Recommendation for Nutrition Information and Front of Pack Labelling

Food and Drugs Act C:30

# Topics

- Nutrition Labelling
- Nutrient Reference values
- Nutritional Tolerances

# **Nutrition Labelling**

# Nutrition Labelling

- CAC/GL-2, 1985 CODEX Guideline on Nutrition Labelling
- Formats originating from outside of the Caribbean Region in line with international standards may be used provided the source country/region is declared.

# Nutrient Reference values

## Nutrient Reference Values

- CAC/GL-2, 1985 CODEX Guideline on Nutrition Labelling
  - Nutrient Reference Values Requirements (NRV-Rs)
  - Nutrient Reference Values Non communicable diseases (NRV-NCDs) US FDA Daily Values
- Other nutrient reference values originating from countries or regions outside of the Caribbean region may be used once the country or region of origin is declared.
- US RDA Recommended Dietary Allowance (RDA) Food and Nutrition Board, Institute of Medicine –
- US DV Daily Values A Food Labeling Guide, Guidance for the Industry (Jan 2013)
- UK Guideline Daily Amounts (GDA) (EU Regulation 2011)
- UK Reference Nutrient Intakes (RNI) (UK 2011)
- Other countries

### FRONT OF PACK LABELING

- Supports transparent Nutrition information to the consumer
- Provides useful and easy-to-understand on-pack nutrition information
- Front of pack GDA facilitates consumers to make informed choices
- GDA for children is recommended to support parents in making informed choices for their children
- Support in addressing the current increase in obesity among the population (children included)
- Front of Pack Labelling can be an optional requirement, not mandatory

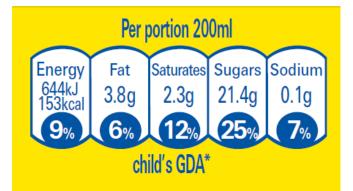
## Monochrome GDA

### **ADULT or FAMILY**

Per portion 115g Energy 1432kJ 341kcal 17% adult's GDA\*

#### **CHILD**





#### **ADULT or FAMILY**

Nutrition Information	Per 100g	Per portion 115g	%GDA* per portion		
Energy	1244kJ 296kcal	1432kJ 341kcal	17%		
Fat	9.8g	11.3g	16%		
of which saturates	2.6g	3.0g	15%		
Carbohy drate	41.2g	47.4g	18%		
of which sugars	5.3g	6.1g	7%		
Fibre	1.0g	1.2g	5%		
Protein	10.2g	11.7g	23%		
Sodium	0.4g	0.5g	21%		

\*Guideline Daily Amounts of an average adult (8400 kJ/2000 kcal) Pack contains 4 portions Portions should be adjusted for children of different ages

#### **CHILD**

Nutrition Information	Per 100g	Per portion 90g	%GDA* per portion
Energy	1244kJ 236kcal	1120kJ 266kcal	16%
Fat	9.8g	8.8g	15%
of which saturates	2.6g	2.3g	12%
Carbohydrate	41.2g	37.1g	16%
of which sugars	5.3g	4.8g	6%
Fibre	1.0g	0.9g	6%
Protein	10.2g	9.2g	42%
Sodium	0.4g	0.4g	29%

\*Guideline Daily Amounts of an average 8 year-old child (7140 kJ/1700 kcal) Pack contains 5 portions Portions should be adjusted for children of different ages

### **Guideline Daily Amounts (GDA)**

Nutrient	Adult GDA	Child GDA				
Energy	2000 kcal / 8400	1700 kcal / 7140				
Lifergy	kJ	kJ				
Fat	70 g	60 g				
Of which Saturates	20 g	20 g				
Carbohydrates	260 g	260 g				
Of which Sugars	90 g	85 g				
Fibre	25 g	15 g				
Protein	50 g	22 g				
Salt	6 g	3.5 g				
Sodium	2.4 g	1.4 g				

#### CODEX NUTRIENT REFERENCE VALUES - REQUIREMENTS

Vitamins	
Vitamin A (μg)	800*
Vitamin D (μg)	5"
Vitamin C (mg)	100
Vitamin K (μg)	60
Thiamin (mg)	1.2
Riboflavin (mg)	1.2
Niacin (mg NE)	15"
Vitamin B6 (mg)	1.3
Folate (µg DFE)	400
Vitamin B12 (µg)	2.4
Pantothenate (mg)	5
Biotin (µg)	30
Minerals	
Calcium (mg)	1,000
Magnesium (mg)	300
Iron (mg)	14
Zinc (mg)**	11 (30% dietary absorption; Mixed diets, and lacto-ovo vegetarian diets that are not based on unrefined cereal grains or high extraction rate (>90%) flours)  14 (22% dietary absorption; Cereal-based diets, with >50% energy intake from cereal grains or legumes and negligible intake of animal protein)
lodine (µg)	150**
Copper	Value to be established
Selenium (µg)	60
Manganese (mg)	3
Molybdenum ((µg)	45
Other	
Protein (g)	50

