

June 2007

Food Facts For You!

Barbara Ingham, Extension Food Scientist

Department of Food Science, 1605 Linden Drive, Madison, WI 53706-1565

bingham@wisc.edu, 608-263-7383

Safety of Imported Foods; Safety of Garden (and Fresh) Produce; Farm Markets and Food Safety; Getting Ready for the Food Preservation Season; What's On Your Mind? ('ready to eat' versus 'ready to cook'; and new resources for at-risk audiences).

Safety of Imported Foods

The safety of imported food has been in the news. A review of this situation will begin with a national news story which summarizes the current situation, followed by an overview from the federal Food and Drug Administration.

Imported Food Rarely Inspected. 04/16/2007. AP. By ANDREW BRIDGES
Just 1.3% of imported fish, vegetables, fruit and other foods are inspected yet those government inspections regularly reveal food unfit for human consumption. Frozen catfish from China, beans from Belgium, jalapenos from Peru, blackberries from Guatemala, baked goods from Canada, India and the Philippines the list of tainted food detained at the border by the Food and Drug Administration stretches on. Add to that the contaminated Chinese wheat gluten that poisoned cats and dogs nationwide and led to a massive pet food recall, and you've got a real international pickle. Does the United States have the wherewithal to ensure the food it imports is safe?

Food safety experts say no. With only a minuscule percentage of shipments inspected, they say the nation is vulnerable to harm from abroad, where rules and regulations governing food production are often more lax than they are at home. "FDA doesn't have enough resources or control over this situation presently," said Mike Doyle, director of the University of Georgia's Center for Food Safety, which works with industry to improve safety. Last month alone, FDA detained nearly 850 shipments of grains, fish, vegetables, nuts, spice, oils and other imported foods for issues ranging from filth to unsafe food coloring to contamination with pesticides to *Salmonella*.

And that's with just 1.3% of the imports inspected. As for the other 98.7%, it's not inspected, much less detained, and goes to feed the nation's growing appetite for imported foods. Each year, the average American eats about 260 pounds of imported foods, including processed, ready-to-eat products and single ingredients. Imports account for about 13% of the annual diet.

"Never before in history have we had the sort of system that we have now, meaning a globalization of the food supply," said Robert Brackett, director of the FDA's Center for Food Safety and Applied Nutrition. FDA inspections focus on foods known to be at risk for contamination, including fish, shellfish, fruit and vegetables. Food from countries or producers previously shown to be problematic also are flagged for a closer look. Consider this list of Chinese products detained by the FDA just in the last month: frozen catfish tainted with illegal veterinary

drugs, fresh ginger polluted with pesticides, melon seeds contaminated with a cancer-causing toxin and filthy dried dates. But even foods expected to be safe can harbor unexpected perils. Take wheat gluten: Grains and grain byproducts like it are rarely eaten raw and generally pose few health risks, since cooking kills bacteria and other pathogens.

Even so, the FDA can't say for sure whether the ingredient used in the pet foods was inspected after it arrived from China. And if the wheat gluten was, officials said, it wouldn't have been tested for melamine. Even though the chemical isn't allowed in food for pets or people, in any quantity, it previously wasn't believed toxic. How did the melamine wind up in the wheat gluten? Investigators still don't know. Meanwhile, China is struggling to overhaul its food system and improve safety standards, but still faces major hurdles.

Farmers use pesticides and chemical fertilizers to build produce yields and antibiotics are used on seafood and livestock. Heavy metals also can be introduced into the food chain by widespread industrial pollution. Increasingly, those foods are sold in a now global marketplace.

While the European Union, Canada and Mexico still top the list of food exporters to the U.S., China is coming up fast. Since 1997, the value of Chinese food imports, including commodities like wheat gluten, has more than tripled, to \$2.1 billion from \$644 million, according to Agriculture Department statistics. It accounts for 3.3% of the total food the U.S. buys abroad. For suspect imported products and wheat gluten is now one of them the FDA issues alerts to its inspectors. The FDA flags Chinese food and other imported products it regulates, like cosmetics, for that extra scrutiny more than any other country except Mexico.

To safeguard its export business, China is looking at separating foods by their ultimate destination, domestic or foreign, according to Michiel Keyzer, director of the Center for World Food Studies at Amsterdam's Vrije Universiteit. U.S. government statistics suggest China still has a way to go. The FDA has been stopping Chinese food import shipments at the rate of about 200 per month this year. Shippers have the right to appeal the detentions, after which the government can order products returned or destroyed.

