

AUGUST 2010 HANDOUTS

CELIAC PICNIC: We recently had our annual GF picnic on July 25th. Twenty people attended and enjoyed a wide variety of wonderful foods and conversation. The weather was pleasant and we had no rain. We were also entertained with banjo, mandolin, and guitar music provided by John and Gene. Our thanks to them for providing their music. If you missed out, you can enjoy our next GF meal in December when we have our annual Christmas Dinner.

CELIAC CONFERENCE: The annual conference at the Nationwide Children's Hospital in Columbus will be coming up this fall. For those of you who are newly diagnosed, now is the time to plan for this. It is a MUST where you will learn about celiac from gastroenterologists, pharmacists, dieticians, researchers, bakers, etc. Not only that, but you will also be able to go from booth to booth and sample goodies from various GF vendors. This is a good way to try all the foods without the expense. This conference costs about \$35 for early registration, which usually begins in September. Reminders will be given each month, but the best advice is NOT to wait, but to sign up early. The date is usually the first Saturday in November, or perhaps the last Saturday in October and has not been announced yet. Scheduling is done around OSU away football games whenever possible. You will be kept informed of the dates as they become available.

"Gluten-free" foods may be contaminated:

NEW YORK (Reuters Health) - People with celiac disease and others who avoid gluten should beware that foods that are supposed to be naturally gluten-free are often contaminated, warns a new study.

Gluten is a kind of protein found in wheat, barley, and rye. In people with celiac disease - a condition that affects up to about 1 percent of the U.S. population - gluten triggers an immune reaction that causes damage to the small intestine and keeps the body from absorbing nutrients.

Grains such as oats, millet, and rice don't have this protein. But in a new survey of grains, seeds, and flours that should be gluten-free, researchers found that some of these products had picked up traces of gluten - probably from being grown or processed near grains that do naturally contain gluten.

"There was some general assumption (among people with celiac disease) that those naturally gluten-free grains and flours weren't contaminated," Tricia Thompson, a nutrition consultant on celiac disease and the lead author on the study, told Reuters Health.

Thompson and her colleagues analyzed 22 naturally gluten-free grains, seeds, and flours off supermarket shelves, only looking at products that weren't specifically advertised as being gluten-free. They tested the amount of gluten in those products against a proposed Food and Drug Administration limit for any product labeled gluten-free, 20 parts contaminant per million parts product.

Seven of the 22 products wouldn't pass the FDA's gluten-free test - and one product, a type of soy flour, had a gluten content of almost 3,000 parts per million, the authors found. Other products from the sample that weren't truly gluten-free included millet flour and grain, buckwheat flour, and sorghum flour.

The study was too small to give consumers a good idea of how common it is for these products to be contaminated or what products should make people with celiac disease especially wary, Thompson said.

But "it is a red flag," Cynthia Kupper, the executive director of the Gluten Intolerance Group of North America, who was not involved with the research, told Reuters Health.

Even companies that do explicitly label their products as gluten-free, she said, might not always test products they assume won't contain any gluten. The study "is a wake-up call to the food industry," said Kupper. Companies "need to make sure (their products) are truly gluten-free."

Without an FDA regulation in place, there is still no hard-and-fast government definition of what gluten-free means, Thompson said.

That makes it harder to keep companies that might skimp on their testing accountable.

"It's hoped but certainly not assumed that manufacturers who are putting the (gluten-free) label on their single-ingredient grains and flours are testing their ingredients," Thompson said. "Do all manufacturers test? Probably not."

Under the proposed gluten-free labeling rule, the FDA could conduct inspections of manufacturers that claim their products are gluten-free and analyze those products.

Thompson and Kupper agreed that more research needs to be done to find out the scope of the contamination problem. In the meantime, Thompson said, people with celiac disease are probably better off purchasing grains, seeds, and flours with the gluten-free label. The products can't be guaranteed to be completely free of gluten, but it is more likely that they will have been tested, she said.

