

of identifying a group of experts to convene a scientific advisory board that would be charged with reviewing the risk assessment. This group

would also be asked to contribute to future scientific analysis related to the risk of melamine and its compounds to humans and animals.”

For additional information about the pet food and contaminated feed investigation, go to www.fda.gov or www.usda.gov.

Childhood Acquisition of *Helicobacter pylori* Linked to Reduced Asthma and Allergy Risk

Acquisition of *Helicobacter pylori*, which predominantly occurs before age 10, may reduce the risks of asthma and allergy.

These findings are based on an analysis of a national health survey data of >7000 adults and showed that persons infected with *H pylori* strains harboring a virulence gene (*cagA*), were more likely to be asthma free before age 15. People who carry *H pylori cagA*⁺ strains were 40% less likely to have had asthma at an early age than those who did not carry these virulent strains. The study also found that the microbe was associated with protection against ragweed and other allergies due to pollens and molds, particularly among younger adults. The study was published in the April 23, 2007, issue of the *Archives of Internal Medicine*.

“Ultimately, the potentially protective properties of *Helicobacter* are consistent with one another,” explains Dr Martin J. Blaser, the Frederick H. King Professor of Internal Medicine, Chairman of the Department of Medicine, and Professor of Microbiology at NYU School of Medicine. “These properties point toward a much more complex view of the organism—not just as ulcer-pathogen or cancer-pathogen, but as an organism that has its costs and benefits to us. The relative costs and benefits clearly differ among individuals.” Dr Blaser’s previous studies have con-

firmed the bacterium’s link to stomach cancer and elucidated genes associated with its virulence, such as *cagA*.

Today, <10% of children carry the organism in industrialized countries, whereas >90% of children are infected, usually by age 5, in developing countries. “This bacterium has been the dominant organism in our stomach for tens of thousands of years, and it can’t disappear from us without consequences,” says Dr Blaser. He notes that a substantial body of work now shows that *H pylori* also may protect against gastroesophageal reflux disease and the conditions it leads to in the esophagus.

If the relationship between *H pylori* and asthma is confirmed in other studies, then it raises the question about whether “we should be trying to eliminate *Helicobacter* from children,” says Dr Blaser. “This is probably the first time in human history that we have children who are growing up without *Helicobacter* guiding their immune responses,” he says. “By the repeated courses of antibiotics given to children, we are changing human microecology and we don’t know what we are doing.”

In the new study, Blaser and co-author Dr Yu Chen, of NYU’s Department of Environmental Medicine, evaluated the associations of *H pylori* status with history of asthma and allergy and with skin sensitization using data from 7663 adults in the Third National Health and Nutrition Examination Survey.

Adjusted odds ratios (ORs) for currently and ever having asthma, allergic rhinitis, allergy symptoms in the previous year, and allergen-specific skin sensitization were determined comparing participants seropositive for *cagA*[−] or *cagA*⁺ strains of *H pylori* with those without *H pylori*.

The presence of *cagA*⁺ *H pylori* strains was inversely related to ever having asthma (OR, 0.79; 95% confidence interval [CI], 0.63–0.99), and the inverse association of *cagA* positivity with childhood-onset (age ≤15 years) asthma was stronger (OR, 0.63; 95% CI, 0.43–0.93) than that with adult-onset asthma (OR, 0.97; 95% CI, 0.72–1.32). Colonization with *H pylori*, especially with a *cagA*⁺ strain, was inversely associated with currently (OR, 0.77; 95% CI, 0.62–0.96) or ever (OR, 0.77; 95% CI, 0.62–0.94) having a diagnosis of allergic rhinitis, especially for childhood onset (OR, 0.55; 95% CI, 0.37–0.82).

The study found consistent inverse associations between *H pylori* colonization and the presence of allergy symptoms in the previous year and sensitization to pollens and molds. “These observations support the hypothesis that childhood acquisition of *H pylori* is associated with reduced risks of asthma and allergy,” the report concludes.

For more details, see “Inverse Associations of *Helicobacter pylori* With Asthma and Allergy,” *Arch Intern Med* 2007;167:821–827.