How do you know the origin of the food you eat? The 2002 Farm Act called for fish, fruit and vegetable imports to be labeled by country of origin, though implementation for the latter two foods has been delayed. Meanwhile, the U.S. imports more and more, though the increase in value is partially due to the weaker dollar. All told, the U.S. is expected to import a record \$70 billion in agricultural products for the 12 months ending in September, according to an Agriculture Department forecast. The value of those imports will be about double the nearly \$36 billion purchased overseas in 1997.

Contributing to that growth are the fresh fruits and vegetables imported during the offseason, when domestic production dwindles or ends. About one-quarter of our fruit, both fresh and frozen, is imported. For tree nuts, it's about half. And for fish and shellfish, more than two-thirds come from overseas.

Even as the amount of imported food increased, the percentage of FDA inspections declined from 1.8% in 2003 to 1.3% this year to an expected 1.1% next year. "Inspections have a very important role but they're not the solution. They are the verification," FDA commissioner Dr. Andrew von Eschenbach said. The FDA and the USDA have adopted a "risk-based" inspection philosophy, focusing on specific foods, sources or producers that they believe represent the largest potential risk to the public's

health. "The public at large is not at any increased risk," said Craig Henry, senior vice president and chief operating officer for scientific and regulatory affairs of the Grocery Manufacturers-Food Products Association, an industry group.

Caroline Smith DeWaal, director of food safety at the Center for Science in the Public Interest, an advocacy group, countered that "risk-based" is just shorthand for "reduced resources." "Whenever they say 'risk-based approach,' it often means they don't have enough staff to actually do the job. They're doing triage. They're trying to hit what's most important to inspect but they're missing a lot," DeWaal said. Groups lobbying to increase the FDA's budget say its spending on food safety has languished, despite the agency's outsized role in ensuring the safety of the nation's food supply.

A recent Government Accountability Office report noted that most of the \$1.7 billion the federal government allocates to food safety goes to the USDA, which is responsible for regulating about 20% of the food supply. The FDA, responsible for most of the other 80%, gets about 24% of the total spent on food safety.

Unlike the FDA, the USDA requires foreign inspection certificates to accompany all products it regulates, which include meat and poultry. Those imports are then re-inspected at each port of entry before they are allowed into this country something that doesn't happen to all FDA-regulated imports. Under the Bioterrorism Act of 2002, anyone importing food into the United States is required to notify the FDA of the shipment before it arrives by land, air or sea. That allows the FDA to intercept contaminated products before they reach the marketplace, though agency officials acknowledge it doesn't always work that way. "We have better control than we did a few years ago but it is largely the responsibility of the importer to make sure those products are safe," said Stephen Sundlof, the FDA's top veterinarian.

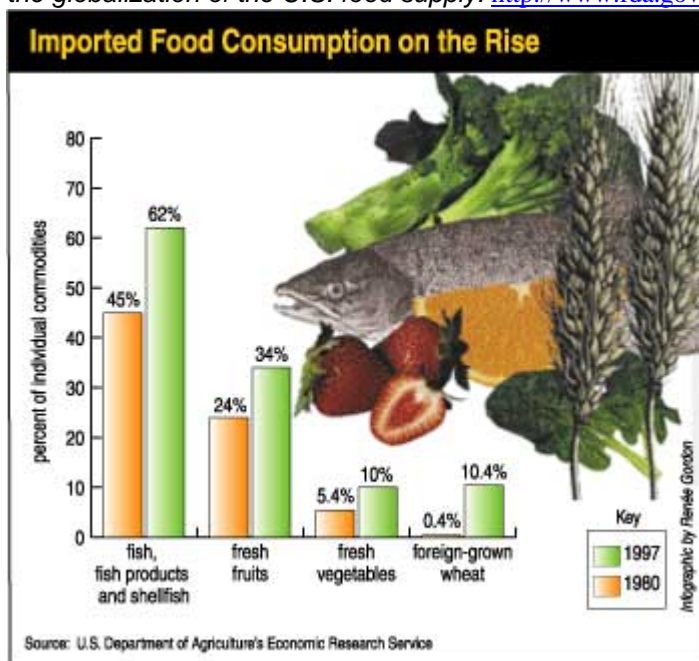
ChemNutra Inc., the Las Vegas importer of the tainted wheat gluten, said it was "particularly troubled" that its supplier did not disclose it contained melamine. Doyle, of the University of Georgia, warned the contaminated pet food could be an unsavory taste of what's to come. "This is not the first and will not be the last but it certainly is a wakeup call for the public to get a better appreciation for where this country is going with imports and imported foods," Doyle said. Brackett, the FDA official, said the globalization of the food supply means the agency is going to have to be more creative and strategic in ensuring its safety. "I am not quite sure how we're going to do that yet," he said, "except to know that that's the direction that we're going to be heading."

