge with sugar	Std	400	200	200						
511	uji wa ulezi na sukari	Sorghum porridge with sugar	A									300
512	chapati	Chapati	S								50	
512	chapati	Chapati	L								100	
512	chapati	Chapati	A									100
513	chapati kavu	Chapati dry	Std								50	100
513	chapati kavu	Chapati dry	A									100
514	chapati maji	Pancake	Std								75	
514	chapati maji	Pancake	A									150
515	pillau	Pillau	Std				450			200		
515	Pillau	Pillau	A									450
516	wali bila mafuta	Rice boiled no oil	Std				450			175		
516	wali bila mafuta	Rice boiled no oil	A									315
517	wali na mafuta	Rice with oil	Std				450			175		
517	wali na mafuta	Rice with oil	A									315
518	wali na tui la nazi	Rice with coconut milk	Std				450			175		
518	wali na tui la nazi	Rice with coconutmilk	A									315
519	ugali wa unga mahindi	Maize ugali (stiff porridge)	Std	225			475			250		
519	ugali wa unga mahindi	Maize ugali (stiff porridge)	A									450
521	ugali wa unga mchele	Rice ugali (stiff porridge)	Std	200			450			200		
521	ugali wa unga mchele	Rice ugali (stiff porridge)	A									350
522	ugali wa unga mtama na ulezi	Sorghum and finger millet ugali (stiff porridge)	std	200			450			200		

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food code	Name Kiswahili	Name English	Size	u1 Bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
522	ugali wa unga mtama na ulezi	Sorghum and millet ugali (stiff porridge)	A									350
523	ugali wa unga mahindi na mtama	Maize and sorghum ugali (stiff porridge)	Std	400			450			200		
523	ugali wa unga mahindi na mtama	Maize and sorghum ugali (stiff porridge)	A									350
524	kitumbua	Rice bun	S	.	.	.	.	.	.	.	50	
524	kitumbua	Rice bun	L	.	.	.	.	.	.	.	75	
524	kitumbua	Rice bun	A									75
525	makande	Maize and kidney beans dish	Std				500		200			
525	makande	Maize and kidney beans dish	A									350
526	ugali wa unga mhogo	Cassava ugali (stiff porridge)	Std	400	.	.	450	.	.	200	.	
526	ugali wa unga mhogo	Cassava ugali (stiff porridge)	A									350
527	tambi zilizoungwa na chumvi	Vermicelli, plain cooked	Std	350	.	.	400	.	.	200	.	
527	tambi zilizoungwa na chumvi	Vermicelli, plain cooked	A									225
528	uji wa mchele na sukari	Rice porridge with sugar	Std	400	200	200	.	.	.	.	.	
528	uji wa mchele na sukari	Rice porridge with sugar	A									350
530	mkate wa kumimina	Rice bread	A									100
531	uji wa mahindi na sukari na siagi	Maize porridge with margerine and sugar	Std	400	200	200						
531	uji wa mahindi na sukari na siagi	Maize porridge with margerine and sugar	A									350
532	maandazi	African doghnut/bun	S	.	.	.	.	.	.	.	25	
532	maandazi	African doghnut/bun	M	.	.	.	.	.	.	.	50	
532	maandazi	African doghnut/bun	L	.	.	.	.	.	.	.	90	
532	maandazi	African doghnut/bun	A	.	.	.	.	.	.	.	.	100

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food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
533	uji wa unga mchele na tui la nazi na sukari	Rice porridge with coconut and sugar	Std	400	200	200						
533	uji wa unga mchele na tui bila sukari	Rice porridge with coconut no sugar	A									350
534	keki	Cake (home baked)	S								25	
534	keki	Cake (home baked)	M								50	
534	keki	Cake (home baked)	L								100	
534	keki	Cake (home baked)	A									120
535	tambi na tui la nazi na sukari	Vermicelli with coconut and sugar	Std	350			400					
535	tambi na tui la nazi na sukari	Vermicelli with coconut and sugar	A									225
536	tambi na mafuta na sukari	Vermicelli with oil and sugar	Std	350			400					
536	tambi na mafuta na sukari	Vermicelli with oil and sugar	A									225
537	tambi na tui la nazi na chumvi	Vermicelli with coconut and salt	Std	350			400					
537	tambi na tui la nazi na chumvi	Vermicelli with coconut and salt	A									225
541	uji wa mhogo na sukari	Cassava porridge and sugar	Std	400	200	200						
541	uji wa mhogo na sukari	Cassava porridge and sugar	A									350
542	uji wa ngano na sukari	Wheat porridge + sugar	Std	400	200	200						
542	uji wa ngano na sukari	Wheat porridge + sugar	A									350
551	mchuzi wa nyama	Beef relish	Std	300						150		
551	mchuzi wa nyama	Beef relish	A									225
552	mchuzi wa nyama na nazi	Beef relish with coconut	Std	300						150		
552	mchuzi wa nyama na nazi	Beef relish with coconut	A									225



