Nutrition and Brain Development 6-12 months

Now your baby has reached another milestone being ready for solid food! Between 5-7 months your baby will begin to be more interested in the people and objects in his environment, including what those people are eating. He may look intently at food going to your mouth, maybe drool or make a grab for it. These are all signs of readiness to graduate to solid food to complement their dependence on milk. Body wise these instincts are driven by physical milestones like the ability to make chewing motions and the fact that the stomach and intestines are mature enough to deal with foods other than milk which is easiest to digest. Brain wise, the need for extra elements like iron is an important step in building the capacity of the brain and an oxygen rich blood supply. Great sources of iron at this stage include red meat, eggs, and tuna, salmon and of course breast milk and appropriate formula milk.

Your child’s brain is also seeking out new taste and smell sensory information. This is a great window of opportunity to expose your child to new foods, even ones you are not particularly fond of. The brain is constantly evaluating the information it receives through the senses, and food does not just provide sensation through the nose and mouth. Babies need to touch, squash, poke and smear the food to get a better idea of what to expect from this new stuff before it gets to their mouth. Don’t worry about the mess; babies as soon as they can manipulate items in their hands to mouth are able to experiment with appropriate pieces of food. Examples like gripping a piece of bread, squeezing a section of banana, and grasping a grain of rice between finger and thumb. All these experiences teach them about texture, hardness, slipperiness, softness, stickiness, and dryness.

Even though solid food is an exciting new experience, the brain and body growth is still heavily dependant on breast or formula milk. This is because the fats and protein in the milk are giving the correct balance of macro and micro nutrients needed at this crucial stage of brain growth. Breast milk contains a relatively large proportion of cholesterol and saturated fat. This is fantastic ‘brain food’. Connections made between brain cells, and indeed all cells membranes of the body, depend on cholesterol to ‘insulate’ the fibres (axons) to effectively communicate. The brain itself is over 60% fats in weight and the relatively high amount in breast milk reflects the importance of brain growth in the human baby compared to other mammals.
What can parents do?

- Let your baby explore their food as well as you feeding them
- Look out for foods that are rich in iron after the first few weeks of introducing solids – especially if your baby was premature.
- Continue to breastfeed for as long as possible to reap the benefit of the brain building properties of breast milk (The WHO recommends breast feeding until about 2 years).
- Avoid giving your baby ‘low fat’ foods as all natural fats are great for brain growth
- Monitor your baby’s environment for toxic hazards. Wash all fruit and vegetable skins or remove peel. Avoid toxic cleaning agents, sprays or even air fresheners and stay away from fumes like heavy traffic, smokes, garden sprays. These chemicals can impact your small baby more than a fully grown adult.
- Watch out for what your baby licks, eats or sucks. Some paint can still contain lead and many plastic baby items contain BPA (Bisphenol A) which is a type of chemical which can have hormone disrupting effects. Buy toys made of natural substances and use china ware over plastic bowls spoons and cups.

References


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ORIGINAL RESEARCH COMMUNICATIONS: Evidence of altered central nervous system development in infants with iron deficiency anaemia at 6 months: delayed maturation of auditory brainstem responses M Roncagliolo, M Garrido, T Walter, P Peirano and B Lozoff Developmental Neurophysiology Unit, Institute of Nutrition and Food Technology (INTA), University of Chile, Santiago.