



ZAMBEZIA

**The Journal of the
University of Zimbabwe**

Volume 16, No. i, 1989

ZAMBEZIA



The Journal of the University of Zimbabwe

Editor: Professor R. S. Roberts

ISSN 0379-0622

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Published by University of Zimbabwe Publications,
P.O. Box MP 45, Mount Pleasant, Harare, Zimbabwe

Phototypeset at the University of Zimbabwe
Printed by City Printers, Harare

RESEARCH REPORT

NUTRITIVE VALUE OF FOODS OF ZIMBABWE*

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MANY COUNTRIES, BOTH developed and developing, have tables of the nutrient composition of their food. The data are used by research nutritionists to assess the nutritional value of a nation's food supply. Home economics teachers and community nutritionists use the food values to develop educational guidance materials for food selection and improvement of diets. Dietitians and physicians use the tables to estimate the nutrient content of therapeutic diets. Government agencies utilize the information to develop regulatory measures such as fortification of processed foods. Food composition tables are an important tool for the interpretation of diets.

Every nation has its own food consumption patterns that are peculiar to its culture. Some of these patterns change with time. As countries develop and cultures intermix, new foods and eating habits are adopted. Methods of food production, distribution, storage, preparation, housewifery, and social values change with a change in food habits, but certain food consumption patterns will long be retained. It is these that distinguish one nation's eating habits from another's.

The table of nutrient composition of foods commonly used in Zimbabwe which is presented here was developed from data reported in various technical and scientific reports and journals.

SELECTION OF FOOD ITEMS

A list of foods characteristic of the diets of Zimbabwean families was drawn from various sources. These included the author's personal experience as a Zimbabwean. Sources in the literature, including Gelfand (1971) and Colborne (1975), provided a countrywide evaluation of foods important to people in the different regions of Zimbabwe. Information was obtained about the diets of patients in urban and rural government hospitals and in mission hospitals. Lists of foods used in boarding high schools and of foods commonly used in high-school cookery classes were provided. Five Zimbabwean families supplied a list of food items characteristic of the eating patterns of their native provinces.

Two hundred food items were selected from the list of foods compiled from the various sources. These foods were considered to be the important foods of the country because the foods were staple items of the diet and/or were important sources of one or more nutrients in the diet. An effort was made to include in the

* This article is a revised edition of *Nutritive Value of Foods of Zimbabwe* (Ames IA, Iowa State Univ., College of Home Economics, Dept. of Food and Nutrition of the Home Economics Research Institute, Bulletin 104, 1981). This article is also available as a separate publication. Enquiries should be addressed to the Publications Officer, University of Zimbabwe.

table foods characteristic of the diets of both rural and urban families. Food values for sadza made from different cereal meals have been included; the values are based on an unpublished and undated table compiled by the Ministry of Health of the Federation of Rhodesia and Nyasaland.

As data were collected from the literature a number of details were considered. A food was identified by its scientific name and its source and variety identified. The method of cooking, temperature used, and length of cooking time (where given) were noted for cooked foods. The type and degree of processing for the few processed foods that were included in the table were recorded. Methods of analyses that were used were recorded; however, most authors from whom values were obtained used the methods of the Association of Official Analytical Chemists for their analyses. The method used to express the values was also recorded. For instance, it was noted whether the carbohydrate values reported were for total carbohydrate or available carbohydrate. Values that were reported in a different form from that used in Table I were converted to the appropriate form, when possible; otherwise, those values were not utilized.

SELECTION OF REPRESENTATIVE VALUES FOR THE NUTRIENT CONTENT OF ZIMBABWEAN FOODS

In order to evaluate the reported values for each nutrient in a food, a reference value was selected for the nutrient. Preference was given to analytical values reported on Zimbabwean foods or on foods from countries neighbouring Zimbabwe. If there were no values reported for a food from any of these countries, a reference value was chosen from a country with climatic conditions similar to those of Zimbabwe. A value that was far beyond the range of values from other reports was omitted. The arithmetical mean of the accepted values was reported as the representative value for a nutrient.

SELECTION OF NUTRIENTS AND MODE OF EXPRESSION

The following food groups were selected and arranged in the following sequence:

- Grains and grain products
- Milk and milk products
- Eggs
- Fats and oils
- Meat, poultry, and edible insects
- Fish
- Vegetables and vegetable products
- Fruit
- Nuts and seeds
- Sugars and syrups
- Beverages

The inclusion of pulses, roots and tubers in the vegetable group eliminated the necessity for cross-referencing many food items, such as peanuts, which would fall into several groups. The only food that required cross-reference in this grouping was coconut. Values for coconut were reported under the section Nuts

and seeds; but the name coconut also appears, without an item number, in the Fruit group and the reader is advised to see items 88 and 89.

Foods within a group were listed in alphabetical order by the common names used in Zimbabwe. Scientific names of the food items are given in Table II. Some foods, such as maize, are consumed in different forms. Values for the different forms were reported under the main heading for that food.

Foods which some people eat with the skin and others peel first, such as guavas, mangoes, apples and others, were considered to be eaten with the skin, unless otherwise stated in the Table.

The nutrients selected for the Food Composition Table included those recommended by Southgate (1974) for national food composition tables. These were: energy, total carbohydrate, total fat, protein, water, calcium, iron, thiamin, riboflavin, niacin, folic acid, vitamin B₁₂, and ascorbic acid. Other nutrients that were considered important to include were sodium, potassium, phosphorous, and vitamin B₆.

All values were expressed on the basis of 100 g of the edible portion of food. Energy is given in kilocalories.

Proximate constituents

The proximate constituents of food included water, protein, carbohydrate, and fat.

Water. The inclusion of the amount of water in each food item allows comparison of values of other nutrients in the same or similar food with those given in other food composition tables.

Protein. Protein values are reported in grams per 100 g.

Carbohydrate. Carbohydrate values are for total carbohydrate obtained by difference. The value given includes both available carbohydrate and dietary fibre. Values for dietary fibre are not given separately because of the paucity of data on dietary fibre. Values are given in grams per 100 g.

Fat. Fat refers to that component of food which is insoluble in water but soluble in organic solvents. It can also be referred to as oil or ether extract. Fat values are expressed in grams per 100 g.

Inorganic constituents

Values were reported for the five selected minerals in the food. No adjustments were made for unavailable portions. The values are expressed in milligrams per 100 g.

Vitamins

Thiamin and riboflavin. Values are reported in milligrams per 100 g.

Niacin. The amino acid tryptophan can be converted in the body to niacin. Therefore, the requirement for niacin in the body is met from both the preformed vitamin and the potential contributions from its precursor. However, in compiling this table it was decided not to convert the niacin values to niacin equivalent because of the paucity of data for tryptophan and niacin determined simultaneously. The preformed niacin values are expressed in milligrams per 100 g.

Vitamin B₆. Vitamin B₆ values represent total vitamin B₆ activity including that derived from pyridoxine, pyridoxal, pyridoxamine, and other conjugate forms and their phosphates. The values are reported in milligrams per 100 g.

Folic acid. Values for folic acid represent the total folic acid present in the food and are expressed in micrograms per 100 g.

Vitamin B₁₂. Information on the vitamin B₁₂ content of food was limited but available data were included. Values are expressed in micrograms per 100 g.

Ascorbic acid. Values for ascorbic acid refer to total ascorbic acid which includes both dehydroascorbic acid and reduced ascorbic acid. The values are expressed in milligrams per 100 g.

