

**COMPARISON OF BREASTMILK AND FORMULA**-askdrsears.com- Dr. William Sears

NUTRIENT	BREASTMILK CONTAINS	FORMULA CONTAINS	COMMENT
Fats	<ul style="list-style-type: none"> <li>Rich in brain-building omega 3's, namely DHA and AA.</li> <li>Automatically adjusts to infant's needs; levels decline as baby gets older</li> <li>Rich in cholesterol</li> <li>Nearly completely absorbed</li> <li>Contains fat-digesting enzyme, lipase</li> </ul>	<ul style="list-style-type: none"> <li>No DHA</li> <li>Doesn't change</li> <li>No Cholesterol</li> <li>Not completely absorbed</li> <li>No lipase</li> </ul>	Fat is the most important nutrient in breastmilk; absence of cholesterol and DHA, vital nutrients for growing brains and bodies, may predispose child to adult heart and central nervous system diseases. Leftover unabsorbed fat accounts for unpleasant stools in formula-fed babies.
Protein	<ul style="list-style-type: none"> <li>Soft, easily-digestible whey</li> <li>More completely absorbed</li> <li>Lactoferrin for intestinal health</li> <li>Lysozyme, an antimicrobial</li> <li>Rich in brain and body-building protein components</li> <li>Rich in growth factors</li> <li>Contains sleep-inducing proteins</li> </ul>	<ul style="list-style-type: none"> <li>Harder to digest casein curds</li> <li>Less completely absorbed, more waste, harder on kidneys</li> <li>None or trace lactoferrin</li> <li>No lysozyme</li> <li>Deficient or lower in some</li> <li>Deficient in growth factors</li> </ul>	Automatically adjusts to infant's needs. (e.g., higher in premature infant)
Carbohydrates	<ul style="list-style-type: none"> <li>Rich in lactose</li> <li>Rich in oligosaccharides that promote intestinal health</li> </ul>	<ul style="list-style-type: none"> <li>Some formulas contain no lactose.</li> <li>Deficient in oligosaccharides</li> </ul>	Lactose is considered an important carbohydrate for brain development. Studies show the level of lactose in the milk of a species correlates with the size of the brain of that species.
Immune Boosters	<ul style="list-style-type: none"> <li>Rich in living white blood cells, millions per feeding</li> <li>Rich in immunoglobulins</li> </ul>	<ul style="list-style-type: none"> <li>No live white blood cells.</li> <li>Processing kills all cells. Dead food has less immunological benefit.</li> <li>Few immunoglobulins and mostly the wrong kind.</li> </ul>	When mother is exposed to a germ, she makes antibodies to that germ and gives these antibodies to her infant via her milk.
Vitamins and minerals	<ul style="list-style-type: none"> <li>Better absorbed, especially iron, zinc, and calcium.</li> <li>Iron is 50-75% absorbed</li> <li>Contains more selenium (an antioxidant) than formula</li> </ul>	<ul style="list-style-type: none"> <li>Less absorbed</li> <li>Iron 5-10 percent absorbed</li> </ul>	Vitamins and minerals in breastmilk enjoy a higher bioavailability; a greater percentage is absorbed. To compensate, more is added to formula, which makes it harder to digest.
Enzymes and Hormones	<ul style="list-style-type: none"> <li>Rich in digestive enzymes, such as lipase and amylase.</li> <li>Rich in many hormones: thyroid, prolactin, oxytocin, and over fifteen others.</li> </ul>	<ul style="list-style-type: none"> <li>Processing kills digestive enzymes</li> <li>Processing kills hormones, which are not human, anyway</li> </ul>	Digestive enzymes promote intestinal health. Hormones contribute to the overall biochemical balance and well-being of baby.
Taste	Varies with mother's diet	Always tastes the same	By taking on the flavor of mother's diet, breastmilk shapes the tastes of the child to family foods.
Cost	\$600 a year, extra food for mother	Around \$1,200 per year for formula; up to \$2,500 a year for hypoallergenic formulas; plus cost of bottles, etc.; plus lost income when baby is ill	>Breastfeeding families save \$600 to \$2,000 a year, and often much more in medical bills since baby stays healthier; and employed breastfeeding mothers miss less work.

**COMPARING FORMULA CONTENTS-** [askdrsears.com](http://askdrsears.com)- Dr. William Sears

FORMULA NAME	PROTEIN SOURCE	FAT SOURCE(Find out if hydrogenated)	CARB SOURCE
Milk Based Formula	Nonfat milk, whey protein concentrate: 60% whey, 40% casein	Palm oil, high oleic (safflower or sunflower) Oil, Coconut Oil, Soybean Oil	Lactose
Soy Based Formula	Soy protein Isolate	Palm oil, high oleic (safflower or sunflower) oil, coconut oil, soybean oil	Corn Syrup Solids and Sucrose
Nestle Good Start Sumprime	Whey, predigested, 100%, nonfat milk	Palm olein, high oleic, 47% Soy, 26% Coconut, 21% Safflower, high oleic, 6%	Lactose, 70% Maltodextrine, 30%
Enfamil Mead Johnson	Whey 60%, casein 40%, nonfat milk	Palm olein, 45% Soy, 20% Coconut, 20% Sunflower, high oleic, 15%	Lactose
Similac Ross	Whey 48%, casein 52%, nonfat milk	Safflower, high oleic, 42% Coconut, 30% Soy, 28%	Lactose
Carnation Follow-up	Whey 18%, casein 82%, nonfat milk	Same	Corn syrup, 63% Lactose, 37%
Isomil	soy	Corn, 50% Coconut, 38% Soy, 12%	Corn syrup solids, sucrose
Prosobee	soy	Palm olein, 45% Soy, 20% Coconut, 20% Sunflower, high oleic, 15%	Corn syrup solids
Alsoy	soy	Palm olein, 47% Soy, 26% Coconut, 21% Safflower, high oleic, 6%	Corn maltodextrine, sucrose
Lacto-free	Whey 60%, casein 40%, nonfat milk	Same as Enfamil	Corn syrup, sucrose
Alimentum	Hydrolyzed casein	Same as Enfamil	Sucrose, modified tapioca starch
Nutramigen	Hydrolyzed casein	Same as Similac	Corn syrup, modified corn starch
Pregestamil	Hydrolyzed casein	MCT oil, 55%	Corn syrup, dextrose, modified corn starch