

Anthropology of Food

ANNA WALDSTEIN

University of Kent, United Kingdom

Food sustains us, connects us to one another, and embeds us in the material, energetic, and spiritual cycles of the ecologies we inhabit. The anthropology of food has a rich history, which addresses fundamental questions about humanity. Food has been instrumental in human evolution and the development of culture and society, yet the ways people define what is and is not food varies throughout the world, as well as how food is classified and distinguished from medicinal, poisonous, and other ingested materials. In particular, understanding of the overlap between food and mind-altering substances reveals the crucial role that “drug-foods” played in the development of colonialism and globalization. Consuming various foods may represent shared identities, political divisions, health imperatives, and spiritual duties, or lack thereof. Currently, malnourishment and other disordered eating patterns are manifestations of the imbalances in global food production and distribution systems. With growing skepticism about corporate, biotechnological approaches to food crises, permaculture and other grassroots initiatives offer promise for the future.

Food in human evolution

Humanity began by gathering, scavenging, hunting, and, eventually, cooking food. Archaeological and ethnographic evidence suggests that in most climates the diets of foragers have been predominately plant based. We have long, coevolutionary relationships with many plant species that we eat. Foraging humans most likely ingested long-lived plants with high concentrations of secondary compounds that provided protection against disease and pests. Some of these plant compounds also would have placed selective pressure on the people who consumed them, perhaps even altering their genetic profiles

over generations. Nevertheless, the consumption of meat is understood to have played an equally important role in the evolution of *Homo sapiens*. As humans radiated out of Africa, scavenging and hunting animals were associated with skeletal, digestive, and cognitive changes in our bodies, as well as having an impact on our social organization, technological development, and relationships with the natural and spiritual world. Our consumption of herd animals eventually led to their domestication, as well as pastoralist lifestyles, while fishing drew us to coastal plains, estuaries, and river valleys where we first began to cultivate plants intensively. The transition from food collection in the Paleolithic era to food production in the Neolithic period was gradual and profound, involving conscious and unconscious selective pressures that humans placed on the genetic make-up of the species we consume.

The origins of plant and animal domestication are the symbiotic relationships that develop when we tend and ingest them. Practices such as weeding, watering, transplanting, feeding, and herding stem from our observations of the natural world and there is growing evidence that humans engaged in these behaviors for many generations before agriculture developed. Eventually, where environmental conditions were favorable, our experiments in cultivation and selective breeding enabled us to actually shape the genetics of domesticated species. Agriculture developed independently in many different parts of the world and gradually spread into others. The adoption of agriculture is generally associated with sedentism, which was a critical step in the development of cities and urbanization. By freeing large sections of a population from food production, intensive agriculture permits the development of trade and elite cultures. However, infectious diseases have also flourished in urban conditions, especially those that jump between domestic animals and humans or are the result of environmental disruption (e.g., due to the creation of irrigation systems). Dependence on crops and livestock also sets populations up for food shortages and famines if agriculture is unproductive. For better and for worse, agriculture has influenced our eating habits and our

The International Encyclopedia of Anthropology. Edited by Hilary Callan.

© 2018 John Wiley & Sons, Ltd. Published 2018 by John Wiley & Sons, Ltd.

DOI: 10.1002/9781118924396.wbiea1605

relative survival rates, along with other ways of life that are patterned around food production and consumption.

Classification of foods

Distinguishing between what is and is not food is a fundamental way of classifying things in our environment. However, the distinction between what should and should not be eaten (or even what can and cannot be eaten) is based on much more than edibility. A delicacy in one cultural context might be disgusting or even an abomination in another. Young manioc leaves (*Manihot esculenta*) are a treat in parts of Africa but may be considered famine foods in other areas of the world. The squeamishness that people feel around the consumption of animals is even more extensive. People avoid eating various foods for a range of reasons. "Humoral" systems of classifying foods, medicines, and physiological states are common throughout the world and are some of the most well-studied foundations of food avoidance. These dynamic classification systems are flexible, as proscriptions against the consumption of specific foods generally depend on bodily states. Moreover, food may be classified as "hot" or "cold" depending on how it affects the body. Ignoring the humoral state of food when ill may be seen as foolish but it is not sinful. In contrast, reasons for not recognizing certain plants or animals as foods that have some kind of moral and/or religious basis are generally theorized as "taboos" in anthropology. Taboos may reflect ecological relationships, perspectives on animal consciousness, or adherence to ritual. They are also often intimately wrapped up in rules for sharing and/or conservation.