Vitamin A. Vitamin A activity is expressed in micrograms retinol equivalent per 100 g. The retinol equivalent values included values from carotenoids present in the food. In some sources, the values for carotenoids were for beta carotene only. Other sources gave values for total carotenoids without indicating how much was beta carotene and how much was not. The divisor used to convert carotenoids to micrograms retinol equivalent represents the efficiency with which the particular carotenoids are converted at different rates in the body. Some are not converted at all. The divisor for beta carotene is six and that for all other provitamin A carotenoids is twelve. But, because of lack of information on the proportion of the different carotenoids in the food, six was used as the divisor for all carotenoids. Hence, the value calculated in this Food Table may slightly overestimate the vitamin A potency of foods. Paul and Southgate (1978) stated that the error introduced in this way is small.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used:

- No information was available for the nutrient.
- () Values are reported without confidence because they are based on a limited number of sources.
- Tr Only a trace of the nutrient was known to be present.
- 0 No detectable amount of the nutrient was known to be present.

CONCLUSION

Appropriate data were not always available for one or more nutrients in an important food. This report, therefore, contains a number of gaps. Information is needed on the nutritional value of processed, cooked, and home-prepared foods of Zimbabwe and on the drought-resistant varieties of maize that are widely used in the low rainfall areas of the country.

Present knowledge of the role of specific amino acids in certain metabolic disorders indicates a need for data on the amino acid composition of foods, especially of low-protein foods like maize.

Finally, there is an urgent need for an estimation of the recommended daily allowances of nutrients for the people of Zimbabwe.

Acknowledgements

I am deeply grateful to Dr Wilma D. Brewer at Iowa State University for her guidance in the compilation of this table. I am also grateful to Dr J. A. Hasler, of the Biochemistry Department, University of Zimbabwe, for facilitating the

publishing of the new edition. Appreciation is also expressed to Dr M. A. Benhura, my supervisor and Chairman of the Biochemistry Department, University of Zimbabwe, for his helpful suggestions about the new material in this edition.

Deep appreciation is expressed to the many people who gave helpful suggestions and prompt and gracious replies to my requests for information about diets and foods commonly used in their areas of work in Zimbabwe, and especially to my husband, Theodore Chitsiku, who collected part of this material in Zimbabwe.

I am very thankful for the help and support of all my friends, family and sponsors throughout my period of study.

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Table I
NUTRIENT COMPOSITION OF FOODS OF ZIMBABWE
(NUTRIENTS PER 100g EDIBLE PORTION)

		<i>Proximate and inorganic</i>						
No.	Foods	<i>Water</i>	<i>Energy</i>	<i>Protein</i>	<i>Fat</i>	<i>Carbohydrate</i>	<i>Calcium</i>	<i>Phosphorous</i>
		<i>g</i>	<i>kcal</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>	<i>mg</i>
GRAINS AND GRAIN PRODUCTS								
MAIZE, white								
Fresh, on cob								
1	Raw	69,0	102,3	3,5	1,3	22,2	5,8	62,4
2	Boiled	70,7	89,0	3,0	1,6	18,4	2,5	89,1
3	Dried, uncooked	11,6	355,8	9,6	4,2	72,3	13,0	246,8
Samp or Mealie-rice								
4	Uncooked	11,6	363,1	8,7	0,7	78,6	8,3	48,7
5	Sadza	70,0	115,0	3,0	1,0	24,0	3,0	—
Mealie-meal, uncooked								
6	Straight run	12,0	356,3	9,5	3,7	72,8	16,3	241,0
7	Refined 60% (extraction)	12,7	363,2	8,3	1,8	78,6	8,5	49,0
8	Cornflour	12,1	356,2	4,5	2,1	84,0	7,0	45,7
9	Stem	75,0	59,0	0,5	(0)	(14,0)	25,0	—
MILLET								
Bulrush (mhunga)								
10	Whole grain, raw	11,6	354,6	12,4	4,9	71,4	31,3	289,7
11	Meal	16,0	349,0	7,5	3,6	77,1	17,3	186,0
12	Sadza	70,0	130,0	4,0	2,0	23,0	8,0	—
Finger (rapoko)								
13	Whole grain, raw	12,2	333,6	7,2	1,6	75,7	350,6	307,0
14	Meal	12,6	332,0	6,2	1,5	78,8	328,7	213,5
15	Sadza	70,0	120,0	2,0	0,7	26,0	120,0	—
OATMEAL								
16	Raw	9,2	389,0	13,1	7,2	68,6	48,8	378,3
17	Boiled	86,8	54,3	1,9	1,0	9,6	7,5	50,0
RICE, white								
18	Raw	12,2	357,4	6,8	0,6	80,6	8,6	109,5
19	Boiled	72,3	111,3	2,1	0,2	25,7	5,5	31,0
20	Brown, raw	12,5	357,0	7,6	1,6	77,5	15,9	161,0
SORGHUM								
21	Whole grain, raw	11,3	356,4	10,7	3,2	73,4	27,4	293,3

Table I (cont.)

Constituents				Vitamins						
Iron	Potassium	Sodium	Vitamin A	Ascorbic acid	Thiamin	Riboflavin	Niacin	Vitamin B ₆	Vitamin B ₁₂	Total folic acid
mg	mg	mg	R.E. ^a	mg	mg	mg	mg	mg	μg	μg
0,7	279,7	2,0	80,00	11,33	0,15	0,08	1,70	(0,19)	(0)	37,70
0,7	118,0	13,5	80,00	7,00	0,11	0,08	0,17	(0,16)	(0)	33,00
2,7	299,0	20,0	25,67	0	0,36	0,11	1,98	—	—	(0,90)
2,7	(80,0)	(1,0)	22,50	0	0,08	0,04	0,30	—	—	(3,80)
1,5	—	—	—	—	0,05	0,5	0	—	—	—
3,0	288,0	11,3	24,00	0	0,35	0,10	1,60	—	—	(6,70)
3,1	—	—	22,50	0,75	0,17	0,05	0,90	—	—	(9,00)
1,6	30,5	26,0	0	0	0,01	0	0,10	(Tr)	(0)	(Tr)
2,0	—	—	0	(0)	—	—	—	—	—	—
9,6	(30,0)	(11,0)	30,00	0,75	0,35	0,16	2,03	—	—	—
29,0	—	—	—	—	0,20	0,18	1,00	—	—	—
2,0	—	—	—	0	0,50	0,03	1,00	—	—	—
9,6	(408,0)	(11,0)	15,00	0	0,33	0,10	1,50	—	—	—
31,2	—	—	—	—	0,24	0,11	0,80	—	—	—
2,0	—	—	0	0	0,10	0,02	0,50	—	—	—
4,2	370,7	11,2	0	0	0,50	0,12	1,00	0,16	0	43,70
0,6	51,5	399,0	0	0	0,07	0,02	0,10	(0,01)	(0)	(6,00)
1,2	95,3	14,3	0	0	0,09	0,03	1,58	0,17	0	17,28
0,6	33,0	188,0	0	0	0,03	0,02	0,43	(0,05)	(0)	(6,00)
1,9	117,0	9,0	0	0	0,27	0,06	2,88	0,59	(0)	18,57
5,8	240,5	(7,0)	12,50	0	0,38	0,13	3,47	—	—	48,95

Table I (cont.)