CELIAC: A Tricky Disease

CD remains a "tricky disease," Dr. Ludvigsson said. "It can be asymptomatic; have so-called traditional symptoms such as diarrhea, weight loss, failure to grow (in children), fatigue, and malnutrition; and have nontraditional symptoms such as osteoporosis, depression, adverse pregnancy outcome; and increased risks of both malignancy and death."

The onset of certain autoimmune disorders including autoimmune liver disease, thyroid disease, type 1 diabetes, and Addison's disease can actually signal CD, he noted. "This means that clinicians should consider CD in a number of symptoms and disorders."

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CD Often Undetected; Cause Unknown

CD often goes undetected, although the percentage of undetected cases varies between countries, Dr. Ludvigsson noted. "In most countries, at least two thirds of individuals with CD have not received a diagnosis by a doctor." The reason for the high percentage of undetected disease is that the disease can be difficult to diagnose, and "it is sometimes almost asymptomatic," he added.

DeBoles Recall: Company Contact: Mike Miller 303-581-1361

July 21, 2010 - DeBoles Nutritional Foods, Inc. announced that it is recalling one lot code of **DeBoles® Kids Only! Gluten Free Tubettini Corn Pasta** because it may contain undeclared whole wheat alphabet pasta.

The product comes in a cardboard box, 8.5 ounce, with a clear plastic window. The expiration lot code is on the top of the box and the UPC Code 087336638305 appears on the bottom of the box. No other lot codes are affected. This recall only affects: Deboles Kids Only! Gluten Free Tubettini Corn Pasta Lot code: 30JUN11D1

It may contain whole wheat alphabet pasta mixed with the gluten-free tubettini corn pasta in packaging that did not declare wheat as an allergen and, as a result, the product is being recalled. The alphabet pasta is clearly visible and is a darker color and characteristic alphabet shape compared to the yellow corn small-tube pasta.

Consumers are urged to return such packages to their place of purchase for a full refund. Consumers with questions may contact the company at 1-800-434-4246 during extended hours from Monday to Friday 9 am to 9 pm EDT, and on Saturday and Sunday from 10 am to 6 pm.

Beef Jerky Recall: A Michigan Firm Recalls Beef Jerky Products Due to Mislabeling and Undeclared Allergen

WASHINGTON, July 6, 2010 - M&K II Co., a Macomb, Mich., establishment, is recalling approximately 8,000 pounds of beef jerky products because they contain undeclared allergens, wheat and soy.

Products recalled: 1-ounce and 3-ounce packages of **"FIREHOUSE JERKY MILD BEEF JERKY SMOKE FLAVOR ADDED."** "Sell By" dates ranging between 06/16/11 and 11/14/11 are ink jetted on the back of each package. 1-ounce and 3-ounce packages of **"FIREHOUSE JERKY PEPPER BEEF JERKY SMOKE FLAVOR ADDED."** "Sell By" dates ranging between 06/12/11 and 11/25/2011 are ink jetted on the back of each package.

Each package bears the establishment number "EST. 6935" or "EST. 10002" inside the USDA mark of inspection. The code number "6935" is ink jetted on the back of each package. These products were produced on various dates from January 28, 2010, through May 21, 2010, and were sent to Firehouse Foods, Inc., a distributor in Alsip, Ill., for further Internet and retail sales.

Consumer and media inquiries regarding the recall should be directed to Terry Amerson, QA Manager, at (586) 677-3018.

Chef's Cupboard Chicken with Rice Recall: Bay Valley Foods recalls Chef's Cupboard Chicken with Rice soup due to undeclared egg & wheat. Some of the cans of soup have been mislabeled and may contain Vegetarian Vegetable Soup. The recalled soup can be identified by:

"BEST BY 01 05 12" that can be found on the bottom of the can

Chef's Cupboard Soups are sold at Aldi stores nationwide. Consumers who have purchased the soup can return it to an Aldi store for a full refund.

Psoriasis and Celiac: Psoriasis patients showed substantially higher celiac-associated antibodies for gliadin IgA/IgG and tissue transglutaminase IgA compared with control subjects ($P < 0.05$, < 0.05 , and 0.01 , respectively).

