

# **Glossary**

### 8 nutrients shown as on food label

These are the energy, protein, carbohydrate, total sugars, fat, saturated fat, fibre and salt as shown on a food label.

### **Alcohol**

Alcohol is high in calories and so can make you put on weight. It's also a diuretic, which means it makes the body lose more water than usual.

Found in gin, whisky, wine, beer, cider.

# **Allergens**

The range of ingredients in food products that cause common food allergies include wheat, milk, eggs, sesame, soya, nuts, fish, gluten.

### **AOAC**

American Association of Analytical Chemists (AOAC) method for fibre analysis - this method includes lignin and resistant starch.

The GDA is 24g a day for men and women.

### **Biotin**

Biotin helps the body turn the food we eat into energy. A water soluble B complex vitamin found in most foods that we eat.

# Calcium

Calcium helps build strong bones and teeth.

RNI 700 mg for men and 700 mg for women a day.

Found in milk, cheese, green vegetables.

#### Calorie

Calorie is a unit of measurement for energy.

# Carbohydrates

Carbohydrates are a source of energy. Recommended intake is not less than 50%

food energy.

Found in starchy and sugary foods.

### Carotene

Carotene is turned into vitamin A in the body. Beta-carotene gives yellow and orange fruit and vegetables their colour.

Found in yellow, orange and green vegetables and fruit.

#### Chloride

Chloride helps the body digest the food we eat because it's an essential component of the juices in the stomach and intestines.

Found in salt.

#### Cholesterol

Dietary cholesterol is the type that we get from our food - it has much less effect on the level of cholesterol in our blood than the amount of saturated fat we eat.

# Copper

Copper helps produce red and white blood cells and triggers the release of iron to form haemoglobin.

Found in shellfish, beans and nuts.

# Costs

The costs are based on supermarket prices - these change and you can put in your own prices using the Edit button.

# DRV

Dietary Reference Values (DRVs) are benchmark intakes of energy and nutrients. They can be used for guidance but should not be seen as recommendations for intakes by individuals or groups. They show the amount of energy or an individual nutrient that a group of people, of a certain age range and sometimes gender, need for good health. Although DRVs are given as daily intakes, people often eat quite different foods from one day to the next, and their appetite can change, so in practice the intakes of energy and nutrients need to be averaged over several days.

DRVs apply to healthy people only and don't apply to children under five years old. DRVs have been set for energy, protein, fat, sugars, starch, NSP and a range of vitamins and minerals. For most nutrients, including protein, vitamins and minerals,

the RNI is the figure usually quoted. The database uses DRVs for energy, carbohydrate, fat, saturated fat and NSP fibre.

### **EAR**

Estimated Average Requirement - is an estimate of the average requirement for energy or a nutrient.

# **Energy**

Energy in food is measured in units called kJ (kilojoules) and kcal (kilocalories). The program gives both values. We need energy to keep us alive and healthy.

### Fat

Fat helps the body absorb some vitamins, it's a good source of energy and a source of the essential fatty acids that the body can't make itself. The DRV for fat is not more than 35% food energy. The Report by Department of Health (1994) on Nutritional Aspects of Cardiovascular Disease recommended that there should be a reduction in the average contribution of total fat to dietary energy to about 35%.

Found in butter, oil, fatty meats and pastries.

#### **Fat DRV**

The Dietary Reference Value (DRV) for total fat for adults is 35% of food energy. Fat values Separate values are given for saturated fat, monounsaturated fat and polyunsaturated fat as well as total fat. The sum of these fatty acids is lower than for total fat because fat is not totally composed of fatty acids. It is also made of glycerol.

### Fibre - dietary fibre

Fibre is needed to keep the gut healthy and prevent constipation. Fibre is measured as NSP or AOAC.