No.	Foods	Proximate and inorganic						
		Water g	Energy kcal	Protein g	Fat g	Carbohydrate g	Calcium mg	Phosphorus mg
22	Meal	12,3	348,0	10,3	2,9	76,3	21,3	207,0
23	Sadza	70,0	120,0	3,0	1,5	23,0	10,0	-
SWEET SORGHUM								
24	Stem, fresh	75,0	59,0	0,5	(1,7)	(14,0)	25,0	-
WHEAT								
25	Whole grain, raw							
	Flour	12,5	332,8	13,1	2,0	70,3	40,9	341,8
26	Whole meal	12,3	334,6	12,5	1,8	71,3	41,5	330,0
27	Brown	12,4	348,2	11,7	1,6	72,9	23,6	233,0
28	White, household	12,7	355,7	10,6	1,0	75,4	17,6	97,7
Macaroni								
29	Raw	10,6	367,8	12,4	1,5	76,3	22,0	161,3
30	Boiled	72,8	108,0	3,8	0,5	22,5	8,0	48,5
SUGAR CANE								
31	Stem, fresh	84,4	51,3	1,7	0,2	11,2	17,0	43,0
VEGETABLES								
BEANS								
Green								
32	Raw	90,0	32,4	2,1	0,2	6,1	45,9	43,2
33	Boiled	92,0	23,2	1,7	0,2	4,8	43,2	37,9
Dried, raw								
34	Butter	11,3	330,0	21,1	1,4	59,6	78,6	310,0
35	Haricot	10,8	319,4	21,8	1,6	56,4	129,4	332,5
BETROOT								
36	Raw	87,9	39,1	1,6	0,1	8,7	20,2	40,2
37	Boiled	88,9	34,5	1,3	0,1	7,8	18,0	26,3
BLACKJACK								
38	Fresh, raw	85,9	36,8	3,4	0,7	5,4	154,8	49,7
CABBAGE								
Common								
39	Raw	92,2	25,0	1,6	0,2	5,2	47,7	33,9
40	Boiled	93,5	19,7	1,4	0,2	3,9	45,1	25,0
CARROT								
Peeled								
41	Raw	89,2	35,5	1,0	0,2	8,0	35,7	34,3
42	Boiled	91,2	28,3	0,8	0,2	6,4	34,0	27,5

Table I (cont.)

Constituents				Vitamins						
Iron	Potassium	Sodium	Vitamin A	Ascorbic acid	Thiamin	Riboflavin	Niacin	Vitamin B ₆	Vitamin B ₁₂	Total folic acid
mg	mg	mg	R.E. ^a	mg	mg	mg	mg	mg	µg	µg
13,5	—	—	0,30	0,40	0,30	0,10	3,20	—	—	—
2,0	—	—	0	0	0,1	0,05	1,20	—	—	—
1,0	—	—	0	(0)	—	—	—	—	—	—
4,7	392,7	3,5	0	0	0,43	0,13	4,76	—	—	42,95
4,4	365,0	3,0	0	0	0,46	0,10	4,57	0,42	0	49,00
2,6	187,5	3,0	0	0	0,27	0,07	2,16	(0,30)	(0)	51,00
1,5	112,5	2,5	0	0	0,19	0,04	1,26	0,11	0	26,00
1,3	216,7	3,9	0	0	0,12	0,05	1,60	0,06	0	11,00
0,5	64,0	4,5	0	0	0,02	0,02	0,35	(0,01)	(0)	2,00
1,4	—	—	0	17,70	0,05	0,01	0,10	—	—	—
1,0	232,6	5,3	146,90	19,30	0,07	0,11	0,70	0,07	0	40,70
0,7	150,9	3,0	127,30	11,80	0,07	0,09	0,55	(0,04)	(0)	34,00
6,1	1320,7	59,0	3,00	0,40	0,45	0,16	1,96	0,54	0	116,90
8,2	1357,0	22,3	2,13	1,00	0,46	0,17	2,27	0,60	0	161,90
0,8	313,8	91,3	6,00	7,80	0,03	0,04	0,30	0,05	0	52,90
0,5	243,5	50,0	6,00	5,75	0,03	0,04	0,25	(0,03)	(0)	44,00
6,1	—	—	69,00	61,00	0,18	0,35	0,89	—	—	—
0,7	234,0	12,8	44,92	44,90	0,05	0,04	0,30	0,15	0	48,20
0,4	162,1	10,5	34,20	32,04	0,04	0,04	0,27	(0,10)	(0)	26,50
0,8	281,5	91,3	1684,16	5,40	0,05	0,04	0,50	0,15	0	17,65
0,5	188,2	38,6	2825,49	5,40	0,05	0,04	0,50	(0,09)	(0)	16,00

Table 1 (cont.)

No.	Foods	Proximate and inorganic						
		Water g	Energy kcal	Protein g	Fat g	Carbohydrate g	Calcium mg	Phosphorus mg
	CAULIFLOWER							
43	Flowers, raw	91,3	27,1	2,4	0,2	4,8	28,3	54,0
	COW PEAS							
	Common							
44	Dried, raw	11,3	340,6	23,0	1,4	59,6	87,6	394,0
45	Leaves, fresh, raw	85,2	50,5	3,8	0,4	7,1	127,5	27,5
	CUCUMBER							
46	Unpared, raw	95,6	13,2	0,7	0,1	2,7	16,6	25,8
	EGG PLANT							
47	Raw	92,1	26,7	1,1	0,2	5,1	12,1	25,3
	GOURD							
48	Immature, raw	94,1	19,7	0,7	0,2	4,3	17,3	(16,0)
	GROUND PEA							
49	Dried, raw	10,5	366,0	17,9	6,2	60,9	69,0	—
	LENTILS							
50	Dried, raw	11,0	340,0	24,2	1,1	58,9	61,3	303,6
	LETTUCE							
51	Raw	95,0	15,9	1,2	0,2	2,4	33,1	30,3
	MOWA							
52	Fresh, raw	86,4	41,4	3,6	0,8	5,9	393,9	78,6
	MUSHAMBA							
53	Fresh, raw	86,8	37,8	3,6	0,6	5,1	162,4	(29,5)
	MUSHROOM							
54	Wild, mixed							
	Fresh, raw	90,0	23,0	1,9	0,4	4,4	10,7	(97,0)
55	Cultivated							
	Fresh, raw	90,7	22,7	2,4	0,4	4,2	10,3	109,8
	OKRA							
	Fresh							
56	Raw	89,2	31,1	2,0	0,2	6,3	76,9	54,3
57	Boiled	90,0	30,9	1,9	0,2	6,2	85,7	41,2
58	Dried, raw	9,4	—	6,0	2,5	(61,7)	756,0	(404,0)
	ONION							
	Mature, dried							
59	Raw	89,6	40,6	1,3	0,2	8,8	29,3	38,8
	Immature leaves and bulb							
60	Fresh, raw	89,9	33,7	1,4	0,2	7,4	57,0	33,9

Table I (cont.)