Women showed substantially higher serum anti-tissue transglutaminase IgA (anti tTG IgA) than did men. Older patients showed higher expressions than did their younger counterparts.

Antibodies showed significant positive correlation (anti-gliadin IgA with anti-gliadin IgG: $r = 0.67$, $P < 0.05$; anti-gliadin IgA with anti tTG IgA: $r = 0.45$, $P < 0.05$, anti-gliadin IgG with anti-tTG IgA: $r = 0.26$, $P < 0.05$, respectively), but showed no significant correlation with HLA Cw6.

From their results, the team concludes that patients with psoriasis commonly show latent celiac disease or celiac-associated antibodies, but that HLA Cw6 is not connected with expression of these antibodies in patients with psoriasis.

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Osteomalacia in Adult Celiac Disease

July 5th, 2010 by Cleo Libonati, RN, BSN

Osteomalacia is common in celiac disease. Osteomalacia can occur at any age. In children, it is called rickets. It is a metabolic bone disorder that involves slow loss of minerals from bone tissue throughout the skeleton, stemming from inadequate absorption of vitamin D. As minerals are dissolved from bone tissue to provide for essential functions elsewhere in the body, bones gradually lose their hardness.

Consequently, pronounced softening of the bones characterizes osteomalacia. Soft bones become deformed, especially bones of the arms, legs, spine, thorax and pelvis. The softer bones have a normal amount of collagen, a strong fibrous protein in the bone matrix (osteoid) that gives bone its structure and tensile capacity, but there is not sufficient calcium and phosphate minerals available to properly mineralize or be deposited in the osteoid to give it necessary hardness.

Bone is living, dynamic tissue. Up to age 18 years, bone is modeled or continually formed to grow bones bigger. After growth stops in adulthood, bone is continuously being remodeled or remade and repaired to keep it strong. Older areas of bone are resorbed (dissolved) and then filled in with new bone tissue on a regular basis.

What causes osteomalacia?

In celiac disease, malabsorption of vitamin D causes the lack of sufficient vitamin D necessary to adequately absorb and use calcium and phosphorus minerals in the body. In addition, fat malabsorption underlies in large part the malabsorption of all three nutrients: vitamin D, calcium and phosphorus. Certain other necessary nutrients needed in small amounts for bone health may also be malabsorbed. These other nutrients include magnesium, vitamin K and selenium.

What are the symptoms of osteomalacia?

- First, lack of energy and rheumatic aches or pains in the lower back and thighs develop.
- Then weakness of the thighs develops that progressively involves the arms and ribs. It becomes more difficult to climb stairs or get up from a squatting position because of thigh weakness. In arm weakness, objects feel heavier than they should to lift or carry. Breathing is more shallow when weak chest muscles do not fully expand the ribs, which is the mechanism that expands the lungs to pull in air.
- Bone tenderness develops, especially in the hips.
- Bones become misshapen from weight of the body and/or the pulling of muscles that attach to them, producing strain on the joints of the hips, knees, lower legs, ankles, and feet. The pelvis flattens front to back and widens side to side. Either bowlegs or knock-knees may result from significant angling of the knees in or out, causing pain and difficulty in walking.

In bowlegs, long bones of the legs above and below the knee bow outward, the knees angle out causing the space between knees to widen and the ankles and feet to roll out. Walking becomes duck-like or waddling.

In knock-knees, the knees angle inward causing the distance between them to decrease. Knees may eventually overlap, hitting each other in walking. The ankles are spaced apart with the feet rolling inward on the arch, creating an awkward walk or gait. From the side, legs may appear saber-shaped as the knee is forced backward.

High impact exercise such as jogging or aerobics puts the person with either bowlegs or knock-knees at high risk for injuries.

- Bones in the tips of fingers can become eroded due to resorption, making them thin and small.
- Bone fractures may develop, especially of the wrist and pelvis.
- Osteoarthritis of the knee will develop if osteomalacia is not treated.

How is osteomalacia diagnosed?

