

NutraLac[™]: Postpartum Infant Health and Wellness

Introduction:

NutraLac[™] was developed to meet the nutritional needs of infants and their breastfeeding mothers during the critical postpartum developmental period from birth to six months when infant digestive systems are maturing and their immune systems are not yet fully developed. Formula feeding during this critical period creates an increased risk of gastrointestinal diseases, including *necrotizing enterocolitis* (NEC), Cronobacter Bacteria contamination, respiratory infections, and immune system deficiencies, that put newborn infants at greater risk of cognitive stunting, diminished life terms, and death (UNICEF Global Report "From the First Hour of Life").

NutraLac[™] focuses on enhancing the nutrition of pregnant and lactating mothers to provide increased health and wellbeing for their breastfed infants during the development period immediately after birth by increasing the bioavailability, efficacy, and volume of the mother's breastmilk. Our patented all-natural enzymatic hydrolyzation process **(U.S. Patent No. 8,945,642 B2)** converts the complex nutraceutical phytonutrients extracted from the bran layer of rice (plant-based nutrients) into simple proteins (amino acids and peptides), carbohydrates into highly bioactive polysaccharides, and fats into efficacious antioxidants for increased immune system enhancement (see Table below), benefits which transfer from mother to baby during the breastfeeding period.

NutraLac[™] is the only clinically proven, all-natural postpartum nutraceutical galactagogue currently available for lactating mothers who breastfeed **(Ref. U.S. Patent No. 11,547,135 B2).** Galactagogues are natural phytonutrients with enhanced nutritional benefits that increase the supply, bioactivity, and efficacy of breastmilk for lactating mothers. NutraLac[™] clinical trials documented infant health and development benefits across all five World Health Organization growth matrixes. NutraLac[™] qualifies as a safe all-natural nutraceutical galactagogue for all claims made under the FDA-Dietary Supplements Health and Education Act. Postpartum nutrition represents a significant market opportunity in the U.S. \$3.6 billion infant nutrition segment, with nearly \$900 million in the breast-feeding segment of nutrition for lactating mothers.

The Opportunity:

In recent years the major infant nutrition companies have become aggressive and misleading in their promotion of direct feeding their infant formulas for preterm and newborn infants. These aggressive practices have resulted in FDA actions relative to the health and wellbeing of infants, including cease and desist warning letters precipitated as a result of legal actions against Abbott and Mead Johnson due to infant health risks



and mortalities resulting from their infant formulas administered prior to the intestinal maturity of the infants. Even under less life-threatening circumstances research has shown that infant immune systems and cognitive capacity are at greater risk with premature consumption of infant nutritional formulations. The safest solution for infant health and wellbeing is breastfeeding during the first six months of infant life. NutraLacs' all-natural nutraceutical nutritional formulation for breastfeeding mothers is clinically documented to meet the nutritional health and wellbeing of lactating mothers and their breastfeed infants. Ref. GE Sanches, GH Sullivan, and LR Miller. Functional Foods in Health and Disease 2022; 12(5):264-282.

The current issues associated with the health risks of early feeding formulated nutritional during the critical postpartum period of infant life create a significant opportunity for NutraLac. Given the renewed interest in breast feeding, we estimate that NutraLac, through our direct-to-consumer market strategy that embodies Certified Lactation Consultants has the potential to achieve \$1.2 million in revenues during FY1, and achieve \$40.2 million in revenue by FY 5 with a \$26.1 million net operating profit.

Non-GMO	13 Phytosterols
Hypoallergenic	10 Tocotrienols/Tocopherols
Low Glycemic	10 Polyphenols (including alpha lipoic acid)
Natural Plant-based Extract	10 B-Vitamin Complexes
Gluten Free	5 Gamma-Oryzanols
Bioavailable and Bioactive	5 Carotenoids
Balanced Nutritional Profile	19 Amino Acids
High in bioavailable protein	7 Phospholipids and Polysaccharides
Scientifically Tested and Documented	

NutraLac[™] Phytonutrient Profile