One of the most debated food taboos in anthropology concerns avoidance of pig consumption in the Middle East, particularly among people who follow the dietary advice of the Old Testament. Marvin Harris (1998) argued that raising pigs as livestock would have been especially challenging in the ecological systems of early biblical Palestine, making it economically impractical to do so for the ancient Israelites (and their neighbors). In contrast, Mary Douglas (1966) explains the inclusion of swine among the abominations of

Leviticus as a function of their ambiguous and anomalous nature; they have cloven hooves but do not chew their cud. An additional explanation is that carnivorous scavenging behavior is the root of biblical prohibitions on pig consumption. Pigs are predators and may even eat human flesh, unlike vegetarian ruminants. Consuming predators and scavengers is prohibited throughout the Bible and seems to provide a plausible explanation for avoiding the consumption of pigs. However, the similarly ambiguous swordfish (with fins but no scales), which is also carnivorous and historically prohibited, has recently been deemed kosher in the United States because it was found to have microscopic scales. Thus, all we can be certain of is that the status of a given consumable as food (or not) changes in different historical and ecological contexts and that people may even alter their own individual classifications in certain circumstances. Considering that the category of food overlaps with other ethnobiological categories complicates food classification systems even further.

In ethnobotany, anthropologists have identified the importance of considering the many contexts within which a single plant is consumed. Many plants are used in both medicines and meals, reflecting a complex relationship between eating and healing. Considering plants in both their dietary and medicinal contexts facilitates a better understanding of the biocultural adaptations effected by human populations in response to disease. It also provides greater insight into how foods are distinguished from other plants and animals. Spices have been dominant among pharmacological investigations of food plants because of their close link with medicine in Western herbalism. The work of Etkin and Ross (1982) was groundbreaking in both ethnobiology and anthropology because it paid attention to the medicinal properties of domesticated staples and wild plants. Medical systems from around the world (e.g., traditional Chinese medicine, Ayurveda) place importance on therapeutic diets, as many plants (and animals) consumed by people are not just nourishing but are also sources of biologically active compounds. While plants used in both cooking and herbal remedies may be of interest to ethnopharmacologists, the overlap between the plants that we eat for sustenance and those that alter our consciousness states

(so-called “drug-foods”) has ramifications for all life on this planet.

“Drug-foods,” colonialism, and globalization

Foodstuffs that provide energy, and possibly a few other nutrients, but also affect the perception of hunger and other sensations were integral to the colonial enterprise and continue to sustain global corporations, if not human bodies. During the age of expansion, the spice trade between Europe, Asia, Africa, and, eventually, the Americas led to the development of international trade routes and institutions to fulfill desires for new flavors, preservatives, and healing agents. However, the introduction of two beverages to Europe (coffee and tea), along with the sugar that made them especially easy and pleasing to consume, changed the shape of eating, healing, and working in European colonial empires, which resonates to this day. Beer was a pervasive foodstuff during the Middle Ages in Europe but coffee (imported from Arabia) displaced it as the default beverage by the seventeenth century. It seems that the “sobering” nature (and alleged ability to reduce sexual urges) of coffee was appealing to Protestants as well as Muslims. Coffee houses became centers of intellectual and social activity (for men) in London and Paris. Eventually, in the eighteenth century, England switched to drinking tea as coffee fell out of fashion, perhaps in part due to conflicts between church women and coffee houses and to complicated relationships between England and China (as well as other tea producing countries).

Both coffee and tea have been made more palatable to Europeans by adding sugar to them, which was made possible by transforming sugar from a luxury item and medicine to a staple “food” through slavery. Sidney Mintz (1986) illustrates the relationship between sugar and colonialism, particularly the transatlantic slave trade. On Columbus’s second voyage to the New World in 1516, sugar was transplanted to Santo Domingo and subsequently spread throughout the West Indies. By 1660 the British had established a sugar-production industry in Barbados and in the following century imported some 3 million slaves for their own (as well as French and

Spanish) colonies. The importation of African slaves and use of their labor on plantations allowed the British to make sugar affordable for the masses who were developing a taste for it and to keep up with their ever-increasing demands. By 1800, a total of 245,000 tons of sugar reached consumers in the world market, predominantly in Europe. By 1830 this had doubled again and by 1890 world production exceeded 6 million tons. Laboring families at the end of the eighteenth century spent 10 percent of their income on sugar, treacle, and tea and taxes on the sugar trade were a major source of government revenue.

