



Gluten Allergy

Fall 2003

by Cindy Javor, RD, LDN

Do you know anyone that has to read labels so carefully because they have to avoid any product with wheat, barley, oats, and rye? Sounds difficult, doesn't it? People that avoid these products have usually been diagnosed with a digestive disorder called **gluten intolerance or celiac sprue**. This disease is an inherited, autoimmune disease and is a life-long condition that may be diagnosed at any age.

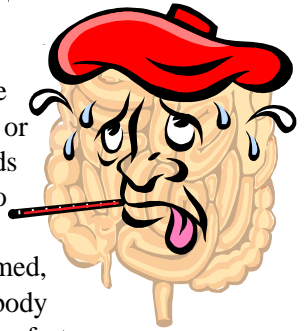
The intolerance or allergy is to the **gliadin** part of the gluten protein. Gluten is found in wheat, barley, oats, and rye, the grains used to make many of the breads, pastas, and cereals we commonly eat. When a person with gluten intolerance eats a food with gluten, the small intestine becomes irritated and is unable to absorb a sufficient amount of vitamins and energy from the food. This person will likely experience flu-like symptoms, such as cramps, diarrhea, abdominal distention, weakness, lack of appetite, and weight loss. Currently, the only way to diagnose this disease is to perform an intestinal biopsy.

The treatment — avoid all foods that contain gluten. To manage this disease, it is necessary to eat a **gluten-free diet**. Even a small amount of gluten can irritate the intestines. Gluten is a fairly common food additive, which makes it particularly difficult to totally remove. However, with proper counseling, the person with this disease can accurately identify all the gluten contained in foods. Recently, many manufacturers have begun making more gluten free-alternatives. For instance, **amaranth**, a very old grain source, has been referred to as the "ancient grain with a future." More manufacturers are producing this as flour, which can be used as a substitute for flours containing gluten.

The key to understanding and following a gluten-free diet is to become a good ingredient label reader. If a label contains ingredients that are questionable, the food should not be consumed until you can verify that it does not contain gluten. (See the box **Nutrition Guidelines for Gluten Intolerance** on Page 4)

Those with a gluten intolerance need to be aware that utensils used for the preparation and serving of food can become contaminated with gluten and cause problems. For example, gluten-free bread placed in a toaster used to toast other breads will likely become contaminated. Flour sifters used for gluten-containing flours should not be shared with gluten-free flours. Even deep-frying gluten-free products may be harmful if they are fried in the same oil as other breaded foods. In addition, wheat flour can remain in the air for hours in a home or bakery and contaminate all preparation surfaces. In order to make a kitchen totally gluten free takes much planning and common sense.

Not all adverse reactions are due to gluten intolerance. At times, lactose intolerance and/or food sensitivities or allergies to soy, corn, and other foods are the cause of symptoms similar to gluten intolerance. It is a good idea to keep a food diary of foods consumed, read food labels, and listen to your body regardless of the cause of your discomfort.



A person suffering from gluten intolerance or Celiac Disease is not alone and new research and information is surfacing at a rapid rate. For more information, check the following websites, www.csaceliacs.org, www.celiac.org, and www.gluten.net, or call your local extension office for the American Dietetic Association's nutrition fact sheet on Gluten Intolerance.

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The Safety of Fruits and Vegetables

by Mary Alice Gettings, MS, RD, LDN, CDE

As we have all heard, eating fruits and vegetables every day can reduce your risk of various chronic diseases. For example, research has shown that those of us who eat five or more servings of fruits and vegetables in combination every day have half the risk of developing some cancers as compared to those who eat one or two servings per day. But, many people are concerned about some fruits and vegetables causing foodborne outbreaks in the U.S.

While the entire population is at risk, those who are younger, older, or have compromised immune systems (those HIV+, with AIDS, or undergoing radiation and/or chemotherapy) are most at risk. From shopping at the grocery store to serving fruits and vegetables, there are steps you can take to protect you and your family from a foodborne illness from “nature’s candy.”

