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Editorial

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ARE WE EXPERIENCING A FOOD ALLERGY EPIDEMIC?

Estamos vivendo uma epidemia de alergia alimentar?

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Food allergy is characterized by an adverse reaction to food intake, or food additives, mediated by immunological mechanisms[1]. The foods most commonly involved in this process are cow's milk, egg, wheat, soy, seafood, fish, peanuts and nuts. But it has also occurred in result of foods formerly not identified as causes of allergies, such as kiwi, sesame and cassava, among others[2].

It is assumed that allergic reactions to food affect approximately 6 to 8% of children under 3 years of age and 2 to 3% of adults, whose symptoms have become more severe and more persistent[2].

Children represent the segment most susceptible to these manifestations. And despite the absence of official data concerning the incidence of food allergy in Brazil, observational studies and reports made by pediatric gastroenterologists assert that this is a rising nutritional problem, which has become a worldwide public health problem, leading to a negative impact on the quality of life of the population.

Several reasons might contribute to such an increase, mainly the genetic and environmental factors. The risk of someone becoming allergic is estimated as being 60% genetically defined and 40% defined by the environment and lifestyle habits[1].

In regard to genetics, the individual presenting food allergy is usually born with a predisposition to develop it. In the presence of familial atopy, it is common for parents or siblings to present rhinitis, asthma, atopic dermatitis or food allergy[3,4].

Among the environmental factors, these stand out: changes in the intestinal microbiota (excessive use of antibiotics, gastric acid inhibitor medications, increase in cesarean births); exposure to processed, ultraprocessed and transgenic foods; low breastfeeding rates and late supply of solid foods to children[5].

One can infer, however, that the major challenges regarding a potential food allergy epidemic in the present are related to the type of childbirth, lack of breastfeeding and exposure to antigens.

Based on the verification that children are born germ-free and that colonization starts immediately after birth, it is understood that this process is influenced by the type of delivery. In the vaginal birth, colonization of the newborn has as natural source the maternal intestinal microbiota, causing their beneficial "contamination", which does not occur during a cesarean section. Therefore, normal delivery has advantages in preventing the risks of allergies, autoimmune diseases, and celiac and inflammatory bowel disease [6,7].

Another important preventive factor is the practice of exclusive breastfeeding. The main components of human milk that act as a protective factor against infections and allergies are: lymphocytes (memory T cells) and macrophages, human milk polymeric immunoglobulin A (IgA), the composition of polyunsaturated fatty acids and polyamines, in addition to immunomodulatory and anti-inflammatory factors (lactoferrin, IgM, IgG and IgA antibodies, neutrophils, cytokines) and growth factors, which probably protect against allergic sensitization during lactation and shortly after weaning[8].

National and international health agencies recommend exclusive breastfeeding up to six months of age and, after that period and up to two years, complementing the diet with solid foods[9]. Even though the human milk has not been definitively proven to prevent allergen sensitization, nor has the mother's diet during pregnancy been proven to influence the development of food

allergy, exclusive breastfeeding should be encouraged, given all its nutritional, immunological, economic and psychological advantages[10].

The diet offered to the child represents another preventive factor, since depending on its composition and the moment when complementary feeding is initiated, it can have a vast influence on the composition of the child's intestinal microbiota, which can contribute to the appearance and duration of the allergy.

Therefore, foods should be included slowly, one by one, not before 4 months of age and without interruption of breastfeeding. The introduction should occur between 4 and 6 months of life, a period called the "immunological window", since the chances of developing food allergies are higher outside this period[10].

The exclusion of potential allergens from the diet is not recommended, whereas the early exposure to a food can have a protective effect, so the start of the supply of solid foods to children it should not be delayed. For those already proven to be allergic, the contact with very small amounts of the allergen in a controlled manner, orally, may assist in the acquisition of tolerance, a method known as desensitization treatment or oral immunotherapy[3].

Some foods can help in the child's adaptation to complementary food. A diet with fibers can be an ally in the prevention of allergies by influencing the diversification of the microbiota. There are also infant formulas added with prebiotics that have positive effects, in cases of children who can not be breastfed[7,11,12].

Nevertheless, although food allergy has been studied for many decades, the knowledge of its risk factors, pathogenesis, cellular and molecular processes is still scarce. It is observed, however, that the infant formulas used in food allergy are becoming more effective and accessible to home and hospital use, improving the quality of life of food allergy sufferers, but should be used sparingly and only prescribed within the protocols established by scientific societies.

Within this current scenario, the actions of health promotion and prevention of food allergies should be stimulated, through the adoption of the guidelines of the Dietary Guidebooks in the training of health professionals, in the orientation to the users of the Unified Health System, in the care for children under 2 years in Primary Care and in childcare clinics, in order to strengthen the implementation of the National Strategy for Promotion of Healthy Eating (*Estratégia Nacional para Promoção da Alimentaç*ão *Saudável - ENPACS*)[9].

The Dietary Guidelines for the Brazilian Population is another instrument that brings together a set of concepts, principles, guidelines and strategies that aim to provide individuals and professionals with the promotion of appropriate food practices at the individual and collective levels, in order to promote health and food and nutritional safety of the population[13].

In short, there is no doubt that prevention is the best route in the context of a probable food allergy epidemic, and it is up to professionals who attend to the mother and child clientele to use primary, secondary and tertiary prevention actions[14].

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