

# Introduction: The Steaks Are High

## What's Wrong with Livestock? What's Wrong with Meat?

Pick up a menu from almost any restaurant and glance through the options. Chicken and pork, burgers and steak, ribs and wings, a couple of seafood items, and near the bottom one or two vegetarian options. Clearly, meat is what's to eat. The dietary dominance of flesh foods, especially from land animals, is such a strong norm that most of us don't question it. But the present status of meat as the main attraction at the center of the plate — across countries, cultures, and socio-economic groups — is unprecedented in human history. Never before on Earth has so much meat been produced and have so many people consumed so much.

An abundance of meat may sound like a solution, not a problem. All that sustenance, all those nutrients, all that delicious fare. But animal products today represent a crisis for the environment and public health. They also represent an opportunity if we, as consumers and communities, recognize and take the challenge on.

What's wrong with livestock? What's wrong with meat? In moderation, nothing — if you accept that humans have the moral right to use animals for food. Most people accept this — as I do — as long as we treat animals respectfully and maintain some reverence for taking their lives. For environmental or health reasons, there's nothing wrong with producing and consuming some flesh foods. Raising livestock allows us to employ animals and plants symbiotically in agriculture and ecosystems, and eating meat gives us nutrients and calories. But is it possible, as the

evidence increasingly suggests, that we're making and eating too much for the good of the planet and our personal and community well-being?

It's all about amounts. In times past, people generally ate animal products in small quantities or on special occasions. Besides, there were fewer of us. So our ancestors raised livestock by grazing a few cows and goats on marginal grasslands or integrating pigs and poultry into mixed farms where the animals ate scraps and provided fertilizer. But now that humans number seven billion, and with whole populations expecting bacon for breakfast, cold cuts for lunch, and chicken for dinner — relatively cheaply by historical standards — meat production is a different story.

Today, especially for those of us in urban United States and Canada, most of our meat comes from large-scale industrial operations. Often called “factory farms,” these mechanized and standardized operations turn out massive quantities of meat. Some people have become dubious about this system, knowing that factory farms crowd animals, afford them limited opportunities for normal behavior, and feed and medicate them for maximum weight gain. We're aware that the system is ethically questionable, despite the argument for plenty at so little cost.

But there is rising evidence of other implications that are more difficult to ignore. Industrial meat production of the type and intensity of today appears to be ecologically impossible long term. It uses a volume of resources and causes a volume of waste that seems beyond the ability of the planet to cope, contributing to a network of environmental and public health problems.

On the input side, factory farming uses staggering amounts of land, fuel, water, fertilizers, and chemicals to grow corn, soy, and other feed crops. On the output side, animal agriculture creates copious greenhouse gases and mountains of manure, some of which ends up contaminating water and soil. Large-scale animal production accelerates climate change, undermines biodiversity, and adds to disease and antibiotic resistance. A resource-intensive food, meat uses large portions of the Earth's arable land and is a factor in the decline of locally controlled family farming worldwide.<sup>1</sup>

Frequently supported and sometimes even subsidized by our governments, industrialized meat production puts bacon, ribs and chicken in grocery stores at prices that encourage us to eat more than is good for us or the planet. But eventually — practically invisibly — we pay the full cost through contaminated water, bacterial infections, animal-to-human flus, and increased rates of obesity, heart disease, strokes, diabetes, and cancers.<sup>2</sup>

I am not suggesting that meat deserves all the blame for our environmental or public health problems. Water pollution, of course, comes from many sources. Industry, domestic waste, and the overuse of pharmaceuticals and pesticides are just a few examples. Greenhouse gases come from air transportation, from construction, from an expanding human population and urbanization, from our over-reliance on cars, and from fuel-dependent international trade. Health problems are the result of myriad interlocking factors, including genes, industrial toxins, cigarettes, and junk food.

But meat production and consumption add markedly to our troubles. Academic and professional researchers, international health agencies, and environmental groups have documented the pressing implications of over-production and over-consumption of animal-source foods, what one book termed “The Meat Crisis.”<sup>3</sup>

The problems seem overwhelming, but they’re amenable to solutions that every one of us can help bring about. We can feed a growing population while minimizing adverse environmental effects. We can make food that is healthy using production methods that are ecologically tenable for the long term and show regard for animals. Joyce D’Silva, a prominent British researcher who has been writing on meat and livestock issues for decades, says the evidence is clear that we can feed the world in 2050 humanely and sustainably “if we reduce meat consumption.”<sup>4</sup>