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food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
553	mchuzi wa kuku bila mafuta	Chicken relish with no oil	Std	300						150		
553	mchuzi wa kuku bila mafuta	Chicken relish with no oil	A									200
554	kipande cha kuku	Chicken piece	S	.	.	.	.	.	.	.	50	
554	kipande cha kuku	Chicken piece	M								100	
554	kipande cha kuku	Chicken piece	L								200	
554	kipande cha kuku	Chicken piece	A									200
556	mchuzi wa kuku na mafuta	Chicken relish with oil	Std	300						150		
556	mchuzi wa kuku na mafuta	Chicken relish with oil	A									200
557	dagaa	Small dried fish	Std	200	.	100	.	.	.	70	.	
558	dagaa	Small dried fish	A									100
559	dagaa	Small dried fish	Std	200	.	100	.	.	.	70	.	
560	dagaa wa kukaanga	Small dried fish -fried	A									100
561	yai la kukaanga	Egg fried	Std								70	
561	yai la kukaanga	Egg fried	A									70
562	spanish omelet	Spanish omelet	Std								100	
563	mchuzi wa samaki	Fish(fresh) fried relish	Std				200			100		
563	mchuzi wa samaki	Fish(fresh) fried relish	A									200
564	samaki wakavu	Dried fish	S	.	.	.	.	.	.	.	135	
564	samaki wakavu	Dried fish	M	.	.	.	.	.	.	.	275	
564	samaki wakavu	Dried fish	L	.	.	.	.	.	.	.	450	
564	samaki wakavu	Dried fish	A									315
565	samaki wabichi	Fresh fish	S	.	.	.	.	.	.	.	135	
565	samaki wabichi	Fesh fish	M	.	.	.	.	.	.	.	275	
565	samaki wabichi	Fresh fish	L	.	.	.	.	.	.	.	450	
565	samaki wabichi	Fresh fish	A									

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food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	u10 Average
566	mchuzi wa samaki wakavu bila mafuta	Fish dried relish no oil	S								120	
566	mchuzi wa samaki wakavu bila mafuta	Fish dried relish no oil	M								250	
566	mchuzi wa samaki wakavu bila mafuta	Fish dried relish no oil	L								400	
566	mchuzi wa samaki wakavu bila mafuta	Fish dried relish no oil	A									250
567	samakiwakavu	Dried fish	S	.	.	.	.	.	.	.	120	
567	samakiwakavu	Dried fish	M	.	.	.	.	.	.	.	250	
567	samakiwakavu	Dried fish	L	.	.	.	.	.	.	.	400	
567	samakiwakavu	Dried fish	A									250
569	samaki wa kukaanga	Fried fish	S	.	.	.	.	.	.	.	135	
569	samaki wa kukaanga	Fried fish	M	.	.	.	.	.	.	.	275	
569	samaki wa kukaanga	Fried fish	L	.	.	.	.	.	.	.	450	
569	samaki wa kukaanga	Fried fish	A									315
570	sambusa – nyama	Samosa – meat	Std								50	
570	sambusa – nyama	Samosa – meat	A	.	.	.	.	.	.	.		150
571	yai ya kuchemsha	Egg boiled	Std								70	
571	yai ya kuchemsha	Egg boiled	A									70
572	mishikaki	Barbecued meat	A									300
573	mchuzi wa kuku na tui la nazi	Chicken relish with coconut milk	Std	300						150		
573	mchuzi wa kuku na tui la nazi	Chicken relish with coconut milk	A									250
574	kipande cha kuku	Chicken piece	S								50	
574	kipande cha kuku	Chicken piece	M	.	.	.	.	.	.	.	100	