<sup>\*</sup> For the declaration of  $\beta$ -carotene (provitamin A) the following conversion factor should be used: 1  $\mu g$  retinol = 6  $\mu g$   $\beta$ -carotene

<sup>\*\*</sup> Competent national and/or regional authorities should determine an appropriate NRV-R that best represents the dietary absorption from relevant diets.

#### CODEX NUTRIENT REFERENCE VALUES - REQUIREMENTS

#### Conversion factors for niacin and folate equivalents

Vitamin	Dietary equivalents	
Niacin	1 mg niacin equivalents (NE) =	1 mg niacin 60 mg tryptophan
Folate	1 μg dietary folate equivalents (DFE) =	1 μg food folate 0.6 μg folic acid added to food or as supplement consumed with food 0.5 μg folic acid as supplement taken on an empty stomach

The conversion factors for vitamin equivalents in the Table provide supporting information for national authorities to enable national authorities to determine the application of NRVs at national level.

#### 3.4.4.2 NRVs-NCD

Intake levels not to exceed

Saturated fatty acids 20 g<sup>8,9</sup>

Sodium 2 000 mg<sup>10</sup>

Intake levels to achieve

Potassium 3 500 mg<sup>10</sup>

Dietary Reference Intakes (DRIs): Recommended Dietary Allowances and Adequate Intakes, Vitamins

Food and Nutrition Board, Institute of Medicine, National Academies

Life Stage Group	Vitamin A (μg/d)"	Vitamin C (mg/d)	Vitamin D (μg/d) <sup>b,c</sup>	Vitamin E (mg/d) <sup>d</sup>	Vitamin K (μg/d)	Thiamin (mg/d)	Riboflavin (mg/d)	Niacin (mg/d) <sup>e</sup>	Vitamin B <sub>6</sub> (mg/d)	Folate (µg/d)/	Vitamin B <sub>12</sub> (µg/d)	Pantothenic Acid (mg/d)	Biotin (µg/d)	Cholin (mg/d)
Infants	•	•	•	•	•		•	•	•	•	•	•	•	•
0 to 6 mo	400*	40*	10	4*	2.0*	0.2*	0.3*	2*	0.1*	65*	0.4*	1.7*	5*	125*
6 to 12 mo	500*	50*	10	5*	2.5*	0.3*	0.4*	4*	0.3*	80*	0.5*	1.8*	6*	150*
Children														
1-3 y	300	15	15	6	30*	0.5	0.5	6	0.5	150	0.9	2*	8*	200*
4–8 y	400	25	15	7	55*	0.6	0.6	8	0.6	200	1.2	3*	12*	250*
Males														
9-13 v	600	45	15	11	60*	0.9	0.9	12	1.0	300	1.8	4*	20*	375*
14-18 v	900	75	15	15	75*	1.2	1.3	16	1.3	400	2.4	5*	25*	550*
19-30 y	900	90	15	15	120*	1.2	1.3	16	1.3	400	2.4	5*	30*	550*
31-50 y	900	90	15	15	120*	1.2	1.3	16	1.3	400	2.4	5*	30*	550*
51-70 v	900	90	15	15	120*	1.2	1.3	16	1.7	400	2.4h	5*	30*	550*
> 70 y	900	90	20	15	120*	1.2	1.3	16	1.7	400	2.4h	5*	30*	550*
Females														
9-13 y	600	45	15	11	60*	0.9	0.9	12	1.0	300	1.8	4*	20*	375*
14-18 v	700	65	15	15	75*	1.0	1.0	14	1.2	400'	2.4	5*	25*	400*
19-30 y	700	75	15	15	90*	1.1	1.1	14	1.3	400'	2.4	5*	30*	425*
31-50 y	700	75	15	15	90*	1.1	1.1	14	1.3	400'	2.4	5*	30*	425*
51-70 y	700	75	15	15	90*	1.1	1.1	14	1.5	400	$2.4^{h}$	5*	30*	425*
> 70 y	700	75	20	15	90*	1.1	1.1	14	1.5	400	$2.4^{h}$	5*	30*	425*
Pregnancy														
14-18 y	750	80	15	15	75*	1.4	1.4	18	1.9	600/	2.6	6*	30*	450*
19-30 y	770	85	15	15	90*	1.4	1.4	18	1.9	600'	2.6	6*	30*	450*
31-50 y	770	85	15	15	90*	1.4	1.4	18	1.9	600′	2.6	6*	30*	450*
Lactation														
14-18 y	1,200	115	15	19	75*	1.4	1.6	17	2.0	500	2.8	7*	35*	550*
19–30 y	1,300	120	15	19	90*	1.4	1.6	17	2.0	500	2.8	7*	35*	550*
31-50 y	1,300	120	15	19	90*	1.4	1.6	17	2.0	500	2.8	7*	35*	550*

