
CENTRAL PA HEALTH CARE QUALITY UNIT NEWSLETTER FOR HEALTHY OUTCOMES

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WHAT IS AN ALLERGY?

When most people think of an allergy, they think of the sneezing, congestion, and itchy eyes caused by pollen. In fact, allergies can be caused by just about any substance that you inhale or swallow, or that touches your skin. You can also be allergic to shots.

Your body's immune system is designed to attack harmful substances like bacteria and viruses. But with allergies, your body launches an assault far beyond what is called for on substances such as pollen, mold, dust mites, pet saliva and dander, and even medications and insect sting venom. Immunity is helpful protection against a substance. An allergy, meanwhile, is harmful hypersensitivity to that substance.

Allergies are extremely common, and they are on the rise. Already, about 50 million Americans suffer from allergies, leading to a lot of missed work and school days each year. Annual medical costs already exceed \$4.5 billion.

Not only do allergies cause a range of annoying symptoms, such as sneezing and itchy eyes, but they can aggravate or trigger other conditions such as asthma, sinusitis, and ear infections. For example, when allergies cause inflammation in your nasal passages, the opening to your sinuses can become blocked, leading to sinus inflammation, sinus infections, and sinus pain. Similarly, allergies can cause the ears not to drain properly, which can lead to ear infections.

But allergies don't stop there. The body's immune system is active from your head to your toes: allergies can cause different skin-related symptoms (such as hives and eczema); some types of allergies can lead to gastrointestinal problems; and assorted allergy-related symptoms can affect other normal body functions (such as headaches, loss of smell, and sleep disturbances).

One of the most deadly kinds of allergic reaction is called "anaphylaxis," which is when the entire body has a swift, severe reaction to something such as foods (examples include peanuts, nuts, shellfish, or food additives), latex, medications (penicillin), or insect stings. The body literally goes into shock, leading to a sharp drop in blood pressure, respiratory arrest, and possible heart failure.



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SAVE THE DATE: June 2, 2011 - Nurses Training Day – Maria Joseph Community Center in Danville Speakers for that day include Bob and Linda Derr and Dave Ferro RPh from the *Medicine Shop*. Registration is from 9 – 9:30 am.

The information offered in this newsletter is to increase your awareness of health related conditions and situations and not intended to be a substitute for professional medical advice. If you believe you or someone you support has a condition, please seek the advice of a physician.

Less Cholesterol in Eggs, USDA Says

Web MD - Kathleen Doheny

February 10, 2011 — Cholesterol in eggs has dropped in the past decade, according to a new analysis by the U.S. Department of Agriculture. Eggs, on average, have 14% less cholesterol and 64% more vitamin D than the last time they were analyzed by the government in 2002.

For the recent analysis, regular large-shell eggs were picked up from 12 locations across the country and then sent off to an independent lab at Virginia Tech University for evaluation.

The average amount of cholesterol found in one large egg is 186 milligrams, a level 14% lower than recorded in the last analysis. A large egg has, on average, 41 international units of vitamin D, 64% higher than found last time.

However, the message is still moderation. "It's still one egg a day," Jacob Exler, PhD, a nutritionist with the Nutrient Data Laboratory at the USDA Agricultural Research Service, tells WebMD. He points to the Dietary Guidelines for Americans 2010, which recommend getting less than 300 milligrams a day of dietary cholesterol.

"Eggs are a healthy food in a diet that has a variety of foods," Exler says.

Egg Analysis: Details

For the recent egg analysis, the laboratory workers evaluated not only cholesterol and vitamin D, but a host of other nutrients. The new information will be updated on nutrition labels on cartons of eggs in grocery stores and on menus.

Why eggs have lower cholesterol than before isn't known, but it may be because of improvements farmers have made to hen feed.

The vitamin D increase, Exler says, is easier to explain. "Some chickens are being supplemented with vitamin D," he says. "We think because of the interest in vitamin D that more egg producers will be changing the diet of their chickens to have more vitamin D."

Cholesterol in Eggs: Other Views

Eggs in moderation can be part of a heart-healthy diet, says David Katz, MD, MPH, director and founder of the Yale University Prevention Research Center in Derby, Conn.

In a study published in 2010 in *Nutrition Journal*, Katz and his colleagues found that moderate egg intake didn't adversely affect blood cholesterol in men and women with high cholesterol (although egg substitutes improved it). The study was funded by the CDC and the Egg Nutrition Center, funded by the American Egg Board, an industry group.

