

From Farm to Fork: Food and the consumer, a shared responsibility

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Information to ensure the safety of food has never been greater. The consumer needs to protect himself against food-borne diseases.

Food Patterns Today

Europe, in the last fifty years, has seen a dramatic shift from post-war shortages to current abundant, diverse and reliable food supplies.

At the same time, social and demographic changes: the 86 million births in the world each year; the continued exodus from the country to the cities; the increase in the number of working women; the ageing of the population and the increased focus on health, fitness and "naturalness" have influenced the consumers needs and desire for different food products as well as the ways in which meals are prepared and consumed. More choices exist now than ever before:

- Increased variety, but variety itself creates complexities: how to store, prepare and eat exotic fruits and vegetables; the necessity for extra care in selecting and preparing food for people who are particularly susceptible to foodborne illnesses.
- Foods that keep longer, but there is always the concern about chemicals and processes to ensure the safety of food for these longer periods.
- More "fresh" and "natural" food, but with the realisation that hazards are inherent in it.
- Modern refrigeration with its improved ability to store food, but without forgetting that the refrigerator is not a magic box; it must be in proper working order; food stored in the refrigerator for too long can become a health hazard; and refrigeration is not as effective as freezing, thus requiring particular attention to "use-by" and "best before" dates on food products.
- Increased emphasis on convenience and speed in preparing meals without forgetting that convenience foods need correct storage and preparation at home.
- New cooking methods such as micro-waving, barbecuing and slow cooking enhance food variety but these create their own safety problems.
- With less time spent on preparing food, there is less awareness of the traditional "food wisdoms" historically passed down from one generation to the next.
- As more meals in restaurants and other public places are consumed and people travel abroad with increasing frequency, often there is insufficient information necessary to determine if food in public places is safe to eat and if exotic foods eaten at home can carry the same hazards as those eaten when abroad.

In spite of the advances in food variety, convenience and safety, the World Health Organisation (WHO) says cases of disease caused by microbiologically-contaminated food are on the increase both in developed and developing countries. In developed countries, WHO identifies errors made in food preparation in the home, in restaurants and other public places as important causes of foodborne disease.

For this reason, information to ensure the safety of food has never been in greater demand. Consumers need to understand how best to protect themselves against foodborne diseases both in the choice and preparation of food and in recognising and acting on the telltale signs of unsafe food.

Food Safety Hazards: The Causes

Public opinion surveys indicate the consumer is increasingly aware of the danger of microbial contamination as the most important threat to food safety, although concern about food additives and pesticide residues in food still persists. The World Health Organisation (WHO) confirms microbial contamination is the greatest risk to food safety. In general, the risks to food safety fall into three broad categories which are, in order of decreasing significance:

- Microbes that proliferate in many different foods if they are not handled properly
- Parasites transmitted through meat and fish when they are improperly cooked and/or preserved
- Chemicals which occur naturally in food substances and those which are in the environment

"Data indicate only a few factors are responsible for a large proportion of foodborne disease episodes. Common errors include:

- Preparation of food long before consumption
- Prepared food left too long at a temperature permitting bacterial proliferation
- Inadequate heating
- Cross-contamination between cooked and raw food
- Contamination through handling" (WHO "In Point of Fact" June 1991)

WHO also points out that "outbreaks of foodborne diseases can be reduced if both professional and domestic food-handlers understand the importance of correct hygienic food practices. Health education is one of the most effective means of reducing the problem."

The Consumers Role in Safety Practices

Throughout the food chain, farmers, food processors, retailers and others utilise numerous procedures based on long experience to ensure the quality and safety of food. Collectively, these procedures are known as "good agricultural practices" and "good manufacturing practices."

While these practices have contributed significantly to food safety, it should not be forgotten that food comes from animals, plants and trees, all of which form part of the natural environment where potentially harmful micro-organisms and chemicals occur naturally.

Consequently, it is essential that anyone preparing food - whether in the home, in a restaurant, at a roadside stand, at a convention or social event or anywhere else - follows "good hygienic practices". However, these require a basic understanding of the sources of microbes capable of contaminating food, what allows these microbes to multiply to dangerous levels and how they can be eliminated.



Good Hygienic Practices: The Basics

Food Safety: A Shared Responsibility

In addition to the role of ensuring food safety at home, the consumer can also play an important role in public places. There is a need to practice informed observation and report defects whether they occur in the wide variety of retail stores or in public places where people eat: restaurants, hospitals, public fairs and fetes, social events, conventions, meetings, roadside snack bars and cruise ships to name but a few. A few simple guidelines may be useful:

- The look, feel and smell of fresh produce is often a good measure of its quality and safety
- Damaged packaging can be a warning that a product may be spoiled or, at the least, that its shelf life may have been reduced. It should be reported to the retailer
- "Best before" and "use-by" dates should be taken seriously; out-of-date products should not be purchased and should be reported to store managers
- If packaged food is found to have gone "off" before the "best before" date on the package, or if damaged packaging is discovered at home, it should be returned or reported to the retailer or food processor
- If food in a restaurant or other public place smells, looks or tastes odd, it should be returned
- Particular care needs to be taken about food prepared in large quantities, in advance or under difficult conditions - at symposia, meetings, large social events, outdoor events, etc.

All participants in the food chain are anxious to ensure the quality and safety of the food they produce and sell. Their reputations depend on it and ultimately their reputations are the most valuable products they have.

Producers and retailers wish to hear from consumers about any possible defects in their products and for this purpose they have established dedicated telephone care lines and mail systems to listen to consumer concerns and views and to answer questions relating to the safety and quality of food products.

A particularly important part of their work is to monitor consumer comments so that modifications can be made to products and processes in order to improve safety as well as the convenience of food. If a consumer identifies a problem with a product, a telephone call will set in motion a quality control system that checks for weak links in the quality chain. This enables problems to be remedied immediately and could assist in the elimination of potentially serious threats to safety.

Special Considerations

Pregnant women, babies, young children and the elderly have particular needs which require special care in selecting, storing and preparing food. In general, people with reduced natural defences should be vigilant about protecting themselves against foodborne diseases. People taking certain kinds of drugs including antibiotics and chemotherapy treatment are also more susceptible to microbially-caused food disease.



Basic Precautions

Today, extensive precautions are taken throughout the food chain to ensure the safety of food. However, because food comes from animals, plants and trees, all of which form part of the natural environment, potentially harmful micro-organisms and chemicals occur naturally. It is very important that the consumer understands and follows basic precautions set by professionals working in the different stages of the food chain when purchasing, transporting, storing, preparing and consuming food. Good hygienic practices both in the home and outside can protect everyone against microbial contamination and the foodborne diseases caused by it.