Constituents				Vitamins						
Iron	Potassium	Sodium	Vitamin A	Ascorbic acid	Thiamin	Riboflavin	Niacin	Vitamin B ₆	Vitamin B ₁₂	Total folic acid
mg	mg	mg	R.E. ^a	mg	mg	mg	mg	mg	µg	µg
0,9	306,0	17,7	8,78	72,40	0,08	0,08	0,60	0,20	2,00	30,40
5,4	926,0	(127,0)	8,20	1,00	0,71	0,27	2,10	0,40	(0)	319,60
1,2	—	—	1969,00	61,00	0,14	0,18	0,93	—	—	—
0,5	149,5	9,5	11,20	29,10	0,03	0,03	0,25	0,04	0	12,97
0,8	230,1	2,8	5,30	5,80	0,05	0,05	0,65	0,09	(0)	19,50
0,5	(151,0)	(310,0)	2,95	11,50	0,04	0,03	0,45	—	—	—
6,8	—	—	9,00	0,67	0,29	0,11	2,03	—	—	—
6,8	717,3	33,8	17,07	1,20	0,44	0,27	1,07	0,57	0	69,30
0,9	228,3	8,9	419,40	11,10	0,07	0,08	0,35	0,06	0	32,80
3,2	—	—	617,50	76,50	0,06	0,24	1,25	—	—	—
3,2	—	—	(900,00)	(20,00)	(0,10)	(0,30)	(1,50)	—	—	—
1,9	(375,0)	(10,0)	(11,26)	14,43	0,07	0,46	4,60	—	—	—
1,1	381,5	11,3	0	3,90	0,10	0,40	4,70	0,09	0	24,40
1,0	221,4	6,0	115,74	25,70	0,10	0,09	0,90	(0,08)	(0)	26,50
0,7	155,5	3,6	114,10	23,90	0,13	0,17	0,97	(0,08)	(0)	(100,00)
9,0	—	—	—	—	—	—	—	—	—	—
1,4	156,8	9,3	4,42	9,20	0,04	0,04	0,20	0,10	0	16,30
0,9	193,0	4,5	792,40	21,60	0,06	0,09	0,43	—	(0)	12,60

Table I (cont.)

No.	Foods	Proximate and inorganic						
		Water g	Energy ^a kcal	Protein g	Fat g	Carbohydrate g	Calcium mg	Phosphorus mg
PEANUT (GROUNDNUT)								
	Dried, shelled							
61	Raw	5,9	591,0	27,0	47,8	19,7	58,1	404,7
62	Roasted, salted	2,5	580,9	25,4	47,8	21,6	70,9	394,7
63	Butter, smooth	2,5	591,5	25,1	49,1	18,4	53,4	400,0
PEAS								
	Fresh							
64	Raw	75,7	85,0	6,4	0,4	15,5	28,7	105,8
65	Boiled	81,3	65,8	5,2	0,4	11,0	19,5	91,8
66	Dried, raw	11,8	330,8	22,8	1,4	58,5	70,3	332,8
PEPPER								
	Sweet, green							
67	Raw	91,5	28,9	1,4	0,4	5,4	13,2	33,1
68	Boiled	94,5	17,7	1,1	0,3	3,4	9,2	17,6
POTATOES, peeled								
69	Raw	78,3	80,8	2,1	0,1	18,3	8,7	50,8
70	Boiled	82,0	69,8	1,9	0,1	16,0	5,8	39,9
PUMPKIN, raw								
	All varieties							
71	Mature fruit	91,0	28,8	1,0	0,1	6,1	25,0	32,2
72	Immature fruit	94,3	18,7	0,8	0,1	4,2	17,0	(32,0)
73	Leaves, fresh	86,5	41,0	4,6	0,5	6,0	259,5	(96,0)
74	RADISH, raw	93,7	17,0	0,9	0,1	3,5	32,8	27,0
75	RAPE, raw	86,6	48,0	4,1	0,4	6,2	(370,0)	(110,0)
76	RUNI, fresh, raw	82,2	68,0	5,9	1,0	8,9	410,0	70,0
SOYABEAN								
77	Dried, raw	8,7	375,3	36,3	18,3	23,8	202,1	592,8
SPINACH								
78	Raw	91,0	25,3	2,9	0,3	3,8	91,8	50,0
79	Boiled	92,0	22,7	2,9	0,3	3,5	92,9	37,9
SQUASH, raw								
80	All varieties	92,5	24,1	1,1	0,2	5,1	21,4	30,8
SWEET POTATOES								
	All varieties							
81	Raw	69,2	112,5	1,9	0,6	26,0	30,7	48,6
82	Boiled	71,1	104,0	1,3	0,4	24,6	29,7	45,5
83	TARO, raw	74,0	94,9	2,1	0,2	22,0	30,9	86,6

Table I (cont.)

Constituents				Vitamins						
Iron	Potassium	Sodium	Vitamin A	Ascorbic acid	Thiamin	Riboflavin	Niacin	Vitamin B ₆	Vitamin B ₁₂	Total folic acid
mg	mg	mg	R.E. ^a	mg	mg	mg	mg	mg	µg	µg
2,8	672,0	5,3	2,30	0,17	0,85	0,12	16,20	0,48	0	80,60
2,0	672,5	383,7	(0)	0	0,30	0,12	16,90	0,37	0	81,30
2,5	680,0	541,5	(0)	(0)	0,15	0,12	15,40	0,42	0	66,00
1,8	316,5	4,8	179,83	28,70	0,31	0,14	2,30	0,16	0	24,50
1,7	174,3	1,1	167,75	17,03	0,27	0,11	1,95	(0,10)	(0)	—
4,8	1081,3	60,0	29,90	1,30	0,74	0,22	2,83	0,13	0	(33,00)
1,0	211,8	5,5	138,70	124,40	0,06	0,06	0,70	0,22	0	13,30
0,5	154,3	6,7	103,28	86,93	0,05	0,06	0,54	(0,14)	(0)	(11,00)
0,7	408,6	4,9	5,33	19,40	0,09	0,04	1,20	0,24	0	11,50
0,5	292,8	2,3	(Tr)	16,70	0,09	0,04	1,10	(0,18)	(0)	(10,00)
0,9	380,0	4,0	497,31	10,10	0,06	0,05	0,50	(0,06)	(0)	19,80
0,8	—	—	278,63	14,00	0,06	0,04	0,50	—	—	—
4,3	—	—	343,33	99,20	(0,14)	0,14	(1,80)	—	—	—
1,0	215,0	44,5	0	23,60	0,03	0,02	0,23	0,09	0	19,40
6,7	—	—	481,67	107,50	(0,01)	0,22	(0,90)	—	—	—
20,5	—	—	—	(11,00)	—	—	—	—	—	—
8,9	1607,0	9,0	15,37	0	0,79	0,28	2,43	0,73	0	197,50
2,6	533,9	80,1	2558,40	53,30	0,09	0,21	0,66	0,28	(0)	124,40
2,2	323,9	50,0	2429,30	27,93	0,07	0,14	0,50	—	—	—
1,4	196,0	2,0	101,67	15,00	0,07	0,07	0,63	0,08	0,32	22,60
1,1	293,0	27,2	1221,40	26,60	0,10	0,05	0,66	0,24	0	33,30
0,7	282,0	21,0	1075,20	16,00	0,09	0,05	0,60	(0,13)	(0)	21,50
1,1	536,8	7,9	6,00	3,79	0,12	0,03	0,84	—	—	—

Table 1 (cont.)