On the Net:

Food and Drug Administration: <http://www.fda.gov/>

Agriculture Department: <http://www.usda.gov/>

International Flow of Food. The January/February 2001 issue of *FDA Consumer* highlighted the globalization of the U.S. food supply. http://www.fda.gov/fdac/features/2001/101_food.html



It is an increasingly globalized food marketplace. According to the *FDA Consumer* article, “As much as anything else, consumer demand drives these changes, especially the shifts in where American companies and consumers get their food. “Food has become a global commodity,” says Janice Oliver, deputy director of FDA’s Center for Food Safety and Applied Nutrition (CFSAN). “We Americans have changed our eating habits. We used to eat whatever was grown locally and in season, and only one or two varieties of anything. Today, food is international. It is from Central and South America or Europe or the Asian countries or the islands of the

world.” More than ever before, Americans can buy more imported foods at local grocery stores and supermarkets, adds Linda Horton, director of FDA’s international agreements staff, because of improved ways of packaging and preserving food, and more rapid means of transporting it. That, she says, means American consumers “can get anything from anywhere at almost any time.” “

According to USDA’s Economic Research Service (ERS), Americans are eating more imported foods than ever before. The latest government figures (2003) show that as U.S. per capita consumption of food grew from an average 1,800 pounds per year in the early 1980s to more than 2,000 pounds in recent years, the import share of U.S. consumed food climbed from 8% to more than 11%. The import shares of U.S. consumption of animal products and food crops both increased in the past two decades, with the aggregate share of fruits and vegetables at least twice as large as that of animal products. The value of these imports amounted to \$64 billion in 2006, according to ERS data <http://www.ers.usda.gov/publications/fau/july03/fau7901/fau7901.pdf>

The numbers for individual commodities are striking. Of all the fish, fish products and shellfish eaten by Americans, 68% came from abroad in 2001, the most recent figures available. Similarly, the percentages of other foods items imported in the diet in 2001 were:

- Red meat, 9.3%
- Dairy products, 2.8%
- Fruits, juices and nuts, 21.4%
- Vegetables, 9.4%
- Sweeteners and candy, 9.7%

All foods imported into the U.S. should meet U.S. standards, but the increasing volume of imports has swamped the government’s ability to provide oversight. Federal legislation to require country-of-origin labeling of fish, fruits and vegetables has been slow to be implemented, or is stalled. With the U.S. consumers’ desire for variety and freshness, there is no doubt that the safety and quality of imported foods will continue to be of interest.

Safety of Garden (and Fresh) Produce

Spring and early summer have home gardeners anxious to begin planting, and grocery stores begin to fill with fresh fruits and vegetables from all corners of the globe. Harmful bacteria that may be in the soil or water where produce grows (at home or abroad) may come in contact with the fruits and vegetables and contaminate them. Or, fresh produce may become contaminated after it is harvested, such as during preparation or storage. Eating contaminated produce (or fruit and vegetable juices made from contaminated produce) can lead to foodborne illness, which can cause serious - and sometimes fatal - infections. However, it's easy to help protect yourself and your family from illness by following these steps for growing and serving produce.

Home Gardening and Food Safety

Applying animal or plant waste material to the soil in your home garden can help to improve the soil, but unless this waste material is properly handled it can also carry the risk of contaminating produce. Some excellent resources to help keep your garden produce safe include:

- **Home Composting 101:** Reap a heap of benefits. Make the most of your composting efforts and ensure that what you are doing is safe.
<http://www.wiparks.net/org/aw/wm/publications/recycle/publsw072.pdf>
- **Safely Using Manure in the Home Garden:** Recent research results support safe ways for using manure in the home garden.
http://www.wifirst.wisc.edu/assets/Safely_Using_Manure_in_the_Garden010407.pdf
- **Using Composted Livestock Manure Safely in the Home Garden:** Washington State University Extension service provides tips on using composted livestock waste in the home garden. <http://gardening.wsu.edu/stewardship/compost/manure/manure2.htm>
- **Using Manure in the Home Garden:** The Wisconsin Master Gardener program offers information on application rates for manure in the home garden.
<http://www.hort.wisc.edu/mastergardener/Features/misc/manure/manure.htm>



Buying Tips for Fresh Produce

If you are buying fresh produce at the grocery store, you can help keep produce safe by making wise buying decisions.