Since the fruit and vegetable section is usually the first area you come to when entering the grocery store, most people choose these foods first. To reduce bacterial growth, those fruits and vegetables that are best kept cool should be refrigerated or on ice in the grocery store. Another shopping tip is to avoid bruised, shriveled, or slimy produce since these can harbor bacteria. When placing meat, poultry, and fish in your grocery cart, always put them in a plastic bag and keep them as far away from the fruits and vegetables as possible. This will help to reduce the chance of bacteria from these foods contaminating those that are ready-to-eat. Because it is important to keep some fruits and vegetables (as well as other perishable foods) out of the temperature danger zone of 40 degrees to 140 degrees Fahrenheit, the grocery store should be your last stop before heading home. In the summer, keep your perishable items in your air-conditioned car. In the winter, place them in the cool trunk.

When you arrive home, the most important step to take is to avoid cross-contamination. This means keeping meat, poultry, and fish away from ready-to-eat fruits and vegetables in and out of the refrigerator. Some produce should be kept at room temperature, while others are best kept cool in a refrigerator.

In the refrigerator, fruits and vegetables should be stored above meat, poultry, and fish to eliminate the chance that juices from these products fall onto produce. Most of us keep fruits and vegetable in the crisper at the bottom of the refrigerator. It’s best to place your meat, poultry, and fish on a large plate in the refrigerator to minimize the chance that juice will fall into other foods. Hopefully, no juice will enter these drawers. If it does, the best thing to do is to throw away anything that has been contaminated. In addition, keep fruits and vegetables separate from meat, poultry, and fish when preparing them. This means using separate cutting boards and utensils or cleaning them with hot, soapy water between two different foods.

Other steps you can take when preparing fruits and vegetables is to always wash your hands for a minimum of 20 seconds before preparing all foods and between different foods. If you are interrupted by a phone call or a bathroom break, for example, wash your hands before proceeding with food preparation. To remove dirt and residue, wash most all fruits and vegetables with cool tap water. Since soap and detergents have not been approved for cleaning produce, we suggest you avoid these. The only exception to this rule is to wash melons and cantaloupes with soap and water before slicing. Since the rind will not be eaten, any bacteria, particularly E.coli and salmonella, can be washed off and not transferred to the inside when cutting. While there are many “produce cleaning” solutions on the market, they have not been shown to remove bacteria any better than water. Produce that has tough skin or an outer covering that won’t be eaten can be scrubbed with a brush under cool running water.

Cut and sliced fruits and vegetables should not be allowed out in the temperature danger zone for more than two hours. Make sure these products are placed in a refrigerator or in a cooler with ice to maintain a temperature of 40 degrees Fahrenheit or lower.

For more information on the proper care and handling of fruits and vegetables, call your local Penn State Cooperative Extension office for a brochure or check out the website www.foodsafety.cas.psu.edu and click on Educator’s Tool Box and then click on brochures. In addition, the Food Marketing Institute has developed The Food Keeper kitchen guide for \$1, which provides tips on maintaining the freshness and quality of food. It was written in cooperation with Cornell University and describes refrigerator and freezer storage, pantry and dry storage, and foods that need special care. To order, visit their website at www.fmi.org/pub/vision_pubs.cfm?prod_id=29 or contact them at 1-202-452-8444.

Attention Nut Lovers!!!

by Kathi French, RD,LDN

Yes, we've been told in the past to avoid nuts because of their high fat and calorie content. Recently, Penn State researchers reviewed 16 major studies on nuts and reported that regular intake of this food can significantly reduce the incidence of heart disease. Great news — nuts are actually good for your health.

The truth of the matter is that nuts are high in fat and calories, but they are high in a healthy unsaturated fat. The beneficial monounsaturated fat in nuts is oleic acid — a fat shown to reduce blood pressure, lower LDLs (“bad” cholesterol carriers), and protect against clogged arteries. The Penn State researchers concluded that eating one ounce of nuts at least five times a week could reduce the risk of heart disease by 25% to 39%.

