TABLE 2: CONDITIONS FOR NUTRIENT CONTENT CLAIMS, PART A

COMPONENT	CLAIM	CONDITIONS	
Part A		NOT MORE THAN	
I	2	3	
Energy	Low	170 kJ per 100 g (solids*) 80k J per 100 ml (liquids*)	
	Virtually free or free from	17 kJ per 100 ml (liquids*)	
Fat	Low	3 g per 100 g (solids*) 1.5 g per 100 ml (liquids*)	
	Virtually free or free from	0.5 g per 100 g/ml	
Saturated fat	Low	1,5 g per 100 g (solids*) 0.75 g per 100 ml (liquids*) and for both solids and liquids, not more than 10% of energy	
	Virtually free or free from	0,1 g per 100 g (solids*) 0,1 g per 100 ml (liquids*)	
Cholesterol	Low	20 mg per 100 g (solids*) 10 mg per 100 ml (liquids*)	
	Virtually free or free from	5 mg per 100 g (solids*) 5 mg per 100 ml (liquids*)	
		and for both claims, low and free of, less than:	
		1.5 g saturated fat and trans fat combined per 100 g (solids) or 0,75 g saturated fat per 100 ml (liquids) and 10% ** of energy from saturated fat	
Sugars (Mono – and disaccharides) and lactose	Virtually free or free from	0.5 g per 100g/ml*	
Sodium	Low	120 mg Na per 100 g* (equals 305 mg NaCl)	
	Very low	40 mg Na per 100 g* (equals 102 mg NaCl)	
	Virtually free or free from	5 mg Na per 100 g* (equals 13 mg NaCl)	
Alcohol	Non-alcoholic	1.2 % by volume*	
	Virtually free or free from	0.05 % by volume*	
Caffeine	Free from	5 mg per kg	

^{*} refers to end product
** percentage expressed per total energy of end product

TABLE 2: CONDITIONS FOR NUTRIENT CONTENT CLAIMS, PART B

COMPONENT Part B	CLAIM	CONDITIONS NOT LESS THAN*
	2	3
Energy	"Source of"	80 kJ per 100 ml
	"High in"	950 kJ per 100 g or 250 kJ per 100 ml
Carbohydrate	"High in"	13 g per 100 g or 6,5 g per 100 ml
Dietary Fibre (as measured by the latest	"Source of" or "contains" or "with added"	2.4 g per 100 g (solids) 1.2 g per 100 ml (liquids)
update of the Englyst method as stipulated in the table in Guideline 1)	"High in"	4.8 g per 100 g (solids) 2.4 g per 100 ml (liquids)
	"Very high in" or "excellent source"	9.6 g per 100 g (solids) 4.8 g per 100 ml (liquids)
Dietary Fibre (as measured	"Source of" or "contains" or "with added"	3 g per 100 g (solids) 1.5 g per 100 ml (liquids)
by the latest update of the specific general AOAC method used which are	"High in"	6 g per 100 g (solids) 3 g per 100 ml (liquids)
listed in the table in Guideline 1)	"Very high in" or "excellent source"	12 g per 100 g (solids) 6 g per 100 ml (liquids)
Protein	"Source of" or "contains" or "with added"	5 g per 100 g (solids*) 2,5 g per 100 ml (liquids*) and for both solids and liquids,2,5 g per 418 kJ
	"High in"	10 g per 100 g (solids*) 5 g per 100 ml (liquids*) and for both solids and liquids,5 g per 418 kJ
Polyunsaturated fatty acids (PUFA's)	"Source of" or "contains" or "with added"	≥ 45 % ****PUFA's and Polyunsaturated fatty acids provides more than 20 % of energy of the end product 0.g <i>Trans</i> fatty acids
	"High in"	≥ 60 % *****PUFA's and Polyunsaturated fatty acids provides more than 20 % of energy of the end product 0.g <i>Trans</i> fatty acids
Monounsaturated fatty acids (MUFA's)	"Source of" or "contains" or "with added"	≥45 % **** MUFA's and Monounsaturated fatty acids provides more than 20 % of energy of the end product 0.g <i>Trans</i> fatty acids
	"High in"	≥60 %**** MUFA's and Monounsaturated fatty acids provides more than 20 % of energy of the end product 0.g <i>Trans</i> fatty acids
Omega-3 fatty acids	"Source of" or "contains" or "with added"	75 mg per single serving
	"High in"	150 mg per single serving
	"Very high in" or "excellent source"	300 mg per single serving
Vitamins and minerals excluding potassium# and	"Source of" or "contains" or "with added"	15 % of NRV** per serving
sodium	"High in"	30 % of NRV** per serving

COMPONENT Part B	CLAIM	CONDITIONS NOT LESS THAN*
	2	3
	"Very high in" or "excellent source"	60 % of NRV** per serving
Carotenoids:		·
Beta-carotene	"Source of" or "contains" or "with added"	0.5 mg per 100 g
	"High in"	2 mg per 100 g
Lycopene	"Source of" or "contains" or "with added"	0.5 mg per 100 g**
1	"High in"	2 mg per 100 g***
Lutein	"Source of" or "contains" or "with added"	0.5mg per 100 g
	"High in"	2 mg per 100 g
Zeaxanthin	"Source of" or "contains" or "with added"	0.1 mg per 100 g
	"High in"	0.5 mg per 100 g

^{*} refers to end product

Comparative claims

- 55. (1) No claim which compares the fat, saturated fat, cholesterol, total sugar, total sodium, energy value or alcohol level of two or more similar foods by using one of the following words or a similar word "reduced", "less than", "fewer", "light", "lite", shall be made on the label or in an advertisement of a food, unless the following conditions are complied with:
 - (a) the foods being compared are different versions of the same or similar foods; and
 - (b) the foods being compared are clearly labelled as follows:
 - a statement is given of the amount of difference in the energy value or relevant nutrient or alcohol, expressed as a percentage;
 and
 - (ii) the identity of the food to which the food is being compared, appears in close proximity to the comparative claim.

^{**} NRV's for individuals from the beginning of 37 months and older

^{***} Wet weight

^{****} of total energy from fat

[#] The claims ("source of" and "high in"), shall only be permitted for potassium *naturally* present in foods: Provided the nutrition information table indicates both the sodium and potassium content.

[#] Nutrient and health claims for Vitamin K $_{(1 \text{ and } 2)}$ may only be made for natural occurring Vitamin K $_r$ or K $_2$ and not where Vitamin K $_r$ or K $_2$ was added to a food.

- (c) the comparison is based on a relative difference of at least 25% in the energy value, nutrient or alcohol content of an equivalent mass or volume (refer to Guideline 12 for examples of how the percentage of difference can be calculated);
- (d) the food is labelled with the mandatory minimum nutritional information declaration referred to in point 1 of Annexure 2, as well as nutritional information relevant to the comparative claim in terms of the specific nutrient(s), energy or alcohol content of both foods:
- (e) the following information shall be stated in the claim:
 - (i) the specific nutrient(s) mentioned in regulation 55(1) above and/or energy and/or alcohol content, whichever relate(s) to the comparison;
 - (ii) a full description of the two foods that are being compared; and
 - (iii) the exact amounts of each of the two foods that are being compared.
- (2) A comparative claim such as "more than", "increased" or that directly or indirectly compares the micronutrient content of a food with that of another food is prohibited for physiologically beneficial nutrients such as vitamins, minerals, bioflavonoids, carotenoids or other beneficial food constituents, except for the cases mentioned in regulation 55(6) below.
- (3) A comparative claim shall not be allowed for foods for which compositional standards exist under the Agricultural Products Standards Act, 1990 (Act No.119 of 1990) and the National Regulator for Compulsory Specifications Act, 2008 (Act No.5 of 2008), unless specific provision is made in these standards to accommodate comparative claims.
- (4) Foods for which a class or category name exists under the Agricultural Products Standards Act, 1990 (Act No.119 of 1990) and the National Regulator for Compulsory Specifications Act, 2008 (Act No. 5 of 2008), in which words that could indicated a comparative or nutrient content claim and which are listed in Guideline 12 shall not be regarded as a comparative or a nutrient content claim.
- (5) Notwithstanding the requirements of regulation 55(1)(c), a food that is required by the Regulations Relating to the Reduction of Sodium in Certain Foodstuffs, published under the Act, to reduce the Sodium content of certain foods according to certain targets by specified dates, may use the following statement if compliant with the aforementioned Regulations' targets and dates of implementation: "Reduced Sodium according to national goals of (year) in the public's interest to lower blood pressure".

In the case of single ingredient agricultural food crops or produce, notwithstanding the requirements of regulations 55(1)(c) and 54(7), in cases of where improved nutritional properties were achieved though agricultural practices, excluding the addition of nutrients through enrichment or fortification, the percentage difference in increase of the particular nutrient in the nutritionally enhanced single ingredient agricultural food crop or produce, compared to the conventional crop or produce, shall be clearly indicated on the label in a mandatory statement that shall accompany the comparative claim to the effect that "The (percentage) higher level of (name of specific nutrient)" is the result of (statement explaining the source of the higher nutrient content).

HEALTH CLAIMS

Glycaemic Index (GI) Category and Glycaemic Load (GL) claims

- 56. (1) The glycaemic index category claim shall, if used, be indicated as either category "Low", "Intermediate" or "High", whatever is applicable, as determined in accordance with the International standard method for GI testing, ISO 26642 and shall not include any method whereby a glycaemic index value is calculated to determine its category.
 - (2) A glycaemic index category and/or a glycaemic load claim shall only be applicable for a food with-
 - (a) a glycaemic carbohydrate content of 50% or more of the total energy value of the food; Provided that no fructose is added to the food;
 - (b) a fat content less than 30% of the total energy value of the food; and
 - (c) a total protein content less than 42% of the total energy value of the food.
 - (3) A glycaemic index category claim shall not be indicated by a specific numerical value but shall, if used, be indicated/ranked as low, intermediate or high glycaemic index (GI) on the last line of the table with nutritional information: Provided the glycaemic index category corresponds with the conditions described in the Table 3 below:

Table 3: CONDITIONS FOR GLYCAEMIC INDEX CATEGORY/RANKING FOR THE PURPOSE OF GI AND/OR GL CLAIMS

GI CATEGORY CLAIM	CONDITION (Values indicated to indicate GI categories; not for labelling purposes)
Low GI	GI Value: 0 to 55
Intermediate GI	GI value: 56 to 69
High GI	GI value: 70 and more

- (4) A glycaemic load (GL) claim is permissible only if-
 - (a) the glycaemic index category is indicated as well;

- (b) the GL is calculated according to the formula as defined in Regulation 1; and
- (c) the information is expressed per single serving, in numerical form, directly underneath the GI category in the Nutritional Information Table.
- (5) When the formulation of a food carrying a GI category claim is changed, the reformulated food may not make a GI category claim unless the new formulation was retested in order to legitimise the new GI category claim.