There are two main methods used in the UK to measure fibre - the Englyst method (NSP) and the Association of Analytical Chemists (AOAC) method. This database gives NSP fibre analysis and AOAC figures where they are available. Dietary recommendations for fibre are 18g NSP a day for adults COMA; 8 g per day per 1000 kcal for children up to 16 years old (Caroline Walker Trust); 24g AOAC fibre (GDA) adults.

Found in cereals, fruit and vegetables.

#### **Folate**

Folate is needed for the normal structure of the neural tube in developing embryos.

RNI 200 ug for men and women a day.

Found in yeast extract, green vegetables and fortified bread.

# Food labeling regulations

By law a food label must contain the following information: the name of the product, the net weight of the product, ingredients in descending order of weight, name and address of manufacturer, country of origin. The food label must show the "use by" or "best before" date to identify the shelf life. This information is shown on the program.

### **Fructose**

Fructose is a simple sugar that is found in honey, tree fruits and some root vegetables.

# Fruit and vegetables

People who eat diets rich in fruits and vegetables have a lower incidence of heart disease, diabetes, dementia, stroke and certain types of cancer.

### **GDA**

Guideline Daily Amounts used on food labels. For example Women – 2000 Calories, 90g Sugars, 70g Fat, 20g Saturates, 6g Salt

### Glucose

Glucose is a simple sugar and source of energy.

# **lodine**

lodine helps make the thyroid hormones which keep cells and the metabolic rate healthy.

RNI 140 ug for men and women a day.

Found in seafood.

### Iron

Iron helps make red blood cells, which carry oxygen around the body.

RNI 8.7mg for men and 14.8 mg for women a day.

Found in liver, meat, beans and nuts.

### kcal

kilocalorie - a measurement of energy in food.

### kJ

kilojoule - a measurement of energy in food.

### Lactose

Lactose is a disaccharide and is found in milk and milk products.

# Magnesium

Magnesium helps the body use energy. Needed for healthy tissues and bones.

RNI 300 mg for men and 270 mg for women a day.

Found in meat, wholegrains, nuts and seeds.

### Maltose

Maltose is a disaccharide formed from two units of glucose.

# Manganese

Manganese helps make and activate some of the enzymes in the body.

Found in green vegetables and fruit.

#### Meals

A meal can supply up to 30% of your daily intake.

My Meals data is from 14 Nutrient based standards from School Food Trust, COMA and SACN.

### Millilitres - mls

Many drinks are measured by volume in millilitres. The ingredients are calculated by the program in grams. If millilitres are used, then in most cases, the weight in grams is often the same as the number of millilitres. However, if the specific gravity of the product is known, the exact weight in grams can be calculated. Alternatively, weigh the liquid.

### Mono-unsaturates

Unsaturated fats like mono-unsaturates can be a healthy choice. These types of fats can reduce cholesterol levels and provide us with the essential fatty acids that the body needs.

# **Natural variation of food products**

All natural products vary in composition. The composition of meat, milk and eggs are affected by season and by the feeding regime and age of the animal. Different

varieties of the same plant may differ in composition. The nutritional value of foods can vary according to the farming practices, the methods of processing and the way the food is prepared and cooked. The length and condition of food storage affect the water content of foods and this will have an effect on the nutrient content per 100 g. Almost all the nutrient values in the tables apply to the edible part of the food and are expressed in100g. Manufactured products may be fortified with minerals and vitamins and the quantity may change.

# **Net weight**

The net weight on the packaging is the total weight or volume of the product without the weight of the packaging.

### Niacin – vitamin B3

Niacin is needed for the release of energy from carbohydrates and protein.RNI 6.6 mg for men and for women a day.

Found in red meat, liver, milk.

# **Nutrition labeling**

Manufacturers are not obliged by law to provide nutrition information, unless they make a nutrition claim. Nutrition labels must follow a format. 4 format (also known as Big 4) shows the energy value in kJ and kcal, and the amounts of protein, carbohydrate and fat. 8 format (also known as Big 4 + little 4 and 4+4 declaration) shows the energy value in kJ and kcal, the amounts of protein, carbohydrate, sugars, fat, saturates, fibre, salt and sodium. The Nutrition Program creates a label to the 8 format.

