

Food From Farm Animals

ANIMAL MATTERS

Eating lower on the food chain (eating fewer animals and animal products) reduces stress on the environment and can be better for personal health, not to mention animal welfare. Customer demand for cheap food doesn't stop with vegetables: in fact, meat, dairy and eggs are one of the largest components of the commercial agricultural system. As with "organics," there are a lot of terms used to describe feeding and handling practices used. It's important to understand these terms when you're considering what eggs to use for your egg salad, cream to use in your coffee, and meat to serve (or not serve) at a special event.

According to the Food and Agriculture Organization of the United States (FAO), 56 billion animals (not including fish) are slaughtered globally each year in the meat, dairy, and egg industries. Most of these animals are raised in conventional, industrial agriculture systems known as factory farms or, less commonly, concentrated animal feeding operations (CAFOs). While these systems are designed to maximize productivity and profit for the producer, they create serious welfare problems for animals. Below you'll find a species by species guide of what you need to know to make food choices that better fit your values.

LIVES OF ANIMALS

Cattle Raised for Dairy:

All cows typically live together in herds and on grasslands, where they spend most of their time grazing. They form strong friendships and family bonds, and recent science has shown that, like in humans, their stress levels (interpreted from heart rates) are lowered when around a preferred partner as compared with a random individual. Although very social animals, most of today's dairy cows live in confined operations where they have limited or no movement, socialization, or access to the outdoors. The dairy cow of today has been artificially and genetically selected to produce up to 12 times the amount of milk needed to feed her calf. Low-welfare breeding practices lead to lameness and other painful conditions in dairy cows, who are slaughtered after 3-4 pregnancy cycles. By contrast, in a traditional pastoral system, a dairy cow's life span could reach 25 years or more.

Like humans, dairy cows produce milk as a result of pregnancy and giving birth. Female calves are typically kept for dairy production, while males are taken away from their mother at a young age and are slaughtered at 16-18 weeks. While some veal farmers allow calves to live in groups, many confine calves to small, solitary stalls where they cannot explore, groom, exercise, or bond with other animals—behaviors crucial for natural development. Calves typically suffer from disease and high levels of stress during their short lives. Because of this, high-welfare certification programs such as Animal Welfare Approved do not certify veal operations.

Cows are routinely fed growth hormones to increase their milk production. The effects of these hormones on people are not fully known, but many people seek to avoid them. The dairy industry has also seen massive consolidation, with low milk prices causing the near collapse of a once-thriving family farm sector in the Northeast. Buying milk from "grass-fed" or "pasture-raised" cows "never treated with rBST" means that you're avoiding extra hormones, and supporting farmers who are taking good care of their animals.

There are higher-welfare alternatives to conventional dairy products and higher-welfare certifications to look for; see appendices I and II.

Interested in dairy alternatives? We are lucky to live in a time where plant-based (e.g., soy, almond, coconut, flax) milk and other dairy alternatives (for yogurt, cheese, ice creams, dips, and spreads) are widely available in many major and smaller stores across the country.

Cattle Raised for Beef:

Most cattle raised for beef start their lives on the range and are allowed to graze and socialize, making their experience much better in comparison to other conventionally raised farm animals. However, almost all cattle spend approximately the last six months of life in feedlots, where they are fattened on grain and kept in dirty, crowded, unnatural conditions. Also, conventional cattle systems allow for painful mutilations, such as dehorning, branding, and sometimes tail docking (although this is typically associated with dairy farming)—all without the use of anesthetics or analgesics.

Food From Farm Animals

Conventionally-raised meat cows are routinely fed hormones to increase their growth rates. They are raised in feedlots with thousands of other cows, in conditions that promote disease. To combat this, preventative antibiotics are added to their food. This overuse of antibiotics stimulates the creation of antibiotic-resistant strains of bacteria, reducing the drug's effectiveness in treating human illness.

The environmental effects of large-scale animal agriculture are huge. While cow manure can fertilize a well-managed pasture, creating a balanced closed-loop ecosystem, manure from cows raised in feedlots has nowhere to go. Giant sewage lagoons of animal waste pollute waterways and cause unpleasant odors for miles around.

There are higher-welfare alternatives to conventional beef products and higher-level certifications to look for: see appendices I and II.

Want to nix the beef and eat it, too? Increasingly, there are plant-based "beef" products that simulate the taste and texture of beef like never before.

Laying Hens and Chickens Raised for Meat:

All chickens are originally from the jungle. They are omnivores who like to scratch in the dirt for bugs and "dust bathe," which is how they stay cool and clean. Research has shown chickens to have complex and well-ordered social structures. They also have the ability to exercise self-control, anticipate the future, and to adjust and tailor their communication to different individuals. Despite what we now know about chickens' and other birds' sophisticated and complex cognitive capacities, these animals suffer more in conventional systems than any other animal.

Traditional breeding of birds for meat and egg production used to occur by carefully selecting healthy males and females and allowing them to mate. Offspring would then possess characteristics similar to their parent birds. These healthy lines are now known as "standard-bred" or "heritage." With the rise of hybrid breeding, highly controlled confinement systems, feed supplements, and subtherapeutic antibiotic use, welfare concerns have yielded to profitability. Many birds in conventional systems suffer from painful abnormalities as a result of their genetics, and are kept in overcrowded conditions with poor air quality and no

natural light. They rarely or never have enough room and opportunity to run, fly, stretch, flap their wings, or express other natural behaviors. Even when given the space, many of these animals are now bred to grow so large so quickly that they often cannot walk, let alone run, without pain.

