The primary function of food is to provide nourishment. Nevertheless, in every society there are dietary customs which play sociocultural and symbolic roles that go far beyond the mere nourishment of the body. So it is extremely important for health workers to understand these roles and their implications when seeking solutions for a community’s nutritional and food safety problems.

The natural environments and trade channels of all human groups provide a variety of nutrients or the potential to produce them. But the nutrients do not automatically become food until they are so defined and are culturally accepted as fit for human consumption. Because of aesthetic preferences, religious taboos, health beliefs and the like, some nutritionally valuable foods are often excluded from the diet. Although people in Western communities have plenty of scientific knowledge about nutrition and dietetics, they generally avoid eating horse or dog flesh, the eyes and lungs of cattle and sheep, snakes and iguanas, mare’s and ewe’s milk, dolphins, locusts, grubs, scorpions and seaweed. Yet all these items are freely consumed in other cultures and are biologically valuable foods.

A recent survey of a South Asian population showed a general correlation between income and nutritional status, the rich being better nourished than the poor. Yet the poorest members of the community were as well nourished as the middle-income groups, simply because they were uninhibited in their choice of nutrients and supplemented their diet with snake and rat meat.

**Certain nutritionally valuable food items may be excluded from the diet for aesthetic, religious or other reasons. Food can also be mishandled, unwisely prepared or inadequately cooked. Health education must be carefully designed to correct such practices in socially and culturally appropriate ways.**

**Cultural taboos**

The avoidance of specific types of food is a widespread phenomenon and applies more commonly to food of animal origin. Religious and other beliefs often call for this avoidance, but other cultural factors are involved as well; some foods are regarded as being of low prestige, for example.

Most people avoid the meat of animals that have died of natural causes, especially if they were diseased. This natural trait is strengthened by injunctions of the major religions. However, beliefs can differ sharply. One of the writers once saw migrant workers in the western Himalayas carrying away meat from a calf that had died of anthrax, a deadly disease, and was told that such meat had a special “sweetish” taste which they highly appreciated. The meat was later confiscated and incinerated by the authorities.

In most societies, cannibalism would be imaginable only in desperate circumstances. Yet in a number of cultural environments it has been...
practised as a ritual. In some tribes, eating the brain of dead ancestors was thought to be a way of obtaining their wisdom, but scientists have seen it as a possible mode of transmission of kuru, an infection endemic in some parts of the highlands of eastern Papua New Guinea. The tribes themselves consider kuru to be the result of sorcery.

Important examples of food avoidance are pork among Jews, Muslims and Ethiopian Christians; beef among Hindus, some Buddhists and Jains; chicken and eggs in some African communities; dog meat in the West; fish in Mongolia and other parts of central Asia; milk and milk products in Polynesia and parts of China. Some communities avoid all food derived from animals.

Folk wisdom

Through trial and error over generations, traditional societies have developed culinary practices which enable them to prepare and eat safe food even in unhygienic environments. Some examples are: thorough boiling of milk, cooking meat in small pieces to facilitate heat penetration, using proper fermentation processes, and eating freshly cooked food.

But folk wisdom is not an infallible guide to healthy food habits and safe culinary practices. For example, it is a widely held belief that raw food of animal origin is more invigorating and strengthening than cooked food. Raw fish and meat dishes such as sashimi in the East, steak tartar in Europe and ceviche in Latin America are well known and are now available in special restaurants worldwide. There are many other raw dishes consumed locally in different parts of the world which encourage transmission of food-borne diseases and parasites.

Many folk beliefs require pregnant and lactating women to avoid eating meat and eggs, or in some societies even to cut out fruit and vegetables. Scientifically, these are precisely the foods they need.

Food processing

In recent years, remarkable progress has been made in developing relatively inexpensive technologies to make food safe for human consumption without reducing its nutritive value. Unfortunately, prejudice and cultural resistance to some of the most useful of these technologies, such as irradiation and microwave cooking, prevents their full exploitation.

Heat treatment (such as pasteurization, frying, grilling or roasting) destroys most of the disease-producing organisms in food, if properly carried out. But people may not cook their food adequately either because they prefer a raw taste or because they cannot pay for fuel. In either case they expose themselves to serious risks of foodborne disease.

Lack of adequate cooking facilities was highlighted some years ago by an outbreak of the pig tapeworm (Taenia solium) infection and a serious disease with its larval form (cysticercosis) among inhabitants of the Irian Jaya Highlands (Indonesia). These people live in close contact with their pigs, but “cooking” merely
means placing slices of pork, alternated with vegetables, among hot stones. Apparently, the tapeworms were introduced by migrants coming from a neighbouring region. Very soon a large percentage of pigs as well as people were infected, and cysticercosis produced epileptic fits, coma and death. The outbreak is now reported to be under control.

It is clearly desirable to change food-related behaviour which leads to malnutrition or to the transmission of agents of disease. Before deciding on intervention strategies, it is necessary to obtain full information about the practices to be changed – not only their health implications but also their sociocultural basis, including tradition and beliefs. Recent development of the Hazard Analysis Critical Control Point (HACCP) approach has provided a simple and relatively inexpensive method of identifying safety hazards in food habits and in culinary practices.

Once the hazards as well as the critical points for their control have been identified, health education can be designed to induce the community and individuals to correct hazardous practices. Two important principles have to be observed to assure the desired changes: firstly, the community should perceive the advantage of the change and, secondly, it should be able to bear any economic and social costs it may involve.

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Our common nutritional heritage

James Akré

According to a traditional Cameroonian saying, the stomach is blind. The implication is that all that matters to the stomach is that it remain full. Of course, the eye and the palate are considerably more discriminating about what in fact goes into the stomach. Nevertheless, choice in the matter is determined to a large extent by culture and geography.

From the universal need for every one of the earth’s estimated 4237 mammalian species to obtain nourishment, the focus for the individual is on the specific foods that are actually available and eaten. Apart from one exception, then, it is probably not an exaggeration to say that there is no single universal food. And what is this exception? Why, breast milk of course!

Breast milk is the contemporary universal nutritional link par excellence for the entire human species – north, east, south and west, all 5700 million of us. Historically, it is also a vital nutritional link in the human family’s unending chain; it helps to define our place in the parade of generations, as much in terms of those who came before us as of those who will come after.

No substitute, not even the most sophisticated and nutritionally balanced infant formula, can possibly compete with the multiple wonders of breast milk. But then, how could it? After 60 million or so years of mammalian evolution – or what many attribute to the perfect hand of the Creator – a synthetic product that is usually based on the milk of another species could hardly be expected to measure up. Nor can artificial feeding do more than approximate the act of breast-feeding, in physiological and emotional significance, for babies and mothers alike.

And so, no matter how important it is to provide a nutritionally balanced substitute when babies are not breast-fed, giving them something else in place of breast milk will always be a deviation from the biological norm for our species. Indeed, breast milk transcends culture and geography, uniting us all through our common nutritional heritage.

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