Synbiotics as a promising approach for the primary prevention and dietary management of cow’s milk allergy

The global rise of allergy

The prevalence of allergic diseases, such as food allergy, atopic eczema, allergic rhinitis and asthma, is rising dramatically worldwide. CMA is one of the most common allergies in infants and young children, affecting up to 5% of the world population.

The importance of the gut microbiota in the early life

The gut microbiota of infants with allergic conditions is characterized by low levels of Bifidobacteria and Lactobacilli compared with healthy infants. Human milk contains human milk oligosaccharides (HMOs) and live bacteria that are provided at a critical stage in the early development of the gut microbiota. Given the present and important role of these naturally occurring pre- and probiotics, and recognising that breast feeding is not always possible, there is a compelling rationale to combine pre- and probiotic ingredients (synbiotics) in infant formula so that functionally it more closely resembles human breast milk.

The synbiotic concept

Synbiotics are a combination of pre- and probiotics. Pre- and probiotics can influence the immune system directly, or indirectly, achieving oral tolerance with time. However, most subjects having symptom resolution and management of food allergies such as CMA is one of the most common allergies in infants and young children, affecting up to 5% of the world population.

Prebiotic fibers which stimulate the growth of beneficial bacteria

Synbiotics can be used to target microbial dysbiosis in the primary prevention and dietary management of cow’s milk allergy

Scientific substantiation of the synbiotic concept for allergy management

Nutra has undertaken an extensive clinical research programme to support the safety, tolerability and efficacy of the synbiotic concept:

“Synbiotics are clinically proven to influence the gut microbiota, offering important opportunities in the management of cow’s milk allergy”

Professor Jan Kool Gut Biology & Microbiology, Nutricia Research

References:

The ongoing PRESTO study includes infants with confirmed IgE-mediated CMA, randomly allocated to receive the same AAF, with or without synbiotics for 12 months, and will assess the AAF’s tolerance acquisition over 12, 24 and 36 months. This trial will inform future studies primarily focusing on the clinical outcomes in the specific CMA populations.

Nutricia continues to collaborate with global experts to further its understanding of the impact of nutrition on food allergy.

For more information visit www.nutriciaresearch.com/allergy/