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food Code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	u10 Average
574	kipande cha kuku	Chicken piece	L	.	.	.	.	.	.	.	200	
574	kipande cha kuku	Chicken piece	A									200
577	nyama ya kukaanga	Meat fried	Std	300			300			150		
577	nyama ya kukaanga	Meat fried	A									250
601	juisi ya zabibu	Grape juice	Std	200								
601	juisi i ya zabibu	Grape juice	A									200
651	mchuzi wa kunde bila mafuta	Cow pea relish no oil	Std	450						175		
651	mchuzi wa kunde bila mafuta	Cow pea relish no oil	A									200
652	mchuzi wa kunde na tui la nazi	Cow pea relish with coconut milk	Std	450						175		
652	mchuzi wa kunde na tui la nazi	Cow pea relish with coconut milk	A									200
653	Kunde	Cow peas plain	Std	400						150		
653	kunde	Cow peas plain	A									150
654	mchuzi wa kunde na mafuta	Cow pea relish with oil	Std	450						175		
654	mchuzi wa kunde na mafuta	Cow pea relish with oil	A									200
655	maharage mchanganyiko	Beans in mixed dish	Std	200						150		
655	maharage mchanganyiko	Beans in mixed dish	A									100
656	maharage kwa ugali au wali	Bean with ugali or rice	Std	200						150		
656	maharage kwa ugali au wali	Bean with ugali or rice	A									120
656	maharage kwa ugali au wali	Bean with ugali or rice	A									120
657	maharage- tupu bila mafuta	Beans alone – no oil	Std	450						175		
657	maharage matupu	Beans alone	A									200
658	choroko – ya kuiva	Mung beans – cooked	Std	400						200		
658	choroko – ya kuiva	Mung beans – cooked	A									150

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658	choroko	Mung bean	Std	200						100		
658	choroko	Mung bean	A									100
659	mbaazi mbichi za kuchemshwa	Pigeon peas fresh boiled	Std	400						200		
659	mbaazi mbichi za kuchemshwa	Pigeon peas fresh boiled	A									120
660	mchuzi wa mbaazi na tui la nazi	Pigeon pea relish with coconut milk	Std	400						200		
660	mchuzi wa mbaazi na tui la nazi	Pigeon pea relish with coconut milk	A									120
661	mchuzi wa mbaazi na mafuta	Pigeon pea relish with oil	Std	400						200		
661	mchuzi wa mbaazi na mafuta	Pigeon pea relish with oil	A									120
662	uji wa soya na sukari	Soya porridge + sugar	Std	400		200						
662	uji wa soya na sukari	Soya porridge + sugar	A									350
663	njugumawe	Bambara nuts	Std	500						200		
663	njugumawe	Bambara nuts	A									120
664	Dengu iliyopikwa	Chick peas cooked	Std	200						100		
664	Dengu iliyopikwa	Chick peas cooked	A									75
664	mchuzi wa dengu na tui la nazi	Chick pea relish with coconut milk	Std	300						150		
664	mchuzi wa dengu na tui la nazi	Chick pea relish with coconut milk	A									150
752	mchicha bila mafuta	Spinsch relish no oil	Std	400						200		
752	mchicha bila mafuta	Spinach relish no oil	A									200
753	mchicha na mafuta	Spinach relish + oil	Std	400						200		
753	mchicha na mafuta	Spinach relish + oil	A									200
754	kachumbari	Cabbage and onion salad	Std							100		
754	kachumbari	Cabbage and onion salad	A									50

