Unit 2 Food Choices: Panorama and Politics

Lesson 2: The Panorama of Food Choices

“The Chinese do not draw any distinction between food and medicine”
Lin Yutang (1895 -- 1976) The Importance of Living. Ch. 9, Sect. 7

Today’s American panorama of food is very broad with "]increase...demands of choice...” (Griffiths & Wallace, 1998, page 1, ¶2) which have in some respects removed Americans from a state of natural and restorative food. While debates continue among scientists and researchers as to whether natural forms of food are the healthiest (Griffiths & Wallace, 1998), the landscape of food has changed significantly over the last few decades. From food in its natural form to artificially enhanced foodstuffs and on to genetically altered food products, the landscape of food continues to evolve. Within this panorama of food is agricultural geography; the background, setting, surroundings, view and environment of food.

Impact of Geography on Food Choices
American food products are offered in a variety of settings from local farmers markets to food pantries to wholesale food warehouses to high end stores specializing in exotic and unusual foods from varying geographies. Food is sold in discount stores, distributed from food banks, displayed and sold in open air markets, or prepared for mass distribution by commercial grocery store chains.

Cuisines vary by geography and environment. In Berkeley, California one’s food choices might include food products from East India, China, Japan, Viet Nam, Mexico, Italy, Australia, Africa or Greece (just to name a few). In New York, one’s food choice might be New York Style pizza, Hungarian, Dutch, Kosher, and the Caribbean. In Pennsylvania, the view of food may be that of Amish, Mennonite or German while in the southern states, African American or ‘southern cooking’ serves as a backdrop to gastronomic history.

Food products from other countries are routinely imported for consumption by Americans. When shopping at a local grocery food chain, one might turn over a package of salmon and discover a label stating ‘Grown in a Chilean Fish Farm.’ Vegetables such as tomatoes are imported from Mexico, fruit such as apples from South America, bananas from Brazil, beef from South American and fish from Chilean fish farms.

In Texas, one might face a myriad of choices related to beef – from steaks to prime rib yet in New Mexico, chili, cheese, tortillas, rice and beans are standard fare. Along the east and west coasts, seafood dishes from oysters to scallions, lobster to shrimp, calamari to albacore are part of food choices available. Food choice also depends on what food products are grown where geographically.

Agriculture and Farming Practices
Agricultural practices vary depending on geography because the soil in which food products are grown (USDA, 1939) varies as well as the availability of irrigation water. According to Griffiths and

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2 Ibid.
Wallace (2008), “The countryside is owned and farmed extensively, with the liberal use of pesticides and fertilizers encouraging ‘natural’ crops” (page 2, ¶3).4

Farming practices vary by region and by type of owner; single family farms have nearly disappeared from the American landscape. According to Schlosser, “Family farms are now being replaced by gigantic corporate farms with absentee owners” (2008, page 8, ¶2).5 The result is that today’s major producers of food products are corporate farms known as ‘factory farms.’

The appearance of corporate of ‘factory farms’ started in the 1980s with “...large multinationals – such as Cargill, ConAgra, and IBP...allowed to dominate one commodity market after another” (2008, page 8, ¶2).7 Independence among farmers and cattle ranchers slowly eroded resulting in the loss of family farms or farmers and cattle ranchers becoming “...hired hands for the agribusiness giants” (2008, page 8, ¶2).8

However, the use of factory farms as part of the landscape of food is subject to debate by opposing groups. For example, according to the FactoryFarm Organization (linked with Johns Hopkins University), ”Factory farms destroy the environment, threaten human health, devastate local communities and compromise animal welfare” (2008).9 These farms are alleged to pose environmental damage, human health impacts, socio-economic impacts, and animal welfare issues.

**Environmental Damage**

According to the FactoryFarm Organization

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8 Ibid.
As a result of irresponsible management practices, inadequate regulation, and insufficient oversight, factory farms are among the worst polluters in the U.S. The fundamental problem: too much poop. Every animal needs to eat, drink, and eventually eliminate its waste (manure and urine). When thousands of animals are confined in one small area on a factory farm, the waste accumulates very quickly. For instance, every day, an average dairy cow produces about 21 times as much waste as an average human\(^1\) - so a mega-dairy CAFO with 15,000 cows generates as much animal waste as a city of 315,000 people! But unlike cities, factory farms aren’t required to install hi-tech sewage treatment facilities; instead, animal waste is stored in manure lagoons and periodically sprayed onto the surrounding land. This process spews toxins into the air, and can pollute surface water and groundwater, damaging the environment, killing aquatic organisms, and threatening human health (2008).\(^{10}\)

