1989

Where are the Risks in Food and What Can You Do About Them?

Charlotte P. Brennand Ph. D.

Utah State University

Follow this and additional works at: https://digitalcommons.usu.edu/extension_histfood

Part of the Food Chemistry Commons, and the Food Microbiology Commons

Warning: The information in this series may be obsolete. It is presented here for historical purposes only. For the most up to date information please visit The Utah State University Cooperative Extension Office

Recommended Citation

https://digitalcommons.usu.edu/extension_histfood/28

This Factsheet is brought to you for free and open access by the Archived USU Extension Publications at DigitalCommons@USU. It has been accepted for inclusion in Archived Food and Health Publications by an authorized administrator of DigitalCommons@USU. For more information, please contact dylan.burns@usu.edu.
Hormones

Bovine Growth Hormones (BGH), also called bovine somatotropin (BST) has been in the news in the last few years. BST is a naturally occurring protein hormone found in all cattle that helps regulate growth and milk production. Giving cows extra BST helps them become more efficient milk producers. The goal is to allow dairy farmers to be able to produce the same amount of wholesome milk from fewer cows at a lower cost. Trace amounts of BST are found in milk from both treated and untreated cows, and thus it is very hard to tell which is from the treated animals. Since the hormone is species-specific, bovine growth hormone doesn't affect humans. Meat and milk from research trials are approved for human consumption by FDA; however, the agency is still reviewing the hormone's effects on cows. Much of the furor over the use of BGH is over the economics of increasing the milk supply rather than human safety.

Pesticides

A very small percent of fruit and vegetables have pesticide levels above the legal level. This is a relatively low risk proposition because:

1. The legal levels have a large built-in safety factor. The pesticide must be safe at 100 times the legal level for extra security.
2. Often the legal problem is due to the pesticide not having been approved for that type of produce, not because it is not safe to consume at that level.

Carcinogens

(Cancer causing chemicals)

Food contains an abundance of potentially carcinogenic compounds naturally. Luckily, our bodies have developed natural defenses against carcinogenic compounds. The overall diet has a much greater relationship to the incident of cancer than does the addition of food additives. Less than 1% of cancer deaths can be attributed to food additives. In many cases, the food additives, such as those compounds added to food to prevent rancidity, may be protective against cancer causing agents.

The most important factors when trying to eat to avoid cancer are:

1. Have a balanced, varied diet. Be sure to eat foods that contain carotene, and vitamins C and E.
2. Consume fat at 30% or less of total calories.
3. Consume adequate fiber.

Microbial

Microorganisms (bacteria, molds, yeasts, viruses) are a normal part of our environment and although most microorganisms are harmless, some can cause illness or death due to food poisoning. These can be found in garden dirt, in fecal material, in water, in/on animals, and on human skin and nasal passages, or anything with which they have had contact. Recognize that all foods have the potential for carrying harmful organisms.

The major food safety problem is food poisoning due to mishandled foods and microbial growth.
In Summary

The good news: In general, those things over which you do not have a direct control - for example pesticides, food additives, hormone treatments - are extremely low food safety risks.

The bad news: More food safety problems are caused by microbial problems than any other category, and the most common abuse is in how the food is handled after purchase. This means it is up to you to keep your food safe.

Enjoy your food but play it safe by following these rules:

**Keep food clean.**

**The Reason:** Microorganisms multiply rapidly at warm temperatures. Some food poisoning organisms can double in numbers every 20 minutes. This means that a single organism can increase to 2,097,152 organisms within 7 hours. Reproduction of the microorganisms is very slow at cold and hot temperatures and therefore is not considered a problem. In most cases, a high number of bacteria in the food is necessary before food poisoning.

**The Application:**
- Don't buy eggs, milk, fresh meats, salads, sandwich spreads, or cream filled products unless they are in a refrigerated case.
- Don't let food sit on the counter while waiting for dinner or after the meal before refrigeration.
- Portion leftovers so that they will cool rapidly. Don't refrigerate whole stuffed turkeys - it takes too long to cool.
- Keep picnic foods at right temperatures by using coolers or insulated containers.
- The safest way to thaw foods is in the refrigerator.

**Keep pets away from food and countertops.**

**Decrease or avoid risk whenever possible.**
- Reheat leftovers thoroughly.
- Discard moldy food or at least trim 1/4-1/2 inch below the visible mold.
- Don't give infants under 1 year of age honey.
- Store household cleaners away from food.
- Never modify canning recipes nor use canning procedures which have not been scientifically tested.
- Wash fruits and vegetables.

**When in doubt, throw it out!**
- Never taste food that looks or smells strange. Just discard it.
- Canned goods - never eat food from a can that was bulging or that spurted when opened.

---

The Utah Cooperative Extension Service, an equal opportunity employer, provides programs and services to all persons regardless of race, sex, color, religion, or national origin. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, R. Paul Larsen, Vice President and Director, Extension Service, Utah State University.