

Danone's commitment to allergy care

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In pursuit of its commitment to promoting optimal nutritional health and wellbeing, Danone and its founding companies have a long and distinguished history at the forefront of advances in knowledge about diet and nutrition. Danone also has a strong ongoing commitment to education and providing platforms for the exchange of knowledge and experience.

Since their foundation, the Danone founding companies have partnered the medical profession to conduct and apply scientific research to develop therapeutic nutrition products specifically for children. The first special formulas were devised more than 100 years ago, to manage digestive disorders. Then, nearly 50 years ago, amino-acid-based formulas were developed to treat patients with inherited metabolic disorders such as phenylketonuria. During the 1970s, the company began providing enteral clinical nutrition based on extensively-hydrolyzed whey protein.

Danone allergy management and prevention products

Danone has a 30-year history of developing modern allergy care products. Soya-based formulas were available from the 1970s, and in the early 1980s Danone introduced Pepti Junior, a special formula for infants with malabsorption. Based on extensive whey hydrolyzate, lactose-free and with 50% medium chain triglycerides, Pepti Junior was not only much more palatable than the contemporary benchmark product Pregestimil, but also proved to be a breakthrough in the dietary management of cow milk protein allergy; a more dedicated allergy management product, Nutrilon Pepti, followed in the early 1990s.¹ The concept of amino-acid-based products for treating severe allergy was developed in the late 1980s, when Neocate was first launched.



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The company also explored the role of extensively hydrolyzed formulas in allergy prevention, but began to realize the hypoallergenic potential of partial whey hydrolyzates in the late 1990s, once there was sufficient evidence that these prevented allergies as effectively as extensive hydrolyzates, in addition to being more palatable and affordable and hypothetically helping to induce tolerance. The most important recent innovation has been scGOS/lcFOS prebiotic mixture, which has been shown to confer long-lasting protection against allergic disease, over and above that afforded by partially hydrolyzed hypoallergenic formula, in high-risk infants,² with effects that persist for at least 5 years. Another study has shown that scGOS/lcFOS supplementation also reduces the occurrence of atopic dermatitis in low-risk infants not consuming hydrolyzed formula.³

Having pioneered the concept of amino acid based infant formulas, with Neocate, and the role of prebiotic oligosaccharides in allergy prevention, Danone has amassed a wealth of pre-clinical and

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clinical research experience. Current research, much of it conducted in collaboration with academia, is focused on increasing our insights in tolerance induction to enable development of new tolerogenic feeding concepts.

References

1. Giampietro P, Kjellman N, Oldeus G, Wouters-Wesseling W, Businco L. Hypoallergenicity of an extensively hydrolysed whey formula. *Pediatric Allergy Immunol.* 2001;83-6.
2. Moro G, Arslanoglu S, Stahl B, Jelinek J, Wahn U, Boehm G. A mixture of prebiotic oligosaccharides reduces the incidence of atopic dermatitis during the first six months of age. *Arch Dis Child.* 2006;91:814-9.
3. Grüber C, van Stuijvenberg M, Mosca F, Moro G, Chirico G, Braegger CP, et al; MIPS 1 Working Group. Reduced occurrence of early atopic dermatitis because of immunoactive prebiotics among low-atopy-risk infants. *J Allergy Clin Immunol.* 2010;126:791-7.