

## **NEWS RELEASE**

### **New perspectives on dietary prevention and management of childhood allergies**

- *New clinical trials explore potential novel treatments for food allergy*
- *Latest progress on food allergy, diagnostic and therapeutic dilemmas*
- *Steps to address cow's milk protein allergy outlined*

**Vevey, Switzerland** – January 2012. At a Nestlé Nutrition Institute Satellite Symposium held at the XXII World Allergy Congress in Cancun (Mexico) in December 2011, leading international experts explored new perspectives on dietary prevention, treatment and management of childhood allergies.

#### **New clinical trials explore potential novel treatments for food allergy**

Associate Professor Mimi Tang, Department of Allergy and Immunology, Royal Children's Hospital, Melbourne, Australia, explored the role of Oral Immunotherapy in treatment of childhood food allergy, its ability to induce de-sensitization and in the long-term modulate allergen specific immune responses to induce tolerance.

The incidence of food allergy across the western world has increased up to ten-fold during the period 1990 – 2004<sup>1</sup> and continues to rise. Similarly, there has been an exponential rise in the incidence of food anaphylaxis, particularly in the under 5yrs age group, suggesting that changes in the environment are having a great effect on the prevalence of food allergy<sup>2</sup>. A/Professor Tang explained, "The most significant increases affected those very allergies that persist into adulthood; peanut allergy, shellfish, fish and tree nut. Currently, the management of food allergy involves providing supportive care in the form of education and allergen avoidance. This includes education on recognition and treatment of allergic reactions, a medical emergency action plan and the provision of an adrenalin auto injector. However, 50% of children accidentally ingest the allergen within two years and of those who have an auto injector only 75% carried it and less than a third (32%) could use it correctly".<sup>3,4,5,6</sup>

Having explained the growing scale of the issue and the limitations of current treatment protocols, Professor Tang highlighted differences between desensitization and tolerance as outcomes of potential treatments for food allergy. Desensitization is the ability to tolerate a food while ingesting regular doses of that food. Tolerance however, is the preferred outcome for treatment of food allergy, namely the long-lasting ability to tolerate a food after a period of time has elapsed since ingesting the food, and likely involves re-programming of the immune response to food allergens.<sup>7</sup>

Oral immunotherapy (OIT) is a novel treatment for food allergy that is being explored in clinical trials. Trials to date show that OIT can induce desensitisation, but has a limited ability to achieve long-term tolerance to food allergens. Professor Tang said, "Modification of oral immunotherapy (OIT) by increasing the maintenance dose, prolonging treatment duration, or the addition of an immune modifying adjuvant may offer improved long-term tolerance induction and is a very promising area of research".

#### **Treatment and management of severe cases of Food Allergy**

Dr Ralf G Heine, Department of Allergy & Immunology, Royal Children's Hospital, Melbourne, Australia, addressed the issue of non-IgE mediated food allergies, which he said still posed significant diagnostic and therapeutic dilemmas.

Dr Heine explained that with IgE-mediated food allergy, the elimination diet that is required does not generally impact on the nutritional status of patients and the main complexity is really avoidance of the food, rather than nutritional management per se. With non-IgE mediated food allergy there is a different degree of complexity, usually due to allergy to multiple food allergens and no clear diagnostic markers. He said this often delays the recognition of non-IgE-mediated gastrointestinal allergic manifestations. This

may lead to adverse nutritional outcomes, including protein-energy malnutrition, feeding difficulties or specific micronutrient deficiencies.

Evaluating current treatment practices, Dr Heine said, "Infants with multiple non-IgE-mediated food allergy usually require treatment with amino acid-based formula until tolerance to cow's milk or soy develops at around 2-3 yrs of age.<sup>8</sup> The often complex nutritional requirements of these infants should be supervised by a dietitian, with close follow-up of growth parameters".

Dr Heine elaborated further on the issue of Multiple Food Allergy, describing Eosinophilic Oesophagitis as an example, which he said is a recently recognised gastrointestinal allergic condition associated with similar complexities. In patients with Eosinophilic Oesophagitis, elemental or targeted elimination diets have been shown to be effective, but may be poorly tolerated in the long-term. The role of food allergies in EOE is thought to be significant, however, the characterisation of underlying IgE-mediated and non-IgE-mediated food allergies in the individual patient remains difficult.<sup>9</sup>

### **Nutrition in Allergic Children: Recommendations and Guidelines**

Professor Christophe Dupont, Department of Gastroenterology and Nutrition, Hospital Necker, Paris, France, focused upon the feeding of children with food allergies. He said that Cow's Milk Allergy may occur with different kinds of symptoms and in relation either to breastfeeding or to formula feeding. If symptoms suggest Cow's Milk Protein Allergy (CMPA), the first step should be the elimination of cows' milk proteins (CMP) from the infant's diet and this diet should be strictly followed, at least until 9-12 months of age.<sup>10</sup> If the child is not breastfed or the mother cannot or no longer wishes to breastfeed, the first choice is an extensive cows' milk hydrolysate (eHF) of efficacy proven by scientifically sound studies. If it is not tolerated, an amino acid based formula is warranted. Affirming this approach, Professor Dupont said, "I would like to emphasize that food allergic patients must benefit from a nutritionally adequate elimination diet until 6 months of age by using formulas adapted for infants; after 6 months of age the approach should be based upon prolonging the use of adequate formulas, balanced and adequate complementary feeding and ensuring an ideal vitamin D status. The role of extensively hydrolysed formula and of amino acid based formula is essential to provide nutritional balance to those children. Food allergy tends to resolve with age, so children need to be challenged very regularly".

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