NOTE: This table (taken from the DRI reports, see <a href="https://www.nap.edu">www.nap.edu</a>) presents Recommended Dietary Allowances (RDAs) in bold type and Adequate Intakes (AIs) in ordinary type followed by an asterisk (\*). An RDA is the average daily dietary intake level; sufficient to meet the nutrient requirements of nearly all (97-98 percent) healthy individuals in a group. It is calculated from an Estimated Average Requirement (EAR). If sufficient scientific evidence is not available to establish an EAR, and thus calculate an RDA, an AI is usually developed. For healthy breastfed infants, an AI is the mean intake. The AI for other life stage and gender groups is believed to cover the needs of all healthy individuals in the groups, but lack of data or uncertainty in the data prevent being able to specify with confidence the percentage of individuals covered by this intake.

<sup>&</sup>quot;As retinol activity equivalents (RAEs). 1 RAE = 1 μg retinol, 12 μg β-carotene, 24 μg α-carotene, or 24 μg β-cryptoxanthin. The RAE for dietary provitamin A carotenoids is two-fold greater than retinol equivalents (RE), whereas the RAE for preformed vitamin A is the same as RE.

bAs cholecalciferol. 1 µg cholecalciferol = 40 IU vitamin D.

<sup>&</sup>quot;Under the assumption of minimal sunlight.

<sup>&</sup>quot;As α-tocopherol includes RRR-α-tocopherol, the only form of α-tocopherol that occurs naturally in foods, and the 2R-stereoisomeric forms of α-tocopherol (RRR-, RSR-, RRS-, and RSS-α-tocopherol) that occur in fortified foods and supplements. It does not include the 2S-stereoisomeric forms of α-tocopherol (SRR-, SSR-, SRS-, and SSS-α-tocopherol), also found in fortified foods and supplements.

As niacin equivalents (NE). 1 mg of niacin = 60 mg of tryptophan; 0-6 months = preformed niacin (not NE).

As dietary folate equivalents (DFE). 1 DFE = 1 µg food folate = 0.6 µg of folic acid from fortified food or as a supplement consumed with food = 0.5 µg of a supplement taken on an empty stomach.

<sup>&</sup>lt;sup>8</sup> Although AIs have been set for choline, there are few data to assess whether a dietary supply of choline is needed at all stages of the life cycle, and it may be that the choline requirement can be met by endogenous synthesis at some of these stages.

<sup>\*</sup>Because 10 to 30 percent of older people may malabsorb food-bound B<sub>12</sub>, it is advisable for those older than 50 years to meet their RDA mainly by consuming foods fortified with B<sub>12</sub> or a supplement containing B<sub>12</sub>.

'In view of evidence linking folate intake with neural tube defects in the fetus, it is recommended that all women capable of becoming pregnant consume 400 μg from supplements or fortified foods in addition to intake of food folate from a varied diet.

Dietary Reference Intakes (DRIs): Recommended Dietary Allowances and Adequate Intakes, Elements Food and Nutrition Board, Institute of Medicine, National Academies