No.	Foods	Proximate and inorganic						
		Water g	Energy kcal	Protein g	Fat g	Carbohydrate g	Calcium mg	Phosphorus mg
84	TOMATO, ripe Raw, with skin	94,0	20,5	1,0	0,2	4,0	8,2	20,9
85	TURNIP Raw	90,9	29,0	1,0	0,2	6,1	39,6	26,2
86	Boiled	94,0	20,7	0,7	0,2	4,3	34,9	22,7
NUTS AND SEEDS								
87	BAOBAB, seeds Dried	7,8	452,0	32,6	29,4	(24,7)	265,0	1430,5
88	COCONUT, meat Fresh	45,5	371,4	3,7	36,0	9,4	16,0	90,3
89	Desiccated	3,0	615,0	5,5	55,3	27,5	24,0	173,5
90	MARULA, seeds Dried	(3,6)	(673,0)	25,5	60,4	(7,7)	123,0	763,0
91	PUMPKIN, seeds Dried	5,2	552,9	27,4	44,0	18,3	48,1	846,5
92	SESAME, seeds Dried	5,6	580,7	18,9	51,2	18,9	1118,0	612,5
93	WATERMELON, seeds Dried	4,9	486,2	22,3	39,0	17,8	58,2	(483,0)
FRUITS								
94	APPLE, unpared, raw	84,6	56,2	0,4	0,6	13,1	6,5	10,8
95	AVOCADO PEAR, raw	75,0	180,7	2,5	17,7	8,3	11,5	31,8
96	BANANA, raw	73,9	94,7	1,3	0,3	24,3	7,0	21,7
97	BAOBAB pulp, raw	11,5	(290,0)	(2,2)	0,4	(76,7)	335,5	(118,0)
98	BLACKCURRANT, raw COCONUT, See items nos. 88 and 89	82,5	50,3	1,4	0,3	11,6	60,0	41,5
99	GOOSEBERRY, raw	85,2	49,3	1,5	0,7	10,1	15,8	38,8
100	GRANADILLA, raw	78,8	84,4	1,6	1,0	15,4	13,8	42,0
101	GRAPE, raw	81,8	67,6	0,8	0,9	15,8	14,8	20,0
102	GRAPEFRUIT, raw	88,7	37,5	0,6	0,2	9,0	15,3	17,0
103	GUAVA, raw	81,1	66,0	1,0	0,5	14,6	16,6	26,0
104	LEMON, raw	89,2	34,6	0,8	0,5	7,8	29,7	18,0
105	MANGO, raw	82,8	62,4	0,6	0,3	14,9	10,8	9,8
106	MULBERRY, Black, raw	84,9	54,0	1,4	0,8	11,4	33,8	37,6
107	NAARTJIE, raw	86,5	44,8	0,8	0,2	10,5	30,1	18,5
108	PAWPAW, raw	89,6	37,0	0,6	0,1	8,9	20,5	16,4

Table I (cont.)

Constituents			Vitamins							
Iron	Potassium	Sodium	Vitamin A	Ascorbic acid	Thiamin	Riboflavin	Niacin	Vitamin B ₆	Vitamin B ₁₂	Total folic acid
mg	mg	mg	R.E. ^a	mg	mg	mg	mg	mg	µg	µg
0,5	233,4	3,3	213,08	22,60	0,06	0,04	0,60	0,10	0	22,60
0,4	226,0	49,0	1,00	30,00	0,04	0,06	0,67	0,09	0	15,90
0,4	180,9	38,3	0	20,70	0,04	0,05	0,33	(0,06)	(0)	(10,00)
13,9	—	—	—	—	1,80	—	—	—	—	—
2,1	348,0	20,0	0	2,00	0,06	0,02	0,40	0,04	0	25,00
3,5	669,0	(28,0)	0	0	0,06	0,04	0,60	(0)	—	—
(8,0)	—	—	—	64,50	—	—	—	—	—	—
9,6	(293,0)	(44,0)	23,32	0,60	0,25	0,18	2,50	—	—	—
9,9	616,5	54,5	4,50	0	0,85	0,22	4,70	—	—	(96,00)
7,3	(606,0)	(36,0)	7,56	0	0,17	0,15	2,20	(70,00)	—	—
0,6	106,2	1,5	13,39	5,40	0,03	0,03	0,15	0,03	0	3,90
0,9	501,2	5,6	62,29	12,10	0,08	0,15	1,30	0,42	0	47,90
0,5	332,0	2,7	54,38	10,90	0,04	0,05	0,70	0,47	0	19,90
(7,4)	—	—	(11,67)	292,50	0,47	(0,06)	(2,10)	—	—	—
1,2	371,0	3,0	51,15	200,00	0,04	0,06	0,30	0,07	0	11
1,1	136,7	1,3	663,85	32,40	0,05	0,03	1,50	0,02	0	—
1,2	(348,0)	(28,0)	83,25	21,50	(0)	0,11	1,40	—	—	—
0,6	192,8	3,6	18,05	3,20	0,05	0,03	0,30	0,09	0	5,70
0,7	(174,0)	1,6	8,36	41,00	0,05	0,02	0,25	0,03	0	7,20
0,9	290,0	4,0	50,00	221,40	0,05	0,04	1,10	—	(0)	—
0,6	135,8	3,6	2,13	45,00	0,04	0,02	0,14	0,09	0	6,50
0,4	189,3	4,8	559,79	37,13	0,05	0,05	0,60	0	0,16	—
2,0	191,5	16,0	21,65	11,00	0,04	0,07	0,50	(0,05)	(0)	—
0,4	181,3	1,7	37,33	48,00	0,08	0,03	0,25	0,05	0	23,20
0,4	214,5	3,8	348,08	57,20	0,03	0,06	0,30	—	(0)	—

Table I (cont.)

No.	Foods	Proximate and inorganic						
		Water	Energy	Protein	Fat	Carbohydrate	Calcium	Phosphorus
		g	kcal	g	g	g	mg	mg
109	PEACH, raw	86,8	47,0	0,7	0,2	11,2	7,8	17,8
110	PEAR, raw, with skin	83,5	57,3	0,4	0,4	13,6	7,8	10,2
111	PINEAPPLE, raw	86,1	53,5	0,5	0,3	13,1	18,5	11,0
112	PLUM, raw	85,0	50,7	0,6	0,2	12,3	12,4	14,4
113	PRICKLY PEAR, raw	83,9	61,4	1,1	0,8	10,6	41,5	25,0
	PRUNE							
114	Raw	23,9	221,5	2,3	0,6	49,3	42,3	81,7
115	Stewed, unsweetened	64,3	101,0	1,0	0,4	26,2	21,1	36,9
116	RAISINS	21,0	271,0	2,3	0,6	70,7	61,0	72,5
117	RHUBARB, raw	94,0	13,0	0,6	0,1	3,3	103,7	19,0
118	SHAKATA, raw	61,8	(167,5)	(1,2)	(0,5)	(41,9)	—	—
119	STRAWBERRY, raw	89,6	36,0	0,8	0,4	7,8	22,9	21,7
120	WATERMELON, raw	92,7	26,0	0,5	0,1	6,4	8,6	8,6
SYRUPS AND SUGARS								
121	HONEY	20,0	303,0	0,4	0	77,2	7,2	15,5
122	JAM, fruit	29,3	253,3	0,2	0	66,0	14,7	(9,0)
123	MOLASSES	25,2	240,5	0,1	0	61,7	250,2	(45,0)
	SUGAR							
124	Brown	4,3	377,6	0,4	0,1	94,3	76,5	12,0
125	White, granulated	0,5	387,9	0	0	100,4	2,3	2,5
126	SYRUP	20,0	307,5	0,3	0	79,0	30,7	20,0
MILK AND MILK PRODUCTS								
	MILK, cow's							
	Whole							
127	Fluid	87,3	66,3	3,5	3,6	4,9	118,5	95,3
128	Dried	3,5	498,0	26,0	27,4	38,1	920,2	751,0
129	Evaporated, unsweetened	72,4	142,8	7,2	8,1	10,0	259,2	209,7
130	Condensed, sweetened	27,4	321,6	7,8	8,5	54,5	278,5	239,2
131	Sterilized	87,6	(65,0)	3,3	3,7	4,7	120,0	(95,0)
	Skimmed							
132	Fluid	90,8	35,5	3,4	0,2	4,9	120,9	97,2
133	Dried	3,9	358,4	35,2	0,9	52,7	1254,9	976,0
134	Condensed, sweetened	28,3	273,8	9,5	0,4	59,4	352,8	(270,0)
135	MILK, goat's	86,7	71,1	3,3	4,3	4,8	136,0	112,0

Table I (cont.)

