

Nothing can completely replace the unique properties of mother's milk, as it contains everything a growing baby requires. However, there are occasions when mother's milk is not sufficient, which is why alternatives are provided by the infant formula industry. Advanced Lipids, a joint venture between AAK and Enzymotec, supplies optimal oil compositions mimicking the composition of mother's milk.

InFat™ – the premium choice for infant formula – closer to mother's milk

The main challenge for infant formula producers is to develop a formula as close as possible to the gold standard of mother's milk.

Over the years proteins, carbohydrates, minerals, vitamins and probiotics have been fine tuned and added to current infant formula. It has been known for some time that a specific fat is required to mimic mother's milk fat, but until recently only limited amounts were commercially available. With the opening of a new dedicated production facility at AAK in Sweden, InFat™ can be supplied in significant quantities and a growing number of customers are appreciating the benefits of a composition close to mother's milk fat, with high quality and an affordable price.

Mother's milk composition

Around 50 % of the calories in human breast milk are supplied to the baby as fat. Human milk fat has a specific composition (the same in humans all over the world), with a saturated palmitic fatty acid (C16:0) in the central position and mainly unsaturated fatty acids (C18:1) in the outer positions in the triglyceride (see picture).

Standard fat for infant formulae

In standard infant formulae, vegetable fat has been used to fulfil the need for fat. However, in vegetable fat the palmitic acid is predominantly located in the outer positions in the triglyceride and the unsaturated fatty acids in the central position – the very opposite to mother's milk fat.

This is believed to be why infant formula-fed infants tend to show problems with energy and calcium uptake and increased constipation.

InFat™ composition

A vegetable fat resembling mother's milk fat is obtained through a unique enzymatic process in which the triglycerides from a vegetable – typically palm-based – fat are rearranged (see picture). InFat™ is based purely on vegetable oils. When InFat™ is used in infant formulae, the results from clinical studies show very similar results to those for mother's milk.

With InFat™, both energy and calcium uptake increase compared to standard vegetable fat. In addition, infants show fewer problems with constipation than with traditional vegetable fat.

Supply of InFat™

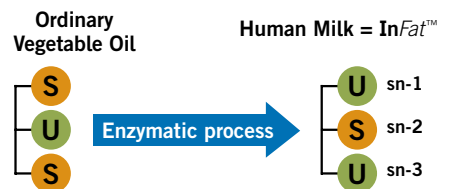
InFat™ can be tailored to individual customer requirements, with all products in the range containing a high level of sn-2 palmitic acid.

In most cases the fine tuning of the fatty acid composition, sn-2 palmitic and antioxidants is done in cooperation with the customer.

InFat™ is currently used around the world, mainly in Europe and Asia.

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From vegetable fat to mimicking mother's milk fat



Benefits

- Constipation is reduced, leading to softer stools and fewer stomach problems.
- Calcium uptake is increased, resulting in higher bone body mass.
- Energy uptake is increased, which is very important for a growing baby.

Advanced Lipids

- Joint Venture of AAK and Enzymotec -

Speciality lipids for infant nutrition

AAK is the world's leading manufacturer of high value added speciality vegetable fats.

Enzymotec is a biotechnology company that addresses health needs associated with the whole life cycle, starting from babies up to seniors.

Together we utilise our combined strengths.

