What is nutrition?

To understand nutrition we need to know about nutrients.

But how do we know how much of each nutrient we need at each stage of life, from birth to older age?

In the UK, we have a set of Dietary Reference Values (DRVs). These are the expert estimates of the quantities of energy and nutrients needed to support adequate growth, development and health, while reducing the risk of deficiencies and diseases like heart disease, stroke and cancer.



Healthy eating and being physically active are particularly important for children and adolescents. This is because their nutrition and lifestyle influence their wellbeing, growth and development.

Tip of the day



Try using low-fat plain yoghurt or fromage frais in recipes instead of cream or crème fraiche. They'll make the recipe much healthier without compromising flavour!



- O Limit to 150ml smoothie and 150ml fruit juice a day
- O Drink plenty, as long as no sugars are added
- O Limit fruit/vegetable juices and smoothies to a combined total of 150ml a day
- O Limit to 150ml of fruit juice and 250ml of smoothie
- O Drink up to 6-8 glasses unsweetened fruit/vegetable juice and smoothies



Although water is not always included in the strict definition of a nutrient, it is essential for health and life.



Macronutrients and Micronutrients

Food provides us with a range of different nutrients that have roles like providing energy and/or being needed for growth and upkeep of our body. Carbohydrate, protein and fat are **macronutrients** (macro means large), so these are the nutrients that we need to eat in relatively large amounts in the diet as they provide our bodies with energy and also the building blocks for growth and maintenance of the body

Vitamins and minerals are **micronutrients**, which are essential nutrients your body needs in small amounts to work properly. Vitamins are classified into two main groups: fat soluble and water soluble vitamins. Each vitamin is given a chemical name and also a letter to distinguish it from other vitamins.









We can get the nutrients we need from a healthy balanced and varied diet

Most people should be able to get all the nutrients they need by eating a healthy, varied diet, although there are a few exceptions.



This is a diagram of the **Eatwell Guide** which is a guide to help you get a balance of healthier and more sustainable food. It shows how much of what you eat overall should come from each food group

Physical activity



During 2013, a new school curriculum for England was published. From September 2014, food and nutrition education will be compulsory from the age of 5 to 14 years, to complement the work that has been done on improving food served at school. While aspects of nutrition will be included in science, the new compulsory aspects will include a focus on learning where food comes from and applied healthy eating and cooking through Design and Technology. In other parts of the UK, food, nutrition and cooking have been long standing components of the school curriculum.

Obesity remains a major problem among British schoolchildren and there is a stark socio-economic gradient, with levels of obesity being highest in the most socially deprived children. In an older age group (11 year olds), obesity prevalence is 13.7% in the least deprived group and 24.3% in the most deprived. Almost 1 in 10 English children are obese when they start school

(Reception class)and 2 in 10 are obese by age 11.



Physical activity throughout the life course is important for health. During adolescence physical activity can be particularly beneficial in terms of social interaction and wellbeing, self-esteem and confidence and maintaining energy balance. Maintaining physical activity throughout the adolescent years also means that the risk of chronic diseases in later life can be reduced. High impact physical activity during the pubertal years is particularly important because it can help to increase the bone mass, which has long-lasting effect on bone health as we age.

It is recommended that young people should engage in at least 60 minutes of moderate intensity physical activity (where you raise your heart rate and feel warmer, but should still be able to hold a conversation) to vigorous intensity physical activity (where your heart rate is much more rapid, you feel warmer and find it much more difficult to hold a conversation) every day.

The following video contains facts and figures on nutrition as well as examples of a healthy, balanced meals.