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food Code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
755	mchuzi wa kabichi na mafuta	Cabbage relish with oil	Std	400	.	.	.	.	.	200	.	120
756	mchuzi wa kabichi na mafuta	Cabbage relish with oil	A									
757	mchuzi wa kisamvu na tui la nazi	Cassava leaf relish with coconut	Std	400	.	.	.	.	.	200	.	
757	mchuzi wa kisamvu na tui la nazi	Cassava leaf relish with coconut	A									120
759	mchuzi wa majani ya kunde na tui la nazi	Cow pea leaf relish with coconut	Std	400	.	.	.	.	.	200	.	
759	mchuzi wa majani ya kunde na tui la nazi	Cow pea leaf relish with coconut	A									120
762	mchuzi wa mboga za majani na karanga	Medium green leaf relish with groundnuts	Std	400	.	.	.	.	.	200	.	
762	mchuzi wa mboga za majani na karanga	Medium green leaf relish with groundnuts	A									120
763	mchuzi wa s mboga za majani na tui la nazi	Medium green leaf relish with coconut milk	Std	400	.	.	.	.	.	200	.	
763	mchuzi wa spinachi na tui la nazi	Medium green leaf relish with coconut milk	A									120
765	mchuzi wa bamia na tui la nazi	Okra with coconut milk	Std	400	.	.	.	.	.	200	.	
765	mchuzi wa bamia na tui la nazi	Okra with coconut milk	A									120
766	njegere	Peas plain	Std	400	.	.	.	.	.	200	.	
766	njegere	Peas plain	A									200
767	mchuzi wa njegere	Green pea relish	Std	400	.	.	.	.	.	200	.	
767	mchuzi wa njegere	Green pea relish	A									200
768	mchuzi wa majani ya maboga na mafuta	Pumpkin leaf relish with oil	Std	400	.	.	.	.	.	200	.	
768	mchuzi wa majani ya maboga na mafuta	Pumpkin leaf relish with oil	A									120
769	mchuzi wa majani ya maboga bila mafuta	Pumpkin leaf relish without oil	Std	400	.	.	.	.	.	200	.	
769	mchuzi wa majani ya maboga bila mafuta	Pumpkin leaf relish without oil	A									120

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770	mchuzi wa spinachi na karanga na mafuta	Spinach relish with groundnuts and oil	Std	400	.	.	.	.	.	200	.	
770	mchuzi wa spinachi na karanga na mafuta	Spinach relish with groundnuts and oil	A									120
771	mchuzi wa spinachi na ufuta	Spinach relish with sesame seeds	9	400						200		
771	mchuzi wa spinachi na ufuta	Spinach relish with sesame seeds	10									120
772	sambusa ya viazi	Samosa potato	Std								70	
772	sambusa ya viazi	Samosa -potato	A	.	.	.	.	.	.	.	.	210
776	mchuzi wa mchunga	Mchunga relish with oil	Std	300	.	.	.	.	.	100	.	
776	mchuzi wa mchunga	Mchunga relish with oil	A									120
778	mchuzi wa njegere, tui la nazi na mafuta	Green pea relish with coconut and oil	Std	300						200		
778	mchuzi wa njegere, tui la nazi na mafuta	Green pea relish with coconut and oil	A									120
779	mchuzi wa majani ya kunde na karanga	Cowpea leaf relish with groundnuts	Std	300						200		
779	mchuzi wa majani ya kunde na karanga	Cowpea leaf relish with groundnuts	A									120
780	mchuzi wa matembele na tui la nazi	Potato leaf relish with coconut milk	Std	300	.	.	.	.	.	200	.	
780	mchuzi wa matembele na tui la nazi	Potato leaf relish with coconut milk	A									120
781	bamia ya kukaanga	Fried okra	A									90
782	mchuzi wa njegere na tui la nazi	Green peas relish with coconut milk	Std	150	.	.	.	.	.	200	.	
782	mchuzi wa njegere na tui la nazi	Green peas relish with coconut milk	A									100
851	mchuzi wa mchicha bila mafuta	Spinach broth no oil	Std	400	.	200	.	20		60	.	

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food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	Average
851	mchuzi wa mchicha bila mafuta	Spinach broth no oil	A									60
852	mchuzi wa mchicha na mafuta	Spinach broth+ oil	Std	400		200		20		60		
852	mchuzi wa mchicha namafuta	Spinach broth+ oil	A									60
853	mchuzi wa nyama bila mafuta	Beef broth no oil	Std	400		200		20		60		
853	mchuzi wa nyama bila mafuta	Beef broth no oil	A									60
854	mchuzi wa nyama na mafuta	Beef broth with oil	Std	400		200		20		60		
854	mchuzi wa nyama na mafuta	Beef broth with oil	A									60
855	mchuzi wa kabichi bila mafuta	Cabbage broth no oil	Std	400		200		20		60		
855	mchuzi wa kabichi bila mafuta	Cabbage broth no oil	A									60
856	mchuzi wa kabichi na mafuta	Cabbage broth w oil	Std	400		200		20		60		
856	mchuzi wa kabichi na mafuta	Cabbage broth w oil	A									60
858	mchuzi wa kisamvu na tui la nazi	Cassava leaf broth with coconut milk	Std	400		200		20		60		
858	mchuzi wa kisamvu na tui la nazi	Cassava leaf broth with coconut milk	A									60
860	mchuzi wa kisamvu na mafuta	Cassava leaf broth with oil	Std	400		200		20		60		
860	mchuzi wa kisamvu na mafuta	Cassava leaf broth with oil	A									60
861	mchuzi wa kuku bila mafuta	Chicken broth no oil	Std	400		200		20		60		
861	Mchuzi wa kuku bila mafuta	Chicken broth no oil	A									60
862	mchuzi wa kuku na mafuta	Chicken broth w oil	Std	400				20		60		
862	mchuzi wa kuku na mafuta	Chicken broth w oil	A									60
863	supu ya kunde na tui la nazi	Cow pea broth with coconut milk	Std	400		200		20		60		
863	supu ya kunde na tui la nazi	Cow pea broth with coconut milk	A									60

