World Health Organization

Food safety: Why educate the consumer?

Françoise Fontannaz explains the work of WHO in empowering consumers to prevent foodborne diseases, and the role and responsibilities of consumers to improve food safety.

Could you begin by offering an overview of your duties within the World Health Organization (WHO) Department of Food Safety and Zoonoses?

WHO provides leadership in global efforts to lower the burden of diseases from food and animals. WHO develops risk assessments, recommends risk management options, and translates complex scientific knowledge into simple risk communication messages for stakeholders, including consumers. It is important to underline that the primary responsibility for safe food lies with the producers, but consumers clearly also have a role to play in preventing diseases.

Through the development of messages and training materials, WHO assists countries in promoting food safety through systematic foodborne and zoonotic disease prevention and health education programmes. I am responsible for health promotion in food safety and more specifically for education directed to the end users.

Each year millions of people become ill and thousands die from preventable foodborne diseases. What is WHO’s specific approach regarding consumers?

Food production is complex and involves a range of different stages before the food reaches the consumer, including on-farm production, slaughtering or harvesting, processing, storage, transport and distribution. Food can be contaminated at any point along the food production chain, including preparation. Food safety is therefore a shared responsibility between producers, industry, governments and consumers.

Food safety requires an ongoing effort and cannot be approached from one direction only. The classic ‘farm to fork’ approach focuses on the quality and safety of the foods to ensure that food products arriving on the market are safe for consumers. However, when the products are on the market, inappropriate handling behaviours can contaminate the products and affect food safety.

WHO’s new approach focuses on the ‘table to farm’ concept with a primary focus on the consumer’s health and wellbeing. This concept reinforces WHO’s mandate to ensure that no harm is caused to humans through food consumption. Raising awareness of all food handlers, which include consumers, about the health risks posed by inadequate practices is part of WHO’s strategy to reduce the burden of foodborne diseases.

Can you describe the responsibilities that rest with the consumer?

Even though the contamination of food can occur at any stage of food production and major responsibility lies with the producers, a large proportion of foodborne diseases are caused by foods that are improperly prepared or mishandled, be it at home or in food service establishments. But few consumers understand that they have a role to play in preventing foodborne diseases.

Consumers are often unaware of, or fail to apply, safe food handling procedures. In developing countries, there is a lack of awareness that food can make an individual sick if it is not properly handled, prepared and stored. In developed countries, consumers take the safety of food for granted. For instance, consumers buy produce from around the world and are increasingly interested in buying produce (e.g., meats, cheeses and other fresh products) directly from local farms, but may not realise that even fresh food requires safe handling. New food products are constantly being introduced and the fact that there are more choices than ever before creates complexity: what to choose, how to cook, how to store? There is an inadequate knowledge of which foods, agents and practices pose the greatest risk. Consumers need to have this basic knowledge to minimise the risks and make safe choices.

What are the basic principles that consumers need to know to handle food safely?

Consumers should always follow the five basic safe food handling rules to protect themselves and ensure that the food they eat is safe: 1) Keep clean; 2) Separate raw and cooked; 3) Cook thoroughly; 4) Keep food at safe temperatures; and 5) Use safe water and raw materials. This is the message of the WHO Five Keys to Safer Food that everybody should know throughout the world.

A great example to illustrate the WHO’s ‘table to farm’ approach can be demonstrated by Key 2: Separate raw and cooked food. A wide majority of food handlers ignore the risks and the health consequences associated with cross-contamination occurring by using the same tools for raw and cooked food, thereby enabling cross-contamination. Even if all the players involved in the food production chain took the perfect measures to ensure the quality and safety of the product, the risk of eating contaminated food is present if the food handler does not practice safe food handling behaviours.

Over the space of 10 years, the WHO Five Keys to Safer food became an international reference source, having been translated into 68 languages, mainly on behalf of countries which use them as the basis for educational programmes and health promotion campaigns. How do you explain this success?

