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Press Article

Breast Milk Enigma, Formula Milk Puzzle

In the state of nature, mothers would breast-feed their babies exclusively to the age of some six months. They would only gradually introduce solids until the child had a full set of teeth. The mother would finally finish feeding from the breast when the next child was born, usually after about 4 years.

We know this for two main reasons. First, a few intrepid explorer-researchers scientifically studied the forager way of life at a time when it was still untainted by contact with civilization. Such a man was Richard Lee who lived among the San Bushmen back in the 1960's.

Secondly, everything we know about breast feeding today supports the finding that this is the ideal. In other words, science continues to add findings to support the mantra that "breast is best".

The latest confirmation comes from an unexpected quarter. Breast-fed babies have less diarrhea and lower incidence of diabetes or asthma compared to formula-fed babies. But precisely how breast milk confers those advantages was unclear. Scientists know the basic ingredients of breast milk but don't fully understand how they work. Now researchers are coming to some startling conclusions.

Dr Carlito Lebrilla, at University of California, Davis, wondered why breast milk contains hundreds of seemingly useless compounds called "oligosaccharides". Her extraordinary finding is that they are there to feed "good" bacteria in the colon. It's an especially important task to ensure that "bad" species of illness-causing bacteria do not hijack a new-born's colon.

This explains why formula-fed babies tend to have "adult-like" species of bacteria and why they are then more susceptible to diarrhea and other intestinal troubles. This gut "seeding" protects against viruses – even the dreaded HIV. Human milk oligosaccharides block the virus in the gut, helping to explain why a majority of infants breast-fed by HIV-positive mothers do not develop the disease.

"Breast milk is a remarkable fluid," remarked Dr. Carlito. "It's extremely embarrassing how little we still know about it." "A better understanding of the chemistry and function of breast milk will lead to the design of more nutritious infant formulas."

So what if you cannot breast feed and need to use a formula milk? In olden days, raw cows' milk killed many babies when desperate non-lactating mothers fed it to their babies. The main problem was the cow's milk protein which is highly allergenic.

In my first book *Natural Eating: Eating in Harmony with our Genetic Programming*, I wrote: "Fortunately, the companies that make formula milk are getting a lot more cute about making a product that imitates human milk as closely as possible. They have come a long way in 50 years."

Even so, it is devilishly difficult to find out precisely what formula manufacturers put into their products. So what should you look out for?

First, make sure they are using "hydrolyzed" cows' milk protein. This means that they have put it through a process which reduces the allergy-provocation to acceptable levels. (But it is not foolproof, particularly against eczema).

Secondly, pay the extra and choose the formula milk that contains "long chain fatty acids", usually "DHA" (docosahexaenoic acid) and "AHA" (arachidonic acid). These are essential oils that babies' bodies cannot make (although we can as adults).

And just in case you need the reassurance, for a couple of generations now, millions of babies have been bottle-fed from birth and they have grown into perfectly healthy infants, children and adults.

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Geoff Bond is a nutritional anthropologist and a recognized authority on what it means to be human in lifestyle terms. He leaves next month on his annual speaking tour to America to instruct doctors about mastering the lifestyle diseases like cancer, heart disease, obesity and osteoporosis. Geoff is available for the occasional talk to interested groups.

Geoff's latest book, *Deadly Harvest*, is the reference work for lifestyle anthropology and the connection with degenerative disease. It is stocked by all good bookstores in Cyprus.

More information about Geoff's work on his website: www.naturaleater.com.

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