Fortunately, there are tools to find higher-welfare alternatives. BuyingPoultry.com is an excellent resource for consumers, providing information about every legally regulated welfare claim as well as ethical ratings for different products. For more information about higher welfare certifications for poultry and eggs: see appendices I and II.

And for those who want to have their meat and not worry about how animals are treated, there is a new generation of plant-based meat analogues to chicken that are increasingly difficult to distinguish from the original.

Farmed Fish:

Fish farming, a form of aquaculture where fish are raised in human-made enclosures either on land or within natural bodies of water, is the fastest-growing area of animal food production. Salmon, tuna, cod, trout, and halibut are among the most commonly farmed species. Although fish farming is often portrayed as taking the burden off of overexploited wild fish populations, these farms can severely damage ecosystems by introducing diseases, pollutants, and invasive species. Farms often depend on wild fish lower on the food chain - like anchovies - to feed larger carnivorous farmed species, and the overfishing wrought on these populations can have disastrous repercussions.

Like with farmed land animals, farmed fish live in crowded and cramped conditions and may suffer from lesions and debilitating injuries. Stressful conditions cause disease and parasite outbreaks, like sea lice, that farmers respond to with pesticides and antibiotics. These treatment measures promote resistant strains of diseases that can harm both wild fish populations and humans who eat the farmed fish. While there are tools to learn about the ecological impacts of fishing and aquaculture—we especially recommend SeafoodWatch.org and the Marine Stewardship Council—there are no regulations to ensure the humane treatment and slaughter of fish raised on aquafarms or those harvested from our oceans.

Food from the Sea

According to Leviticus 11:9-12, any fish that has fins and scales is kosher. These criterion rule out seafood such as eels, shellfish, and catfish. Fish is considered pareve and can be eaten with either milk or meat. There is no particular method of slaughter required for fish and, therefore, any fresh fish with fins and scales is kosher.

Fish are the last group of wild animals that are hunted for large scale consumption. As worldwide demand for fish has increased, wild fish populations can't keep up with our appetites, and find themselves threatened by overfishing (harvesting at faster rates than the population can reproduce) and by-catch (accidental death caused by trawls, dredges, long-lining, purse seining, and gill-netting). Scientists suspect that due to overfishing and by-catch, 90% of the large predatory fish populations have been depleted.

The Monterey Bay Aquarium Seafood Watch is one of the leading organizations working to protect our oceans and fish populations. Seafood Watch has created several resources to help consumers make educated choices. Their "sustainable" certification for fish is based on the concept of "ocean friendly," which assesses damage to the environment during the fishing/fish farming process, health and abundance of the fish population, the amount of by-catch from the fishing process, and how well the fishery or fish farm is managed.

Tuna that is labeled "dolphin safe" means that no dolphins are intentionally harmed during the fishing process. This certification still allows fishermen to lower nets around schools of tuna and dolphins but they must lower the nets enough to allow dolphins to escape. Although the dolphin safe label has improved conditions for dolphins, research indicates that dolphins face health risks due to the stress of the fishing process: including being temporarily captured, which often results in heart problems, miscarriages, and mothers being separated from their calves, which results in the death of the calves. Therefore, Seafood Watch recommends purchasing hook and line caught canned tuna, instead of "dolphin safe" tuna.

Aquaculture, the process of farming fish in either fresh or saltwater, is the fastest growing method of animal food production. Nearly 50% of the fish consumed worldwide come from fish farms. Depending on the type of fish, location of farm, and farming practices, aquaculture can offer either a sustainable option or one that is equally problematic to wild caught fish. Farmed salmon is one such example. These salmon are

raised in coastal waters and, therefore, the pollution generated by the farm flows into the coastal water. Large numbers of salmon are kept in a pen, resulting in diseases and parasites, which can easily spread to wild salmon swimming nearby. It is not uncommon for the farmed salmon to break out of these pens and compete with wild salmon populations. Additionally, farm raised salmon require approximately 3 pounds of wild fish to produce 1 pound of farmed salmon, which is an unsustainable ratio. The most sustainable options for farmed fish include those which are herbivores or omnivores. Some of the best farm raised options include: arctic char, striped bass, and U.S. raised barramundi, cobia, tilapia, and rainbow trout.

HOW YOUR INSTITUTION CAN SOURCE AND USE SUSTAINABLE FISH:

- Print a sustainable fish pocket guide from Seafood Watch (or download their free smartphone app) and use this guide before purchasing fish.
- Serve Pacific sardines, which reproduce quickly and are currently abundant.
- Purchase fish that has the Marine Stewardship Council certification.
- Make your tuna salad with pole/troll caught albacore tuna from the U.S. or Canada.
- Make sure the lox on your bagel is wild-caught from Alaska.

Seafood Watch's Super Green List

Fish that are good for you and good for the earth, the Super Green List includes fish that meet these criteria:

- Low levels of contaminants (below 216 parts per billion [ppb] mercury and 11 ppb PCBs)
- The daily minimum of omega-3s (at least 250 milligrams per day [mg/d])*
- Classified as a Seafood Watch "Best Choice" (green)

The Best of the Best (July 2013)

- Atlantic Mackerel (purse seine from Canada and the U.S.)
- Freshwater Coho Salmon (farmed in tank systems, from the U.S.)
- Pacific Sardines (wild-caught)
- Salmon (wild-caught, from Alaska)
- Salmon, canned (wild-caught from Alaska)
- Albacore Tuna (troll- or pole-caught, from the U.S. of British Columbia)
- Sablefish/Black Cod (from Alaska and Canadian Pacific)