![Manure Spill](http://www.factoryfarm.org/home.php)

**Manure Spill**
Source: FactoryFarm Organization.\(^{11}\)
2008. Compiled by K. Cavanaugh

### Human Health Impacts
According to the FactoryFarm Organization a less apparent but serious thread from factory farms jeopardizes “…the health and safety of neighbors, employees, and the general public…by contaminating ground and surface water, releasing harmful pollutants into the air, promoting the development of antibiotic-resistant bacteria, incubating infectious diseases, and facilitating the continued overuse of chemical pesticides” (2008).\(^{12}\)

So great is the public health threat posed by factory farms that the world’s largest association of public health professionals, the American Public Health Association (APHA), issued a resolution urging state and local officials to impose a precautionary moratorium on the construction of new factory farms (FactoryFarm Organization, 2008).

### Antibiotic Resistance and the Animal Industry
According to the Sustainable Table Organization modern commercialized livestock operations overuse antibiotics as part of feeding practices. Antibiotics have been mixed “…into livestock feed since 1946, when various studies showed that low levels of antibiotics (too low to actually fight


\(^{11}\) Ibid.

\(^{12}\) Ibid.
disease) seemed to help animals grow faster and put on weight more efficiently, thus increasing profits for meat producers” (2008).^{13}

![Image: Antibiotic overuse in factory farms. 
From www.Themeatrix.com.](Image)

2008. Compiled by K. Cavanaugh

The FactoryFarms Organization points to the health risks inherent with the overuse of antibiotics as part of commercial livestock operations

- Among the most serious public health threats posed by factory farms is their tendency to accelerate the proliferation of antibiotic-resistant bacteria. As a result of the confined, crowded, and unsanitary conditions found on factory farms, animals are stressed and prone to sickness. Rather than improving these squalid conditions, factory farm owners routinely add low doses of antibiotics to animal feed; this practice prevents widespread disease and also benefits factory farms by artificially boosting animals’ growth rates. As a result, huge quantities of antibiotics are currently fed to animals on factory farms; according to the Union of Concerned Scientists, approximately 70% of all antibiotics used in the U.S. are fed to farm animals for non-therapeutic purposes.

- Unfortunately, routine administration of antibiotics has the harmful effect of promoting the development of antibiotic-resistant bacteria. Although the low dosage of antibiotics kills many bacteria, the stronger bacteria that survive can reproduce and pass their resistance to future generations.

- Since bacteria are able to reproduce in as little as 20 minutes, routine administration of antibiotics can induce the rapid development of antibiotic-resistant bacteria, which can spread directly to humans and animals. When manure is spread onto fields or stored in manure lagoons, these bacteria can also contaminate waterways and groundwater; in fact, scientists have detected antibiotic-resistant bacteria in groundwater as far as 250 meters away from manure lagoons. As antibiotic-resistant bacteria spread, medicines used to treat diseases become less effective - this poses a significant threat to public health. The Institute of Medicine estimates that antibiotic-resistant bacteria cause U.S. health care costs to increase by 4 to 5 billion dollars each year.\(^5\)

**Interactive Activity**


The Problem of Food Misinformation

Part of the panorama of food includes how food is viewed and the environment in which food is offered. A segment of the population views food as functional meaning the landscape of food includes food as a healing agent or protection against sickness and disease. Whitney and Rolfes ((2002) discuss how "...the food industry has always catered to consumers’ demands for health-promoting foods" and how "Folklore throughout the ages has supported the idea that foods have healing powers" page 459, ¶1).15

For example, yogurt has long been theorized and advertised as ‘health food’ without scientific support for the claim in spite of the fact that yogurt as a food product does seem to improve health. Recent scientific studies reveal that microbial properties in yogurt influence body functions (Whitney and Rolfes, 2002, page 459).16

According to Whitney and Rolfes, "...the creation of...functional foods is the fastest growing trend and the greatest influence transforming the American food supply" (2002, page 459). This influence helps persuade consumers in believing that a new category of ‘health food’ has been created to satisfy demand for foods specifically designed to improve health.

However, information can be confusing due to the number of foods claiming to be functional and designed to significantly improve health outcomes. According to Griffiths and Wallace (1998)

16 Ibid.
“Advertisers stress the close connection between their food product and a well-loved and purely imagined nature, by depicting, for example, creamy milk pouring into a bar of chocolate or ears of wheat falling into a cereal bowl (page 3, ¶1). Thus, the setting of food as a perception in the mind of consumers is part of the geography of food. The media often portrays food as transporting one to a more simple time by ingesting wholesome natural food. For example, California sunshine and ‘sun chips’ which are claimed to be grown and harvested using environmentally safe methods.