Constituents			Vitamins							
Iron	Potassium	Sodium	Vitamin A	Ascorbic acid	Thiamin	Riboflavin	Niacin	Vitamin B ₆	Vitamin B ₁₂	Total folic acid
mg	mg	mg	R.E. ^a	mg	mg	mg	mg	mg	µg	µg
0,6	220,0	3,2	196,45	9,80	0,02	0,05	0,70	0,02	0	4,30
0,4	117,7	1,1	4,91	3,90	0,02	0,03	0,14	0,02	0	9,00
0,4	179,3	1,0	20,53	31,90	0,07	0,03	0,20	0,09	0	7,90
0,5	194,8	2,5	62,52	4,70	0,06	0,03	0,40	0,05	0	4,20
0,7	—	—	6,50	19,80	0,02	0,03	0,40	—	—	—
3,2	777,0	10,0	365,56	1,00	0,12	0,16	1,28	0,24	0	4,30
1,6	348,3	5,5	166,93	0,90	0,03	0,07	0,70	(0,10)	(0)	(Tr)
2,6	747,0	33,7	10,25	0,20	0,09	0,07	0,70	0,29	0	7,20
0,6	350,3	5,3	23,30	9,50	0,02	0,04	0,20	0,03	0	5,80
(2,2)	—	—	(158,30)	(55,70)	—	(0,50)	—	—	—	—
0,8	170,0	1,9	11,19	54,60	0,03	0,06	0,60	0,06	0	13,80
0,2	106,8	3,9	62,89	6,33	0,04	0,04	0,16	0,06	(0)	0,70
0,4	65,5	9,1	0	1,75	0	0,05	0,20	0,02	0	(3,00)
0,5	(88,0)	(12,0)	1,70	4,30	0	(0,03)	(0,20)	—	(0)	(Tr)
6,3	(917,0)	(15,0)	(0)	0	0,06	0,11	1,90	0,24	(0)	11,25
3,4	334,0	29,3	0	0	0,02	0,04	0,17	—	—	—
0,1	2,5	0,7	0	0	0	0	0	(0)	(0)	(0)
2,4	(240,0)	(270,0)	0	0	(0)	(0,01)	(0,10)	(Tr)	(0)	(Tr)
0,1	146,3	48,4	39,96	0,90	0,04	0,18	0,10	0,05	0,33	5,00
0,6	1302,8	395,8	317,40	7,95	0,29	1,29	0,74	0,25	2,30	38,50
0,2	322,1	131,5	94,32	1,30	0,05	0,40	0,20	0,05	0,20	7,50
0,2	363,3	122,3	101,22	2,40	0,08	0,40	0,20	0,05	0,50	9,50
(0,1)	(140,0)	(50,0)	42,00	0,45	0,03	0,17	0,09	0,14	(0,20)	(4,00)
0,1	158,2	53,0	3,60	0,96	0,04	0,17	0,22	0,04	0,30	5,00
0,6	1737,5	538,8	11,83	9,80	0,40	1,70	1,00	0,30	3,10	35,50
0,3	(500,0)	(180,0)	4,80	1,90	0,09	0,50	0,30	0,05	0,55	(10,00)
0,1	181,0	39,8	43,73	1,30	0,05	0,13	0,27	0,04	0,05	0,60

Table 1 (cont.)

		<i>Proximate and inorganic</i>						
<i>No.</i>	<i>Foods</i>	<i>Water</i>	<i>Energy</i>	<i>Protein</i>	<i>Fat</i>	<i>Carbohydrate</i>	<i>Calcium</i>	<i>Phosphorous</i>
		<i>g</i>	<i>kcal</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>	<i>mg</i>
136	MILK, human	87,1	69,9	1,3	3,9	7,5	29,2	16,4
137	BUTTER (cow's milk)	15,3	734,4	0,7	82,2	0,2	18,5	21,6
	CHEESE (cow's milk)							
138	Cheddar	37,7	393,3	24,9	32,1	1,4	757,5	592,7
139	Cottage	76,0	105,2	16,4	2,7	2,5	82,1	172,3
EGGS								
HEN'S								
140	Whole, raw	74,3	156,7	12,5	11,4	0,7	52,8	205,8
141	White, raw	87,9	45,0	10,1	0,1	0,8	7,3	19,2
142	Yolk, raw	50,6	347,7	16,2	30,9	0,5	130,2	467,7
MEAT, POULTRY AND INSECTS								
BEEF								
Carcass, raw								
143	Fat	46,1	435,0	13,5	42,9	0	9,0	128,0
144	Medium	61,2	254,4	17,6	20,2	0	8,7	151,8
145	Lean	69,7	159,6	19,7	8,7	0	11,8	164,0
Forerib, lean and fat								
146	Raw	51,9	371,3	15,2	30,5	0	9,1	138,6
147	Roast	45,6	412,5	20,5	36,0	0	10,3	168,9
Heart								
148	Raw	77,0	113,3	16,8	4,4	0,6	7,5	183,2
149	Stewed	61,4	185,7	31,5	5,8	0,7	6,2	203,2
Kidney								
150	Raw	76,8	117,8	15,5	5,8	0,6	11,8	228,3
151	Stewed	55,8	232,0	31,2	10,9	0,6	17,5	258,0
Liver								
152	Raw	69,9	140,3	19,8	4,4	4,8	8,3	347,4
153	Fried	55,2	235,3	26,4	11,3	6,0	11,8	474,5
154	Lung, raw	81,3	83,0	15,7	1,9	0	(10,0)	186,5
Mince								
155	Raw	61,6	252,3	18,2	19,5	0	11,6	157,3
156	Stewed	5,8	270,1	24,3	18,7	0	12,8	194,4
157	Rump steak, raw	59,9	252,3	17,0	20,1	0	8,2	168,6
Stewing steak								
158	Raw	67,7	183,1	19,9	11,3	0	9,9	168,0
159	Stewed	57,3	250,7	30,1	13,8	0	12,7	212,7

Table I (cont.)