If heart health benefits are not enough, nuts have also been linked to **possibly** lowering the risk of Alzheimer's disease. Peanut butter and nut consumption may even

lower the risk of type 2 diabetes. In these studies, those who ate nuts most (up to one ounce of nuts daily for five days per week) reduced their risk of diabetes by 27%. Researchers believe the **high monounsaturated** fat content helps to control blood sugar levels and increase **insulin sensitivity**.

There is much talk these days about the health benefits of omega 3 fatty acids, which are found specifically in walnuts. These fats have not only been shown to lower the risk of heart disease but also protect against certain types of cancer. In addition, Brazil nuts are found to contain cancer-fighting compounds.

Registered dietitian, Andrea Platzman, provides some easy ways to add nuts to your diet:

- ◆ Toss one to two tablespoons of walnuts, almonds, or other nuts on salads.
- ◆ Munch on a small handful of soynuts instead of chips.
- ◆ Spread a thin layer of peanut butter instead of cream cheese on bagels.
- ◆ Add nuts to quick breads, muffins, and casseroles.
- ◆ Stir one tablespoon of nuts into your favorite yogurt.
- ◆ Snack on an ounce of nuts when you feel hunger pangs in the mid-afternoon.

For nut lovers, the thing to remember is moderation. The health benefits can come from a small amount of this food each week. To prevent gaining weight as you increase your nut intake, decrease the number of calories you're eating somewhere else in your daily diet. The bottom line: enjoy the healthy benefits of nuts!

Source: Environmental Nutrition, February 2003

What is LDN?

You may have noticed that there is a new addition to the titles of the registered dietitians who author the articles of this newsletter. LDN stands for Licensed Dietitian-Nutritionist. After almost 20 years of lobbying for this credential, which will help to protect the public, Act 99 was signed into law in June 2002. This Act recognizes Licensed Dietitian-Nutritionist as the nutrition expert in Pennsylvania. LDN is the credential that identifies qualified nutrition professionals who have satisfied the educational and clinical requirements to provide medical nutrition therapy and accurate nutrition information. These requirements include at least four years of a science-based curriculum at an accredited university or college and 900 hours of pre-planned and supervised clinical work.

“The LDN after a person's name can provide a degree of confidence to the people of Pennsylvania who are seeking accurate meaningful nutrition advice,” says Susan Gargano, president of the 3400-member Pennsylvania Dietetic Association. “This is the first time that residents of our state can identify, with certainty, qualified nutrition professionals,” says Gargano. Pennsylvania has joined 44 other states, the District of Columbia, and Puerto Rico to grant licensure to dietitians.

What is One Ounce of Nuts?

- 23 Almonds
- 8 Brazil nuts
- 33 Peanuts
- 15 Pecan halves
- 47 Pistachios
- 14 Walnuts halves

A Food Pantry Wish List

by Dori Donough, RD,LDN

In today's world where so many wake up and go to sleep hungry, each of us must ask, "How can I help?" America's farmers produce enough food to help feed most of the world's people, and they provide Americans the most safe, abundant, accessible, and affordable food supply in the world. Despite these statistics, we still have 31 million Americans who are unsure from where their next meal will come. In fact, the twelve counties served by the Southwest Regional Food Banks will provide an estimated 353,516 individuals with food this year.

It's amazing to think that up to one-fifth of America's food goes to waste each year, with an estimated 130 pounds of food per person ending up in landfills. The annual value of this lost food is estimated at around \$31 billion and could feed roughly 49 million people.

What can you do to help with this problem? Become involved in food recovery, the collection of wholesome food for distribution to the poor and hungry. It follows a basic humanitarian ethic that has been a part of society for centuries. Today, the four most common methods for food recovery are:

Field gleaning - the collection of crops from farmers' fields that has already been mechanically harvested or crops on fields where it is not economically profitable to harvest.