# **Nutritional Data**

The databank used for The Nutrition Program is based upon the UK Nutrient Databank developed by The Royal Society of Chemistry and the Ministry of Fisheries and Food. This databank is shown in the book by McCance and Widdowson's called The Composition of Foods, Sixth Edition. The Nutrition Program also uses nutritional data from supermarkets and food companies and USDA food composition data.

# **NSP**

Non Starch Polysaccharide. This term for dietary fibre is measured by the Englyst method. Experts recommend that we eat 18 grams of NSP fibre a day. Children need to eat proportionally less. The database for My Meals uses figures from the Caroline Walker Trust for children aged 4-18 years.

### **Pantothenate**

A water-soluble vitamin involved in the Kreb's energy production cycle.

Found in wholegrain cereals, eggs and meat.

# **Phosphorus**

Phosphorus helps build strong bones and teeth and helps release energy from food. RNI 550 mg for men and for women a day.

Found in most foods.

# **Polyunsaturates**

Unsaturated fats can be a healthy choice. These types of fats can reduce cholesterol levels and provide us with the essential fatty acids that the body needs.

### **Portion**

The amount by weight of a food product that people like to eat - for example, the weight of a slice of pizza.

Portion sizes are suggested, based upon Ministry of Agriculture, Fisheries and Food Portion Sizes, second edition 1998, and from leading brands sold in UK. Portion sizes help to choose the amount you use. In the Nutrition Program, you decide the number of portions for your recipe – this is the amount by weight of a food product that people like to eat - for example, the weight of a slice of pizza.

### **Potassium**

Potassium controls the balance of fluids in the body and may also help lower blood pressure.

RNI 3500 mg for men and for women a day.

Found in fruit and vegetables.

#### Protein

The dietary reference value for protein is based on the RNI of grams per day. Protein is needed for growth and repair, and also a source of energy.

Found in meat, fish, eggs, beans, milk products.

### QUID

Quantitative Ingredient Declaration - ingredients on a food label are sorted into order of weight with the heaviest first and shown as a percentage of the net weight.

#### Retinol

A form of Vitamin A which is needed for growth, development and eyesight.

RNI 700 ug for men and 600 ug for women a day.

Found in animal foods and forms vitamin A.

### Riboflavin – vitamin B2

Riboflavin is needed for the release of energy from carbohydrates and protein.

RNI 1.3 mg for men and 1.1mg for women a day.

Found in red meat, lover, milk and fortified breakfast cereals.

### RNI

Reference Nutrient Intake (RNI) is the amount of a specific nutrient which is sufficient for almost all individuals. ; it is an amount that is enough or more than enough for about 97% of people in a group. Intakes above this amount will almost certainly be adequate. This corresponds with the previous COMA Recommended Daily Amount (RDA). The database uses RNI amounts for protein, vitamin A, C, thiamin, riboflavin, niacin, vitamin B6, folate, vitamin B12, sodium, calcium, phosphorus, iron, magnesium, zinc, iodine, copper, potassium, manganese, selenium.

### Salt

Salt is made of sodium chloride. It is essential for the makeup of all cells and is needed for the control of body fluids. The COMA Report "Nutritional aspects of cardiovascular disease" recommends a gradual reduction in average salt intake by the adult population to about 6 grams a day. GDA for salt is 6g a day for adults and 4g a day for children. To convert sodium (mg) into salt (g), divide by 1000 and multiply by 2.5.

Found in table salt and salty food like salami.

### Saturates/ Saturated fat

Too much saturated fat can increase the amount of cholesterol in the blood, which increases the chance of developing heart disease. The DRV for saturated fat is not more than 11% food energy. The GDA for saturated fat for women and children is 20g and for men 30g.