T:0.0:												-	Potass-	Sodium	Chloride
Life Stage Group	Calcium (mg/d)	Chromium (µg/d)	Copper (µg/d)	Fluoride (mg/d)	Iodine (μg/d)	Iron (mg/d)	Magnesium (mg/d)	Manganese (mg/d)	Molybdenum (μg/d)	Phosphorus (mg/d)	Selenium (μg/d)	Zinc (mg/d)	ium (g/d)	(g/d)	(g/d)
Infants	•	•	•	•	•	•	•	•	•	•	•	•	•		•
0 to 6 mo	200*	0.2*	200*	0.01*	110*	0.27*	30*	0.003*	2*	100*	15*	2*	0.4*	0.12*	0.18*
6 to 12 mo	260*	5.5*	220*	0.5*	130*	11	75*	0.6*	3*	275*	20*	3	0.7*	0.37*	0.57*
Children															
1-3 y	700	11*	340	0.7*	90	7	80	1.2*	17	460	20	3	3.0*	1.0*	1.5*
4–8 v	1.000	15*	440	1*	90	10	130	1.5*	22	500	30	5	3.8*	1.2*	1.9*
Males	,														
9-13 v	1,300	25*	700	2*	120	8	240	1.9*	34	1,250	40	8	4.5*	1.5*	2.3*
14–18 y	1,300	35*	890	3*	150	11	410	2.2*	43	1,250	55	11	4.7*	1.5*	2.3*
19-30 y	1,000	35*	900	4*	150	8	400	2.3*	45	700	55	11	4.7*	1.5*	2.3*
31-50 y	1,000	35*	900	4*	150	8	420	2.3*	45	700	55	11	4.7*	1.5*	2.3*
51-70 y	1,000	30*	900	4*	150	8	420	2.3*	45	700	55	11	4.7*	1.3*	2.0*
> 70 y	1,200	30*	900	4*	150	8	420	2.3*	45	700	55	11	4.7*	1.2*	1.8*
Females															
9-13 y	1,300	21*	700	2*	120	8	240	1.6*	34	1,250	40	8	4.5*	1.5*	2.3*
14-18 y	1,300	24*	890	3*	150	15	360	1.6*	43	1,250	55	9	4.7*	1.5*	2.3*
19-30 y	1,000	25*	900	3*	150	18	310	1.8*	45	700	55	8	4.7*	1.5*	2.3*
31-50 y	1,000	25*	900	3*	150	18	320	1.8*	45	700	55	8	4.7*	1.5*	2.3*
51-70 y	1,200	20*	900	3*	150	8	320	1.8*	45	700	55	8	4.7*	1.3*	2.0*
> 70 y	1,200	20*	900	3*	150	8	320	1.8*	45	700	55	8	4.7*	1.2*	1.8*
Pregnancy															
14–18 y	1,300	29*	1,000	3*	220	27	400	2.0*	50	1,250	60	12	4.7*	1.5*	2.3*
19–30 y	1,000	30*	1,000	3*	220	27	350	2.0*	50	700	60	11	4.7*	1.5*	2.3*
31-50 y	1,000	30*	1,000	3*	220	27	360	2.0*	50	700	60	11	4.7*	1.5*	2.3*
Lactation															
14–18 y	1,300	44*	1,300	3*	290	10	360	2.6*	50	1,250	70	13	5.1*	1.5*	2.3*
19–30 y	1,000	45*	1,300	3*	290	9	310	2.6*	50	700	70	12	5.1*	1.5*	2.3*
31-50 y	1,000	45*	1,300	3*	290	. 9	320	2.6*	50	700	70	12	5.1*	1.5*	2.3*

NOTE: This table (taken from the DRI reports, see <a href="https://www.nap.edu">www.nap.edu</a>) presents Recommended Dietary Allowances (RDAs) in **bold** type and Adequate Intakes (AIs) in ordinary type followed by an asterisk (\*). An RDA is the average daily dietary intake level; sufficient to meet the nutrient requirements of nearly all (97-98 percent) healthy individuals in a group. It is calculated from an Estimated Average Requirement (EAR). If sufficient scientific evidence is not available to establish an EAR, and thus calculate an RDA, an AI is usually developed. For healthy breastfed infants, an AI is the mean intake. The AI for other life stage and gender groups is believed to cover the needs of all healthy individuals in the groups, but lack of data or uncertainty in the data prevent being able to specify with confidence the percentage of individuals covered by this intake.

SOURCES: Dietary Reference Intakes for Calcium, Phosphorous, Magnesium, Vitamin D, and Fluoride (1997); Dietary Reference Intakes for Thiamin, Riboflavin, Niacin, Vitamin B<sub>15</sub>, Pantothenic Acid, Biotin, and Choline (1998); Dietary Reference Intakes for Vitamin C, Vitamin E, Selenium, and Carotenoids (2000); and Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc (2001); Dietary Reference Intakes for Water, Potassium, Sodium, Chloride, and Sulfate (2005); and Dietary Reference Intakes for Calcium and Vitamin D (2011). These reports may be accessed via <a href="https://www.nap.edu">www.nap.edu</a>.

## **Nutritional Tolerances**

Recommendation to be based on CODEX Guideline 2 – 1985 – Guidelines on Nutrition Labelling.