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February 1, 2007

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Asthma, eczema and allergies: Why are they plaguing kids?

In the past 20 years, the number of children afflicted with asthma, eczema, and food allergies has doubled. What are these diseases and what causes them? How can we protect our children from these increasingly common problems?

Children with these diseases are considered allergic or atopic. They produce blood products to fight infection from common environmental antigens which would normally cause no harm. The production of these antibodies causes an inflammation in the lung (asthma) or a reaction in the skin (eczema). Allergic reactions to food range from abdominal irritation to a life threatening, asthma-like response known as anaphylaxis.

Although physicians and scientists offer a number of theories, the reason for the increasing frequency of these disorders remains a mystery. Some investigators believe in the hygiene hypothesis--that our immune systems overact to minimal stimulation, because our environments have become so clean and germ-free. Others have suggested that, with improved insulation and less fresh airflow in our homes and workplaces, our increased exposure to dust and chemicals may sensitize us.

Pediatricians have long worried about the effect of foods on the development of allergies in children. Many wonder whether breastfeeding or the early introduction of solid foods makes a difference in the development of eczema, asthma, and food allergies. Some have suggested that allergy problems could be prevented if certain foods are avoided during pregnancy or when breastfeeding.

The American Academy of Pediatrics recently published a clinical report (Pediatrics, January 2008) that reviews these issues in depth and makes new recommendations. A number of long-standing feeding recommendations were found to be effective, while others were not supported and may be of little value.

Maternal Food Restriction - No evidence was found that restricting the food eaten by mother during pregnancy or when breastfeeding protected infants and children from developing allergic conditions.

Breastfeeding in Infants at Risk of Developing Allergies - Infants at risk of allergies are those with parents or siblings who have allergies. Children exclusively breastfed for 4 months wheeze less and have less eczema and cow's milk allergies than those fed or supplemented with cow's milk formulas. Certain formulas, used alone or in combination with breastfeeding, also provide protection. Although more costly, Enfamil Nutramigen Lipil®, Enfamil Pregestimil®, and Similac Alimentum Advance® are all considered protective.

Soy-Based Formula - These products were used extensively for decades as an alternative to cow's milk-based products, with the expectation that they would protect babies from developing allergies. No evidence was found suggesting that using them prevented allergies.

Introduction of Solid Foods - A generation ago, parents commonly started solid foods before infants reached a month of age. Pediatricians have been trying to reverse that trend for at least three decades, as overfeeding leads to obesity. In addition, many believe that the early introduction of solid foods caused an increase in allergies. There is no evidence to suggest that delaying solids beyond four months has any impact on the development of allergies, however, given the epidemic of obesity, it may still be a good idea to avoid these high calorie options in infants less than 6 months of age.

These are complex issues. If you have questions or concerns make an appointment to speak with your pediatrician.

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