### Shelf life

The shelf life of a food product is the length of time that the product will remain safe and attractive to eat. This time depends on how the product is prepared and packed. Chilled foods may keep in chilled conditions for up to 5 days and frozen food in the

freezer for several months. Canned food will keep for several years.

### Selenium

Selenium plays an important role in our immune system's function, in thyroid hormone metabolism and in reproduction.

RNI 75 ug for men and 60 ug for women a day.

Found in red meat, fish and cereals.

# Selling price

This price is worked out using this formula:

Selling price = food cost x100/40

### Sodium

Sodium and chloride both help to keep the level of fluids in the body balanced. Mainly found in sodium chloride - table salt. Experts recommend that the sodium content of the UK diet should be lowered. Sodium is expressed in milligrams – values should be divided by 1000 to convert into grams. To convert sodium (mg) into salt, divide by 1000 and multiply by 2.5.

Found in table salt and salty food like salami.

# Starch

Polysaccharide made up of glucose units. Used for energy.

Found in bread and potatoes.

### Storage instructions

This is the information on how to keep the product. Chilled food should be kept in the refrigerator, ambient food such as flour and canned food is stored at room temperature in a cool, dry place.

#### Sucrose

Sucrose is table sugar. Too much sugar in the diet is linked to tooth decay. GDA is 90g a day for women, 120g for men.

### Sugar

Sugar adds flavour and sweetness to foods and is a source of energy. Frequent consumption of sugary foods is associated with an increased tendency to tooth decay.

The GDA for sugar is 90g per day for women and children and 120g a day for men.

#### Thiamin – vitamin B1

Thiamin is needed for the release of energy from carbohydrates and protein.

RNI 1mg for men and 0.8mg for women a day.

Found in red meat, liver, fortified breakfast cereals.

# **Total sugars**

All types of sugar in the food.

# Traffic light system

This shows the colours green, amber and red for food products for 100g. Used on food labels to show which foods we should eat more or less of. Food labels show colours - green= low, amber = medium, red = high, the colours of traffic lights.

Traffic light data is from FSA with nutritional boundaries linked to COMA and SACN.

# **Trans Fats/ Trans fatty acids**

Trans fats have a similar effect on blood cholesterol as saturated fats - they raise the type of cholesterol in the blood that increases the risk of heart disease.

# **Tryptophan**

An essential amino acid that your body does not have the ability to synthesise. Found in chocolate, oats, dried dates.

### Vitamin A

Vitamin A is needed for growth, development and eyesight. It is calculated from retinol and carotene figures.

RNI 700 ug for men and 600 ug for women a day.

Found in milk, cheese, eggs, oily fish.

### Vitamin B12

Vitamin B12 is needed for blood cells and nerve function.

RNI 1.5 ug for men and for women a day.

Found in red meat, milk and eggs.

### Vitamin B6

Vitamin B6 is essential for good health and red blood cell metabolism.

RNI 1.4mg for men and 1.2mg for women a day.

Found in fish, liver, potatoes and starchy vegetables.

### Vitamin C

Vitamin C is needed for healthy skin and tissue, and to aid the absorption of iron.

RNI 40 mg a day for men and women.

Found in fresh fruit and vegetables.

### Vitamin D

Vitamin D helps regulate the amount of calcium and phosphate in the body.

Found from sunlight. Added to low fat spreads and margarines.

# Vitamin E

Vitamin E helps protect cell membranes by acting as an antioxidant.

Found in margarine, sardines, nuts and seeds.

# Vitamin K1

Vitamin K helps wounds heal properly because it's needed for blood clotting.

Found in green vegetables, red meat, cereals and oils.

#### Water

Chemical reactions that happen in our cells need water. We also need water for our blood to be able to carry nutrients around the body.

# Zinc

Zinc is required for tissue growth and repair.

RNI 9.5mg for men and 7mg for women a day.

Found in meat, dairy products, pulses and wholegrain cereals.