



HEALTHY CHOICES

Latest tips on the art of living well.

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Early Childhood Nutrition



We encourage parents to seek professional advice when choosing a feeding method.

Good nutrition provides babies and toddlers with the foundation of a healthy start in life.

Parents, doctors and nutrition experts understand that the first months of a baby's life are the most critical in their development. Comprehensive and high quality nutrition in these early months creates the basis for a healthy life.

World Health Organisation guidelines state that breast feeding during this time is the best form of nutrition you can provide. However, sometimes breast feeding may not be possible. We encourage parents to seek professional advice when choosing a feeding method.

Infant formula manufacturers must adhere to strict nutritional guidelines to ensure that each stage of a baby's development is carefully met by the right mix of nutrients. Generally, infant formula is split into 3 to 4 nutrient variants, defined by the age range they apply to.

- Stage 1: - from birth to 6 months
- Stage 2: - from 6 to 12 months
- Stage 3: - from 12 months to 3 years
- Stage 4:- 3 years and up

Each of these groups has their own specific nutritional needs. In the first six months of life an infant formula that most closely resembles human breast milk is the only alternative. Cow's milk is not suitable for infants of this age as there is far too much protein and sodium for the baby's new digestive system to handle. Cow's milk is also too low in the Vitamins C, D and E and the minerals Iron and Copper.

Infant formula producers must ensure safe protein and sodium content as well as ensuring there are adequate levels of the essential vitamins and minerals that human breast milk would naturally provide. If you look at the nutritional information panel on a can of Stage 1 infant formula you are likely to see at least 30 different nutrients. Human breast milk provides all of these and more.

Infant formula for 0 to 6 months has to follow a very stringent set of guidelines. In New Zealand all manufacturers must comply with FSANZ, NZFSA and MAF regulatory and



quality control requirements. Strict labelling is enforced, with mandatory labelling notices and warnings required on all products within this class, including hygiene, dosage and preparation. If these warnings are not followed there is a possibility of making a baby very ill.

As babies grow past one year old they

require less concentrated amounts of these vitamins and minerals and more of a varied diet. Some mashed solids may be regularly introduced as part of normal feeding. At this point the need for human milk (or formula) begins to decrease.

After 3 years of age there is normally no need for formula but some children enjoy the taste of milk and a formula can be an excellent way of providing them with healthy doses of essential vitamins, minerals and proteins.



A REVIEW OF SOME INGREDIENTS USED IN INFANT FORMULA:

Colostrum and Lactoferrin - for immunity and growth support

Colostrum is the first milk produced by all mammals and contains protective antibodies called immunoglobulins and lactoferrin, a protein that helps support a healthy immune system. Passive immunity is transferred from mother to baby through colostrum. Colostrum also contains an abundance of growth factors to support healthy growth and development of the infant's gut.

Nucleotides - the building blocks for

cellular DNA synthesis

Nucleotides are nature's building blocks for growth and development in babies and toddlers and contribute to brain development, the development of a healthy digestive tract and a responsive immune system. Research shows they are important to cellular communication within the brain and, as the basis of genetic material, are important in tissues with rapid turnover such as those in the digestive system. Mother's breast milk is naturally high in nucleotides.

GOS & FOS - to support a healthy digestive system

Galacto Oligo Saccharides (GOS) and Fructo Oligo Saccharides (FOS) are prebiotics which promote a healthy digestive system by supporting the growth of beneficial bacteria in the digestive tracts of infants and toddlers.

Healthy gut flora supports the integrity of gut tissue, good digestion, nutrient absorption and a healthy immune system.

Oligosaccharides naturally occur in breast milk. Inclusion in infant formulas is considered a major innovation as infants fed GOS-supplemented formula have stool characteristics similar to breastfed infants.

DHA and ARA - for healthy brain and cognitive development:

Mother's breast milk is high in both DHA and ARA and infants depend on these fats for healthy development. They contribute to brain development, healthy cognitive function, development of the visual system and normal eyesight as well as balanced mood, learning and behaviour.

They also contribute to the development of a healthy and responsive immune system.

Taurine - an essential amino acid for infants

Taurine is essential for newborns as they are unable to manufacture this amino acid. It is the most abundant free amino acid in breast milk and research suggests its inclusion in infant formula supports infant development, contributing to brain and hearing development, health of the nervous system, healthy growth and cardiovascular development.

Choline and Inositol - important for brain and nervous system

Choline and inositol are B vitamins and play an important role in the structure and function of the brain. Choline is a precursor to the neurotransmitter acetylcholine. Brain and nervous system development and cognitive functions such as learning and memory and mood depend on choline and inositol.

Infants have a high demand for choline and a substantial amount is contained in breast milk. Low intake of choline in babies and toddlers is believed to have negative effects on brain function, learning and memory that can persist into adulthood.

Vitamins & Minerals - a full complement of all that is essential for balanced nutrition:

The right balance of vitamins and minerals at each stage of early childhood development provides the foundation for a healthy life.

Because babies and toddlers grow rapidly, they rely on good nutrition to achieve growth and development milestones and normal brain and nervous system development. Healthy eyesight and hearing, normal cognition, behaviour and balanced mood all depend on a sufficient intake of vitamins and minerals. Vitamins and minerals also support a responsive immune system and resistance to illness.