Marketing-driven innovation in the field of pediatric nutrition, in particular in the infant formula segment is not sustainable. New benefits of products must be scientifically proven and safety and efficacy of new formulae established in clinical trials. The innovation process of three infant formulae is described, which are dominating their category worldwide. Improvement in protein quality allowed to reduce the protein concentration in whey-based infant formula. Weight gain and BMI of infants fed those formulae correspond to breastfed infants and are lower than in infants fed traditional formulae with higher protein concentration.

A meta-analysis indicates associations between rapid weight gain in infancy and obesity later in life. If infants cannot be exclusively breastfed until 4–6 months of age, feeding low-protein formulae may contribute to positive long-term health outcome with potentially high health economic effects. A partially hydrolyzed whey-based formula for prevention of allergic symptoms in children with hereditary risk for allergic diseases was developed more than 25 years ago. The most recent meta-analysis which included fifteen randomized clinical trials indicates reduced risk of all allergic diseases and atopic dermatitis/eczema in favor of the partially hydrolyzed formula compared with standard formula. The partially hydrolyzed formula had the same protective effect as casein-based high-degree extensively hydrolyzed formula. Because of substantial price differences between the two formulae, feeding the partially hydrolyzed whey formula is cost saving. Hypoallergenic claims can be made in many countries, and international nutrition committees have positively commented the preventive effect of those formulae. Acidified formulae have been widely used during the last decade in replacement feeding programs for infants whose
mothers are HIV positive. The formula was innovated by improving whey protein quality and lowering protein concentration. The bacteriostatic properties of the new formula were proven in in vitro tests. Meta-analysis indicated that feeding the formula to immunocompromised infants resulted in growth similar to breastfed infants. The bacteriostatic effects of the acidified formula need to be communicated to health care professionals but also the risks if replacement feeding is not acceptable, feasible, affordable, sustainable, and safe for mother and infant.