It is a simple global health message: countries can easily adopt and adapt in any context. Although differences in socioeconomic conditions and cultural behaviours can vary from one environment to another, risk factors for foodborne diseases are basically the same everywhere.
(food prepared too far in advance, food not kept at safe temperatures, inadequate cooking/reheating, improper storage, use of contaminated ingredients, use of contaminated equipment, contamination by an infected person). The option to design a global message is of particular importance to avoid confusion, especially now that communication regularly goes global. We developed a concept and training materials which meet the needs of countries. As an example, the Five Keys to Safer Food poster includes the rationale behind the recommendations (the ‘why’), which facilitates understanding, learning and teaching to encourage the adoption of safe behaviours. We assist countries in providing them with templates to produce materials, which is of great value both in terms of investment of time, human and financial resources. We also concentrate efforts in facilitating communications between countries to encourage them to share their materials, experiences and tested solutions. As a result, countries benefit from each other’s efforts (e.g. through the use of translated materials) and are stimulated to duplicate the successfully implemented programmes and create new ways to disseminate the message in various contexts.

How are the Five Keys to Safer Food used?

They are used both in developing and developed countries to promote food safety by training food handlers in restaurants, canteens and marketplaces, processing businesses, hospitals, healthcare centres, schools, and at home.

The Five Keys to Safer Food are intensively used in emergency situations to prevent and control outbreaks (e.g. cholera). They were part of the main preventive recommendations during the 2005 outbreak of Avian influenza. More recently they were promoted by the European Food Safety Authority (EFSA) and the European Centre for Disease Prevention and Control (ECDC) to advise consumers during the 2011 outbreak of Escherichia coli in Germany caused by sprouts. This food safety event led to 55 deaths and it is an important reminder that foodborne diseases have devastating health consequences in both developed and developing countries.

Through food safety education, we strongly promote the health of women and their families. Women play a key role in food production and preparation, in particular in developing countries. They have too often limited access to education while their role is essential to ensure transmission of the safe food handling practices. We also direct our efforts to have food safety education integrated into school curricula since children are tomorrow’s consumers. We work towards a systematic integration of food safety education into nutrition programmes. For example, the importance of fruits and vegetables in nutritious, healthy diets is well-recognised, and in recent years consumers have been encouraged to eat more of these products. At the same time, food safety problems linked to the consumption of fresh fruits and vegetables contaminated with microorganisms are increasing. Consumers must be aware of the potential health risks and nutritional benefits when growing, buying and consuming these products. The right to education is again essential.

How do you see the role of consumers in the future?

We know that in the future consumers will drive the changes needed to improve food safety systems and we work to stimulate countries to communicate and consult effectively with consumers. Consumers have a right to expect that the foods they purchase and consume will be safe and of high quality. They have a right to voice their opinions about the food control procedures, standards and activities that governments and industry use to ascertain that the food supply has these characteristics. They need to be fully confident not only when they buy products, but also when they eat in restaurants, canteens, food markets, etc. With the recent changes in lifestyles, more and more meals are taken outside of the home, which is another factor contributing to the increase of foodborne diseases all over the world. Education in food safety is a way of empowering consumers, providing them with the tools to raise their voices and participate in the public debate. In some countries, consumers have put pressure on authorities to make the results of food inspections public. Therefore some countries now display classification results at the entrance of restaurants to raise consumer trust and expectations for safe food handling and healthy food.

I will end with an experience I had in Egypt when we organised with a local NGO a ‘Five Keys to Safer Food’ training initiative for women in a slum of Cairo. I asked the organisers how the women would benefit from the course, as there was no infrastructure to maintain basic food hygiene and limited or no access to running water. The response given was that now the women understand that having access to running water is essential to improve the health of the family, they will have the impetus to put pressure on the local authorities to get infrastructures.

This example also shows that education in food safety through the Five Keys to Safer Food goes far beyond food safety in improving the health of communities, and can ultimately aid in achieving the UN’s Millennium Goals.

www.who.int/foodsafety/consumers/en