

## Chapter One

# It Is All about Food



It is a sad but true saying that our biggest problems are ignorance and apathy. It is certainly true of agriculture. With the bulk of the American population two or more generations removed from farming, few of us know very much about the sources of our food. In rich nations at the start of the twenty-first century, science and technology have made our food supply so abundant and inexpensive that the typical attitude about agriculture is complacency. At the same time, there are warning signs in our air, water, soil, climate, and even food itself that indicate agriculture must change—and that change is so significant that everyone will be involved.

A wise professor once told me that the secret to successful problem solving was to ask the right question. As an applied ecologist focusing on agricultural sustainability, my question is this: How can we draw attention to that essential body of knowledge and wisdom about agriculture that most of us so complacently ignore? A second question quickly follows: Once ignorance is reduced, how can we motivate people to change? To help answer these questions, I have been looking for a central theme that, like a cut diamond, would have many facets that unify and enliven all of the dimensions of life related to our basic dependence on farming. I think that theme is food. Though food may seem mundane and even self-indulgent, several times a day our body tells us otherwise. Civilization, with its science and technology, has made it possible for rich humans to live in a rather thoughtless

manner, but reflective and watchful persons also remind us that we live thoughtlessly at our own peril. The goal of this chapter is to open up our thinking about food, to show how it is life's central and comprehensive theme. The facets of food reflect on all of the aspects of life, and in that sense, it *is* all about food.

### Thanksgiving

The comprehensive associations of food can be illustrated by a couple of pictures from my own life. Starting with the elaborate, consider a holiday meal at our home, say a Thanksgiving meal in November. There will be a dozen or so people gathered around our table for a traditional feast. The people will be our own family plus an assortment of international students and friends unable to be with their own family on that special day. The preparation started back in May when I harvested and froze rhubarb that will now be a key ingredient for a favorite family dessert. In July, homegrown blueberries were picked and frozen for the same purpose. In July or August, we ordered a locally raised turkey available at the Ithaca Farmers' Market. A week before the celebration, we discussed together what each household would bring so that the meal would be a community affair. The evening before, I will have made a special cranberry salad with a recipe given to me by my mother. Typically, my wife and children will be busy at the same time making rhubarb and blueberry pies. Someone will see that there also is the usual pumpkin pie. On the morning of the day, my wife will prepare the turkey and place it in the oven for the several hours of cooking while other preparations take place. The kitchen crew will process the last of the season's fresh produce from our garden. Usually there will be "Long Keeper" tomatoes harvested in September but carefully stored for this day in November. If the local deer have not broken into our garden, then there might still be Swiss chard, Brussels sprouts, carrots, and kohlrabi or rutabaga. As my children have said, these are "real vegetables" and not the common fare from the supermarket. We will go to the grocer for green beans or corn or peas and for potatoes to be specially seasoned with herbs and spices. There also will be sweet potatoes, special at our home because they re-

mind us of the years when sweet potatoes were one of the few foods our severely allergic child could eat. Our guests will be bringing some of their traditional dishes from Uganda or India or Korea. A close friend usually brings an amazing array of locally baked breads. There also will be special drinks and juices, often apple cider in season that time of year.

I am sure I have forgotten some items, but you get the picture. It is an elaborate feast, a celebration of abundance and friendship, and it is more than that too. At our house, we often will begin the meal with a word of thanksgiving from each person around the table. Then we will hold hands and sing a song, perhaps, "Creator God, Lord of the universe, thank you for creation, thank you for food." Sometimes people at our table will not share our faith but not complain in front of all that food. They at least observe and hopefully enjoy the ritual of a special occasion where they are guests. Often after the first session of feasting, there will be prayers of gratefulness, and I will read the story of the first American Thanksgiving to remind us of the history that is being commemorated. We will then retire to various social events that include clearing the table, doing dishes, and appropriate games for the age range of those who are present. We may gather around the piano as my wife or daughter-in-law plays and sing a few favorite songs. And then a few hours later, when we are able, we will gather at the table again for dessert, for those pies I mentioned earlier, usually accompanied by some ice cream. And so goes the feast.