People with vitamin D deficiency need medical treatment to restore bone health. Your doctor will order medical tests that may include:

- Blood work shows low vitamin D, calcium and phosphate levels and usually elevated bone alkaline phosphatase (an enzyme) and parathyroid stimulating hormone (PTH) levels typical in celiac disease.
- Bone X-rays show bone deformities such as bowing and translucent pseudofractures called Looser's zones that are diagnostic of osteomalacia.
- Bone biopsy of bone tissue shows demineralization at a microscopic level.
- Dexascan is a non-invasive procedure that scans bone of the lumbar spine, hip and wrist to measure bone density.

Treatment

A doctor will prescribe the correct dosage of vitamin D based on bloodwork to restore normal levels and follow-up to monitor response. Blood monitoring of calcium and phosphorus is also important to evaluate the need for supplements while bone is healing. Too much is just as bad as too little.

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Because many processed foods are fortified with vitamin D, it necessary to read food labels for added vitamin D in order to tell the doctor how much vitamin D is in the fortified products you regularly consume. This way he can factor that amount into the dosage he wants to prescribe.

Pain and weakness usually disappear within 1 to 2 months. Repeat x-rays show improvement in bones within a few weeks while complete healing takes 6 months.

Medical Research

A study investigating bone metabolism in celiac patients demonstrated that static and dynamic microscopic examination of cells of iliac crest bone biopsy are useful tools to evaluate bone metabolism in CD, especially if hyperparathyroidism or mineralization defect are suspected. Hyperparathyroidism, caused by inadequate calcium, may be a problem in patients before introducing a gluten-free diet. Mineralization defect and osteomalacic changes are common later on, irrespective of whether patients are in remission or not.

Changes may not respond to a gluten-free diet alone but may require supplementation.

What should I do?

1. Check yourself for bone changes. We cannot “see” bone softening. And because muscle, fat and other soft tissue surrounding bone make it hard to notice bowing in early stages of osteomalacia, the way to check for bone changes is to look at the knee joints. They should be over the center of your feet.

- Stand in front of a full-length mirror with feet spaced so they are in line with your hip joints. The knees normally are centered over the feet and the kneecaps face forward.
 - In bowlegs, a line straight down from the kneecap falls outside the feet and knee-caps turn out.
 - In knock-knees, a line straight down from the kneecap falls inside the feet and knee-caps turn in.
- If you have knee problems, plan to see an orthopedic doctor to learn what treatment is necessary and what exercises are appropriate for you. High impact exercises should be avoided. Cycling or swimming are low impact forms of exercise, as are pilates and yoga.

2. Learn more about vitamin D deficiency through books and online resources.

3. Spend time in the sunshine. Worried about skin cancer? Sun damage to the skin that may lead to cancer is caused by burning the skin. This doesn't happen in the 10 minutes it takes to get enough vitamin D. So enjoy your break outside when the sun shines. When you walk the children to school, let everyone get sun on their skin. Put the kids outside to play.

4. Use an untraviolet lamp indoors if getting out in the sunshine is NOT an option.

5. Keep a strict gluten-free diet. It is essential to heal the intestinal lining to prevent vitamin D deficiency through fat malabsorption.

6. Include natural food sources, such as fatty fish and eggs, **and fortified food sources**, such as milk, rice milk, soy milk, orange juice and cereal products in your diet. The egg has been shown to be an ideal food. The old assumption that the natural cholesterol in an egg would be harmful has been proven false by well-designed studies that show the opposite effect. Natural lecithin in egg is a powerful reducer of bad cholesterol in humans.

7. To prevent stress fractures and falls, learn and use proper body mechanics.

1. Sleep on a firm mattress to keep your body in alignment while sleeping
2. Use assistive devices to prevent losing balance by overreaching for high things or trying to pick up low things.

Damage from osteomalacia is progressive and the deformity is irreversible, making early treatment imperative to allow bones to heal and stop or prevent deformities from developing.

Resources:

- *Recognizing Celiac Disease* by Cleo Libonati.
- <http://courses.washington.edu/bonephys/ophome.html> by Dr. Susan Oh is a website with excellent detailed explanation of bone tissue with graphics.

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