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food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
864	supu kunde na mafuta	Cow pea broth with oil	Std	400		200		20		60		
864	supu ya kunde na mafuta	Cow pea leaf broth with oil	A									60
865	supu ya kunde bila mafuta	Cow pea broth with no oil	Std	400		200		20		60		
865	supu ya kunde bila mafuta	Cow pea broth with no oil	A									60
866	supu ya majani ya kunde na tui la nazi	Cow pea leaf broth with coconut milk	Std	400		200		20		60		
866	supu ya majani ya kunde na tui la nazi	Cow pea leaf broth with coconut milk	A									60
867	supu ya majani ya kunde na mafuta	Cow pea leaf broth with no oil	Std	400		200		20		60		
867	supu ya majani ya kunde na mafuta	Cow pea leaf broth with oil	A									60
868	supu ya samaki na mafuta	Fish broth with oil	Std	400		200		20		60		
868	supu ya samaki na mafuta	Fish broth with oil	A									60
869	supu ya samaki bila mafuta	Fish broth no oil	Std	400		200		20		60		
869	supu ya samaki bila mafuta	Fish broth no oil	A									60
870	supu ya njegere bila mafuta	Green pea broth no oil	Std	400		200		20		60		
870	supu ya njegere bila mafuta	Green pea broth no oil	A									60
871	supu ya njegere na mafuta	Green pea broth with oil	Std	400		200			20	60		
871	supu ya njegere na mafuta	Green pea broth with oil	A									60
872	supu ya maharage na tui la nazi	Kidney bean broth with coconut milk	Std	400		200			20	60		
872	supu ya maharage na tui la nazi	Kidney bean broth with coconut milk	A									60
873	supu ya maharage bila mafuta	Kidney bean broth no oil	Std	400		200			20	60		
873	supu ya maharage bila mafuta	Kidney bean broth no oil	A									60



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food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
874	supu ya maharage na mafuta	Kidney bean broth with oil	Std	400		200			20	60		
874	supu ya maharage na mafuta	Kidney bean broth with oil	A									60
878	supu ya maboga bila mafuta	Pumpkin leaf broth no oil	Std	400		200			20	60		
878	supu ya maboga bila mafuta	Pumpkin leaf broth no oil	A									60
878	supu ya maboga bila mafuta	Pumpkin leaf broth no oil	Std	400		200			20	60		
878	supu ya maboga bila mafuta	Pumpkin leaf broth no oil	A									60
879	supu ya dagaa na mafuta	Sardines broth with oil	Std	400		200			20	60		
879	supu ya dagaa na mafuta	Sardines broth with oil	A									60
880	supu ya njegere na tui la nazi	Green pea broth with coconut	Std	400		200			20	60		
880	supu ya njegere na tui la nazi	Green pea broth with coconut	A									60
881	supu ya majani ya kunde na mafuta	Cow pea leaf broth with oil	Std	400		200		20		60		
881	supu ya majani ya kunde na mafuta	Cow pea leaf broth with oil	A									60
951	ndizi zilizopikwa na mafuta	Banana with oil	Std	420			500			300		
951	ndizi mbichi na mafuta	Banana with oil	A									515
952	ndizi zilizopikwa na tui la nazi na nyama	Banana with meat and coconut milk	Std	420			500			300		
952	ndizi zilizopikwa na tui la nazi na nyama	Banana with meat and coconut milk	A									515
953	ndizi zilizopikwa na nyama	Banana with meat	Std	420			500			300		
953	ndizi zilizopikwa na nyama	Banana with meat	A									515
954	ndizi zilizopikwa na korosho	Banana with cashewnuts	Std	420			500			300		