## **Addressing Livestock and Meat Is Key to Food Security**

Food security has become a concept for our time. A unifying idea in the growing citizen “food movement,” food security is a kind of hope. It’s an objective, a plan, and even a prayer that humans might figure

out how to provide predictable and widespread access to basic sustenance that is adequate, healthy, and appropriate. The food movement calls for deep changes in agriculture, including local control over food systems through “food sovereignty” and “food democracy.” The movement is a collage of people and organizations seeking to address major challenges: global starvation and undernutrition; an epidemic of diet-related disease; a proliferation of over-processed snacks and meals with too much salt, fats, and sweeteners; environmental degradation from chemical-dependent agriculture; and control of food production by large corporations. The movement for food security argues that current systems of sustenance aren’t serving most of us very well, even those of us who get served several times a day.

Food security is a compelling area of study and action because it draws on the biggest challenges of our day. Food is an environmental issue, a health issue, an ethical issue, and a social justice issue. For all these reasons, the food movement calls to me, as it calls to many of you. When I tell people the topic of my research, almost everyone has a food story or is eager to talk about what’s healthy, what’s sustainable, and what they should eat. I am not trained in clinical nutrition and do not give dietary advice. But I’m drawn to issues that are relevant to how we eat. I gradually became aware of such issues through my travels in developing countries<sup>5</sup> and through my research on a wide range of topics related to my writing and teaching. For ten years, I worked as a journalist, then studied psychology and neuroscience before spending another decade as a college instructor teaching about health and illness of body and mind. Food issues continued to intrigue me, so I signed on for an additional graduate degree in food policy, which allowed me to read and learn about what researchers are saying is right and wrong with the ways we farm and eat today.

My decision to focus on “the meat problem” developed when I realized that, in political and community discussions about food systems, the topic of animal products didn’t seem to get the attention warranted by the scientific research. You could say that, in public discourse, meat is rare. Within governments, focus on the problem is almost nonexistent — except when elected officials are required to address short-term

crises such as bacterial infections or animal flus. The topic of meat is seen as “politically explosive,” in the words of international food policy expert Dr. Tim Lang who, along with his colleagues, says the meat problem and potential solutions are terrain “which few if any politicians dare to enter.”<sup>6</sup> The Food and Agriculture Organization (FAO) of the United Nations calls livestock one of the most crucial, yet least understood, topics of our time that “should rank as one of the leading focuses for environmental policy.”<sup>7</sup>

Yet potential solutions to the meat problem aren’t radical. There’s no need for whole populations to become vegetarian, or for people to stop raising livestock. As you’ll see throughout this book, what’s needed is a moderate but widespread response by entire households, communities, and nations to decrease consumption of animal products and support producers who are raising livestock within the capacity of local ecosystems. Some people have chosen not to eat meat or other animal-source foods, or will make that choice. But those who wish to include animal products in their diets can do so in moderation and still know they’re contributing to health and sustainability.

When I began researching this book five years ago, it was unusual to suggest that people eat less meat. But the movement is growing quickly, and more people have come to agree that we’ve got a problem and that everyone — vegetarians and meat-eaters alike — can be part of the solution.

Nevertheless, the suggestion that people moderate their consumption has its critics. It’s not surprising that much of the criticism for the “eat less meat” message comes from agribusiness, the large corporations that dominate agriculture and food. However, there are also critics from the other side of the table. Some are animal activists who don’t believe it’s right for humans to consume meat at all. Other critics say that for health reasons we should all just give up animal-source foods.<sup>8</sup> While I sympathize with the concern for the way billions of food animals are treated, I believe that livestock can be raised sustainably and compassionately. I also believe animal-source foods can be healthy in small amounts. Besides, most people aren’t willing to make a total break.

I've come across ambivalence, and even antipathy, to this issue from some scientists and activists. Three years ago, I was scolded in front of a large audience by a climate-change scientist who claimed that meat and its environmental consequences constitute a trivial issue promoted by (in his words) ideological vegetarians. A few minutes later, he told me privately he is aware that large-scale meat production is a problem for ecosystems, but will not say so publicly for fear of appearing "marginal."<sup>9</sup> The meat issue is, indeed, a tough sell, and I don't focus on it for my personal comfort. Once you start recommending that people ease back on their meat consumption, some people won't ask you to dinner.<sup>10</sup>

Yet more and more individuals and organizations are agreeing on the importance of the topic. There is a surging chorus of voices calling for animal agriculture that is consistent with our deepest desires to promote the health of our planet and our fellow beings. While conducting this research, I've had the pleasure to connect with policymakers and organizations involved in educating citizens about the need to consume "less and better." These groups promote the idea of producing fewer livestock animals in ways that are more harmonious with the environment and with health in the broadest sense. I've also had the honor to meet and interview Americans and Canadians who work courageously for cleaner and kinder food systems — people you'll encounter as you read this book.