Moderate egg consumption doesn't appear to be linked to an increased cardiac risk, Katz and his colleagues conclude, although further testing is needed on people with established heart disease "to clarify the place of eggs in a judicious and heart-healthy diet."

When people are told to avoid or eliminate eggs from their diet, Katz says they might substitute unhealthy foods. "When we tell people not to eat eggs, what are they eating instead?" He suspects they may substitute a Danish pastry for instance, for their breakfast eggs.

What is Pica?

Pica is a psycho-behavioral eating disorder of compulsive persistent eating of non-nutritive substances for a period of at least one month, as defined by the DSM IV. Other criteria to warrant the behavior to be classified as pica is that it must be inappropriate given the developmental level of the person and, it must **not** be part of culturally acceptable practice.

Simply said, Pica comes from the Latin word for magpie – a bird known for its large and indiscriminate appetite. Pica is an atypical eating disorder in which the person craves and consumes non-food items. Commonly consumed items of no food value include: dirt, clay, sand, stones, pebbles, hair, fingernails, feces, paint chips, plaster, chalk, coffee grounds, cigarette butts/ashes, paper, plastic, coal, needles, batteries.



The prevalence of Pica is unknown because the disorder often is unrecognized and under reported. Sometimes the compulsive eating is secretive and difficult to diagnose until medical symptoms occur. Persons with Intellectual and Developmental Disabilities and/or autism are affected more frequently than children without these conditions. Among individuals with Intellectual Disabilities, pica is the most common eating disorder. In this population, the risk for and severity of Pica increases with an increasing severity of intellectual functioning.

There is no single agreed upon explanation of cause of this behavior, however there are a number of theories.

Nutritional: Although deficits in nutrients have been found, they have not been able to find a link between what people lack and what individuals choose to consume. Although there is no firm empirical data supporting any the nutritional deficiencies in iron, calcium, zinc, and other nutrients (thiamine, niacin, vitamins C and D) they have been associated with pica.

Physiological: Eating clay or dirt helps relieve nausea, control diarrhea, increase salivation, remove toxins, and alter odor or taste perception.

Psychological:

Stress - can cause vitamin depletion, increase stomach acidity, cause diarrhea, and this leads to physiological changes that may then precipitate pica behavior.

Habits – could include chewing on hair, fingernails, drinking other body fluids (this can be a cultural or religious practice)-blood and urine drinking.

Oral fixation – eating items of certain consistencies, consuming clay or dirt as part of a daily routine such as smoking. In individuals with mental retardation, pica has been suggested to result from an inability to discriminate between food and non food items, however, this theory is not supported by findings of selection of pica items and the often, aggressive search for non food items of choice.

Cultural Component: The ingestion of clay or soil may be culturally based and is regarded as acceptable by various social groups. Pica is a widespread practice in western Kenya, southern Africa, India and Uganda. In Uganda for example, soil is available for purchase for the purpose of ingestion.

What's the Harm?

- Gastrointestinal tract complications, including mechanical bowel problems, constipation, ulcerations, perforations and intestinal obstructions, Bezoar (a ball of hair that collects in the stomach and fails to pass through the intestines), have resulted from pica.
- Choking – blockage of airway due to ingested material
- Exposure to infectious agents via ingestion of contaminated substances is another potential health hazard associated with pica, the nature of which varies with the content of the ingested material. In particular geophagia (soil or clay ingestion) has been associated with soil-borne parasitic infections.
- Indirect toxicity from direct toxic substances – lead, mercury (ink and printed paper), phosphorous (matches) poisoning. Direct toxic effects on body organs such as liver, kidney and brain which may be irreversible.
- Nutritional deprivation – eating non-nutritive substances (clay) can cause anemia and hypocalcemia
- Dental injuries from eating hard inedible objects



What's the Treatment?

- A multidisciplinary approach involving psychologist, social workers and physician is recommended for effective treatment. Psychologist/Psychiatrist – Careful analysis of the function of pica behavior in persons is critical to effective treatment. Currently behavioral strategies have been most effective in treating pica.
- Development of the treatment plan must take into account the symptoms of pica and contributory factors, as well as the management of possible complication of the disorder.
- Safety measures – safety locks, high shelving, household chemicals and medications out of sight/out of reach.
- Provide healthy regular snacking in small amounts.
- Offer a food product when inedible PICA is attempted. Teach what is edible.
- Keep busy in a safe environment. Eliminate boredom and the need to explore and act on compulsions.
- Have a concrete plan as to what works and be consistent when PICA is attempted.
- Give people time to adjust, learn and accept the plan – do not give up the plan because it does not always work.