Perishable food rescue or salvage - the collection of perishable produce from wholesale and retail sources.

Food rescue - the collection of prepared foods from the food service industry.

Nonperishable food collection - the collection of processed foods with long shelf lives. (Most of us have probably contributed in some way to nonperishable food collection.)

Food recovery is a creative way to help reduce hunger in America. It supplements federal food assistance programs, like Food Stamps and the Women, Infants, and Children program, by making better use of food sources that already exist.

The easiest way to get involved is to donate nonperishable foods to a food bank or food pantry. A more in-depth project might include:

- ◆ organizing a community food drive
- ◆ planting extra crops in your own garden to donate to the hungry
- ◆ becoming involved with or organizing a community garden to support a food pantry
- ◆ organizing a vegetable stand where proceeds benefit a group or cause
- ◆ volunteering at or financially supporting your local food bank or food pantry

On Page 6, you will find a list of processed foods with long shelf lives that is divided into groups of the Food Guide Pyramid. You can use this list to decide what you may like to donate, or it can help you provide ideas to others if you are initiating a community food drive.



Hunger hurts. It drains human energy, erodes human dignity, and diminishes human potential. You can help! To get involved, use the ideas in this article, contact your local food bank, or call "1-800-GLEAN-IT," a toll-free hotline of the USDA and National Hunger Clearinghouse.

Adapted from The University of Maine Cooperative Extension, Food For ME, A Citizen Action Fact Sheet for Community Food Recovery, Bulletin #4304 A Food Pantry Wish List.

Nutrition Guidelines for Gluten Intolerance

(continued from Page 1)

Foods Allowed

Rice, corn, soy, potato, tapioca, bean, sorghum, quinoa, millet, arrowroot, amaranth, and nut flours

Foods Not Allowed

Wheat, (durum, semolina, kaput, spelt), rye, barley, oats, and triticale

Questionable Ingredients

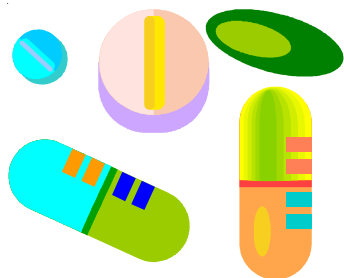
Brown rice syrup (frequently made with barley)
Caramel color
Dextrin (usually corn, but may be wheat based)
Flour or cereal products
Hydrolyzed vegetable protein (HVP)
Malt or malt flavoring (usually made from barley)
Malt vinegar
Modified food starch
Mono- & di-glycerides (in dry products only)
Natural or artificial flavors
Soy sauce or soy sauce solids (many contain wheat)
Vegetable gum (some made from oats)

POPPING PILLS

by Cindy Javor, RD,LDN

A growing number of medical experts are concerned that we are overdoing it on our vitamin consumption. It's estimated that 70% of the population are taking supplements, mostly vitamins, but we are not becoming a healthier population. That leads us to the belief that vitamin and mineral supplements will not correct a poor diet.

In the past, health care professionals were concerned with vitamin and mineral deficiencies, like vitamin C or iron, in individuals. Today, the concern has shifted to the dangers of excessive vitamin and mineral intake. In fact, some of the megadoses (high doses) of vitamins and minerals might actually be contributing to an increased risk of some diseases. For example, research has discovered that excessive amounts of Vitamin A, which is stored in the body, can have a negative effect on bones. Scientists in Sweden found that men with higher levels of vitamin A in their blood were more likely to experience a bone fracture and exhibit signs of osteoporosis. While vitamin A is essential for vision, cell growth and preventing infections, it is highly unlikely that the average person is deficient. Therefore, supplementing the diet with Vitamin A is rarely required for good health.