Glycaemic Index claims

- (6) When a food passes the screening test of the Nutrient Profiling Model and is subsequently, in principle, eligible for a nutrient or health claim and comply with all the criteria of Regulation 56,-
 - (a) and has a high or intermediate GI value, no claim that conveys in any manner the health benefits associated with the concept of low glycaemic index, sustained energy, slow release, slow absorption, slowly digestible carbohydrate or wording conveying a similar message in any manner, shall be made or be endorsed by any organisation that in terms of Regulation 16(1)(a)(ii), promotes the reduction of risk for non-communicable diseases; and
 - (b) a food may, when appropriate, use the following prescribed wording in support of a relevant GI category as appropriate:
 - (i) "Low GI": "Low GI foods, when eaten regularly in moderate portions at a time, generally provide a slow release of energy, improve blood glucose control, may elicit a higher feeling of satiety and may decrease the risk of non-communicable diseases in the long term."; Provided that the claim "sustained energy" or similar wording is reserved for low GI foods only;
 - (ii) "Intermediate GI": "intermediate GI foods generally provide a moderately fast release of energy and are ideal for diabetic individuals after exercise lasting at least one hour, or as a special treat."; or
 - (iii) "High GI": "High GI foods generally provide a fast release of energy and are preferable in smaller portions but ideal for regular sportsmen after exercise lasting at least one hour."

Function claims

- 57. (1) A function claim may be made for the nutrients or substances listed in Table 4 below, by using the approved, appropriate wording in column 2 of Table 4; Provided that-
 - (a) no deviation from the approved wording listed in column 2 of Table 4 for a claim shall be permitted; and

- (b) not all the claims listed per nutrient or substance need necessarily be used at all times.
- (2) A function claim shall not be permitted-
 - (a) for vitamins and minerals for which an NRV value is not provided in Annexure 3;
 - (b) for any other substance not listed in Part B of Table 2, unless specifically provided for in Table 4 below; and
 - (c) in both cases (a) and (b) above, the food shall contain, per single serving-
 - (i) at least 30% of the NRV as indicated in Annexure 3; or
 - (ii) in the case of carotenoids, at least the amount specified in column 3 of Part B of Table 2; or
 - (iii) the amount indicated in column 3 of Table 4 below, whatever the case may be.

TABLE 4: APPROVED FUNCTION CLAIMS

	THE ELECTION OF THE PROPERTY O	CLIMIC
NUTRIENT OR	SELECT ONE OR MORE OPTION OF THE	ADDITIONAL CONDITIONS AND/OR
SUBSTANCE FOR	PERMITTED WORDING FOR A FUNCTION CLAIM	RESTRICTIONS AND/OR
WHICH A FUNCTION		ADDITIONAL STATEMENT(S) OR
CLAIM IS MADE		WARNING(S) TO APPEAR ON THE
		LABEL AND IN COMMERCIAL
		MARKETING
1	2	3
Beta-carotene	Beta-carotene can be converted to Vitamin A in	
	the body.	
	Beta-carotene functions as a tissue antioxidant	
	and so keeps cells healthy.	
Betaine	Betaine contributes to normal homocysteine	The claim may be used only for food
	metabolism	which contains at least 500 mg of
		betaine per single serving. In order to
		bear the claim, information shall be
		given to the consumer-
		1. that the beneficial effect is
		obtained with a daily intake of 1.5.
		g of betaine;
		2. that the daily intake in excess of 4
		g may significantly increase blood
		cholesterol levels; and
		3. name additionally at least three of
		the following foods that naturally
		contains betaine: shellfish,
		spinach, wheat germ and bran,
		sugar beets.
Biotin	 Biotin is necessary to normal fat metabolism and 	
		<u> </u>

SUBSTANCE FOR WHICH A FUNCTION CLAIM IS MADE 1 2 3 energy production / helps the body with the transformation of fats and carbohydrates into energy / contributes to normal energy-yielding metabolism / involved in fatty acid formation, energy transformation from fats, carbohydrates & proteins / contributes to normal macronutrient	ON THE
CLAIM IS MADE WARNING(S) TO APPEAR LABEL AND IN COMM MARKETING 1 2 3 energy production / helps the body with the transformation of fats and carbohydrates into energy / contributes to normal energy-yielding metabolism / involved in fatty acid formation, energy transformation from fats, carbohydrates	ON THE
LABEL AND IN COMM MARKETING 1 2 3 energy production / helps the body with the transformation of fats and carbohydrates into energy / contributes to normal energy-yielding metabolism / involved in fatty acid formation, energy transformation from fats, carbohydrates	
MARKETING 1 2 3 energy production / helps the body with the transformation of fats and carbohydrates into energy / contributes to normal energy-yielding metabolism / involved in fatty acid formation, energy transformation from fats, carbohydrates	TERCIAL
1 2 3 energy production / helps the body with the transformation of fats and carbohydrates into energy / contributes to normal energy-yielding metabolism / involved in fatty acid formation, energy transformation from fats, carbohydrates	
energy production / helps the body with the transformation of fats and carbohydrates into energy / contributes to normal energy-yielding metabolism / involved in fatty acid formation, energy transformation from fats, carbohydrates	
transformation of fats and carbohydrates into energy / contributes to normal energy-yielding metabolism / involved in fatty acid formation, energy transformation from fats, carbohydrates	
energy / contributes to normal energy-yielding metabolism / involved in fatty acid formation, energy transformation from fats, carbohydrates	
metabolism / Involved in fatty acid formation, energy transformation from fats, carbohydrates	
energy transformation from fats, carbohydrates	
& proteins / contributes to normal macronutrient	
metabolism	
Biotin contributes to healthy normal growth,	
development and body maintenance.	
Biotin contributes to normal functioning of the	
nervous system	
Biotin contributes to normal psychological	
function	
Biotin contributes to the maintenance of normal	
hair	
Biotin contributes to the maintenance of normal	
mucous membranes	
Biotin contributes to the maintenance of normal	
skin	
Biotin aids in utilisation of other B-complex vitamins.	
Boron Boron is needed for healthy bones.	
, and the state of	
Calcium • Calcium is necessary to maintain healthy bones	
and teeth	
Calcium is necessary for normal nerve and	
muscle function / is needed for muscular growth	
and contraction and prevents muscle cramps.	
Calcium is necessary for normal blood	
coagulation (clotting) / is essential in blood	
clotting	
Calcium contributes to normal energy-yielding	
metabolism	
Calcium contributes to normal	
neurotransmission	
Calcium contributes to normal function of	
digestive enzymes	
Calcium has a role in the process of cell division	
and specialisation	
 Calcium is important for healthy regular 	
heartbeat	

NUTRIENT OR SUBSTANCE FOR WHICH A FUNCTION CLAIM IS MADE	SELECT ONE OR MORE OPTION OF THE PERMITTED WORDING FOR A FUNCTION CLAIM	ADDITIONAL CONDITIONS AND/OR RESTRICTIONS AND/OR ADDITIONAL STATEMENT(S) OR WARNING(S) TO APPEAR ON THE LABEL AND IN COMMERCIAL MARKETING
1	2	3
Choline	 Choline contributes to normal homocysteine metabolism Choline contributes to normal lipid metabolism Choline contributes to the maintenance of normal liver function Choline is needed for proper transmission of 	The claim may only be used for food which contains at least 83 mg of choline per single serving of food
	nerve impulses from brain through central nervous system. Choline aids in hormone production. Choline aids in fat and cholesterol metabolism. Choline is needed for brain function and memory.	
Chromium	 Chromium contributes to normal macronutrient metabolism Chromium contributes to the maintenance of normal blood glucose levels Chromium is vital in synthesis of cholesterol, fats and proteins. 	
Co-enzyme Q10	 Co-enzyme Q10 aids in the production of ATP, an immediate source of cellular energy. Co-enzyme Q10 plays a role in maintaining a healthy heart 	 Co-enzyme Q10 naturally present in the food
Copper	 Copper contributes to normal iron transport and metabolism / contributes to normal iron transport in the body / aids in formation of haemoglobin and red blood cells Copper contributes to cell protection from free radical damage / contributes to the protection of cells from oxidative stress Copper is necessary for normal energy production / contributes to normal energy-yielding metabolism Copper is necessary for normal neurological function / contributes to normal functioning of the nervous system / is needed for healthy nerves and joints Copper is necessary for normal skin and hair colouration / contributes to normal skin and hair 	
	colouration / contributes to normal hair and skin pigmentation/colouring Copper contributes to maintenance of normal	

NUTRIENT OR	SELECT ONE OR MORE OPTION OF THE	ADDITIONAL CONDITIONS AND/OR
SUBSTANCE FOR	PERMITTED WORDING FOR A FUNCTION CLAIM	RESTRICTIONS AND/OR
WHICH A FUNCTION		ADDITIONAL STATEMENT(S) OR
CLAIM IS MADE		WARNING(S) TO APPEAR ON THE
		LABEL AND IN COMMERCIAL
		MARKETING
1	2	3
	connective tissues / works in balance with zinc	
	and vitamin C to form elastin for a healthy skin /	
	contributes to normal connective tissue structure	
	Copper contributes to the normal function of the	
	immune system	
	Copper aids in formation of bone	
	Copper is involved in taste sensitivity	
Colubia diatan, fibro that		
Soluble dietary fibre that	Soluble dietary fibre plays a role in glucose	
has effects on glucose	absorption and maintaining a healthy blood	
and lipid absorption	cholesterol level.	
Insoluble dietary fibre	Insoluble dietary fibre plays a role in keeping the gut	
that has more	healthy. / contributes to regular laxation	
pronounced effects on		
bowel habits		
Fatty acids:	y	
Alpha-linolenic acid	ALA contributes to the maintenance of normal	The claim may be used only for a food
(ALA)	cholesterol levels	which contains at least 300 mg alpha-
		linolenic acid per 100g and per 418 kJ
		simultaneously. Information shall be
		given to consumers that the beneficial
		effect is obtained with a daily intake of
		2 g ALA
Linoleic acid (LA)	Linoleic acid contributes to the maintenance of	The claim may be used only for a food
	normal blood cholesterol levels	which provides at least 1.5 g of linoleic
		acid (LA) per 100 g and per 418 kJ
		simultaneously. Information shall be
		given to consumers that the beneficial
		effect is obtained with a daily intake of
		10 g LA
	Docosahexaenoic acid or DHA contributes to	The claim may be used only
	maintenance of normal brain function	for food which contains at least 80 mg
	Docosahexaenoic acid or DHA contributes to the	DHA per 100 g and per 418 kJ
	maintenance of normal vision	simultaneously.
Docosahexaenoic acid		 In order to bear the claim,
(DHA)		information shall be given to the
		consumer on the label and in
		advertising that the beneficial effect is
		obtained with a daily intake of 250 mg
		of DHA.
Eicosapentanoic acid	The omega-3 fatty acids EPA and DHA contribute to	 The claim may be used only for
(EPA) and	the normal function of the heart	food which contains at least 80