Yet as sugar consumption increased exponentially among the general populace throughout the time of colonialism and slavery, wealthy people began to repudiate their own consumption of sugar as its symbolic meaning changed (and negative effects of excess consumption became apparent). Mintz (1986) refers to sugar, tea, and other such consumables as “proletarian hunger killers.” They provide energy in the form of calories and caffeine and also suppress the appetite. Another advantage of producing sugar, tea, coffee, and alcohol over other foods is that the drug-foods themselves can be used as inducements for slaves and other workers and may also help them keep up with production, at least until malnutrition catches up with them. Dependence on globally traded drug-foods not only facilitated European colonization but continues to maintain unequal economic relationships throughout the contemporary world. Colonial empires have fallen and corporations are amassing increasing levels of control over governance, trade, food, and drugs (among other things). Leatherman and Goodman (2005) refer to this phenomenon as “Coca-colonization,” documenting how sugar (especially that which is processed into carbonated soft drinks) contributes to malnutrition and poverty in Mexico. In many cultures, industrially produced foods are believed to be superior to foods that can be grown at home. The convenience foods produced by agribusiness corporations provide extra leisure time for women and may signify higher social status. However, in other cultural contexts, avoiding drug-foods is also a political statement, as is eating traditionally cooked meals.

Social meanings of food and eating

Social anthropologists who study food have found that eating can be as much a political act as a process of nourishment. In particular, industrially processed foods may be seen as symbolic of everything that is wrong with global capitalism and eating a diet of more sustainably produced foods is a political statement in groups as diverse as Rastafari italists (who eat an Afro-centric vegan diet) and “punks” of the American Pacific Northwest (who likewise prefer locally produced vegetarian food). The production, preparation, and serving of food are also laden with politics. Appadurai (1981) coined the term “gastro-politics” to describe the study of who produces/prepares food and who is given precedence in the serving and eating of food. Gastro-politics operate everyday within households all over the world; they can also be seen in wider family/community rituals such as wedding feasts, in religious rituals, and as a subtle form of protest. For example, in the Tamil Brahmin households that Appadurai studied, there are elaborate gastro-political rules that often rank, distance, and segment members. Women do the cooking for the men, the children, and themselves. In multifamily households, there is further hierarchy among the cooks (young daughters-in-law have the lowest status). Because women do the serving, they can and do make subtle statements about other members of the household, as well as guests, through relative portion sizes. Outside the household, Tamil Brahmin wedding feasts often become tournaments of rank that reflect political power in the community.

Other social meanings of food and eating relate to identity, self-control, and morality. Sometimes people are defined by what they eat, either by themselves (e.g., “people of corn”) or others (e.g., “garlic eaters”). Whatever, their origins, Jewish dietary laws set Jews apart from others. Cuisine (the cultural construction of proper meals) is also bound up with identity. For Mexicans, food is not a meal unless tortillas are involved, while in Ethiopia neighboring ethnic groups eat the same foodstuffs but are distinguished by how they cook and present them. Generally eating with other people is a homogenizing process that indicates equality, intimacy, and/or solidarity. We

share nourishment of body and soul when we eat with other people. In some places people go so far as to define kin not by shared blood ties but by shared food. People also develop systems of eating in reference to particular states (e.g., fitness, illness, holiness) and specific diets may catch on and even become institutionalized for a variety of reasons. Some are very medicalized (such as diets for diabetes control), others are more cultural, some are even spiritual. The body may be understood as something that can undermine the true self (through desires for unhealthy foods) and must be controlled carefully. Whether the true (whole/healthy) self is conceived as the fit Adonis or the divine being incarnate in flesh, keeping discipline about the food one consumes is key to achieving these states. Thus eating is a moral as well as a material issue.