All foods contain nutrients in greater or lesser degrees and the ingestion of ‘standard’ foods such as vegetables and fruits have the same benefits as ‘functional foods.’ This means that for the consumer, making food choices can be challenging because “Confronted with thousands of food choices, consumers may find it more difficult than ever to make healthy selections” (Whitney and Rolfes, 2002, page 459).

**Role of U.S. Food and Drug Administration**

The U.S. Food and Drug Administration (FDA) has the responsibility of enacting and enforcing regulations related to food health claims, structure-function claims and advertising.

**Health Food Claims**

The FDA has established tightly regulated criteria that a food must meet in order to advertise itself as a ‘health food’ or make a health claim (Whitney and Rolfes, 2002, pgs. 460-461). Without FDA approval, a food cannot be viewed as ‘health food’ nor make claims to improve health outcomes based on the nutrients contained within the food.

**Structure-function Food Claims**

Claims about the structure-function of food can be made without FDA approval meaning food can claim to make improvements so long as the claim is not linked specifically to a disease. For example, ingesting food containing carbohydrates to improve memory is a structure-function claim.

However, if the claim specified, ‘Eating pasta is a proven way to prevent dementia such as Alzheimer’s disease’ then this would be a health food claim and would not be approved as a structure-function food claim.

According to Whitney and Rolfes, advertising related to food claims is under the jurisdiction of the Federal Trade Commission (FTC) which regulates all advertisements for all products in all media (2002, page 461, ¶3). This is the area of least regulation and one which may cause confusion of the part of consumers related to food misinformation.

**“Deconstructing” Dietary Advice**

Nestle discusses how the governmental dietary advice contained in the *Food Guide Pyramid* have been influenced by the food industry. The advice to ‘eat less’ is at odds with the need by food companies to earn profits by selling more and motivating consumers to ‘eat more’ and not less.

The original intent of the US government’s food advice was to “…help dispel public misunderstanding of nutritional advice, resolve conflicting interpretations of research studies, and clear up confusion among experts about the applicability of public health recommendations to the dietary practices of individuals” (Nestle, 2007, page 67-68).

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17 Ibid.
18 Ibid.
In order to compromise the food guidance in the USDA’s *Dietary Guidelines for Americans*, the food industry insisted that government food guidelines focus on nutrients and moderation rather than eating less. To accomplish this, the principle of

...consumption of all foods regardless of nutritional value: “balance, variety, and moderation are the keys to healthful diets; there is not such thing as a good or a bad food; all foods can be part of healthful diets’ it’s the total diet that counts (Nestle, 2007, page 67-68).\textsuperscript{21}

**Groups Vulnerable to Food Misinformation**

Within the American landscape certain groups view food and food claims as a panacea to illness, disease and health challenges. These groups are said to be a more vulnerable population because they are highly susceptible to exaggerated food claims. For example: pills or food additives such as vitamins that claim to restore loss memory and delay the onset of the Alzheimer’s form of dementia.

**Older Persons:**

While part of the normal aging process involves some memory loss or increased time lapse for memory retrieval, this population is enticed to purchase food products that make health claims related to restoration and improvement of mental and physical capabilities. Examples are ‘power drinks,’ pills, diet supplements, performance-enhancing drugs such as metabolic steroids.

**Teenagers:**

Because of the societal focus on outward appearance, teenagers may be enticed to use food products which claim to immediately promote beauty and physical enhancement, restrict appetite, build muscles quickly and promote acceptance by their peers based on physical appearance. Examples include diet pills, highly caffeinated drinks known as ‘energy drinks’ appetite suppressants, drugs or exercises claiming to enhance breast size or penis size, enhance sexual prowess and performance or other enhancements.

**Athletes:**

As demonstrated by the high use of performance enhancing drugs, athletes are attracted to food claims that promote greater endurance, energy, and recovery and restoration from injury or to gain an edge in competitive events. Examples are metabolic steroids, muscle and pain medications, energy drinks, and muscle-building or enhancing food products.

**Obese Persons:**

Persons who are obese or morbidly obese are more vulnerable to food products promising immediate weight loss, ‘eat all you want and still loose weight’ including food products containing chemical additives such as Ephedrine, appetite suppressants, highly caffeinated foods and drinks, crash diet programs consisting of restricted food intake or foods high in sugar such as liquid diet drinks.

\textsuperscript{21}Ibid.