Don't be concerned about the Vitamin A in a multivitamin. It is unlikely that you will experience toxic effects from this supplement unless you are eating liver on a very regular basis. Health professionals are more concerned about people who take supplements of only Vitamin A or other supplements that contain large amounts of this vitamin. While the recommended daily intake of Vitamin A is 5,000 International Units (IU's), the tolerable upper limit is 10,000 IU's.

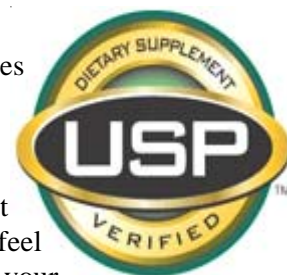
This is not to say that it is wrong to take some vitamin and/or mineral supplements. The concerns involve healthy people taking a myriad of vitamins and minerals not certain groups taking them for specific health needs. For example, as people age, they may develop a vitamin B12 deficiency because they lose their ability to absorb it from foods. In addition, older people are less able to produce Vitamin D from their skin. For women of child-bearing age, it is recommended they consume 400 micrograms of folic acid daily to reduce the risk of neural tube defects, i.e. spina bifida. In addition to eating a healthy diet, these groups would benefit by taking a supplement to meet their requirements.

If you are choosing a supplement, it is important to understand that not all vitamin and mineral supplements are equal. It is important to look at the label on the package (it is similar to those found on food labels). These labels contain a two useful pieces of information — serving size and % daily value. Serving size is the suggested amount of supplement you

should take at one time. It may be listed as 1 tablet, 1 packet, 1 capsule, or 1 teaspoon. The number of servings per day may vary. Read and follow the label carefully. The % Daily Value is the percentage of the recommended daily amount of a nutrient that is provided from one serving of the supplement.

The US Pharmacopeia sets the countries standards for the selling of drugs and supplements. This verification program is intended to assure the public that any product with the USP seal contains what the label says it does; it contains the amount stated on the label and no known harmful contaminants; it will dissolve in your body and you will absorb it; and it is produced according to good manufacturing practices batch after batch.

The USP seal does not say that the supplement is necessarily safe and effective, but it can make you feel comfortable that your getting what you pay for. The seal, which is round with the USP letters surrounded by the words "Dietary Supplement Verified," is one you should consider purchasing.



The Federal Trade Commission's (FTC) goal is to protect consumers from fraudulent, deceptive, and unfair business practices in the marketplace and to provide information to help consumers avoid these practices. To file a complaint visit www.ftc.gov or call toll free, 1-877-FTC-HELP.

A Food Pantry Wish List

(continued from Page 3)



Food and Nutrition Notes

... Bringing you the latest research on nutrition and food safety.

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Bread, Cereal, Rice, & Pasta

Rice and rice mixes
Canned pastas
Noodle mixes
Dry noodles and pastas
Macaroni and cheese mix
Cold cereals
Infant cereal
Hot cereal mixes
Bread and muffin mixes
Pancake mix
Whole-grain crackers
Granola bars
Graham crackers
Flour

Meat, Poultry, Fish, Dry Beans,

Eggs, and Nuts

Canned tuna
Canned chicken
Canned beef stews
Canned salmon
Bean soups
Canned or dried beans
Canned chili
Peanut butter
Bagged or canisters of nuts

Fruits

Canned Fruit
Raisins
Applesauce
Dried fruits
Baby food fruit
Fruit leather (100% fruit)
Canned and boxed 100% juice

Vegetables

Canned vegetables
Vegetable soup
Canned tomato products
Spaghetti sauce
Baby food vegetables
Tomato or vegetable juice

Milk, Yogurt, and Cheese

Infant formula
Powdered milk
Evaporated milk
Instant breakfast drinks
Small boxes of sterile milk
Canned or boxed pudding

Fats, Oils, and Sweets

Syrup
Jelly and jam
Honey
Sugar
Mayonnaise
Vegetable oil

To donate fresh or frozen fruits and vegetables and/or perishable food items, call your local food bank or food pantry to be sure they can accept them.

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