Advertising: A form of communication used to persuade people to purchase a particular product. Television, Internet, billboards, magazines, newspapers, radio, and other forms of media frequently feature food advertising.

Agriculture: The production of food and goods through farming.

Algal bloom: A rapid increase in the population of algae, often the result of excess nutrients in the water. Some algal blooms are toxic to humans and marine life. See runoff.

Biodiversity: The variety of organisms in an ecosystem. Domestic biodiversity refers to the diversity among organisms cultivated for human use, in contrast to wild biodiversity.

Brand loyalty: The extent to which consumers continue buying products of a particular brand.

Climate: The temperature, precipitation, humidity, and other weather conditions over a long period of time. Climate is a major factor in what crops can be grown in a region.

Climate change: A significant, lasting change in temperature, precipitation, humidity, or other measures of climate. The term often refers to the current trend toward higher average global temperatures (global warming) alongside increased frequency and severity of droughts, heat waves, hurricanes, and other weather events. See greenhouse gases.

Community Food Security: “A condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance, social justice, and democratic decision-making.” See food security.

Compost: A dark, crumbly, soil-like material made from decomposed (or decomposing) organic matter, such as animal manure, food waste, leaves, and grass clippings. Compost is applied to soil as a nutrient-rich fertilizer for plants. See composting.

Composting: A managed process by which fungi, bacteria, and other microorganisms to decompose organic matter, such as animal manure and food waste. See compost.

Concentrated animal feeding operation (CAFO): Environmental Protection Agency category for a large facility in which animals are confined and fed or maintained for at least 45 days out of the year, the operation does not produce crops or vegetation, and it meets size thresholds (e.g., 1,000 cattle, 10,000 swine, or 125,000 chickens may be classified as a “large CAFO,” depending on how animal waste is managed).

Culturally appropriate food: Food that is compatible with the traditions, values, beliefs, taste preferences, and ingredients associated with a particular culture or religion.

Dead zone: Area of water with insufficient oxygen to support most organisms.

Dietary nutrients: Materials obtained through food that are used by the body for energy, growth, maintenance, and repair. These include carbohydrates, proteins, fats, vitamins, and minerals.

Economies of scale: The gain in efficiency that comes with doing something on a larger scale, such as mass production or buying in bulk.

Ecosystem: A community of organisms interacting with each other and with their physical environment.

Enrichment: The addition of dietary nutrients to restore nutritional value lost in processing. See fortification.

Equity: Justice, fairness, or freedom from bias.

Farm Bill: A federal law that influences, to a large degree, what and how food is grown in the United States. The Farm Bill also sets the laws and funding amounts for domestic food and nutrition assistance programs, such as the Supplemental Nutrition Assistance (SNAP) and Women, Infants and Children (WIC), as well as international food aid programs. The Farm Bill falls under the responsibility of the United States Department of Agriculture (USDA).

Farm subsidies: Payments or other financial supports provided by the government to support farmers and agricultural industries.

Feedlots: Confinement facilities, usually outdoors, where animals (typically cattle) are fed for the purpose of rapid weight gain prior to slaughter. Large feedlots are a type of concentrated animal feeding operation (CAFO).
**Glossary of Key Terms**

**Fertilizer:** Material spread on soil to increase the land’s capacity to promote plant growth. Common fertilizers include animal manure, compost, synthetic (human-made) chemicals, and certain minerals.

**Field to plate:** The span of activities from food production through consumption. See supply chain.

**Foodborne illness:** Illness resulting from recent ingestion of contaminated food (e.g., with microbial pathogens or toxins).

**Food deserts:** Areas with low access to healthy food, commonly low-income urban or rural areas without nearby supermarkets.

**Food distributors:** Intermediaries who pick up food from producers or processors, temporarily store it in large (often refrigerated) warehouses, and transport it to supermarkets, restaurants, and other retailers.

**Food environments:** All aspects of our surroundings that may influence our diets, including friends and family, physical settings such as stores and restaurants, and food marketing.

**Food marketing:** The activities involved in distributing, promoting, and selling a food product, such as advertising, building relationships with consumers, creating brand awareness, and the strategic placement of products in stores. See advertising.

**Food miles:** The distance food travels from where it is grown or raised to where it is purchased by a consumer.

**Food policy councils (FPCs):** Organizations that study a region’s food system and make recommendations on how to improve it. Food policy councils bring together farmers, retailers, community members, policymakers, and other stakeholders in the food system.

**Food processing:** The practices used by food industries to transform raw plant and animal materials, such as grains, produce, meat, and dairy, into products for consumers. Examples include freezing vegetables, milling wheat into flour, and frying potato chips. Slaughtering animals is sometimes considered a form of food processing.

**Food safety:** The science and practice of protecting the food supply from contamination by disease-causing organisms, harmful chemicals, and other threats to health.

**Food security:** Consistent access to enough safe, nutritious food for an active, healthy life, without resorting to emergency food programs, scavenging, or stealing. See community food security.

**Food system:** The people, activities, resources, and outcomes involved in getting food from “field to plate,” in addition to preparing and eating food.

**Fortification:** The addition of dietary nutrients to enhance a food’s nutritional value. See enrichment.

**Freshwater:** Naturally occurring water that is not salty. Freshwater sources include ponds, lakes, streams, and underground aquifers.