NUTRIENT OR	SELECT ONE OR MORE OPTION OF THE	ADDITIONAL CONDITIONS AND/OR
SUBSTANCE FOR	PERMITTED WORDING FOR A FUNCTION CLAIM	RESTRICTIONS AND/OR
WHICH A FUNCTION		ADDITIONAL STATEMENT(S) OR
CLAIM IS MADE		WARNING(S) TO APPEAR ON THE
		LABEL AND IN COMMERCIAL
		MARKETING
1	2	3
Docosahexaenoic acid		mg DHA per 100 g and per 418
(DHA) (but not omega-3		kJ simultaneously.
in general)		 In order to bear the claim,
		information shall be given to the
		consumer on the label and in
		advertising that the beneficial
		effect is obtained with a daily
		intake of 250 mg of EPA and 250
		mg DHA per day
Unsaturated and/or	Replacing saturated fats with unsaturated fats in the	Food shall be high in MUFAs or high
polyunsaturated fatty	diet contributes to the maintenance of normal blood	in PUFAs, whatever is appropriate
acids	cholesterol levels. Both Monounsaturated fatty acids	according to the criteria listed in Part
	(MUFAs) and Polyunsaturated fatty acids (PUFAs)	B of Table 2
	are unsaturated fatty acids	
Oleic acid	Replacing saturated fats with unsaturated fats in the	At least 70 % of the fatty acids
	diet contributes to the maintenance of normal blood	present in the product shall be
	cholesterol levels. Oleic acid is an unsaturated fatty	derived from unsaturated fat; and
	acid	Unsaturated fat provides more
		than 20 % of energy of the
		product.
Foods with a low content of saturated fatty acids	Reducing consumption of saturated fat contributes to the maintenance of normal cholesterol levels	The claim may only be used for a food
of saturated ratty acids	the maintenance of normal cholesterol levels	low in saturated fat according to the criteria listed in Part A of Table 2
Folate (but not folic acid)	Folate contributes to maternal tissue growth	Citeria listed in Part A of Table 2
Totale (but not tolic acid)	during pregnancy	
	Folate contributes to normal amino acid	
	synthesis	
	Folate contributes to/is necessary for normal	
	blood formation	
	Folate contributes to normal homocysteine	
	metabolism	
	Folate contributes to normal psychological	
	function	
	Folate contributes to the normal function of the	
	immune system	
	Folate contributes to the reduction of tiredness	
	and fatigue	
	Folate has a role in the process of cell division /	
	Necessary for normal cell division	
	Helps to form body proteins, genetic material	
	70	

NUTRIENT OR	SELECT ONE OR MORE OPTION OF THE	ADDITIONAL CONDITIONS AND/OR
SUBSTANCE FOR	PERMITTED WORDING FOR A FUNCTION CLAIM	RESTRICTIONS AND/OR
WHICH A FUNCTION		ADDITIONAL STATEMENT(S) OR
CLAIM IS MADE		WARNING(S) TO APPEAR ON THE
		LABEL AND IN COMMERCIAL
		MARKETING
1	2	3
	and red blood cells.	
	Folate is essential for the normal development of	
	the unborn baby.	
	 Needed for energy production; involved in 	
	protein metabolism.	
lodine	 lodine is necessary for normal production of 	
	thyroid hormones / lodine is needed for a	
	healthy thyroid gland	
	lodine is necessary for normal neurological	
	development	
	lodine is necessary for normal energy	
	metabolism	
	lodine contributes to normal growth and	
	development in children	
	lodine contributes to normal cognitive function	
	lodine contributes to normal energy-yielding	
	metabolism	
	lodine contributes to normal functioning of the	
	nervous system	
	Iodine contributes to the maintenance of normal	
	skin lodine contributes to the normal production of	
	thyroid hormones and normal thyroid function	
	Prevents goitre which, untreated, will lead to	
	mental retardation	
iron	Iron is necessary for normal oxygen transport	
	 Iron contributes to normal energy production / 	
	energy-yielding metabolism	
	Iron is necessary for normal immune system	
	function	
	 Iron contributes to normal blood formation / 	
	contributes to normal formation of red blood	
	cells and haemoglobin / helps maintain healthy	
	red blood cells, which play a role in oxygen	
	transportation	
	 Iron is necessary for normal neurological 	
	development in the foetus	
	 Iron contributes to normal cognitive function 	
	 Iron contributes to normal oxygen transport in 	
	the body	

NUTRIENT OR	SELECT ONE OR MORE OPTION OF THE	ADDITIONAL CONDITIONS AND/OR
SUBSTANCE FOR	PERMITTED WORDING FOR A FUNCTION CLAIM	RESTRICTIONS AND/OR
WHICH A FUNCTION		ADDITIONAL STATEMENT(S) OR
CLAIM IS MADE		WARNING(S) TO APPEAR ON THE
		LABEL AND IN COMMERCIAL
		MARKETING
1	2	3
	Iron contributes to the reduction of tiredness and fatigue	
Lactulose	Lactulose contributes to an acceleration of intestinal	The claim may be used only for food
	transit / Lactulose is a laxative indicated in the case	which contains 10 g of lactulose in a
	of chronic constipation	single serving. In order to bear the
		claim, information shall be given to
		consumers that the beneficial effect is
	·	obtained with a single serving of 10 g
		lactulose per day.
Lycopene	Lycopene is a carotenoid which acts as a tissue	
,	antioxidant and so keeps cells healthy	
Lutein	Lutein is a carotenoid, which acts as a tissue	
	antioxidant, specifically important for eye health.	
Magnesium	 Magnesium contributes to normal energy 	
· ·	metabolism / energy-yielding metabolism	
	Magnesium is necessary for normal nerve and	
	muscle function / functioning of the nervous and	
	muscle systems / Helps maintain a healthy	
	muscle and nervous system / Plays role in	
	transmission of nerve and muscle impulses,	
	therefore preventing irritability nervousness	
	Magnesium is necessary for normal electrolyte	
	balance	
	Magnesium contributes to a reduction of	
	tiredness and fatigue	
	Magnesium contributes to electrolyte balance /	
	aids in maintaining proper pH balance	
	Magnesium contributes to normal protein	
	synthesis	
	Magnesium contributes to normal psychological	
	function	
	Magnesium contributes to the maintenance of	
	normal teeth	
	Magnesium contributes to the maintenance of	
	normal bones / is necessary for teeth and bone	
	structure / assists in calcium and potassium	
	uptake and plays role in formation of bone	
	Magnesium has a role in the process of cell	
	division	
	 Magnesium helps to utilise carbohydrates, 	
	proteins, fats & minerals; aids as vital catalyst in	

NUTRIENT OR SUBSTANCE FOR WHICH A FUNCTION CLAIM IS MADE	SELECT ONE OR MORE OPTION OF THE PERMITTED WORDING FOR A FUNCTION CLAIM 2 enzyme activity, especially those enzymes involved in energy production	ADDITIONAL CONDITIONS AND/OR RESTRICTIONS AND/OR ADDITIONAL STATEMENT(S) OR WARNING(S) TO APPEAR ON THE LABEL AND IN COMMERCIAL MARKETING 3
Manganese	 Manganese is necessary for normal bone formation, the formation of cartilage and lubrication of joints / contributes to the maintenance of bone health Manganese contributes to cell protection from free radical damage / contributes to the protection of cells from oxidative stress Manganese contributes to normal energy-yielding metabolism / is needed for protein and fat metabolism and used for energy production/energy metabolism Manganese contributes to the normal formation of connective tissue 	
Molybdenum	 Molybdenum contributes to normal sulphur amino acid metabolism Molybdenum promotes normal cell function Molybdenum aids in activation of certain enzymes Molybdenum supports bone growth and strengthening of teeth 	
Niacin	 Niacin is necessary for normal neurological function / contributes to normal functioning of the nervous system Niacin is necessary for normal energy release from food / contributes to normal energy-yielding metabolism Niacin is necessary for normal structure and function of skin and mucous membranes / contributes to the maintenance of skin and mucous membranes Niacin contributes to normal psychological function Niacin contributes to the reduction of tiredness and fatigue 	
Olive oil polyphenols	Olive oil polyphenois contribute to the protection of blood lipids from oxidative stress	The claim may be used only for Extra virgin or Virgin olive oil which contains at least 5 mg of hydroxytyrosol and its derivatives (e.g., oleuropein complex and tyrosol) per 20 g (=22 ml) of olive

NUTRIENT OR	SELECT ONE OR MORE OPTION OF THE	ADDITIONAL CONDITIONS AND/OR
SUBSTANCE FOR	PERMITTED WORDING FOR A FUNCTION CLAIM	RESTRICTIONS AND/OR
WHICH A FUNCTION		ADDITIONAL STATEMENT(S) OR
CLAIM IS MADE		WARNING(S) TO APPEAR ON THE
		LABEL AND IN COMMERCIAL
		MARKETING
1	2	3
		oil. In order to bear the claim,
		information shall be given to the
		consumer that the beneficial effect is
		obtained with a daily intake of 20 g
		(=22 ml) of Extra virgin or Virgin olive
		oil
Pantothenic acid	Necessary for normal fat metabolism	
	Pantothenic acid contributes to normal energy-	
	yielding metabolism	
	Pantothenic acid contributes to normal synthesis	
	and metabolism of steroid hormones, vitamin D	
	and some neurotransmitters	
	Pantothenic acid contributes to the reduction of	
	tiredness and fatigue	
	Pantothenic acid contributes to normal mental	
	performance	
Phosphorus	Phosphorus is necessary for teeth and bone	
	structure / contributes to the maintenance of	
	normal bones	
	Phosphorus is necessary for normal cell	
	membrane structure / contributes to normal	
	function of the cell membranes	
	Phosphorus is necessary for normal energy	
	metabolism / energy-yielding metabolism	
	Phosphorus contributes to the maintenance of	
	normal teeth	
Potassium	Potassium is necessary for normal water and	The food naturally contains no less
	electrolyte balance / works with sodium to	than 200 mg of potassium per serving
	control body's water balance	
	Potassium contributes to normal functioning of	
	the nervous system / aids in transmitting	
	electrochemical impulses.	
	Potassium contributes to normal muscle function	
	/ proper muscle contraction	
	Potassium contributes to normal blood pressure	
	/ Important for regular heart rhythm and	
	maintenance of stable blood pressure.	
Prebiotic	Prebiotics such as [name of specific prebiotic]	• The foods shall have at least 2
	beneficially affects the intestinal flora by	mg pure prebiotic per single

NUTRIENT OR SUBSTANCE FOR WHICH A FUNCTION CLAIM IS MADE	SELECT ONE OR MORE OPTION OF THE PERMITTED WORDING FOR A FUNCTION CLAIM	ADDITIONAL CONDITIONS AND/OR RESTRICTIONS AND/OR ADDITIONAL STATEMENT(S) OR WARNING(S) TO APPEAR ON THE LABEL AND IN COMMERCIAL MARKETING
1	selectively stimulating the growth of the good/ beneficial gut flora/micro-organisms / positively affects intestinal health; and An average of 6 g prebiotics is needed daily for general digestive health	serving; The prebiotic shall be one or combination of the following prebiotics: trans- galactooligosaccharide; inulin; oligofructose; fructooligosaccharides (FOS); xylooligosaccharides (XOS);
		 <u>polydextrose</u>; or <u>galactooligosaccharides</u> (GOS).
Protein	 Protein helps build and repair body tissues / is necessary for tissue building and repair Protein contributes to the maintenance of muscle mass 	
Selenium	 Selenium is necessary for normal immune system function Selenium is necessary for the normal utilization of iodine in the production of thyroid hormones Selenium is necessary for cell protection from some types of free radical damage / contributes to the protection of cells from oxidative stress Selenium contributes to normal spermatogenesis Selenium contributes to normal hair Selenium contributes to the maintenance of normal nails Selenium contributes to the normal function of the immune system Selenium contributes to the normal thyroid function 	
Vanadium	 Vanadium is needed for cellular metabolism and plays role in growth and bone and teeth formation. Vanadium plays a role in reproduction. Vanadium inhibits cholesterol synthesis. 	
	Vanadium has the ability to improve insulin	