This holiday is observed with countless variations in countless American and Canadian households. Financial offerings have been given and volunteers enlisted to repeat the theme at soup kitchens and homeless shelters so that even the poor and broken can participate in the feast. Turkey, a uniquely American poultry, is the traditional focal point, but as a child my family roasted a chicken. (I am not certain why, but perhaps that is all we could afford.) Because of food allergies, we also have had leg-of-lamb instead of turkey. There are special recipes for special celebrations around a vegetarian table. The details are not so important, but the elaborate and careful process speaks volumes about the associations of food. And that is the point: It is all about food. Food is a comprehensive theme.

On even a larger scale, this special meal shows connections to all of life's dimensions and meaning. There are aspects related to the physical and biological needs of life. Though extravagant, this meal does provide food nutrients we need to live. It is a step in the ecological cycles and flows supplying carbohydrates, proteins, fats, minerals, and vitamins that meet our natural needs while we are alive. You do not have to look too far past the table to come to the foundations of the food system with its interconnections to agriculture and the world of nature and nature's laws. Perhaps it is uncommon in America today, but for my house and for much of the world, those steps are no farther than the vegetable garden in the backyard. Although they are steps often not contemplated in our food-rich society, it is direct and obvious to go from the food on the table to the growing food in the field embedded in the milieu of natural ecosystems with their biophysical laws that cannot be broken. (See the following definitions [boxed text] of some technical terms used in these chapters.)

### Other Food Associations

Another food association is obvious in these celebratory feasts, and that is the social dimension. With family and friends gathered together in thanksgiving, eating is clearly a social act and statement. We eat our feasts with a ritual that has history and tradition. Messages of culture exist here. We eat with our friends and not usually with our enemies. Messages of diplomacy and reconciliation are here. We share our food with those we value and appreciate. Messages of social structure and caring are prevalent here. We eat in celebration as best we can afford. Economic messages are here too. Though matters of personal preference and health also affect our diet, it appears that all matters of culture and society are expressed in some way at some time in our food and in our eating.

The spiritual dimension is another food association that is clear in a celebration such as Thanksgiving. The American Thanksgiving holiday (holy day) has its roots in a religious observance. Many, perhaps most, of the traditional family-oriented practices

### **Key Terms Used in This Book**

**ag´ri-cul´ture.** The human endeavor to produce food and other useful products by the managed care of plants and animals; the art and practice of farming.

**e´co-sys´tem.** A distinct natural community characterized by dynamic interactions among its physical and biological components. Examples of ecosystems are a tundra, hardwood forest, savannah, seashore, or an agricultural field. The last example also is called an **ag´ro-e´co-sys´tem**.

**met´a-phor.** A figurative use of language for the purpose of providing insight by noting the similarity or likeness of objects and ideas literally different (e.g., agriculture is like a three-legged stool).

**mod´el.** A representation of some part of reality that contains enough detail to allow the study of certain aspects of what it represents.

**sus-tain´a-bil´i-ty.** That quality of a system that gives it persistence; the capacity to continue into the future; in practice, it means avoiding depletion or permanent damage to the resources of a system while they are used to meet life's basic necessities.

**sys´tem.** A part of reality or a set of concepts in which the relationships of the component parts are significant or meaningful. The parts of a system are interdependent or interactive.

**world´view.** The beliefs and values that are expressed in how one thinks and acts, including motivation for deliberate behavior, sometimes called **functional religion**.

described for our home have deliberate religious overtones. Taking the time to remember that there are things to be thankful for is an expression of a value system, or worldview, or religion, with primary or ultimate concerns and commitments. Some people may not think of these associations as spiritual or religious, but

everyone is at some stage of developing and expressing moral and ethical ideals that emerge from their view of the world. What we eat and how we eat is full of meaning about what we believe and what we value.