- Purchase produce that is not bruised or damaged.
- When selecting fresh-cut produce – such as a half a watermelon or bagged mixed salad greens – choose only those items that are refrigerated or surrounded by ice.
- Bag fresh fruits and vegetables separately from meat, poultry and seafood products when packing them to take home from the market.

A resource in this area is **Safe Handling of Fresh Fruits and Vegetables**

<http://fruitandvegetablesafety.tamu.edu/Consumers/GeneralSafety.pdf> (English)

<http://fruitandvegetablesafety.tamu.edu/Consumers/E-197S.pdf> (Spanish)



Storage Tips for Fresh Produce

Whether produce is harvested from the garden, or purchased at a grocery or farm market, there are certain things that you can do to maintain both safety and quality.

- Certain perishable fresh fruits and vegetables (like strawberries, lettuce, herbs, and mushrooms) can be best maintained by storing in a clean refrigerator at a temperature of 40° F or below.
- All produce that is purchased pre-cut or peeled should be refrigerated to maintain both quality and safety.
- Other produce such as uncut tomatoes, bananas, potatoes and onions are best stored at cool room temperature.
- Produce should not be washed before store as excess water will encourage the growth of spoilage bacteria.



A new UWEX publication, **Storing Fruits and Vegetables from the Home Garden A3823**, offers tips on maintaining quality of harvested produce <http://learningstore.uwex.edu/index.aspx>
Tips for safe storage can be found in **Safe Storage of Fresh Fruits and Vegetables**
http://fruitandvegetablesafety.tamu.edu/Consumers/Safe_Food_Storage.pdf (English),
<http://fruitandvegetablesafety.tamu.edu/Consumers/E-200S.pdf> (Spanish)

Separate for Safety

Keep fruits and vegetables that will be eaten raw **separate** from other foods such as raw meat, poultry or seafood - and from kitchen utensils used for those products. In addition, be sure to **wash** cutting boards, dishes, utensils and counter tops with hot water and soap between the preparation of raw meat, poultry and seafood products and the preparation of produce that will not be cooked. For added protection, kitchen sanitizers can be used on cutting boards and counter tops periodically. **Try a solution of one teaspoon of chlorine bleach to one quart of water.**



Preparation of Fresh Produce

Begin with clean hands. Wash your hands for 20 seconds with warm water and soap before and after preparing fresh produce. **Next, cut away** any damaged or bruised areas on fresh fruits and vegetables before preparing and/or eating. Produce that looks rotten should be discarded.

Always wash fresh produce!

All produce should be thoroughly washed before eating. This includes produce grown conventionally or organically at home, or produce that is purchased from a grocery store or farmer's market. Wash fruits and vegetables under running water just before eating, cutting or cooking. Even if you plan to peel the produce before eating, it is still important to wash it first.

Washing fruits and vegetables with soap or detergent or using commercial produce washes is not recommended.

Do not use bleach. Scrub firm produce, such as melons and cucumbers, with a clean produce brush. Drying produce with a clean cloth towel or paper towel may further reduce bacteria that may be present.

What about pre-washed produce? Many pre-cut, bagged produce items like lettuce are pre-washed. If so, it will be stated on the packaging. Current evidence suggests that pre-washed, bagged produce can usually be used without further washing. As an extra measure of caution, you can wash the produce again just before you use it. Pre-cut or pre-washed produce in open bags should be washed before using. A publication on **Washing Fresh Fruits and Vegetables** is available

English http://fruitandvegetablesafety.tamu.edu/Consumers/Washing_FV.pdf
Spanish <http://fruitandvegetablesafety.tamu.edu/Consumers/E-199S.PDF> .

New Resource: Food Safety and Selection at the Farmer's Market Educators at the University of Nebraska- Lincoln have developed an educational resource for those programming at farmers' markets. Content includes:

- **Food and Nutrition**
- **Food Safety**
- **Friendly Advice**
- **And more.....**

This powerpoint can be found here: <http://lancaster.unl.edu/food/farmers-market.shtml>



Getting Ready for the Food Preservation Season

You may have already had your fair share of food preservation questions this year, but if you haven't here are some tips on getting ready for this busy season.