NUTRIENT OR SUBSTANCE FOR	SELECT ONE OR MORE OPTION OF THE PERMITTED WORDING FOR A FUNCTION CLAIM	ADDITIONAL CONDITIONS AND/OR RESTRICTIONS AND/OR
WHICH A FUNCTION CLAIM IS MADE		ADDITIONAL STATEMENT(S) OR WARNING(S) TO APPEAR ON THE LABEL AND IN COMMERCIAL MARKETING
1	2	3
	utilization, resulting in improved blood sugar tolerance	
Vitamin A	 Vitamin A is necessary for normal vision / for the maintenance of good vision Vitamin A is necessary for normal skin and mucous membrane structure and function Vitamin A is necessary for normal cell differentiation / cell specialisation Vitamin A contributes to normal growth Vitamin A contributes to normal iron metabolism Vitamin A contributes to the maintenance of normal mucous membranes 	
	 Vitamin A contributes to the maintenance of normal skin Vitamin A contributes to the maintenance of normal vision Vitamin A contributes to the normal function of the immune system 	
Vitamin B₁	Thiamine is necessary for normal carbohydrate metabolism	
(Thiamine)	 Thiamine is necessary for normal neurological and cardiac function Thiamine contributes to normal energy-yielding metabolism / helps the body change the food you eat into energy. 	
	Thiamine contributes to the normal functioning of the nervous system / maintains growth and healthy nerve function. Thiamine contributes to normal psychological	
	function Thiamine contributes to the normal function of the heart	
Vitamin B ₂	Riboflavin contributes to normal iron transport and metabolism / contributes to the maintenance	
(Riboflavin)	Riboflavin Contributes to normal energy release from food / helps the body change the food you eat into energy. Riboflavin contributes to normal skin and mucous membrane structure and function	

NUTRIENT OR	SELECT ONE OR MORE OPTION OF THE	ADDITIONAL CONDITIONS AND/OR
SUBSTANCE FOR	PERMITTED WORDING FOR A FUNCTION CLAIM	RESTRICTIONS AND/OR
WHICH A FUNCTION		ADDITIONAL STATEMENT(S) OR
CLAIM IS MADE		WARNING(S) TO APPEAR ON THE
		LABEL AND IN COMMERCIAL
		MARKETING
1	2	3
	Riboflavin contributes to normal functioning of	
	the nervous system	
	Riboflavin contributes to the maintenance of	
	normal mucous membranes	
	Riboflavin contributes to the maintenance of	
	normal skin	
	Riboflavin contributes to the maintenance of.	
	normal vision	
	Riboflavin contributes to the normal metabolism	
	of iron	
	Riboflavin contributes to the protection of cells	·
	from oxidative stress	
	Riboflavin contributes to the reduction of	
	tiredness and fatigue	
Vitamin B ₆	Vitamin B ₆ is necessary for normal protein	
Vitaliiii Dg	metabolism	
(Pyridoxine)	Vitamin B ₆ is necessary for normal iron transport	
(i yildoxiiic)	and metabolism	
	• Vitamin B ₆ contributes to normal cysteine	
	synthesis	
	• Vitamin B ₆ contributes to normal energy-yielding	
	metabolism / helps the body change the food	
	you eat into energy.	
	• Vitamin B ₆ contributes to normal functioning of	
	the nervous system	
	• Vitamin B ₆ contributes to normal homocysteine	
	metabolism	
	Vitamin Be contributes to normal protein and	
	glycogen metabolism	
	 Vitamin B₆ contributes to normal psychological 	
	function	
	Vitamin B ₆ contributes to normal red blood cell	
	formation	
	Vitamin B ₆ contributes to the normal function of	
	the immune function	
	• Vitamin B ₆ contributes to the reduction of	
	tiredness and fatigue	
	Vitamin B ₆ contributes to the regulation of	
	hormonal activity	
Vitamin B ₁₂	Vitamin B ₁₂ is necessary for normal cell division /	

NUTRIENT OR	SELECT ONE OR MORE OPTION OF THE	ADDITIONAL CONDITIONS AND/OR
SUBSTANCE FOR	PERMITTED WORDING FOR A FUNCTION CLAIM	RESTRICTIONS AND/OR
WHICH A FUNCTION		ADDITIONAL STATEMENT(S) OR
CLAIM IS MADE		WARNING(S) TO APPEAR ON THE
		LABEL AND IN COMMERCIAL
		MARKETING
1	2	3
	plays a role in the process of cell division	
	Vitamin B ₁₂ contributes to normal blood	
	formation / contributes to normal red blood cell	
	formation	
	 Vitamin B₁₂ contributes to normal energy-yielding 	
	metabolism	
	Vitamin B₁₂ contributes to normal functioning of	
	the nervous system / is necessary for normal	ŕ
	neurological structure and function	
•	Vitamin B ₁₂ contributes to normal homocysteine	
	metabolism	
	Vitamin B ₁₂ contributes to normal psychological	
	function	
	Vitamin B ₁₂ contributes to the normal function of	
	the immune system	
	• Vitamin B ₁₂ contributes to the reduction of	
	tiredness and fatigue	
Vitamin C	Vitamin C contributes to iron absorption from	
	food / helps with the absorption of iron from food	
(Ascorbic acid)	/ increases iron absorption / increases iron	
	absorption	
	Vitamin C is necessary for normal connective	
	tissue structure and function	
	Vitamin C is necessary for normal blood vessel	
	structure and function	
	Vitamin C contributes to cell protection from free	
	radical damage	
	Vitamin C is necessary for normal neurological	
	function	
	Vitamin C contributes to maintain the normal	
	function of the immune system during and after	
	intense physical stress	
	Vitamin C contributes to normal collagen	
	formation for the normal function of blood	
	vessels	
	Vitamin C contributes to normal collagen	
	formation for the normal function of bones`	
	Vitamin C contributes to normal collagen	
	formation for the normal function of cartilage	
	Vitamin C contributes to normal collagen	
	formation for the normal function of gums	

NUTRIENT OR SUBSTANCE FOR WHICH A FUNCTION CLAIM IS MADE	SELECT ONE OR MORE OPTION OF THE PERMITTED WORDING FOR A FUNCTION CLAIM	ADDITIONAL CONDITIONS AND/OR RESTRICTIONS AND/OR ADDITIONAL STATEMENT(S) OR WARNING(S) TO APPEAR ON THE LABEL AND IN COMMERCIAL MARKETING
1	2	3
	 Vitamin C contributes to normal collagen formation for the normal function of skin Vitamin C contributes to normal collagen formation for the normal function of teeth Vitamin C contributes to normal energy-yielding metabolism Vitamin C contributes to normal functioning of the nervous system Vitamin C contributes to normal psychological function Vitamin C contributes to the normal function of the immune system Vitamin C contributes to the protection of cells from oxidative stress Vitamin C contributes to the reduction of tiredness and fatigue Vitamin C contributes to the regeneration of the reduced form of Vitamin E 	
Vitamin D	 Vitamin D is necessary for normal absorption and utilisation of calcium and phosphorus Vitamin D contributes to normal cell division Vitamin D is necessary for normal bone structure Vitamin D contributes to normal absorption/utilisation of calcium and phosphorus / helps the body utilise calcium and phosphorus, which are necessary for the normal development and maintenance of strong bones and teeth Vitamin D contributes to the maintenance of 	
	normal bones and teeth Vitamin D contributes to normal calcium levels Vitamin D contributes to the maintenance of normal muscle function Vitamin D contributes to the normal function of the immune system Vitamin D has a role in the process of cell division	
Vitamin E	Vitamin E contributes to cell protection from free radical damage / contributes to the protection of cells from oxidative stress / functions as a tissue	

NUTRIENT OR SUBSTANCE FOR WHICH A FUNCTION CLAIM IS MADE	SELECT ONE OR MORE OPTION OF THE PERMITTED WORDING FOR A FUNCTION CLAIM	ADDITIONAL CONDITIONS AND/OR RESTRICTIONS AND/OR ADDITIONAL STATEMENT(S) OR WARNING(S) TO APPEAR ON THE LABEL AND IN COMMERCIAL MARKETING
1	2	3
	 antioxidant thereby keeping cells healthy Vitamin E helps maintain a healthy immune system Vitamin E protects unsaturated fatty acids and vitamin A against oxidation in the body Vitamin E assists in cardiovascular health 	
Vitamin K	 Vitamin K is necessary for normal blood coagulation (clotting) Vitamin K contributes to normal bone structure and its maintenance 	
Water	Water contributes to the maintenance of normal regulation of the body's temperature Water contributes to the maintenance of normal physical and cognitive functions	The claim may only be used for water as defined in the Regulations relating to all Packaged Water published under the Act
Yoghurt cultures:	Yoghurt cultures, Lactobacillus delbruekii subsp. Bulgarius and Streptococcus thermophillus improve	The food shall contain at least 10 ⁸ cfu per gram
Lactobacillus delbruekii subsp. Bulgarius and Streptococcus	lactose digestion in individuals who have difficulty digesting lactose (milk sugar)	The claim shall be permitted for dairy yoghurt or fermented milk only
thermophillus Zeaxanthin	Zeaxanthin is a carotenoid which acts as a tissue antioxidant and so keeps cells healthy	
Zinc	 Zinc is necessary for normal immune system function / contributes to the normal function of the immune system / is essential for growth and maintenance of a healthy immune system. Necessary for normal cell division Contributes to normal skin structure and wound healing / promotes healing of wounds Zinc contributes to normal acid-base metabolism Zinc contributes to normal carbohydrate metabolism Zinc contributes to normal cognitive function Zinc contributes to normal DNA synthesis Zinc contributes to normal fertility and reproduction Zinc contributes to normal macronutrient metabolism Zinc contributes to normal metabolism of fatty acids 	

NUTRIENT OR	SELECT ONE OR MORE OPTION OF THE	ADDITIONAL CONDITIONS AND/OR
SUBSTANCE FOR	PERMITTED WORDING FOR A FUNCTION CLAIM	RESTRICTIONS AND/OR
WHICH A FUNCTION	:	ADDITIONAL STATEMENT(S) OR
CLAIM IS MADE		WARNING(S) TO APPEAR ON THE
		LABEL AND IN COMMERCIAL
		MARKETING
1	2	3
	Zinc contributes to normal metabolism of	
	Vitamin A	
	 Zinc contributes to normal protein synthesis 	
	Zinc contributes to the maintenance of normal	
	bones / is vital for bone formation	
	Zinc contributes to the maintenance of normal	
	hair, nails and skin	
	· Zinc contributes to the maintenance of normal	
	testosterone levels in the blood	
	Zinc contributes to the maintenance of normal	
	vision	
	Zinc contributes to the protection of cells from	
	oxidative stress	
	 Zinc has a role in the process of cell division 	
	 Zinc is necessary for normal taste and smell 	
	Zinc is a constituent of insulin and many vital	
	enzymes	
	 Sufficient intake and absorption of zinc is 	
	needed to maintain proper vitamin E levels in	·
	blood and increases the absorption of vitamin A	

Reduction of disease risk claims

- 58. The following reduction of disease risk claims that link the consumption of a food or a food constituent in the context of the total diet to the reduced risk of developing a disease or a health related condition, shall be permitted for foods, provided-
 - (1) the conditions set out in Table 5, are met:
 - (2) The food shall comply with the characteristics specified in column 3; and
 - (3) (a) The wording of the reduction of disease risk claim in column 4 may not be added to, omitted, reduced, or altered in a way which will result in a change of meaning or which will result in a change of emphasis; and
 - (b) a disease risk claim may not attribute any degree of a disease risk reduction to specific dietary guidelines.