You'll hear about a family in upstate New York that produces sheep, cattle, pigs, and chickens with no hormones or antibiotics. Their animals are raised in numbers low enough to enrich rather than degrade the land. You'll read about an organic beef farmer who believes he has a duty to steward the precious southern Alberta ranchland. There's a southern Ontario woman who runs a mixed organic crop-and-livestock operation who also travels the world speaking in support of sustainable farmers. There's a California chef who shows omnivores how delicious meatless meals can be. There are university-based researchers across the United States, Canada, Europe, and Australia working for more ecological food policies. There are experts at the United Nations FAO, based in Rome, who ignited the debate on the meat problem with a

groundbreaking report in 2006. There are scientists in North Carolina and Manitoba who raise awareness of the environmental and health problems of intensive animal factories. There are activists toiling for clean water and air, working hard to educate people about the ecological and ethical questions of intensive livestock. I met ordinary citizens whose quality of life was compromised when a factory farm moved into their neighborhood. Their experiences illustrate the depth and breadth of the meat problem, and the dedication of those who are challenging it.

In Chapter 5, you'll read about plain-speaking Don Webb, a 70-something North Carolinian who was an intensive hog farmer until he realized his animal factory was causing such terrible odors that his rural neighbors couldn't enjoy the outdoors. It made him sell off his hogs and start down a different path, opposing corporations in their quest to expand facilities in his part of the world. Mr. Webb still enjoys his meat, however, and said he was once approached by a supporter of agribusiness. Looking for a chance to embarrass Mr. Webb, the man boomed: "Don, I hear tell you like to eat pork!" Replied Mr. Webb: "Hell, yeah, I love pork. I love ribs and bacon and chitlins." However, he said, he also loves sex, but that doesn't mean he wants a red-light district next door.<sup>11</sup>

I also sought alternative opinions, in particular, from representatives of intensive meat production. Though we may disagree on particular topics, I respect such individuals who are genuine in their desire to provide good food, consistent with government priorities and consumer habits. That said, I and many others believe those government priorities and consumer habits need to be reconsidered.

As individuals and as societies, there are modest and common-sense responses we can make to the seemingly overwhelming food-related issues of access, equity, ecology, and health. As consumers, we can act immediately — at the grocery store, in our kitchens, in restaurants, and in our daily lives. We can commit to eating more meatless meals and smaller portions of animal products. We can choose meat, dairy products, and seafood that have been produced well, and we can be willing to pay more for it. Equally crucial, there are steps our governments can take to strengthen environmental and health guidelines on production, support medium- and small-scale operations, and promote good

consumption. These questions are global ones, and ultimately they will need to be addressed multilaterally as well as locally. The changes won't come easily, yet the scale of the meat problem calls for action.

Dairy and fish consumption are also part of the problem, since both are increasing beyond the planet's capacity to cope. I discuss the topic briefly, but concentrate on meat. And, while I do discuss the international situation in this book, I focus on the United States and Canada as key examples of the problem and of potential solutions.

### **We're Capable of Eating Less and Better**

It's easy to be skeptical about people's ability to reduce their meat consumption. I've heard experts give detailed summaries of the devastation to the environment and public health from too many livestock and too much meat, yet some of those same experts continue to assume that heavily meat-centered diets are inevitable. But there are reasons to be optimistic that we can make relatively small adjustments in our lives and large adjustments in our food systems.

People can change, as I learned over the years studying and teaching psychology. We, as individuals, can alter our behavior and habits when they cause us trouble, whether in love or money, work or play. History demonstrates that whole societies can change. Less than 200 years ago, slavery and serfdom were widely accepted practices. And it was only about a century ago that women got the right to vote. And, in a less dramatic example, remember that just a few decades ago, people smoked cigarettes anywhere and anytime — including at the adjoining table in your neighborhood restaurant. There are countless examples of the power of new attitudes. Social norms can change. People can change.

Eating less and better meat is a natural extension of shifts that many of us are already making. More and more people are committing to healthier eating and choosing local and organic foods that are good for the environment and their communities, and there is a small but growing movement among food-conscious people to decrease their intake of animal products. This is laying the groundwork for addressing the meat problem.