The ritual/symbolic significance of food has been well studied but less well understood is how the biological character of certain foods affect the use of food to control human behavior, optimize health, and facilitate worship. Spiritual practices are grounded in the physical act of eating and the nutritional choices of devotees become a manifestation of faith as well as guidelines for spiritual wellbeing. For example, Krishna devotees are expected to offer food to Krishna before eating it and Krishna will accept only vegetarian food. Meat is thought to lead to anger and lust due to an increase in stress hormones of the animal during slaughter, which are stored in its tissues and transferred to the consumer. Thus, Krishna cuisine is said to have the right biological properties to purify the body and increase spiritual awareness. This is why it is cooked and shared freely with the general public on a regular basis. Similarly, the Buddhist principle of *ahimsa* (nonviolence) leads many Buddhists to avoid eating animals. Buddhists value vegetarian foods because they help them to stay focused and balanced in meditation and daily life. Indeed, many spiritually based diets are vegetarian, which is meant to facilitate the achievement of certain spiritual aims. However, vegetarianism/veganism is not necessarily the best way to achieve optimal physical health because nutrient deficiencies can occur. The avoidance of eating all together may also be practiced for spiritual (as in fasting) or other reasons (such as eating disorders).

Disorders of food and eating

People voluntarily stop eating for extended periods of time for a variety of reasons, including purification/detoxification of the body, the altering of consciousness, the intensification of meditation, or as a form of political protest. In Medieval times, female saints frequently fasted and performed miraculous deeds with their bodies. The flesh was seen as sinful, associated with gluttony and lust, and through controlling food intake these women were able to discipline their bodies. Accounts of what women did, how long they survived without food, and of miraculous acts of lactation and non-decomposition of corpses, for instance, led Bynum (1985) to tentatively conclude that maybe their bodies really were rather different to ours. Similar to these medieval saints, many contemporary anorexics remain remarkably unbothered (physically and mentally) during experiences of prolonged starvation and even exhibit increased energy and optimism. There may be sound evolutionary reasons underlying these characteristics. Indeed, family social environment has been shown to have little or no effect on the prevalence of anorexia but genetics do. Evolutionary perspectives on anorexia nervosa suggest that the ability to tolerate periodic starvation and to help others during such times may have been beneficial and selected for in our evolutionary environments. The ability to ignore hunger, hyperactivity, and denial of starvation has also been hypothesized to facilitate migration in periods of starvation.

Currently, anorexia happens in boys, men, and old women but it disproportionately affects teenage girls and young women. The high prevalence of anorexia in young women and girls is no longer limited to industrial societies but seems to be spreading throughout the world. Images of slender “supermodels” in the media have been cited as an explanation for increasing rates of anorexia; such images fuel female concerns with weight, which the diet (and cosmetic surgery) industry caters to. Feminist writers have also linked eating disorders such as anorexia with movement away from femaleness (i.e., a maternal body) toward androgyny as women move out of the home and into the workplace. Bordo

(1993) has focused her work on the relationship between capitalist consumer culture and anorexia, which suggests that such disordered eating is about control over and mastery of the body. In the development of capitalism from the eighteenth through the twentieth century, social power became less about the accumulation of material wealth and more about the ability to manage and control others. Thus, a thin and firm body has become evidence of the ability to control the self. At the same time, capitalism implies a contradiction between self-restraint and the self-indulgence required of “good consumers.” Bordo argues that such a construction is unstable and easily falls to extremes of overindulgence (obesity, bulimia nervosa) and asceticism (anorexia). But because women are more likely to diet and lose weight than men, it is plausible that some develop symptoms of anorexia as a biological response to weight loss.

Disorders of food and eating do not just affect individuals. On a global scale, one could argue that the entire planet is collectively suffering from malnutrition, a particularly insidious pattern of disordered eating. Undernutrition comes in a variety of forms including protein-energy malnutrition and a variety of vitamin and mineral deficiencies. These disorders result in poor physical and cognitive development (particularly in children under five years old), increased susceptibility to infectious diseases, and difficulty working and studying. The causes of undernutrition are complex, being variously ecological (e.g., drought, crop diseases), economic (e.g., poverty, limited access to food and medical care), social (e.g., family breakdown, poor dietary habits), and political (e.g., war, public policies). At the same time, overnutrition—which results from irregular eating habits, large portion sizes, and the consumption of energy-dense foods—is also spreading, leading to increased rates of heart, liver, and kidney disease, high blood pressure, and diabetes. Although historically they have been treated as separate conditions, over- and undernutrition are now being seen alongside each other (sometimes referred to as paradoxical malnutrition), especially in countries that are undergoing rapid economic development. Imported processed foods are often more readily available and easier to preserve than fresh, locally produced foods, which reorganizes both tastes

and local material cultures of food production, fueling the rising pandemic of malnutrition.