TABLE 5: REDUCTION OF DISEASE RISK CLAIMS

CLAIM NO	NUTRIENT/DIET RELATED TO DISEASE	FOOD CHARACTERISTICS OR CRITERIA	PERMITTED WORDING OF CLAIM EXPLAINING THE DIETARY
	RISK		CONTEXT
1	2	3	4
1.	Calcium and Osteoporosis	 At least 290 mg calcium naturally present in the food per serving At least 30 mg magnesium per 100 g food Phosphorus content may not exceed calcium content 	Regular exercise and a healthy diet high in calcium and an adequate Vitamin D status may assist to maintain good bone health and may reduce the risk of osteoporosis or osteoporotic fractures later in life
2.	Enhanced bone mineral	At least 200 mg calcium	Regular exercise and a healthy diet
	density	naturally present in the food- per serving • At least 15 mg magnesium per 100 g food • Phosphorus content may not exceed calcium content	high in calcium, an adequate status in Vitamin D and other minerals essential for bone health, may assist to maintain and enhance bone mineral density and good bone health
3.	Sodium and	Food shall be low in sodium	Diets low in sodium may reduce the
	Hypertension		risk of high blood pressure, a disease associated with many risk factors, in some individuals
4.	High intake of Fruits, vegetables and a reduced risk of coronary heart disease and cancer	 Fresh, dried, canned and frozen fruit, vegetables which contains no less than 90% fruit or vegetables by weight Claim is not permitted on fruit juices, except fresh fruit juices, fruit nectars or foods with less than 90% fruit or vegetables by weight 	A high intake of fruits and vegetables contribute to heart health by reducing the risk of coronary heart disease and cancer
5.	Folic acid and Neural	The food contains no less than 40	(a) Women of child bearing age should
	tube defects	μg folic acid per single serving	consume diets rich in food folate (fruits, dark green leafy vegetables, legumes; and
			(b) consume at least 400 µg folic acid daily, through fortified grain products, fortified foods or daily nutritional supplementation, at least in the month before and three months after conception to reduce the risk of foetal neural tube birth defects
6.	Plant sterol esters and	The food-	Diets low in saturated fat and
	plant stanol esters and		cholesterol that contain 2 g of plant

	coronary heart disease	 is a fat spread including butter, cooking oil, salad dressing shall contain at least 0,8 g plant sterols equivalents per serving; is low in saturated fat; and is trans-fat free shall bear a statement on the main panel in capital letters at least 3 mm in vertical height to indicate that the particular food is suitable for the intended target group only 	sterol esters and plant stanol esters daily, may reduce the risk of heart disease by lowering cholesterol
7.	Beta-glucans in oat bran, whole grain oats and whole grain barley and Biood cholesterol	 The claim may only be used for the following single ingredient foods: oat bran, whole grain oats, whole grain barley A single serving of the food shall contain at least 1 g betaglucan from one or more of the following foods: oat bran, whole grain oats and whole grain barley. 	3 g beta glucan fibre from 60 g whole oats daily, or 40 g oat fibre daily, as part of a diet low in saturated fat and cholesterol, may reduce the risk of coronary heart disease by reducing blood cholesterol levels. and/or Diet must contain at least 3 g beta glucan per day and single serving must contain at least 1 g beta-glucan from one or more of the flowing foods: oat bran, whole grain oats and whole grain barley
8.	Wainuts and Heart disease	30 serving of raw walnuts without any added ingredients or additives	Walnuts contribute to reducing the risk of heart disease by improving the elasticity of blood vessels In order to bear the claim, information shall be given to the consumer that the beneficial effect is obtained with a daily intake of 30 g of walnuts
٤.	Potassium, blood pressure and stroke	Foods that naturally contain at least 350 mg Potassium per serving and which are low in Sodium	Diets containing foods that naturally contain at least 350 mg Potassium and which are low in Sodium may reduce the risk of high blood pressure and stroke. All fruits and vegetables contain Potassium

- 59. Health claims related to the "whole grain" concept: "100% intact whole grain", "Partially intact whole grain" and "Made with whole grain flour"
- (1) "100% Intact whole grain" health claim

Table 6: "100% Intact whole grain" health claim

FOOD CHARACTERISTICS OR CRITERIA	PERMITTED WORDING OF	UNCOOKED SINGLE INGREDIENT
	CLAIM EXPLAINING THE	FOODS FOR WHICH THE CLAIM
	DIETARY CONTEXT	"WHOLE GRAIN" IS PERMITTED
The food shall-	Diets rich in intact whole-grain	Pearl wheat
 Comply 100% in terms of the definition 	foods and other plant foods and	Pearl bariey
for "whole grain" in these regulations	low in fat and cholesterol may	Brown rice
Be 100% whole grain	reduce the risk of most chronic	 Wild rice
Naturally low in sodium	diseases of lifestyle such as	 Whole flake oats
Have a natural Low Glycaemic Index	coronary heart disease, Diabetes	Corn on the cob
value	Mellitus, cancer, normal weight	 Frozen whole kernel maize (corn)
indicate the GI category as the heading	management and gastrointestinal	Intact or cracked rye
of the claim as follows:	health	
Whole grain (low GI)		
(claim as indicated in column 2)		
No or minimal processing		

(2) "Partially intact, whole grain" health claim

Table 7: "Partially intact, whole grain" health claim

FOOD CHARACTERISTICS OR CRITERIA	PERMITTED WORDING OF CLAIM EXPLAINING
	THE DIETARY CONTEXT
The food shall-	The food may bear the following claim:
Comply 100% in terms of the definition for "whole grain" in	
these regulations	"Made with (indicate minimum %) intact whole grains
Contain at least 66% intact whole grain from one or multiple	from (list cereals). Diets rich in whole-grain cereals
cereals	and other plant foods, low in fat and cholesterol may
Indicate the quantitative ingredient declaration of the intact	reduce the risk of most chronic diseases of lifestyle.
whole grains present as part of the name/or description of the	This product is a (category) GI food.
food as well as part of the claim]	
Indicate the GI category as part of the claim as per column 2	

(3) "Made with whole grain flour" health claim

Table 8: "Made with whole grain flour" health claim

FOOD CHARACTERISTICS OR CRITERIA	PERMITTED WORDING OF
	CLAIM EXPLAINING THE
	DIETARY CONTEXT
The food shall-	The food may bear the following
• Comply 100% in terms of the definition for "whole grain flour " in these	claim
regulations	"Made with (indicate minimum %)
 Contain at least 66% whole grain flour 	whole grain flour. Diets rich in
• Indicate the quantitative ingredient declaration of the whole grain flour as	whole-grain cereals and other
part of the name/or description of the food as well as part of the claim	plant foods and low in fat and
 Indicate the GI category as part of the claim as per column 2 	cholesterol may reduce the risk of

FOOD CHARACTERISTICS OR CRITERIA	PERMITTED WORDING OF
	CLAIM EXPLAINING THE
	DIETARY CONTEXT
	most chronic diseases of lifestyle.
	This product is a (category) GI
	food.

Health claims for oral health

60. The following dental health claims shall be permitted provided the conditions for the table below are met fully:

Table 9: Approved health claims for oral health

NUTRIENT	PERMITTED WORDING FOR A CLAIM	ADDITIONAL CONDITIONS AND/OR RESTRICTIONS OF USE OF THE CLAIM	FOODSTUFF CATEGORY
		OR THE FOOD AND/OR ADDITIONAL	
		STATEMENT OR WARNING ON LABELS	
		AND IN COMMERCIAL MARKETING	
The polyol/sugar alcohol Xylitol	Frequent eating of foods high in sugars and starches that are retained on the teeth between meals can promote tooth decay. The sugar alcohol(s) [name sugar alcohol(s)] used as a sweetener in name the product) does(do) not promote tooth decay/dental caries.	 Chewing gum sweetened with Xylitol where Xylitol is the main sweetener in the foodstuff In order to bear the claim the following additional shall appear on the label: The beneficial effect is obtained with a consumption of 2-3 g of chewing gum sweetened with 100% xylitol at least 3 times per day after meals 	Chewing gum
Polyols/Sugar alcohols	Sugar-free chewing gum contributes to the maintenance of tooth mineralisation	The claim may be used for chewing gum sweetened with sugar alcohols and which contain no added sugar or non-nutritive sweeteners. Information shall be given to the consumers that the beneficial effect is obtained with chewing, for at least 20 minutes after eating or drinking.	Chewing gum
Polyols/Sugar alcohols	Sugar-free chewing gum contributes to the neutralisation of plaque acids	The claim may be used for chewing gum sweetened with sugar alcohols and which contain no added sugar or non-nutritive sweeteners. Information shall be given to the consumers that the beneficial effect is obtained with chewing, for at least 20 minutes after eating or drinking	Chewing gum
Polyols/Sugar alcohols	Sugar-free chewing gum contributes to the reduction of oral dryness	The claim may be used for chewing gum sweetened with sugar alcohols and which contain no added sugar or non-nutritive sweeteners. Information shall be given to	Chewing gum

NUTRIENT	PERMITTED WORDING	ADDITIONAL CONDITIONS AND/OR	FOODSTUFF
	FOR A CLAIM	RESTRICTIONS OF USE OF THE CLAIM	CATEGORY
		OR THE FOOD AND/OR ADDITIONAL	
		STATEMENT OR WARNING ON LABELS	
		AND IN COMMERCIAL MARKETING	
		the consumers that the beneficial effect is	
		obtained with the use of the chewing gum	
		whenever the mouth feels dry.	
Sugar-free chewing	Sugar-free chewing gum	The claim may be used for chewing gum	Chewing gum
gum with carbamide	with carbamide neutralises	sweetened with sugar alcohols and which	
	plaque acids more	contain no added sugar or non-nutritive	
	effectively than sugar-free	sweeteners. In order to bear the claim, each	
	chewing gums without	piece chewing gum shall contain at least 20	
	carbamide	mg carbamide. Information shall be given to	
		the consumers that the beneficial effect is	
		obtained with chewing, for at least 20	
		minutes after eating or drinking	

Approved health claims for physical performance/exercise

61. The following health claims related to physical performance may be made on a food complying with the criteria in Table 10 below:

Table 10: Approved health claims for physical performance

SUBSTANCE	PERMITTED WORDING	ADDITIONAL CONDITIONS AND/OR	FOOD
	FOR A CLAIM	RESTRICTIONS OF USE OF THE CLAIM	CATEGORY
		OR THE FOOD AND/OR ADDITIONAL	
		STATEMENT OR WARNING	
Creatine	Creatine increases physical	The claim may only be used for foods	Powders and
	performance in successive	targeting adults performing high	beverages
	bursts of short-term, high	intensity exercise	formulated for the
	intensity exercise	The claim may be used only for foods	specific purpose to
		which provide a daily intake of 3 g of	support and
		creatine.	enhance physical
		In order to bear the claim, information	performance in
		shall be given to the consumer on the	sport activities
		label and in advertising that the	
	-	beneficial effect is obtained with a daily	,
		intake of 3 g creatine	
Carbohydrate-	Carbohydrate-electrolyte	In order to bear the claim carbohydrate-	
electrolyte solutions	solutions contribute to the	electrolyte solutions should contain 80-350	
	maintenance of endurance	kcal/ litre (335 - 1463 kJ/ litre) from	
	performance during	carbohydrates, and at least 75% of the	
	prolonged endurance	energy should be derived from	
	exercise	carbohydrates which induce a high	
		glycaemic response (glycaemic index value	

SUBSTANCE	PERMITTED WORDING	ADDITIONAL CONDITIONS AND/OR	FOOD
	FOR A CLAIM	RESTRICTIONS OF USE OF THE CLAIM	CATEGORY
		OR THE FOOD AND/OR ADDITIONAL	
		STATEMENT OR WARNING	
		of 70 or more), such as glucose, glucose	
		polymers and sucrose. In addition, these	
		beverages should contain between 20	
		mmol/ litre (460 mg/litre) and 50 mmol	
		(1,150 mg/	
		litre) of sodium, and have an osmolality	
		between 200-33- mOsm/kg water.	
Carbohydrate-	Carbohydrate-electrolyte	In order to bear the claim carbohydrate-	
electrolyte solutions	solutions enhance the	electrolyte solutions should contain 80-	
	absorptions of water during	350kcal/ litre (335 - 1463 kJ/ litre) from	
	physical exercise	carbohydrates, and at least 75% of the	
		energy should be derived from	
		carbohydrates which induce a high	
		glycaemic response (Glycaemic Index value	
		of 70 or more), such as glucose, glucose	
		polymers and sucrose. In addition, these	
		beverages should contain between 20	
		mmol/litre (460 mg/litre) and 50 mmol (1,150	
		mg/litre) of sodium, and have an osmolality	
		between 200-33- mOsm/kg water.	
High biological value	Protein contributes to a		
(quality) protein	growth in muscle mass		
High GI	"High GI foods generally	Subject to the requirements of regulation 56	
	provide a fast release of		
	energy and are ideal for		
	regular sportsmen after one		
	hour's exercise or during		
	and after exercise lasting		
	more than one hour and		
	diabetic individuals during		
	and after exercise lasting at		
	least two hours or more."		