Constituents				Vitamins						
Iron	Potassium	Sodium	Vitamin A	Ascorbic acid	Thiamin	Riboflavin	Niacin	Vitamin B ₆	Vitamin B ₁₂	Total folic acid
mg	mg	mg	R.E. ^a	mg	mg	mg	mg	mg	µg	µg
0,1	47,8	15,2	58,90	3,80	0,02	0,04	0,20	0,01	0,03	2,50
0,1	23,4	887,1	837,37	0	0	0,01	0,04	0	Tr	3,00
0,8	124,0	789,9	352,12	0	0,03	0,40	0,30	0,08	1,11	17,10
0,2	101,7	389,4	30,68	0	0,02	0,30	0,20	0,04	0,56	17,10
2,5	124,8	136,8	260,67	0	0,10	0,34	0,11	0,15	1,70	51,70
0,1	147,6	176,6	0	0	0,02	0,30	0,09	0,08	0,09	8,40
5,3	99,3	42,8	694,92	0	0,24	0,40	0,06	0,30	4,90	113,50
2,0	183,5	(33,0)	(18,00)	0	0,06	(0,15)	(3,40)	0,30	1,20	(10,00)
2,2	329,0	69,0	11,21	0,30	0,08	0,20	4,30	0,30	1,20	(10,00)
3,0	419,5	77,0	5,67	0	0,07	0,30	5,20	(0,32)	(2,00)	8,50
2,0	243,9	47,8	20,75	0	0,05	0,13	3,50	0,23	(1,00)	(7,00)
2,4	235,1	49,9	23,70	(0)	0,05	0,20	3,70	(0,24)	(1,00)	(13,00)
4,6	256,5	90,5	50,80	0,60	0,49	0,80	6,30	0,24	12,00	3,60
6,4	226,4	129,3	8,52	2,10	0,24	1,18	6,88	(0,11)	(15,00)	(2,00)
9,2	227,5	185,3	239,25	8,00	0,30	2,00	6,90	0,38	31,00	71,80
11,8	288,2	289,7	321,30	10,00	0,25	2,00	4,80	(0,30)	31,00	(75,00)
7,5	285,3	101,0	13207,00	40,00	0,24	2,70	12,70	0,80	50,00	284,30
8,5	387,5	179,2	16365,00	23,50	0,26	4,20	16,28	(0,73)	(87,00)	(320,00)
(5,0)	—	—	—	0	(0,09)	(0,12)	4,80	—	—	—
2,7	270,7	74,3	11,28	(0)	0,07	0,20	4,20	(0,27)	(2,00)	(9,00)
3,2	270,7	74,3	11,34	(0)	0,08	0,24	5,20	(0,30)	(2,00)	(16,00)
2,4	283,1	51,4	13,79	(0)	0,07	0,18	3,97	(0,27)	(2,00)	(9,00)
2,5	316,0	70,2	(7,26)	(0)	0,07	0,20	4,45	(0,27)	(2,00)	(9,00)
3,3	290,0	215,1	7,47	(0)	0,06	0,26	4,93	(0,30)	(2,00)	(16,00)

Table I (cont.)

No.	Foods	Proximate and inorganic						
		Water	Energy	Protein	Fat	Carbohydrate	Calcium	Phosphorus
		g	kcal	g	g	g	mg	mg
160	Sirloin, raw	56,9	291,6	16,4	24,5	0	9,4	149,5
161	Tongue, raw	68,0	193,0	16,4	15,0	0,4	8,0	—
162	Tripe, raw	80,2	97,4	16,2	3,4	0,1	105,8	123,7
163	BIRDS, raw	68,7	128,7	19,7	7,8	0,2	17,5	3,2
	CATERPILLAR							
164	Fresh, raw	77,3	98,7	14,8	3,5	2,5	24,0	—
165	Cooked and dried	8,5	386,8	52,0	12,6	17,3	232,0	619,5
	CHICKEN							
166	Raw	67,0	195,1	19,0	12,9	0	12,0	179,0
167	Roast, skin and meat	63,8	216,0	26,7	8,2	0	12,0	214,4
168	DUCK, raw	51,6	365,2	14,5	33,0	0	12,2	158,3
	GOAT, carcass							
169	Raw, medium fat	67,8	190,0	18,0	7,8	0	11,2	161,0
	LAMB, carcass,							
170	Raw, medium fat	57,8	293,6	15,8	25,3	0	9,0	162,5
	Chop, loin, lean and fat							
171	Raw	53,1	326,8	14,4	29,6	0	7,9	130,6
172	Grilled	46,3	375,6	22,0	31,5	0	8,8	183,0
	Leg, lean and fat							
173	Raw	62,9	229,0	16,6	18,1	0	8,1	152,6
174	Roast	56,2	276,0	24,4	18,8	0	9,9	202,0
	Liver							
175	Raw	68,0	148,0	20,6	5,6	3,4	9,2	358,3
176	Fried	52,4	253,3	29,9	12,8	3,3	14,8	528,5
	LOCUST							
177	Fresh, raw	72,4	140,0	15,1	8,3	2,6	28,0	—
178	Cooked and dried	39,0	319,0	31,0	19,7	(8,0)	113,3	438,0
	PORK							
	Bacon rashers,							
179	streaky, raw	25,3	604,0	12,4	61,0	0,8	12,7	140,0
	Carcass, raw,							
180	medium fat	42,4	451,7	12,0	44,6	0	8,3	147,6
	Chop, loin, lean and fat							
181	Raw	55,4	295,5	15,3	25,7	0	8,3	165,7
182	Grilled	46,0	372,0	26,1	24,9	0	10,9	247,8
	Leg, lean and fat							
183	Raw	56,8	285,9	15,1	24,7	0	7,9	160,3
184	Roast	47,4	350,5	23,6	23,9	0	10,0	217,7

Table I (cont.)

Constituents			Vitamins							
Iron	Potassium	Sodium	Vitamin A	Ascorbic acid	Thiamin	Riboflavin	Niacin	Vitamin B ₆	Vitamin B ₁₂	Total folic acid
mg	mg	mg	R.E. ^a	mg	mg	mg	mg	mg	µg	µg
2,1	255,4	51,9	14,78	(0)	0,06	0,15	4,03	(0,23)	(1,00)	(7,00)
3,4	(1970,0)	(73,0)	(Tr)	3,00	0,19	0,29	6,20	0,16	(5,00)	(6,00)
1,5	8,5	(59,0)	30,83	4,00	(0,20)	0,12	2,60	(Tr)	(Tr)	(2,00)
—	—	—	60,00	0	5,53	9,05	7,10	—	—	—
0,9	—	—	—	(0)	0,29	1,23	7,35	—	—	—
16,0	(2027,0)	(2616,0)	37,29	5,20	0,28	1,39	7,93	—	—	—
1,2	227,3	68,3	105,15	0,90	0,08	0,15	7,70	0,30	0,40	5,00
1,5	308,1	82,4	45,00	(0)	0,07	0,23	5,60	—	—	—
2,0	209,5	70,0	160,25	0,70	0,11	0,21	5,60	(0,19)	(0,25)	(13,00)
2,2	—	—	0	0,70	0,20	0,24	5,10	—	—	—
1,9	292,5	77,0	4,60	0,50	0,10	0,20	3,80	0,20	2,08	3,80
1,1	227,2	55,1	(Tr)	0	0,12	0,17	4,10	(0,15)	(1,00)	(3,00)
1,4	263,4	63,0	(Tr)	(0)	0,12	0,22	4,80	(0,15)	(2,00)	(3,00)
1,4	274,3	52,1	(Tr)	(0)	0,14	0,23	5,10	(0,20)	(2,00)	(4,00)
1,9	274,3	63,6	(Tr)	(0)	0,14	0,28	5,40	(0,18)	(2,00)	(3,00)
9,0	246,0	64,0	11565,00	23,30	0,30	3,00	17,30	(0,42)	94,00	219,50
16,0	323,3	110,8	21939,00	29,75	0,43	4,90	22,48	(0,49)	81,00	(240,00)
1,0	—	—	(0)	(0)	(0,22)	0,52	2,50	—	—	—
12,5	(476,0)	(1969,0)	—	(Tr)	(0,03)	(5,97)	(5,80)	—	—	—
1,2	(290,0)	(1820,0)	15,00	0	0,38	0,15	3,50	(0,27)	(Tr)	(1,00)
1,5	(229,0)	(57,00)	4,50	5,00	0,60	0,20	3,20	0,31	(0,50)	4,40
1,8	252,7	51,6	0	(0)	0,70	0,16	3,97	(0,29)	(2,00)	(3,00)
2,8	310,5	72,1	0	0	0,90	0,25	5,60	0,31	(1,00)	(6,00)
1,7	258,0	53,2	0	(0)	0,71	0,18	4,00	(0,33)	(2,00)	(4,00)
2,4	303,8	67,8	0	(0)	0,55	0,24	4,50	(0,31)	(1,00)	(6,00)

Table I (cont.)