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Food Code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
954	ndizi zilizopikwa na korosho	Banana with cashewnuts	A									515
955	ndizi zilizopikwa na tui la nazi	Banana with coconut	Std	420			420			210		
955	ndizi zilizopikwa na tui la nazi	Banana with coconut	A									515
956	mhogo na tui na nazi	Cassava with coconut	Std	400			400			200		
956	mhogo na tui na nazi	Cassava with coconut	A									400
957	mhogo wa kukanga	Cassava fried	Std								50	
957	mhogo wa kukanga	Cassava fried	A									350
958	mchuzi wa viazi mviringo na mafuta	Potato relish with oil	Std	450			450			225		
958	mchuzi wa viazi mviringo na mafuta	Potato relish with oil	A									450
959	mchuzi wa viazi mviringo na nyama	Potato relish with beef	Std	450			450			225		
959	mchuzi wa viazi mviringo na nyama	Potato relish with beef	A									450
960	viazi chipsi	Potato chips	Std				300			150		
960	viazi chipsi	Potato chips	A									300
961	viazi viringo vya kuchemsa	Potato boiled	Std				300			150		
961	viazi viringo vya kuchemsa	Potato boiled	A									225
963	futari	Selected fruits and tubers	Std				400			200		
963	futari	Selected fruits and tubers	A									400
964	ndizi mbichi ya kukaanga	Banana fried	Std								130	
964	ndizi mbichi ya kukaanga	Banana fried	A									310
965	mhogo mchanganyiko	Cassava mixed	Std				100			50		
965	mhogo mchanganyiko	Cassava mixed	A									100
965	mhogo	Cassava plain	Std				350			175		
965	mhogo mtupu	Cassava plain	A									200
966	viazi vitamu vya kukaanga	Sweet potato fried	Std				400			200		

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Food Code	Name Kiswahili	Name English	Type	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsps	u6 tsp	u7 saucer	u8 unit	u10 Average
966	viazi vitamu vya kukaanga	Sweet potato fried	A									200
967	viazi vitamu vya kuchemsha	Boiled sweet potato plain	Std	.	.	400		.	.	200	.	
967	viazi vitamu vya kuchemsha vitupu	Boiled sweet potato plain	A	.	.			.	.			200
968	ndizi mbichi na maharage	Banana with kidney bean	Std	420		500				300	.	
968	ndizi mbichi na maharage	Banana with kidney bean	A									515
969	ndizi mbichi ya kuchemsha	Banana plain – boiled	Std		.	290		.	.	175	.	
969	ndizi mbichi ya kuchemsha	Banana plain – boiled	A	.	.			.	.		.	200
970	maghambi mchanganyiko	Taro mixed	Std	.	.	200		.	.	100	.	
970	maghambi mchanganyiko	Taro mixed	A	.	.			.	.			200
970	maghambi ya kuchemsha	Taro plain	A	.	.			.	.			200
970	maghambi ya kuchemsha	Taro plain	Std	.	.	290		.	.	175		
970	maghambi mchanganyiko	Taro mixed	Std	.	.	200		.	.	100	.	
970	maghambi mchanganyiko	Taro mixed	A	.	.			.	.			200
970	maghambi ya kuchemsha	Taro plain	Std	.	.	290		.	.	175		
972	mchuzi wa viazi mviringo na tui la nazi	Potato relish with coconut milk	Std	400		400				225		
972	mchuzi wa viazi mviringo na tui la nazi	Potato relish with coconut milk	A									450
973	ndizi zilizopikwa na nyama na mboga a majani	Banana with meat and vegetables	A									515
973	ndizi zilizopikwa na nyama na mboga za majani	Banana with meat and vegetables	Std	420		500				300	.	
975	mtori	Mtori	Std	400		250						
975	mtori	Mtori	A									350
1001	chai na sukari bila maziwa	Tea with sugar no milk	Std	200	.	200		.	.	.	.	
1001	chai na sukari bila maziwa	Tea with sugar no milk	A									200
1002	chai na maziwa na sugar	Tea with milk and sugar	Std	200	.	200		.	.	.	.	
1002	chai na maziwa na sugar	Tea with milk and sugar	A									200