Claims for slimming/ weight loss

- 62. No claim shall be made that a food is an aid to weight reduction, weight loss, diet or slimming, or words to a similar effect, unless the following requirements are complied with:-
 - (1) The food shall be labelled with the words "ONLY EFFECTIVE AS PART OF AN ENERGY-CONTROLLED PRUDENT DIET AND AN INCREASE IN MODERATE PHYSICAL ACTIVITY" in bold, capital letters not less than 3,0 mm in font height.

- (2) Subject to these regulations, in particular regulations 53(2) and 53(12) and notwithstanding regulation 55(1)(c), the total energy of the food shall be at least 40% less than the same quantity of reference food; Provided that a content claim about energy, including the word "diet" or "zero" or words to a similar effect, shall not be used as a descriptor in the name, brand name or trade name or in any other manner.
- (3) No words, pictures or graphics which imply that the food has weight loss properties, may result in weight loss or slimming, directly or indirectly, shall be permitted, unless fully compliant with regulation 62.
- (4) The single serving indication is equal or less than the single serving sizes indicated in Annexure 6 and a statement to the effect that the slimming effect is only applicable when consumption of the food is in accordance with the recommended serving size as well as the recommended number of daily servings as indicated on the label, in capital letters not less than 3,0 mm in font height;
- (5) Subject to the composition criteria referred to in Regulation 56(2), the GI of the food shall be low, and the GL equal to or less than 10 for a snack or a carbohydrate-rich main meal component, equal to or less than 20 for a complete breakfast or light meal and equal to or less than 25 for a complete main meal.
- (6) No reference shall be made to the rate (e.g. "lose 3 kg in one week") or amount (e.g. "lose 3 kg") of weight loss, or any suggestion that it would be detrimental to health not to consume a certain type of food, or a claim which suggest that health could be adversely affected by not consuming the food.
- (7) In the case of formulated meal replacements for the purpose of slimming, weight loss/ weight reduction, or diet, the food shall in addition to Regulation 62 comply with the Codex standard for formula foods for use in weight control diets.
- (8) No food containing a weight management substance or ingredient that is linked to or is implicated to have an effect on reducing energy intake and/or on energy uptake, and/or increases energy expenditure; result in actions such as thermogenesis, increased satiety, appetitive suppression, absorption blocking effect, or similar actions shall be permitted, unless a dossier which provides conclusive scientific substantiation, in the format and to the requirements of Guidelines 15 and 16, is submitted to the Directorate: Food Control prior to market appearance; Provided that no scheduled substance under the Medicines and

Related Substance Control Act (Act No.101 of 1965) as amended, shall be permitted in such food.

(9) Taking portion control/serving size and reduction of energy intake into consideration, all foods fit in an energy-controlled, healthy diet, therefore no claim for weight management/control/maintenance, in any way, shall be permitted.

Detoxification

63. Any health claim that implies that a food may have any detoxification or any similar effects or benefits shall be considered a medicinal claim and shall be prohibited for foods.

EXEMPTIONS

- 64. (1) The following ingredients of a food need not be named in the list of ingredients:
 - (a) any substance other than water, when used as a solvent or carrier for a food additive or nutrient, and which is used in an amount that is consistent with good manufacturing practice:, Provided that the solvent or the carrier shall not be nor contain traces of a common allergen specified in these regulations;
 - (b) water or other volatile ingredients that evaporated in the course of manufacture.
 - (2) The following foods need not be labelled with a list of ingredients:
 - (a) vinegars which are derived by means of natural fermentation exclusively from a single basic product and to which no other ingredient has been added; or
 - (b) a food which consists of a single ingredient and of which the name clearly identifies the single ingredient.
 - (3) The following foods are, unless otherwise provided in these regulations, exempted from the requirements regarding labelling, but when an energy, health, ingredient content or nutrition claim is made, the exemption falls away and all these regulations shall become applicable;
 - (a) eggs except for a date on which the eggs were packed;
 - (b) fresh, unprocessed vegetables which have not been mixed;
 - (c) fresh, unprocessed fruit which have not been mixed;
 - (d) wheat products, which are not pre-packed (naked bread) except for information on the list of ingredients, allergens, an appropriate date marking and price, which must be printed on the scale label;
 - (e) any drink regulated by the Liquor Products Act, 1989 (Act No. 60 of 1989): Provided for an indication of allergens and where health statements or warnings

are required, these statements shall be indicated on the label in accordance with relevant regulations under the Act;

- (f) unprocessed fish, marine products, meat of animals and birds referred to in Schedule 1 of the Meat Safety Act, 2000 (Act No.40 of 2000) that is intended for human consumption in South Africa, that have not been pre-packed, except-
 - (i) for an indication of the type of animal, bird, fish or marine product;
 - (ii) the information of (i) above-
 - (aa) appears on a poster placed in close vicinity of where the food is offered for sale:
 - (bb) is easily legible and in clear view of the consumer;
 - (cc) is in black, bold letters of which the size is suitable for easy legibility on a poster, where such foods are exhibited for sale in bulk:
- (g) unprocessed fish, marine products, meat of animals and birds referred to in Schedule 1 of the Meat Safety Act, 2000 (Act No. 40 of 2000) that is intended for human consumption in South Africa, <u>pre-packed</u> in such a way that the purchaser is able to identify the contents of the package, except for an indication of the type of animal, bird, fish or marine product, the date on which the product was packaged, the price per kilogram, as well as the price per container, printed on the scale label;
- (h) any ready-to-consume food, prepared and sold on the premises of a catering establishment for consumption, except for information on the list of ingredients, allergens, QUID, an appropriate date marking, printed on the scale label or kept on file and made available immediately upon request, whatever the case may be;
- (i) unpacked or transparently-packed servings of foods that are sold as snacks or meals on the premises of preparation, except for information on the list of ingredients, allergens, QUID, an appropriate date marking and price, printed on the label scale;
- (j) flour confectionary intended to be consumed within 48 hours of manufacture, except for information on the list of ingredients, allergens, QUID, an appropriate date marking and price, printed on the label scale; and
- (k) ice, except for the name and address of the manufacturer.

COMMERCIAL MARKETING OF FOODS AND NON-ALCOHOLIC BEVERAGES TO CHILDREN

65. No food or non-alcoholic beverage shall be marketed to children unless it complies with all the criteria in Guideline 14.

LABELLING OF ENTERAL FOODS FOR THE DIETARY MANAGEMENT OF PERSONS WITH SPECIFIC MEDICAL CONDITIONS (FSMPS)

- 66. (1) Foods are regarded as enteral foods for special medical purposes (FSMPs) if they are -
 - (a) formulated to be consumed or administered orally, through a naso-gastric tube or other enteral route that uses the digestive system, under the supervision of a physician or registered dietician;
 - (b) intended for the exclusive or partial feeding of a patient who-
 - (i) because of therapeutic or chronic medical needs, is seriously ill or who requires use of the product as a major component of a disease or condition's specific dietary management;
 - (i) has limited or impaired capacity to take, digest, absorb or metabolise ordinary foods or certain nutrients contained therein;
 - (ii) has special, distinctive, medically-determined nutritional requirements, determined by the underlying medical condition; and whose dietary management cannot be achieved by modification of the normal diet, other foods for special dietary uses or by a combination of the two;
 - (c) specially formulated and processed for the specific dietary management of a disease or condition for which distinctive nutritional requirements, based on recognized scientific principles, are established by medical evaluation (as opposed to naturally occurring food used in a natural state);
 - (d) for persons of all ages with specific medical conditions, excluding infant formula and follow-on formula for the special dietary management for infants with specific medical conditions which are intended for infants up to the age of 1 years;
 - (e) not making any nutrient, ingredient content or health claims, but limit indications for use to a statement about the dietary requirements for the special medical condition it was formulated for; and
 - (f) presented as a FSMPs according to the requirements of regulation 66 and Guideline 17:
 - (2) Enteral foods for special medical purposes for persons with specific medical conditions, exclude foods presented in any manner for the dietary management or support of persons living with HIV/AIDS, tuberculosis, moderate acute malnutrition (MAM), not acute malnutrition (NAM) overnutrition or general nutritional support during convalescence.
 - (3) The formulation of enteral foods for special medical purposes for patients with specific medical conditions shall be based on generally recognised medical and nutritional principles.