Food and the future of humanity

Rising rates of obesity and other sociocultural changes in eating behavior have also been associated with the growing popularity of fast-foods. The components of these consumables are processed by machines and assembled/cooked by low-skilled workers, making them fast and convenient to both serve and eat. It is widely assumed that fast-foods have become globally popular because they taste good (i.e., are fatty, salty, and/or sweet) but anthropological research suggests that they are an acquired taste for people who first try them as adults. Tastes are shaped by cultural standards and individual mindfulness. Fast-food eaters may be perceived as “slaves to taste,” in contrast with people who consume organically produced foods who are thought to be more mindful. Organic food is also dichotomized with industrially produced foods because of the ideal that it is produced by hand without pesticides or “chemical” fertilizers. However, organic commodities can become specialty items rather than a systemic alternative to industrial foods and organic farming can become mechanized and unsustainable if demand is high enough. As such, there are imbalanced labor and ecological relations within much organic food production as well as its distribution.

In the current era where global agribusiness corporations are pushing genetically modified organisms as solutions to global hunger, anthropologists and environmental activists such as Vandana Shiva (2000) highlight the threats to biological diversity (not to mention human health) that such biotechnology creates. With the failures of earlier “green revolutions” in mind, the wisdom of relying on corporately controlled technology and agricultural systems that depend on expensive inputs and expansive monocultures is being questioned. As a counterpoint, “food sovereignty” is the right and ability of individuals and groups to determine their own foodways and while it does not automatically imply sustainability, most food sovereignty movements focus

on foods that are particular to local ecological systems. Anthropological interest in agroecology, permaculture, food sovereignty, food justice, and slow-food movements can be seen as restoring eaters as citizens, rather than consumers, providing hope for a future in which all humans (and indeed all life) on earth are properly nourished.

SEE ALSO: Cooking and Human Brain Evolution; Medicinal Plants; Agroecology; Nutritional Anthropology; Anorexia; Green Revolution; Genetically Modified Organisms; Nutritional Issues in Medical Anthropology; Ethnobiology; Malnutrition; Ethnobiology and Cognition; Nutritional Ecology

REFERENCES AND FURTHER READING

- Appadurai, Arjun. 1981. “Gastro-Politics in Hindu South Asia.” *American Ethnologist* 8: 494–511.
- Bordo, Susan. 1993. *Unbearable Weight: Feminism, Western Culture and the Body*. Berkeley: University of California Press.
- Bynum, Caroline Walker. 1985. “Fast, Feast, and Flesh: The Religious Significance of Food to Medieval Women.” *Representations* 11: 1–25.
- Counihan, Carole, and Penny Van Esterik, eds. 2013. *Food and Culture: A Reader*. New York: Routledge.
- Douglas, Mary. 1966. *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*. New York: Routledge.
- Etkin, Nina, and Paul Ross. 1982. “Food as Medicine and Medicine as Food: An Adaptive Framework for the Interpretation of Plant Utilization Among the Hausa of Northern Nigeria.” *Social Science & Medicine* 16: 1559–73.
- Goody, Jack. 1982. *Cooking, Cuisine and Class: A Study in Comparative Sociology*. Cambridge: Cambridge University Press.
- Harris, Marvin. 1998. *Good to Eat: Riddles of Food and Culture*. Long Grove, IL: Waveland Press.
- Leatherman, Thomas, and Alan Goodman. 2005. “Coca-colonization of Diets in the Yucatan.” *Social Science & Medicine* 61: 833–46.
- Mintz, Sidney. 1986. *Sweetness and Power: The Place of Sugar in Modern History*. New York: Penguin.
- Shiva, Vandana. 2000. *Stolen Harvest: The Hijacking of the Global Food Supply*. New York: South End Press.