No.	Foods	Proximate and inorganic						
		Water g	Energy kcal	Protein g	Fat g	Carbohydrate g	Calcium mg	Phosphorous mg
	Liver							
185	Raw	71,0	138,0	20,5	5,1	2,1	8,7	364,0
186	Fried	56,7	223,7	28,5	10,4	2,9	13,7	489,3
	Sausage							
187	Raw	43,2	406,4	10,4	38,6	5,1	24,7	119,5
188	Grilled	38,2	423,4	16,5	37,7	11,5	22,3	181,3
	RABBIT							
189	Raw	72,0	137,3	21,0	5,8	0	18,5	286,0
190	Stewed	50,7	174,3	24,2	8,0	0	15,9	206,0
	TERMITES, winged							
191	Fresh, raw	67,8	140,3	12,9	8,0	1,2	13,2	426,0
192	Cooked and dried	2,9	634,5	38,3	46,9	6,0	91,0	609,0
	FISH							
	Oily, raw							
193	Fresh	73,1	147,0	19,1	6,4	0	27,5	157,4
194	Dried	21,4	299,5	54,8	11,3	0	2600,0	—
	White, raw							
195	Fresh	81,6	73,0	17,0	0,5	0	21,7	208,0
	FATS AND OILS							
	ANIMAL FAT							
196	Lard or dripping	0,6	895,0	0	99,5	0	0,3	5,2
	VEGETABLE FAT							
197	Oil	0	895,0	0	100,0	0	0	0
198	Shortening	0	884,0	0	100,0	0	(0)	(0)
	BEVERAGES							
199	COCOA, powder	3,4	364,2	16,9	23,0	31,4	91,0	664,0
200	COFFEE, ground	4,1	49,0	7,6	5,1	13,5	79,0	139,5
201	TEA, Indian, leaves	40,0	—	13,0	—	4,6	66,7	—

Table I (cont.)

Constituents			Vitamins							
Iron	Potassium	Sodium	Vitamin A	Ascorbic acid	Thiamin	Riboflavin	Niacin	Vitamin B ₆	Vitamin B ₁₂	Total folic acid
mg	mg	mg	R.E. ^a	mg	mg	mg	mg	mg	µg	µg
14,7	292,3	92,7	5156,70	18,70	0,50	2,90	18,00	0,67	28,50	192,80
25,1	395,0	117,3	6847,30	15,50	0,89	3,97	18,70	(0,60)	(2,60)	(110,00)
1,5	168,0	768,0	(0)	1,00	0,30	0,15	2,80	0,20	1,05	8,90
2,1	246,0	972,0	0	(0)	0,53	0,27	3,80	(0,07)	(1,00)	(4,00)
1,3	372,5	55,0	(Tr)	0	0,08	0,12	10,07	0,47	(10,00)	(5,00)
1,3	282,1	32,6	—	(0)	0,06	0,14	10,40	(0,50)	(12,00)	(4,00)
9,0	—	—	—	—	—	—	—	—	—	—
35,2	(476,0)	(1969,0)	(1,00)	Tr	0,13	4,50	5,69	—	—	—
1,2	(252,0)	(396,0)	30,00	(0)	0,07	0,20	2,90	—	—	—
6,2	—	—	21,00	0	0,12	0,35	6,00	—	—	—
0,6	—	—	(0)	(1,00)	0,05	0,08	2,35	—	—	—
0,1	2,0	2,5	0	0	0	0	0	(Tr)	(Tr)	(Tr)
0	0	0,1	0	0	0	0	0	(Tr)	0	Tr
(0)	—	—	—	—	—	—	—	—	—	—
12,3	1511,0	(478,0)	20,22	0	0,13	0,26	1,70	(0,07)	(0)	(38,00)
2,1	2032,5	(37,5)	(0)	(0)	—	0,06	20,10	—	—	—
44,0	(900,0)	(1,9)	—	(0)	(0,14)	1,10	6,50	—	—	(0,08)

^a Values for beta carotene and for Vitamin A in International Units were converted to retinol equivalents.

Table II
SCIENTIFIC AND OTHER NAMES OF
SELECTED FOODS INCLUDED IN TABLE I

<i>Common name</i>	<i>Scientific name</i>	<i>Other names</i>
<i>Grains and grain products</i>		
Maize, white	<i>Zea mays</i>	White corn
Samp		Hominy
Mealie-meal		Corn meal
Straight-run meal		Whole meal
Millet		
Bulrush	<i>Pennisetum typhoides</i>	Mhunga
Finger	<i>Eleusine coracana</i>	Rapoko
<i>Vegetables and vegetable products</i>		
Beans		
Butter	<i>Phaseolus lunatus</i>	Lima, Burma
Haricot	<i>Phaseolus vulgaris</i>	Kidney, snap, pinto, navy, string, French
Blackjack	<i>Bidens pilosa</i>	
Cow peas	<i>Vigna sinensis</i>	
Egg plant	<i>Solanum melongena</i>	Aubergine
Gourd	<i>Lagenaria siceraria</i>	
Ground Pea	<i>Voandzeia subterranea</i>	Bambara groundnut
Lentils	<i>Lens esculenta</i>	
Mowa	<i>Amaranthus thunbergii</i>	Spinach
Mushamba	<i>Citrullus vulgaris</i>	Cow pumpkin
Mushroom		
Wild, mixed	<i>Auricularia</i> spp.	
Cultivated	<i>Agaricus</i> spp.	
Okra	<i>Hibiscus esculentus</i>	
Peanut	<i>Arachis hypogaea</i>	Groundnut
Pepper, sweet, green	<i>Capsicum Annum</i>	
Rape	<i>Brassica napus</i> or <i>B. rapens</i>	
Runi	<i>Solanum nigrum</i>	Black nightshade
Squash	<i>Cucurbita</i> spp.	
Sweet potato	<i>Ipomoea batatas</i>	
Taro	<i>Colocasia antiquorum</i>	Yam

Table II (cont.)

Common name	Scientific name	Other names
<i>Nuts and seeds</i>		
Baobab seeds	<i>Adansonia digitata</i>	
Marula seeds	<i>Sclerocarya caffra</i>	Mapfura
Pumpkin seeds	<i>Cucurbita pepo</i>	
Sesame seeds	<i>Sesamum indicum</i>	
Watermelon seeds	<i>Citrullus lanatus</i>	
<i>Fruits</i>		
Baobab	<i>Adansonia digitata</i>	
Granadilla	<i>Passiflora</i> spp.	Passion fruit
Guava	<i>Psidium</i> spp.	
Mango	<i>Mangifera indica</i>	
Mulberry	<i>Morus nigra</i>	
Naartjie	<i>Citrus aurantium</i>	Tangerine
Pawpaw	<i>Carica papaya</i>	Papaya
Prickly pear	<i>Opuntia</i> spp.	
Rhubarb	<i>Rheum rhabarbarum</i>	
Shakata	<i>Parinari curatellifolia</i>	Mobola plum
Watermelon	<i>Citrullus lanatus</i>	
<i>Meat, poultry, and insects</i>		
Caterpillar	<i>Imbrasia ertli</i>	
Locust	<i>Nomadacris septemfasciata</i>	
Termites, winged	<i>Macrotermes natalensis</i>	
<i>Beverages</i>		
Cocoa	<i>Theobroma cacao</i>	
Coffee	<i>Coffea</i> spp.	
Tea, Indian	<i>Cameiia sinensis</i>	



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