- (4) Subject to regulation 66(1)(c), when enteral foods are used as the sole source of nutrition, the composition of these foods shall be such that they can provide the full range of essential macro- and micronutrients in amounts proven to be optimal when used as long term sole source of nutrition: Provided that in such cases an indication that the product is "Suitable as sole source of nutrition" may be used and is subject to regulation 16(h).
- (5) The use of enteral foods for special medical purposes shall have been demonstrated, by scientific research in the form of clinical studies, to be safe and effective in meeting the nutritional requirements of persons for whom they are intended in the short or long term, whatever is appropriate. The dossier of information according to Guideline 17 to this effect, shall be kept on record and are subject to the requirements of regulation 6.
- (6) Any commercial marketing, including advertising of enteral foods for special medical purposes to the general public is prohibited.
- (7) Regulation 66 is
 - a. exempted from regulations 25 and 49; and
 - b. subject to the Regulations Relating to Foods for Infants and Young children published under the Act.
- (8) The labels of FSMPs shall provide sufficient information on the nature and purpose of the food as well as detailed instructions and precautions for its use.
- (9) The label shall indicate the following complete nutritional information per specified quantity of the foods as suggested for consumption and per 100 g/ml:
 - (a) the prescribed minimum mandatory nutritional as described in point 1 of Annexure 2; and
 - (b) the nutritional information relevant to the particular dietary modification referred to in regulation 66(5) present:
 - (c) the amounts of essential and non-essential amino acids expressed in grams (after protein) or essential fatty acids expressed in grams
 - (d) the amounts of vitamins and essential minerals, in appropriate metric units: and
 - (e) any other nutritional information relevant to the specific FSMP.
- (10) The label shall contain the following information:
 - (a) the osmolality or osmolarity;
 - (b) acid-base balance, where appropriate;
 - (c) the number of servings or portions contained in the package;

- (d) the nature of the animal or plant protein hydrolysates where applicable;
- (e) where the essential characteristic of the foods involves a specific modification of the content, or the nature of the proteins, fats or carbohydrates has been modified, the description of the modification and information on the amino acid, fatty acid or carbohydrate profile;
- (f) the prominent statement, "USE UNDER MEDICAL SUPERVISION", shall appear on the main panel of the label in bold, capital letters not smaller than 3 mm in vertical font height in an area separated from other written, printed, or graphic information:
- (g) adequate directions for the preparation, including the requirement to add other ingredients for the use of the food, if and where necessary,
- (h) adequate directions for its storage and keeping after the container has been opened;
- (i) additional prominent warning statement consisting of an explanatory statement in bold letters in an area separated from other written, printed or graphic information if the foods pose a health hazard when consumed by persons who do not have the disease(s), disorder(s) or medical condition(s) for which the food is intended when appropriate:
- (j) a statement that the product is not to be used for parenteral (intravenous) administration; also referred to as "TPN":
- (k) the statement "For the dietary management of...", indicating the specific disease(s), disorder(s) or medical condition(s) for which the product is intended, and for which it has been shown to be effective;
- (I) a statement concerning adequate precautions, known side effects, contraindications, and nutrient-drug interactions, where applicable;
- (m) a statement of the rationale for the use of the product and a description of the properties or characteristics that make it useful for the particular purpose;
- (n) if the product has been formulated for a specific age group, a statement to this effect:
- (o) a statement specifying the nutrient(s) which have been reduced, deleted, increased or otherwise modified, relative to normal requirements, and the rationale for the reduction, deletion, increase or other modification; and
- (p) feeding instructions, including the method of administration and serving size, where applicable.

REPEAL

67. R146 of 1 March 2010, R1091 of 19 November 2010 and R45 of 19 January 2012 shall be repealed from the day that these regulations come into operation.

COMMENCEMENT

- 68. (1) These regulations except the regulations identified in regulation 68(2) to 68(11) below, shall come into operation 36 months after the date of final publication; Provided that for the purpose of compliance monitoring, the date of manufacture, including foods in bulk that are re-packed for distribution as end product, will be considered the date from which full compliance to the provisions of these regulations are applicable.
 - (2) When a label is changed to make any health claim before the period for general compliance of 36 months comes to an end, regulation 68(1) becomes invalid with immediate effect and such new label shall without delay comply fully with all these regulations.
 - (3) Where a label contained a nutrition or health claim on the date of final publication of these regulations, that are not compliant with regulation 53(7) and 53(11), the label shall be corrected within 3 months after date of final publication.
 - Where a label contained wording that relates to the concept of whole grain, on the date of final publication of these regulations that are not compliant with regulations 53(7) and 53(11) and 59, the label shall be corrected within 3 months after date of final publication;
 - (5) Regulations 1, 24, 25 and 53(6)(b) in relation to raw processed meat, shall come into effect 1 month after date of final publication.
 - (6) Regulations 22(2), 25, and 54(14)(b) in relation to fruit juices shall come into effect 3 months after date of final publication.
 - (7) Regulations 16(1)(b), 46, 52(12), 53(1), 53(2) and 65 shall come into effect on the date of final publication.
 - (3) Regulation 16(2) shall become effective on 1 May 2015.

Regulation 66 shall come into effect 12 months after the date of final publication.

MINISTER, DR AARON MOTSOALED!

MINISTER OF HEALTH

(9)

D. 4/T.

ANNEXURE 1

CATEGORIES OFADDITIVES THAT MAY BE IDENTIFIED BY THEIR CATEGORY NAME IN A LIST OF INGREDIENTS

- *Acidity regulator
- *Anti-caking agent
- *Antifoaming agent
- *Antioxidant
- *Bleaching Agent
- *Bulking agent
- *Carbonating Agent
- *Colour retention agent
- *Colour / Colouring / Colourant (except Tartrazine)
- *Emulsifier
- *Emulsifying salt
- *Firming agent
- *Flavouring
- *Flavour enhancer (except MSG and sodium chloride)
- *Flour treatment agent
- *Foaming agent
- *Gelling agent
- *Glazing agent
- *Humectant
- *Propellant
- *Raising agent
- *Sequestrant
- *Stabiliser
- *Thickener

MANDATORY NUTRITIONAL INFORMATION DECLARATION

1. Format

The following format is the format of the prescribed minimum mandatory nutritional information that has to be declared on the label of all foods, unless otherwise indicated in these Regulations:

(TYPICAL) NUTRITIONAL INFORMATION (as packed /ready-to-consume)

Quantified single serving size expressed in grams or millilitres, whatever is appropriate, unless the single serving is already quantified in the third column of the Table below

	Per 100 g/ml	Per single serving	NRV per single serving (optional)
Energy (kJ)			
Protein (g)			
Total carbohydrates (g): of which Glycaemic carbohydrates (g) of which total sugar (g) Dietary fibre# (g)			
Fat (g): of which Saturated fat (g)			
Total Sodium (mg)			

^{*}Nutrient reference values (NRVs) for individuals from the beginning of 37 months and older (see Annexure 3) expressed per single serving - Declaration of this column is optional.

Place the statements required by regulation 52(4) as appropriate, as footnote(s) below the Table.

Indicate method of analysis which was used to determine dietary fibre as a footnote below the Table

2. The following format is the format that provides guidance of how and where other nutrients, other than the minimum nutritional information, shall be declared when necessary:

(TYPICAL) NUTRITIONAL INFORMATION (as packed /ready-to-consume) Quantified single serving size expressed in grams or millilitres, whatever is appropriate, unless the single serving is already quantified in the third column of the Table below

	Per 100 g/ml	Per single serving	NRV * per serving (optional)
Energy (kJ)			
Protein (g)			
Total carbohydrates: of which Glycaemic carbohydrates (g) of which total sugar (g) Dietary fibre (g) Prebiotics (Novel fibre) (g) Polyols (g)	•		
Fat (g): of which Saturated fat (g) Trans fat Monounsaturated fat (g) and/or Polyunsaturated fat (g) and/or of which Omega-3 fatty acids (mg) Cholesterol (mg)			
Total Sodium (mg)			
Any other nutrient or food component to be declared in accordance with these Regulations:			
 in alphabetical order, in the order: vitamins, minerals, others. Carotenoids and other bioactive substances GI GL 	Indicated in milligrams (mg), micrograms (mcg/ µg), or IU (International Unit), as appropriate according to Annexure 3		

^{*}Nutrient reference values (NRVs) for individuals from the beginning of 37 months and older (see Annexure 3) expressed per single serving - Declaration of this column is optional.

Place the statements required by regulation 52(4) as appropriate, as footnote(s) below the Table. Indicate method of analysis which was used to determine dietary fibre as a footnote below the Table

ANNEXURE 2 (continued)

MANDATORY NUTRITIONAL INFORMATION DECLARATION

3. Energy conversion factors

In the calculation of the energy value of a food for the purposes of the prescribed energy statement referred to in this Annexure the following conversion factors shall be employed:

- (a) Energy: 1 kcal equals 4,18 kJ;
- (b) 1 g of glycaemic carbohydrates expressed as monosaccharide equivalents-
 - (i) measured by direct analysis shall be deemed to contribute 15.7 kJ (rounded off to 16 kJ); or
 - (ii) when calculated by difference shall be deemed to contribute 16.7 kJ (rounded off to 17 kJ);
- (c) 1 g of glucose monohydrate shall be deemed to contribute 14.1 kJ (rounded off to 14 kJ);
- (d) 1 g of glucose shall be deemed to contribute 15.7 kJ (rounded off to 16 kJ);
- (e) 1 g of fructose shall be deemed to contribute 15.7 kJ (rounded off to 16 kJ);
- (f) 1 g of lactose shall be deemed to contribute 16.5 kJ (rounded off to 16 kJ);
- (g) 1 g of sucrose shall be deemed to contribute 16.5kJ (rounded off to 16 kJ);
- (h) 1 g of starch and glycogen shall be deemed to contribute 17.5 kJ; (rounded off to 17 kJ);
- 1 g of NSP fibre shall be deemed to contribute 7.7 kJ (rounded off to (8 kJ);
- 1 g of fermentable fibre shall be deemed to contribute 11 kJ, excluding synthetic polydextrose, fructo-oligosaccharides, inulin and maize bran;
- (k) 1 g of resistant starch shall be deemed to contribute 11.4 kJ (rounded off to 11 kJ);
- 1 g of synthetic polydextrose (5% glucose) shall be deemed to contribute
 6.6 kJ (rounded off to 7 kJ);
- (m) 1 g of isolated Fructo-oligosaccharides shall be deemed to contribute 11.1kJ (rounded off to 11 kJ);
- (n) 1 g of isolated inulin (pure) shall be deemed to contribute 11.4 kJ (rounded off to 11 kJ);
- 1 g of non-digestible oligosaccharides in general conventional foods shall be deemed to contribute 11.1 kJ (rounded off to 11 kJ);

- (p) 1 g of maize bran shall be deemed to contribute 1,3 kJ;
- (q) 1 g of glycerol shall be deemed to contribute 18 kJ;
- (r) 1 g of polyol not specified hereunder shall be deemed to contribute 10 kJ;
- (s) 1 g of Erythritol shall be deemed to contribute 1.1 kJ (rounded off to 1 kJ);
- (t) 1 g of Isomalt be deemed to contribute 11.2 kJ (rounded off to 11 kJ);
- (u) 1 g of Lactitol shall be deemed to contribute 10.7 kJ (rounded off to 11 kJ);
- (v) 1 g of Maltitol shall be deemed to contribute 13 kJ;
- (w) 1 g of Mannitol shall be deemed to contribute 8.1 (rounded off to 8 kJ);
- 1 g of Polyglycitol shall be deemed to contribute 13.2 (rounded off to 13 kJ);
- (y) 1 g of Sorbitol shall be deemed to contribute 11.7 (rounded off to 12 kJ);
- (z) 1 g of Xylitol shall be deemed to contribute 13.7 kJ; (rounded off to 14 kJ);
- (aa) 1 g of protein shall be deemed to contribute 16.8 (rounded off to 17 kJ);
- (bb) 1 g of alcohol (ethanol) shall be deemed to contribute 29 kJ;
- (cc) 1 g of fat shall be deemed to contribute 37.4 kJ (rounded off to 37 kJ);
- (dd) Novel fats:
 - Salatrims, general family: 1 g shall be deemed to contribute 22 kJ;
 - Olestra: 1 g shall be deemed to contribute 0 kJ;
- (ee) 1 g of organic acid shall be deemed to contribute 13 kJ;

References:

- Elia, M and Cummings, JH. 2007. FAOWHO Scientific Update on Carbohydrates in Human Nutrition: Physiological aspects
 of energy metabolism and gastrointestinal effects of carbohydrates. European Journal of Clinical Nutrition, 61 (Suppl 1):
 S40–S74
- FAO Food and Nutrition Paper no77: Food Energy methods of analysis and conversion factors
- Life Science Research Office (LSRO): Federation of American societies for Experimental Biology (1994), The evaluation of the Energy of Certain Sugar Alcohols used as Food Ingredients
- Roberfroid M. B. (1999) Caloric value of inulin and oligofructose. J Nutr. 129: 1436S-1437S.
- · Salatrims means random short- and long-chain triacylglycerol molecules
- FSANZ: FINAL ASSESSMENT REPORT APPLICATION A537 REDUCTION IN THE ENERGY FACTOR ASSIGNED TO MALTITOL: 05 October 2005

4. Protein conversion factors

FACTORS FOR CONVERTING TOTAL NITROGEN TO PROTEIN

	FACTOR
Meat, Poultry and Fish	6,25
Eggs:	
*Whole	6.25
*Albumin	6,32
*Vitellin	6,12
Milk and milk products	6,38
Casein	6,40

Human milk	6,37
Soya	6,25
Beans	6,25
Nuts:	
*Almond	5,18
*Brazil and groundnuts	5,46
*Others	5,30
Gelatine	5,55
Oil seeds	5,30
Cereals:	
*Durum wheat	5,70
*Wheat:	
**Whole	5,83
**Bran	6,31
**Embryo	5,80
**Endosperm	5,70
*Rice	5,95
*Barley, oats and rye	5,83
*Millet	6,31
*Maize	6,25
Chocolate and cocoa	4,74
Mushrooms	4,38
Yeast	5,70
Compound foods (mixed proteins)	6,25

DAILY NUTRIENT REFERENCE VALUES (NRVs) FOR THE PURPOSES OF THESE REGULATIONS

NUTRIENT	UNIT OF MEASUREMENT	INDIVIDUALS FROM THE BEGINNING OF 37 MONTHS AND OLDER
MACRO NUTRIENTS		
Protein	G	56
Saturated fat	G	20
MICRO NUTRIENTS		
Vitamin A ^a	μg	800
Vitamin B ₁ or thiamine	mg	. 1,2
Vitamin B ₂ or riboflavin	mg	1,3
Nicotinic acid, nicotinamide or	mg	16
niacin ^e		
Vitamin B ₆ or pyridoxine	mg	1,7
Folic acid(added to food) or	μg	400
folate (naturally occurring in		
food)		
Vitamin B ₁₂ or	μg	2,4
cyanocobalamin		
Biotin	μ Q	30
Pantothenic acid	mg	5
Vitamin C or ascorbic acid	mg	100
Vitamin D ^b	μg	15
Vitamin E ^c	mg te	15
Vitamin K ^d	μg	120
Boron***	Mg	1.5***
Calcium	Mg	1300
Chromium	μg	35
Copper	Mg	0.9
lodine	μQ	150
iron	Mg	13
Magnesium	Mg	365
Manganese	Mg	2.3
Molybdenum	μĞ	45
Phosphorus	Mg	1250
Potassium****	Mg	Not less than 4700 per day
Sodium	Mg	Not more than 2000 per day
Selenium	μg	55
Vanadium****	Mg	0.9***
Zinc	Mg	10
Choline	Mg	550

The values used in this Table are based on Recommended Dietary Allowances (RDAs) which will meet the needs of nearly all (97 to 98%) healthy individuals to prevent nutrient deficiencies. RDA values are not necessarily enough to maintain optimum nutritional status and prevent chronic disease. These values are therefore considered to be the minimum amounts necessary to achieve and maintain optimum nutritional status which will assist in the reduction of disease, specifically degenerative diseases of lifestyle.

- The NRV for Boron is 50% of the UL for the age group 1 to 3 years. No value for the age group birth to 1 year could be established due to lack of data on adverse effects for this age group.
- The NRV value for Vanadium is 50% of the UL value for males and females from 19 to 70 years old since no value could be established due to lack of data on adverse effects for the other age groups.
- ***** Applicable to Potassium naturally present in food but exclude any added potassium.

Conversion factors for Vitamins and minerals

- 1 mcg Retinol activity equivalents (RAE) = 1 mcg retinol = 3,33 l.U. (International units) vitamin A activity from retinol = 1 mcg of all-trans-retinol = 12 mcg all trans dietary ß-carotene = 24 mcg other dietary pro-vitamin A carotenoids, excluding pro-vitamin A carotenoids from red palm oil, red palm oil carotenoids = 2 mcg all-trans-ß-carotene from red palm oil.
- As cholecalciferol: 1 mcg cholecalciferol (Vitamin D_3) and Ergocalciferol (Vitamin D_2) = 40 l.U. of Vitamin $D_{2 \text{ and } 3}$.
- As d alpha tocopherol: mg = TE. 1 mg (d alpha tocopherol) = 1,49 l.U. of Vitamin E.
- Vitamin K_1 and K_2 when naturally present in food and does not included added Vitamin K_1 and K_2
- Niacin 1 mg niacin equivalents (NE) = 1 mg niacin =60 mg tryptophan.
- Folate 1 μ g dietary folate equivalents (DFE) = 1 μ g food folate =0.6 μ g folic acid added to food or as supplement consumed with food = 0.5 μ g folic acid as supplement taken on an empty stomach.

LIST OF FOODS AND INGREDIENTS EXEMPTED FROM A BEST BEFORE DATE

- Any alcoholic beverage as described in the Liquor Products Act, 1989 (Act No.60 of 1989).
- Chewing gum.
- Confectionary products consisting of flavoured and/or coloured sugars.
- Fresh fruits and vegetables which have not been peeled or cut or similarly treated.
- Biltong and dried sausage which have not been pre-packed.
- Honey, except for the date the honey was pre-packed.
- Ready-to-consume flour confectionary, provided that the date of manufacture is indicated on the label or in the direct vicinity where the products are displayed.
- Sugars.
- Unprocessed, unpacked fish, unprocessed, unpacked meat and poultry which have not been pre-packed.
- Vinegar.

EVALUATION OF PROTEIN QUALITY FOR THE PURPOSE OF WHEN A PROTEIN CLAIM IS MADE

1. Recommended reference amino acid scoring pattern* contains (per 1g protein):

Histamine	17.0 mg
Isoleucine	30.5 mg
Leucine	62.0 mg
Lysine	50.0 mg
Methionine plus cysteine	24.0 mg
Phenylalanine plus tyrosine	43.5 mg
Threonine	. 26.00 mg
Tryptophan	6.8 mg
Valine	40.5 mg

^{*2007} FAO/WHO/UNU suggested pattern of amino acids average requirements for children (1-10 years)

2. Template

Reference amino acid pattern per 1g protein*		•	le food nformation**	Amino acids expressed as % from reference amino acids	
			Analysed amino acids (g) in 100 g edible food/g. total protein	Conversion to amino acids (g) in 1 gram protein in food	Rounded off to 2 decimal points (0.00)
Histidine (g)		0.017			
Isoleucine (g)		0.0305			
Leucine (g)		0.062			
Lysine (g)		0.05			
Methionine cystine (g)	plus	0.024			
Phenylalanine tyrosine (g)	plus	0.0435			
Threonine (g)		0.026			
Tryptophan (g)		0.0068			
Valine (g)		0.0405			

^{*2007} FAO/WHO/UNU suggested pattern of amino acids average requirements for children (1-10 years)
** Source of information

3a. Example 1: Skim milk, fresh (compliant in terms of protein quality)

Reference amino acid pattern per 1g protein*		Information sou	Ik, fresh rce: MRC Tables w code 2775)**	Amino acids expressed as % from reference amino acids		
			Analysed amino acids (g) in 100 g edible food/ 3.4g.total protein	Conversion to amino acids (g) in 1 gram protein in food	Rounded off to 2 decimal points (0.00)	
Histidine (g)		0.017	0.092	0.027058824	159.17	√
Isoleucine (g)		0.0305	0.206	0.060588235	198.65	\checkmark
Leucine (g)	- "	0.062	0.334	0.098235294	158.44	√
Lysine (g)		0.050	0.27	0.079411765	158.82	$\sqrt{}$
Methionine cystine (g)	plus	0.024	0.118	0.034705882	144.61	V
Phenylalanine tyrosine (g)	plus	0.0435	0.33	0.097058824	223.12	√ √
Threonine (g)		0.026	0.154	0.045294118	174.208	√
Tryptophan (g)		0.0068	0.048	0.014117647	207.61	√
Valine (g)		0.0405	0.228	0.067058824	165.58	V

^{*2007} FAO/WHO/UNU suggested pattern of amino acids average requirements for children (1-10 years) **Fatty acid and amino acid composition tables – Supplement to MRC Food Composition Tables (1991)

3b. Example 2: Peanut butter, smooth (non-compliant in terms of protein quality)

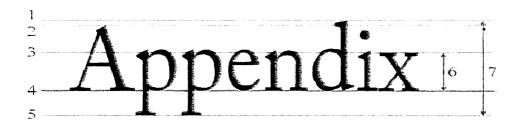
Reference amino acid pattern per 1g protein*		Information sou	ter, smooth rce: MRC Tables w code 3485)**	Amino acids expressed as % from reference amino acids			
			Analysed amino acids (g) in 100 g edible food/ 24.6g.total protein	Conversion to amino acids (g) in 1 gram protein in food	1	Rounded off to 2 decimal points (0.00)	
Histidine (g)		0.017	0.622	0.025284553	148.73	V	
Isoleucine (g)		0.0305	0.865	0.035162602	115.29	V	
Leucine (g)		0.062	1.594	0.064796748	104.51	V	
Lysine (g)		0.05	0.883	0.035894309	71.79	χ	
Methionine cystine (g)	plus	0.024	0.302	0.012276423	51.15	x	
Phenylalanine tyrosine (g)	plus	0.0435	1.275	0.051829268	119.15	V	
Threonine (g)		0.026	0.842	0.034227642	131.64	1	
Tryptophan (g)		0.0068	0.239	0.009715447	142.87	V	
Valine (g)		0.0405	1.031	0.041910569	103.48	√	

^{*2007} FAO/WHO/UNU suggested pattern of amino acids average requirements for children (1-10 years)

^{** **}Fatty acid and amino acid composition tables – Supplement to MRC Food Composition Tables (1991)

LETTER SIZES: DEFINITION OF x-HEIGHT

x-HEIGHT



Interpretation Key

1	Ascender line	
2	Cap line	
3	Mean line	
4	Baseline	
5	Descender line	
6	x-height	
7	Font size	

NOTICE - CHANGE OF TELEPHONE NUMBERS: GOVERNMENT PRINTING WORKS

As the mandated government security printer, providing world class security products and services, Government Printing Works has adopted some of the highly innovative technologies to best serve its customers and stakeholders. In line with this task, Government Printing Works has implemented a new telephony system to ensure most effective communication and accessibility. As a result of this development, our telephone numbers will change with effect from 3 February 2014, starting with the Pretoria offices.

The new numbers are as follows:

Switchboard : 012 748 6001/6002

012 748 6205/6206/6207/6208/6209/6210/6211/6212 Advertising

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Maps : 012 748 6061/6065 BookShop@gpw.gov.za

Debtors : 012 748 6060/6056/6064 PublicationsDebtors@gpw.gov.za

Subscription: 012 748 6054/6055/6057 Subscriptions@gpw.gov.za

SCM 012 748 6380/6373/6218 :

012 748 6236/6242 **Debtors**

Creditors 012 748 6246/6274

Please consult our website at www.gpwonline.co.za for more contact details.

The numbers for our provincial offices in Polokwane, East London and Mmabatho will not change at this stage.

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