**Greenhouse gases:** Gases that trap heat in the atmosphere. The accumulation of these gases causes an increase in average global temperature. Greenhouse gases from human activities and natural processes include carbon dioxide, methane, and nitrous oxide. See climate and climate change.

**Hunger:** The pain, discomfort, weakness, or illness caused by a long-term lack of food.

**Industrial food animal production (IFAP):** An approach to meat, dairy, and egg production characterized by specialized operations designed for a high rate of production, large numbers of animals confined at high density, large quantities of localized animal waste, and substantial inputs of financial capital, fossil fuel, feed, pharmaceuticals, and indirect inputs embodied in feed (e.g., fuel and freshwater).

**Industry concentration:** The extent to which a small number of corporations control most of the sales in an industry. Greater industry concentration means that fewer corporations control the majority of sales.

**Industry consolidation:** The shift toward fewer and larger operations. The trend toward fewer and larger farms is an example of consolidation in the food system.

**Irrigation:** Human-made methods of delivering freshwater to agricultural fields. Irrigation techniques include the use of flooding, canals, sprinklers, and drip tape (a hose with small holes that releases water slowly).

**Local food:** Food that was produced within roughly 100 to 250 miles of where the consumer lives, or food that is sold directly from a farmer to a consumer or nearby retailer. The term has no strict definition.

**Manure:** Animal waste used as fertilizer.
Mechanization: The replacement of animal and human labor with machinery. In the food system, routine tasks such as sowing seeds and harvesting crops are often mechanized.

Monocultures: Large plantings of a single variety of a single crop.

Nutrient: A substance used by an organism for energy, growth, or maintenance. Plants, for example, require nitrogen, phosphorus, and potassium to grow.

Organic matter: Anything that was once part of a living organism, such as decaying leaves and animal waste. Organic matter is among the most important ingredients of fertile soil. See manure and compost.

Pasture: Land covered with grasses and other plants that are food for grazing animals.

Pasteurization: A process that uses controlled amounts of heat to extend the shelf life of milk, juice, and other products by inhibiting the growth of pathogens.

Pathogens: Microorganisms that cause disease upon infecting a host organism. Pathogens include certain viruses, bacteria, and fungi.

Pest: An organism that threatens human interests. Common pests in agriculture include certain plants (weeds), insects, fungi, rodents, and bacteria that can kill crops or interfere with their growth.

Pesticides: Natural or synthetic chemicals used to kill, repel, or control populations of target organisms (“pests”); includes insecticides, herbicides, and fungicides.

Plow: A tool used by farmers to turn over the top layer of soil. Plowing buries weeds and residues from prior crops, brings nutrients to the surface, and loosens soil for planting.

Public health: The science and practice of protecting and promoting the health of communities, as opposed to focusing on individual patients.

Regional food: Food that was produced within the region where the consumer lives. A region can be defined by geographic, cultural, or political boundaries—for example, the Chesapeake Bay Watershed, New England, or the Northeast—rather than size. Regional food systems include, but are not limited to, local food systems.

Runoff: The flow of water from rain, irrigation water, and other sources over land; often carries topsoil and contaminants into bodies of water.

Shelf life: The amount of time a food can be stored before it is considered unsuitable for selling or eating.

Soil: The top layer of the earth’s surface. Fertile soil aids plant growth by providing root support and serving as a reservoir of air, water, and nutrients. It is home to countless organisms—many of them beneficial—including bacteria, arthropods, earthworms, fungi, nematodes, and protozoa.

Soil erosion: The removal of soil from the ground by wind, water, and other forces. Erosion contributes to the loss of soil’s fertility.

 Spoil: To become unfit for consumption. Bacteria and fungi are usually responsible for foods spoiling or “going bad.” Perishable foods such as produce and animal products are particularly susceptible to spoiling, especially if they are not properly stored.

Supplemental Nutrition Assistance Program (SNAP): Federal food assistance for qualifying low-income households; formerly known as the Food Stamp Program.

Supply chain: The people, activities, and resources involved in getting food from farm to plate. Major stages along the supply chain include production, processing, distribution, retail, and consumption.

Sustainable: Able to be maintained in the long term. Agriculture, for example, must be ecologically sound, economically viable, and socially just to be sustainable.

U.S. Department of Agriculture (USDA): The department responsible for developing and executing federal policies on food and agriculture. The work of the USDA includes promoting economic growth in the agriculture industry, enhancing food safety, and providing food and nutrition assistance.

U.S. Food and Drug Administration (FDA): The federal department responsible for assuring that foods are safe and properly labeled. Among other things, the FDA regulates dietary supplements and veterinary drugs.
Glossary of Key Terms

USDA Organic: A certification that generally restricts the use of petroleum-based fertilizers, synthetic pesticides, sewage sludge, irradiation, and genetic engineering in producing food or food ingredients. For animal products certified as USDA Organic, animals are required some access to the outdoors, cannot be raised in continuous confinement, and must be raised on a diet of organic feed.

Women, Infants and Children Program (WIC): A federally funded program that provides supplemental food, health care referrals, and nutrition counseling for pregnant women, new mothers, infants, and children under age 5.