Make sure equipment is in working order.

1. If your office has canners or dehydrators available for loan, check over this equipment to make sure it is in working order. The bulletin *Using and Caring for a Pressure Canner* is available online http://www.foodsafety.wisc.edu/assets/pdf_Files/B2593_Pressure%20Canner.pdf
2. If your office checks pressure canners, make sure your tester gauge is re-calibrated every year. Questions? Contact Presto at: (715) 839-2232 and ask for the Home Economist.
3. The National Center for Home Food Preservation has developed a **pressure canner** inspection form and that can be found here <http://www.uga.edu/nchfp/educators/PressureCannerInspect03.pdf>

Evaluating a Dial Gauge Canner

- Consumers should still test dial-gauges every year. Presto recommends testing dial gauges at 6 and 11 pounds (only) as these are the pressures that will be recommended in canner recipes.
- Canner gauges that are off by more than 2 pounds should be replaced. Presto sells replacement gauges. Several years ago we were telling consumers to replace gauges that were off by more than 1 pound; however canner gauges are simply not manufactured well enough to be replaced when only off by 1 pound.
- Literature from Presto recommends that you **ONLY** test Presto-supplied canners/gauges using the bicycle pump tester that they manufacture.

Stock up on Publications

If your office sells, or gives, copies of the **Wisconsin Safe Food Preservation Series** publications to the public, be sure to have enough copies of these on hand. Current publications include: *Canning Fruits Safely* (B0430), *Canning Meat, Wild Game, Poultry and Fish Safely* (B3345), *Canning Salsa Safely* (B3570), *Freezing Fruits and Vegetables* (B3278), *Homemade*

Pickles and Relishes (B2267), *Making Jams, Jellies and Fruit Preserves* (B2909), *Tomatoes Tart and Tasty* (B2605), *Wisconsin's Wild Game: Enjoying the Harvest* (B3673). Other resources (not specific for Wisconsin) can be found at the web site for the National Center for Home Food Preservation: www.uga.edu/nchfp

What's On Your Mind?

Read Labels to Reduce Risk of Getting Sick. [*beFoodSafe Winter/Spring 2007*]

What's the difference between "ready-to-eat" and "ready-to-cook"?

An enormous one if you're not careful, which is why USDA recommends that you read all food product labels very carefully. "**Ready-to-eat**" means just what it says — the food does not require cooking or any additional preparation by the consumer before it's eaten. Phrases such as "**cook and serve**," "**ready to cook**" and "**oven ready**" on labels convey to consumers that the product is not ready to eat and should be accompanied by validated cooking instructions. Although products might appear to be cooked, partially cooked or browned, you should prepare these foods no differently than if you were handling a raw product. Many frozen stuffed poultry products, such as those filled with cheese and other ingredients, are typically not ready to eat and must be fully cooked as if they were raw. Because these products are stuffed with additional ingredients, they will likely take longer to cook than products, such as chicken breasts, that do not contain fillings to reach a safe minimum internal temperature of 165° F. If the label mentions that a microwave oven can be used, then always follow the cooking instructions carefully. Cover and rotate so it heats evenly and always use a food thermometer to take multiple temperature readings in different locations throughout the product. This will ensure that the product is safely cooked.

Targeted Materials for the Immune-Compromised [*beFoodSafe Winter/Spring 2007*]

"Food Safety for the At-Risk: A Brochure Series for the Immune-Compromised," a new series of publications, is targeted to persons most susceptible to foodborne illness. These at-risk groups include the very young, pregnant women, older adults and those with a weakened immune system who may experience lengthier illness, hospitalization or even death should they contract a foodborne illness.

The series comprises five brochures that provide a comprehensive, yet consumer-friendly overview of safe food-handling principles. They include:

- Food Safety for Transplant Recipients
- Food Safety for Older Adults
- Food Safety for People with Diabetes
- Food Safety for People with Cancer
- Food Safety for People with HIV/AIDS

The brochures will help to promote safe food-handling behaviors among the select at-risk groups and their caregivers and are available on the web at:

http://www.fsis.usda.gov/News_%26_Events/BFS_Magazine_WS2007_7/index.asp