Eating less and better meat is consistent with basic values we all hold, whether philosophical, religious, or common sense. We want to act in ways that are good for our families, friends, and communities, and for the people and animals with whom we share the planet. Years ago, we may have thought this could be accomplished by eating as much meat as possible. Today, the evidence suggests a different course.

People who are intrigued about eating less meat increasingly have access to specific strategies, many of which are discussed in this book. The strategies aren't complicated, but are nevertheless important: moving flesh foods to the side of the plate, serving smaller portions, using culinary alternatives, and resolving to buy organic and locally produced chicken, pork, and beef. The meat problem can be addressed top-down by policymakers, but also bottom-up by all of us, as citizens of the world.

I believe these changes are possible. I believe this despite being aware there are powerful forces opposed to changes in food systems and consumer habits. These include agribusinesses that work to convince us we need processed foods and animal products every day. But they also include our evolutionary attraction to high-fat foods, and our comfortable, long-standing dietary habits. Altering these structures and habits will take commitment.

My belief that we can address these problems stems partly from my experience in altering my own food habits. As a teenager, I overate sweets and fast foods, and in adulthood I retained a taste for dishes smothered in heavy sauces. I still occasionally reach for too many chocolate desserts or salt-and-vinegar potato chips. Mostly, however, my eating is moderate and nourishing. I consume small amounts of animal products, including cheese and (very occasionally) a little wild fish. My meals are based on fresh vegetables, grains, legumes, and fruits, plus a small amount of animal products—minimally processed and organic, when possible. I have grown to love brown rice and sautéed vegetables with light sauces allowing the flavor of the food to come through. I occasionally allow myself “fun foods,” such as popcorn and beer.

It doesn't matter to me whether someone is “vegetarian,” a term people apply to themselves for many different reasons. Sometimes it's

because they eat few or no animal products. Sometimes it's because they only eat meat a couple of times a week, or only white meat, or eggs but no dairy, or fish but no chicken. And sometimes they eat all kinds of meat — but feel guilty about it. The proliferation of these flexible definitions gives me confidence that more and more people consider it desirable to be discerning about their intake of animal foods.

Food became a serious concern for me years ago when I read a book describing intensive livestock operations.<sup>12</sup> It jarred me into cutting out meat and starting to view meals in light of the health and well-being of people, of animals, and of the world. Since then, I've gradually developed new eating patterns and discovered that culinary tastes and habits are not immutable.

The fact that I don't eat meat gives me a point of view on issues of livestock. One friend cautioned me to keep it quiet for fear of being accused of bias. Indeed, in one academic article on the health benefits of reduced meat consumption, the author, despite being internationally renowned in the fields of food and health, felt the need to add a footnote that he has no conflict of interest and "is not a vegetarian."<sup>13</sup> We all have points of view and limitations. Me too, including that I'm a city person without intimate personal experience of food production. However, my suggestion that people eat less meat is strongly supported by scientific evidence. As well, I'm not recommending that anyone — let alone, everyone — desist from eating meat. If everyone stopped, it would cause another set of environmental problems, since sustainable agriculture frequently relies on integrating livestock into crop production.

But why would meat-eaters be considered more objective on this topic than non-meat-eaters? Behind much of research, there are points of view. What is important is that our conclusions be based on reliable evidence and the work of recognized experts in the field. Besides, whether I'm a vegetarian or not depends on how you define it. In my opinion, what matters is not labels, but that we all work together for sustainable food systems. Nevertheless, I urge you to form your own opinions and to accept or reject mine guided by your own assessment of the evidence.

Whatever positions we take, I believe and hope we can cooperate to improve food systems. That belief stems from a worldview that life is purposeful and that we need to act as if positive change is possible. From personal experience and from social science research, I have found that people who believe they can make a difference tend to act in ways that cause them to make a difference. So it makes sense to be confident in our ability to help improve the world.

Our confidence, our attitudes and our choices have weighty consequences. I've been haunted by a phrase from Herman Melville, who said that to produce a mighty book you must have a mighty theme. This book does not aspire to be mighty, but its theme qualifies. Today's large-scale production of livestock, and the storm of problems it brings, is one of the great challenges and decision points of our time. Let's call this a meaty book with a meaty theme. And, if you'll allow me one more pun (discussions of meat are full of them), the book is also about stakes. It's about flesh steaks, but it's also about the high stakes for the planet and humanity. It's about lowering the steaks.