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food code	Name Kiswahili	Name English	Size	u1 bowl	u2 glass	u3 cup	u4 plate	u5 tbsp	u6 tsp	u7 saucer	u8 unit	10 Average
1003	chai na maziwa bila sukari	Tea with milk no sugar	Std	200	.	200	.	.	.	.	.	
1003	chai na maziwa bila sukari	Tea with milk no sugar	A									200
1004	kahawa na sukari bila maziwa	Coffee with sugar no milk	Std	200	.	200	.	.	.	.	.	
1004	kahawa na sukari bila maziwa	Coffee with sugar no milk	A									200
1005	kahawa na maziwa and sugar	Coffee with milk and sugar	Std	200		200						
1005	kahawa na maziwa na sugar	Coffee with milk and sugar	A									200
1006	kahawa na maziwa bila sukari	Coffee with milk no sugar	Std	200		200						
1006	kahawa na maziwa bila sukari	Coffee with milk no sugar	Std	200		200						
1101	kahawa na maziwa bila sukari	Coffee with milk no sugar	A									200
1102	sami	Butter oil - ghee	A									7.5
1104	tui la nazi	Coconut milk (squeezed out of coconut)	A									50
1107	margarine na mkate	Margarine with bread	A									15
1107	margarine in mixed dish	Margarine	A									10
1108	mafuta ya mawese	Red palm oil	A									10
1111	mafuta ya Cowboy	Vegetable fat	A									10
1113	mafuta ya maji (yatokanayo na mimea)	Vegetable oil	A									10

**Table 3.4 Children Food portion data base**

*Amounts of food consumed are categorized by age group. Amounts of certain foods can be applied to all foods in that category for example, the amount of rice cooked can be applied to the rice cooked with oil or coconut and likewise for tea with sugar, tea with sugar and milk and so on*

**Children**

Food Code	Name Swahili	Name English	Age in Months		
			6-12	13-36	37 and over
			Amount (gm)		
1	biskuti	Biscuits		45	50
3	mkate	Bread		190	135
6	keki	Cake		130	100
9	cerelac ya mtoto	Infant Cerelac	160		
101	parachichi	Avocado		100	
102	ndizi mbivu	Ripe banana	215	80	90
112	embe	Mango			150
114	machungwa	Orange	100	130	
115	papai	Pawpaw		350	250
118	mapeasi	Pears			75
235	maziwa	Milk	150	240	230
251	aisikrimu	Icecream		100	100
256	mtindi	Yoghurt		100	
318	soseji	Sausage		25	
404	karoti	Carrot			70
418	njegere	Peas		10	50
458	soda	Soft drinks (coke, peps)		150	200
461	asali	Honey		5	
465	sukari	Sugar			5
512	chapati	Chapati			100
515	pilau	Pillau			175
516	wali	Rice, cooked		140	175
519	ugali	Ugali (stiff porridge)	80	140	130
527	tambi	Vermicelli		100	100

Contd children - Food portion data base

Food Code	Name	Name	Age in Months	Food Code	Name
	Swahili	English	6-12		Swahili
			<b>Amount (gm)</b>		
532	mandazi	African doghnut/bun		75	150
561	yai la kukaanga	Fried egg		40	
569	samaki	Fish	100	90	80
572	mishkaki	Beef pieces			75
574	kuku	Chicken			100
578	nyama (mchuzi)	Meat (in relish)		30	
610	jamu	Jam		5	
658	choroko	Mung bean		50	
679	mchuzi wa dagaa	Sardines relish	75	65	50
752	spinachi	Spinach	30	70	50
754	kachumbari	Cabbage and onion salad		100	45
761	majani ya maboga	Pumpkin leaf		50	
764	mchuzi wa matembele	potato leaf relish			50
781	bamia	Okra		15	
853	mchuzi wa nyama	Beef relish		125	
869	supu ya samaki	Fish broth	45		
873	mchuzi wa maharage	Kidney bean relish	100	70	65
953	ndizi na nyama	Banana and meat relish		200	200
956	mhogo na tui la nazi	Cassava with coconut milk			165
960	chipsi	Chips		100	200
961	viazi	Potato, cooked	60	190	150
965	mhogo	Cassava			65
1001	chai	Tea	60	165	140
603-610	juisi	Juice	55	155	150
974-977	mtori	Banana porridge	180	270	
1101/1110	siagi/ marjarin	Butter/Margarine		2.5	5
All broths					
<b>Section H</b>	mchuzi	Broth	30	75	80
All porridges	uji	Porridge	160	260	260





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