

Life span	Physiological Needs	Nutrient Needs	Nutrient concerns	Food strategies
Foetal life	<ul style="list-style-type: none"> <li>- Body water reduced from 90% to 70% by term</li> <li>- AA's cross placenta for protein synthesis</li> </ul>	<ul style="list-style-type: none"> <li>- Folate need high</li> <li>- Significant iron and calcium needs</li> </ul>	<ul style="list-style-type: none"> <li>- If mother does not have adequate iron or calcium stores</li> </ul>	<ul style="list-style-type: none"> <li>- Mother should consume folate supplement</li> </ul>
Infancy	<ul style="list-style-type: none"> <li>- Require more water to excrete waste due to limited ability to concentrate urine</li> <li>- Low pancreatic lipase – fat digestion achieved through lipases in breast milk, tongue and stomach.</li> <li>- Limited gastric capacity</li> <li>- Large surface area to volume ratio – more heat and water loss</li> <li>- High resting metabolic rate – higher nutrient requirement for body weight</li> </ul>	<ul style="list-style-type: none"> <li>- High energy and nutrient density</li> <li>- High water content</li> <li>- Fat principle energy source</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of one or more essential AA – declined growth weight</li> <li>- Vitamin D in breastfed babies with no sunlight</li> <li>- Vitamin K – shot given at birth</li> <li>- Vitamin C in infants fed heat treated cow's milk</li> <li>- Calcium in formula fed infants</li> <li>- Sodium deficiency only if excess vomiting or diarrhoea</li> <li>- Iron in pre-term, low birth weight or babies fed cow's milk.</li> </ul>	<ul style="list-style-type: none"> <li>- Supplement vit D</li> <li>- Formulas higher calcium content to allow for less bioavailability</li> <li>- Pre-term infants require iron supplement during first few months. Iron added to formulas</li> <li>- Women who are pregnant, breastfeeding take iodine supplement</li> </ul>