All of these associations of food are rather easy to discern in a feast of celebration, but what about a simpler example also drawn from my own experiences? What about the late-night snack? Perhaps I have been watching television or reading a book. I will take a break and make some popcorn. I may eat it alone without a prayer or a thought of thankfulness, engrossed in whatever has kept me up so long that my body is calling for more food. Has the different context changed any of the associations of food with all of life? I think not. They are only less obvious.

The relationship of the bowl of popped corn to the crop in the field is still there with all of the ecological principles and consequences that operate in agricultural practices. The social aspects are not expressed in an immediate interaction with people, but the fact that the snack is popcorn instead of sugarcane tells a great deal about the cultural setting. The kind of snack also is related to nutritional knowledge and concerns about health that depend on the educational system of the culture. The kind of popcorn chosen is related to economic factors and to a particular setting in the processing, transportation, and marketing components of our food system.

The spiritual associations with food are almost invisible in this case, but upon reflection, one observes that the kernels of grain that were alive are dead by the time they are consumed. Each act of eating involves this principle of life. Life comes only from life, only by taking life. Even in this mundane vegetarian example, the kernels of grain have been killed. This is a large truth in most religions of the world, and it is demonstrated whenever we eat. We may never think about it, but it is true.

Whether an elaborate celebration or a simple snack, a little reflection shows that the biological, social, and spiritual associations of food are always present. All aspects of life are interconnected with food. That is why I say, "It is all about food." But it also is true that food, or rather the absence of food, is associated with death. If we are rich and affluent, then we may have the luxury of not thinking about food, but for many, it is a matter of life and death.

## A Matter of Life and Death

Early in the twenty-first century, a group of the world's leading economists came together to identify the most critical problems of humanity. Their findings are known as the Copenhagen Consensus of 2004.<sup>1</sup> The top five problems on the list are (1) control of HIV/AIDS, (2) providing micronutrients for the malnourished, (3) trade liberalization, (4) control of malaria, and (5) development of new agricultural technologies. Two of the top problems are clearly about food, and all five are interrelated.

Though it is essential, it is not sufficient to meet only the energy and protein needs in the human diet. Counting vitamins, minerals, trace elements, amino acids, and essential fatty acids, there are at least fifty nutrients that humans need.<sup>2</sup> In 2006, about 900 million people were hungry, that is, they had less energy and protein in their diet than they needed. Approximately 2 billion people on the planet were afflicted with malnutrition, lacking one or more of the other essential nutrients. The Food and Agricultural Organization of the United Nations (FAO) estimated that about 25,000 people died each day as the direct or indirect result of hunger and malnutrition. Two out of three were children.<sup>3</sup> Malnutrition (problem 2) and lack of food (problem 5) are certainly big problems. Even the diseases (problems 1 and 4) are made worse by shortages of food.

The suffering of hunger and malnutrition is doubly tragic because there is enough food produced in the world to feed everyone.<sup>4</sup> A big part of the problem is that the food is not produced where some of the people who need it live. Markets, transportation, and even moral determination must be enhanced to alleviate the tragedy of hunger. Thus trade liberalization (problem 3) and the associated development of the capacity of poor and hungry people to participate in trade can also be linked to the life-and-death issues that surround food.

Although it has frequently been overlooked, human health and well-being are essential aspects of sustainability. If a food system cannot keep people healthy and well nourished, then how can it be sustainable? Health is bound to agriculture by the human food chain. Agricultural sustainability must encompass human nutrition, a point that is being strongly addressed by my colleague, Ross Welch.<sup>5</sup>

If our analysis is theoretical and leisurely or if it is practical and urgent, then we still come to the same conclusion. It *is* all about food. This is a point well remembered in the following chapters. The material about stewardship, ecology, the fundamentals of agriculture, and the related issues of abuse and justice is really about food and thus is of vital concern to everyone. And because we all consume food, we all have the opportunity to positively influence the sustainability of our food systems.