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*Narrative Review*

## Which Foods Can Be Beneficial in Dermatology?

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### KEYWORDS

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### ABSTRACT

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The authors discuss the potential role of specific nutrients in the prevention of atopic dermatitis. They highlight the importance of introducing micronutrients to promote favorable immunomodulation in children affected by this condition. Finally, they emphasize the need for consensus among specialists regarding the execution of allergy testing, as well as the timing of dietary introduction of solid foods, eggs, and peanuts.

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## The role of nutrition in prevention in pediatric dermatology

Promoting a balanced, healthy, and varied diet from pregnancy through childhood can be helpful in preventing atopic dermatitis and childhood asthma (1). Nutrients such as vitamin D, probiotics, and omega-3-LCPUFA fatty acids have been shown to be effective in the literature. Both during pregnancy, especially in the third trimester, and after birth, while continuing to

provide the child with a diet rich in protective nutrients, the mother can supplement the diet with vitamin D, probiotics, and omega-3-LCPUFA supplements, at high doses, to reduce the risk of developing atopic dermatitis and prevent childhood asthma (1-3).

## Food allergies and atopic dermatitis

The most complete and safe food for newborns is breast milk. Through breastfeeding, nutrients and many functional elements are passed on to the baby, helping to shape a developing immune system. It is therefore important to reinforce the value and necessity of breastfeeding. In infants at high risk of developing atopic dermatitis, a risk primarily determined by family history, or who have already developed dermatitis in the first six months of life, weaning should involve regular introduction of foods, even the most allergenic ones, following appropriate timing as with all other infants. It should be done no earlier than 5-6 months, but no later than the seventh month. During this phase of complementary feeding, food allergy screening is indicated

only in a few cases, and only in cases of dermatitis that have already appeared and is more severe. Elimination diets are widely discouraged, not only to avoid nutritional deficiencies but also because of the risk of developing new allergies. According to Anglo-Saxon studies, introducing allergenic foods such as eggs and peanuts in small amounts and at appropriate times, such as between 6 and 8 months of age, can help reduce the risk of allergies. Although this is more difficult in our population, the idea of introducing allergens during a phase of immune system development, which corresponds to the complementary feeding phase, is appealing in the perspective that can induce greater tolerance (4).

## Micronutrients and immune modulation

Vitamins and micronutrients are essential for children with dermatitis. Ensuring an adequate intake of vitamins C, D, E, magnesium, selenium, zinc, and omega-3s is recommended for immune health and disease prevention or treatment. Ensure your child's diet includes foods rich in essential vitamins and minerals, such as citrus fruits for vitamin C, fish for omega-3-LCPUFA fatty acids and vitamin D, and nuts and seeds for magnesium and zinc. If dietary intake is scarce, supplementation is needed. This can help maintain a healthy immune system and help treat dermatitis, where nutritional deficiencies of trace elements and vitamins are often common (5, 6). Some deficiencies, in fact,

are characterized by dermatological manifestations. It is therefore necessary to raise awareness of the importance of preventing vitamin C and B3 deficiencies to avoid diseases such as scurvy and pellagra, which are extremely rare today but can recur. Educating parents on the importance of a balanced diet to prevent vitamin deficiencies is therefore essential for the pediatrician. For example, including fresh fruits and vegetables to prevent scurvy (vitamin C deficiency) and niacin-rich foods such as meat and whole grains to prevent pellagra (vitamin B3 deficiency). But this is an opportunity to reiterate how a varied, free, and rich diet is important for both children and parents.

## Clinical recommendations and specialist collaboration

A child with atopic dermatitis is usually treated by a series of specialists: family pediatricians, dermatologists and pediatric allergologists. Always remembering that this is constitutional condition, all specialists involved should approach the disease uniformly. Specific allergy tests should be performed only in very select

cases, paying close attention to the test results. It is necessary to adopt targeted therapies for the management of persistent atopic dermatitis, but also to distinguish between allergies and intolerances and avoid unnecessary and often dangerous strict diets for growing children. Therefore, full collaboration between specialists

such as allergists and dermatologists is necessary to perform specific allergy tests indicated and develop increasingly personalized treatment plans for children with persistent atopic dermatitis. It is essential to avoid unnecessary restrictive diets and clearly distinguish between allergies and intolerances (7).

From a practical standpoint, solid foods should be introduced after 6 months of age, never at 4 months,

based on the baby's chewing ability and neuromotor development. Introduce solid foods such as pureed vegetables and fruit around 6 months, ensuring the baby is ready. Offer cooked and uncooked eggs as the first solid food and introduce peanuts during weaning in an appropriate form even at high risk children, performing the skin prick tests only in patients with severe atopic dermatitis.

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