

Sugar Intake Linked to Kids' Asthma?

Diet Rich in Sweets Could Promote Kids' Asthma, Study Shows By Charlene Laino

March 17, 2008 (Philadelphia) -- Sugar might do more than just plump up our children, it could also help give them asthma, animal research suggests. Asthma now affects nearly 9% of children and teens, a figure that has doubled since the 1980s, according to a study published last year. Poor eating habits, including frequent consumption of candy and other sugary foods, are among factors blamed for the increase of asthma in children and teens, says Sonja Kierstein, PhD, of the Nestle Research Center in Lausanne, Switzerland. Kierstein and colleagues hypothesized that a sugar-rich diet may prime the immune system of the airways to allergic inflammation. The inflammation, in turn, can cause a narrowing of the airways and mucus production, resulting in asthma symptoms, such as wheezing and shortness of breath. Kierstein, who performed the study while at the University of Pennsylvania, presented the findings here at the annual meeting of the American Academy of Allergy, Asthma and Immunology.

Mice, Like Kids, Can't Get Enough Sugar To test their theory, the researchers studied two groups of mice. One group was given water. The other mice were offered sugar-laced water and allowed to drink up -- as much as they wanted. "Their behavior was just like in kids," Kierstein tells WebMD. "Once they tasted [the sugar water], they went back again and again." Both groups of mice were then injected with an allergen in an effort to make them more tolerant to that allergen. The idea of tolerance is to strengthen the immune system to fight off the effects of a future exposure to that allergen. Allergens are substances that can cause allergic reactions such as runny noses and hives and can trigger asthma symptoms. Then, both groups of mice were reinjected with the same allergen and the researchers looked at whether there was any difference in how susceptible the two groups were to inflammation in the airways and the allergic response. "What we found," Kierstein says, "is that the sugar-fed mice had more than twice as much airway inflammation as the water-fed mice. Their immune systems were more activated. This makes them more susceptible to asthma." Asriani M. Chiu, MD, a pediatric allergist at the Medical College of Wisconsin in Milwaukee, says the findings provide "one more reason to encourage our children to eat less sugar." One simple way to cut back on your kid's sugar intake is to replace soda and sugar-laden fruit punch with juices that don't have any added sugar, Chiu tells WebMD. "Read the labels," she advises. "Some parents are not aware that high-fructose corn syrup, an ingredient in many fruit drinks, is just another form of sugar."