

## Information for Protein

Meat, fish, eggs, nuts and pulses are needed two or three times a day - these are rich in nutrients such as protein, vitamins and iron.

### Q. Why do we need these foods?

A. Protein is needed to help you grow and keep healthy, replace hair, nails skin etc.  
Did you know that your body makes 36.5m of hair every 24 hours! - How amazing is your body!

### Q. How much is enough?

A. You need two to three portions a day. A rough guide for a portion is what fits in the palm of their hand. The foods vary considerably, it is more important that they eat two to three different pieces a day.

### Portion sizes

These have been calculated using McCance & Widdowson's The Composition of foods 5<sup>th</sup> edition Department of Health Dietary reference values and Ministry of Agriculture, Fisheries and Food - Food portion sizes 2<sup>nd</sup> edition.

One portion for a one to three year old is:

- chicken cooked 20g = 1/5 small chicken breast
- cooked mince 22g = 1 oz
- beef/pork sausage 38g = 1 cooked sausage (4 cocktail sausages)
- cod/haddock 20g = 1/6 medium fillet
- fish finger 28g = 1 fish finger
- egg 1 egg
- baked beans 100g = 1/4 large tin

### Portion size control

It sounds obvious but children's tummies are smaller than adult tummies - so try to give them a portion that matches their size. It is better to give a smaller portion and be asked for more than to overload the plate then nag them to finish it!

### Children aged one to three years

Energy requirements increase because children are active and growing rapidly. Protein requirements do not increase much. There is an increased need for all the vitamins, except vitamin D (some of which will now be synthesised in the skin, following sunlight exposure). Slightly lower amounts of calcium, phosphorus and iron are needed. There is an increased requirement for all the other minerals except for zinc.

In the second year of life, children continue to need energy-dense diets. They should be given whole milk, not skimmed or semi skimmed, and care needs to be taken over the amount of fibre (non-starch polysaccharide or NSP) eaten. If the diet is too bulky due to too many high fibre foods, there is a danger the child will be unable to eat enough food to satisfy its energy needs. After the age of two years, semi-skimmed milk may be given provided adequate energy intake is assured, although skimmed milk should not be introduced before five years of age. (British Nutrition Foundation)

### Children aged four to six years

Energy requirements continue to increase and there is a greater need for protein, all the vitamins (except C and D) and all the minerals (except iron). The RNI figure for vitamin C remains the same as for younger children. No value is given for vitamin D since the action of sunlight on the child's skin will now be the major source of this vitamin. (British Nutrition Foundation)

### **Vegetarian children/families**

Children can get all the energy and nutrients they need from a vegetarian diet, it just takes a little more effort. They need to have foods rich in milk, cheese and eggs to provide the protein they need without being too bulky. Iron is one of the largest challenges. Iron can be found in: fortified breakfast cereal (most of our cereal is fortified), pulses, beans, dried fruit and green leafy vegetables, egg yolk, nuts and seeds. Drinks high in vitamin C such as orange juice will aid the uptake of iron. Children should not be given tea or coffee as this will interfere with the uptake of iron. (Information source: Caroline walker trust, [www.eatwell.gov.uk](http://www.eatwell.gov.uk))

### **What are fish and oily fish? ([www.eatwell.gov.uk](http://www.eatwell.gov.uk))**

Children are advised to have two portions of fish each week. Some fish are called oily fish because they are rich in certain types of fats, called omega 3 fatty acids, which can help keep our hearts healthy. You can give boys up to four portions of oily fish a week, but it's best to give girls no more than two portions of oily fish a week.

### **Examples of oily fish**

Sardines, pilchards, salmon, trout, mackerel, herring, fresh tuna and eel are examples of oily fish. Shark, swordfish and marlin should be avoided by young children because they contain relatively high levels of mercury, which might affect a child's developing nervous system.

### **Health issues**

Iron deficiency anaemia is associated with frequent infections, poor weight gain and delay in development. Iron rich foods, such as liver and red meat, are not always popular with children, so other ways of providing this nutrient may need to be found, e.g. offering home-made paté or minced meat burgers. Children who are vegetarian must have alternative sources of iron, such as dark green leafy vegetables, pulses and nuts. Other useful sources include bread and some fortified breakfast cereals. Iron from plant sources is less well absorbed than iron from animal sources. Consuming vitamin C rich foods or drinks such as orange juice with a meal can increase iron absorption from plant sources. (British Nutrition Foundation)