

# Nutrient requirements for different groups of people – Age Groups

**Nutrition through life differs mainly due to the need for energy and protein for growth and development – in younger age groups, growth and development occurs, in older age groups only maintenance of the body is required, therefore protein and energy requirements are reduced.**

**GENDER affects nutritional requirements after puberty – before puberty male and female requirements are the same. Puberty causes girls to begin menstruation, increasing their iron needs, which remain higher than men until the menopause which occurs around 50 years of age. Generally males are physically larger than females and therefore need to consumer more energy and protein on a daily basis.**

**PHYSICAL ACTIVITY LEVEL affects a person's' energy requirements. The more active a person is, the more energy they need. It is recommended that extra energy requirements come from extra starchy carbohydrate in the diet,. Increased PAL could be from having an active job or from playing lots of sport.**

<p><b>Babies and Toddlers</b></p> <ul style="list-style-type: none"> <li>• Milk only for first 4-6 months</li> <li>• Weaning occurs from 6 months – introduce a wide variety of textures and colours</li> <li>• Avoid nuts (choking hazard), salt and sugar</li> </ul>	<p><b>Pre-school children</b></p> <ul style="list-style-type: none"> <li>• Balanced diet needed – in line with Eatwell Guide from 12 months</li> <li>• High needs for energy and protein due to rapid growth and constant movement</li> <li>• Full fat dairy products should be consumed</li> <li>• Salt and sugar should be avoided</li> </ul>	<p><b>Children</b></p> <ul style="list-style-type: none"> <li>• Balanced diet needed – in line with Eatwell Guide from 12 months</li> <li>• High needs for energy and protein due to rapid growth and constant movement</li> <li>• 5-a-day is recommended</li> </ul>
<p><b>Teenagers</b></p> <p>Increased needs for iron in teenage girls due to menstruation</p> <p>Calcium intake &amp; vitamin D are really important to ensure Peak Bone Mass is reached – setting up bone health for life</p> <p><i>Many UK teenagers are lacking in calcium, iron and vitamin A.</i></p>	<p><b>Adults</b></p> <p>No more growth means less energy is needed for adults than teenagers</p> <p>Well balanced diet modelled on the Eatwell Guide essential.</p> <p><i>Many UK adults eat too much fat, too much salt and not enough fruit and vegetables.</i></p>	<p><b>Elderly</b></p> <p>Sedentary older people will have reduced energy requirements. Calcium and vitamin D are still very important to prevent osteoporosis.</p> <p>Some elderly people do not get outside much and can be at risk of Vitamin D deficiency</p> <p>Sometimes elderly people may have issues getting access to food due to mobility issues, they may also be at risk of lack of variety of nutrients due to poor absorption.</p>
<p><b>Pregnancy &amp; Lactation</b></p> <p>Because the body becomes more efficient at absorption during pregnancy, normal nutritional requirements apply until the last third of pregnancy, when some extra energy and calcium is required. Pregnant and lactating ladies should eat a varied diet rich in fresh fruit and vegetables and wholegrains (in line with the Eatwell Guide).</p> <p>There are some foods to avoid:</p> <ul style="list-style-type: none"> <li>• Unpasteurised milk products and undercooked meats/cured meat products – they may contain listeria which is harmful to unborn babies</li> <li>• Pate, liver and liver products – due to high vitamin A content (Vitamin A is harmful to unborn babies if eaten in large quantities)</li> <li>• Swordfish, marlin and shark as they are high in mercury which can be harmful to unborn baby,</li> </ul>		

## Nutrient requirements for different groups of people – Special Diets (Religious, Medical, Ethical)

Medical Diets	Religious Diets	Ethical Diets
<p><b>Nut &amp; other allergies</b> Must avoid particular allergen, otherwise an allergic reaction may occur. Serious allergic reactions can result in anaphylaxis and even death.</p> <p><b>The 14 common allergens which must be declared on menus and food packaging are:</b> Celery, Gluten, Crustaceans, Eggs, Fish, Lupin, Milk, Molluscs, Mustard, Nuts, Peanuts, Sesame, Soya, Sulphites.</p>	<p><b>Halal (Muslim)</b> Halal is Arabic for permissible. Halal food is that which adheres to Islamic law, as defined in the Koran. Haram is the opposite to Halal and describes food which is not permitted under Islamic law. Haram items that Muslims will not consumer include pork and all pork products as well a alcohol.</p>	<p><b>Vegetarian</b> Vegetarians do not eat any flesh – they do not eat meat, poultry or fish/shellfish. Vegetarians do eat dairy products and eggs (lacto-ovo-vegetarian).</p>
<p><b>Lactose intolerance</b> People who are lactose intolerant do not make the digestive enzyme which is needed to digest lactose (a milk sugar found in dairy products). If they consume lactose, they will experience digestive discomfort including cramps, excess wind and diarrhoea. Lactose intolerant people can consumer lactose free milk and dairy products or dairy alternatives. They must be careful to ensure they get enough calcium in their diet.</p>	<p><b>Kosher (Judaism)</b> Judaism instructs its followers to observe a kosher diet, this means no pork. Kosher food also does not mix dairy products and meat in the same meal/course. Foe example, a burger must be served without cheese.</p>	<p><b>Vegan</b> Vegans avoid consuming any animal products – including milk and dairy products, Protein is a nutrient which can be lacking in a badly planned vegan diet – vegans can eat wholegrain cereals, nuts, beans, lentils and tofu. Calcium may be lacking in a vegan diet – some vegans replace dairy with calcium fortified alternatives such as soya milk or almond milk.</p>
<p><b>Coeliac</b> Coeliac disease sufferers react to the presence of gluten, a protein found in wheat flour and wheat flour products. They must avoid consuming gluten. Gluten is present in any wheat flour – alternatives such as</p>	<p><b>Hindu</b> Followers of the Hindu religion do not eat Beef, as they believe it is a sacred animal.</p>	<p><b>Pescetarian</b> Pescetarians do not eat meat, but will eat fish and shellfish.</p>
<p><b>Coronary Heart Disease</b> People who are diagnosed or at risk of Coronary Heart Disease are currently recommended to adopt a low sugar, low saturated fat, high fibre and fruit and vegetable Mediterranean style diet.</p>	<p><b>Buddhist</b> Buddhists are usually vegetarian and do not consume meat or fish.</p>	<p><b>Flexitarian</b> This is a new concept – followers of a flexitarian diet choose vegetarian or vegan diet meal choices for some parts of the week, in order to reduce their carbon foot print. Meat-Free Mondays campaign spearheaded this movement.</p>