

## Agriculture and Food

The U.S. is the world's 3<sup>rd</sup> largest country, in terms of land mass,<sup>497</sup> and much of its land is fertile. It can easily feed all its people from its lands. In fact, it could easily feed all the world's hungry, if we chose to. We don't chose to. Instead, we spend \$66 billion (6% of FADS) annually trying to lose weight,<sup>498</sup> half of what it'd cost to feed all of the world's hungry,<sup>499</sup> and \$210 billion (18% of FADS) in medical costs for the U.S. obesity epidemic,<sup>500</sup> twice what it would cost to feed all the world's hungry. How does that feel?

The U.S. uses taxpayer money to pay farmers \$24 billion (2% of FADS) in annual subsidies,<sup>501</sup> often so they will not plant fields, so prices and profits stay high. Farm subsidies are a scheming maze of complex handouts at taxpayer expense, often to vast agricultural conglomerates that are already profitable.<sup>502</sup>

The U.S. wastes \$165 billion of food each year (14% of FADS), about 1.5 times what the Federal Government spends on education, more than enough to feed all of the world's hungry. 7% of crops are left in fields; food is lost in transportation, packing, processing and distribution; food is discarded because it isn't pretty enough for shelves; supermarkets throw out \$15 billion of unsold fruits and vegetables every year; diners in restaurants leave 17% of their food uneaten (in part because U.S. portion sizes have become so huge); U.S. families throw away 14% - 25% of their food every year.<sup>503</sup>

Agriculture has experienced massive market consolidation in the U.S. Small family farms have difficulty surviving in competition against big corporations with big money to invest in massive field monoculture, using enormous farm machine combines ten feet off the ground with enclosed, air-conditioned cabins. There were 6.8 million farms in 1935, versus 2.2 million today, and now large-scale and nonfamily farm operations account for 12% of farms but 84% of the value of production.<sup>504</sup> Small farms struggle.

Monoculture is when massive fields are planted with a single crop, eliminating biodiversity and healthy interactions between species. It's enabled by huge land tracts, bioengineered seeds, poisons for pests, petrochemical fertilizers, artificial watering, and huge machines to replace physical labor in cultivating the soil, planting, weeding, watering, tending plants and harvesting. It tries to maximize the yield at the lowest costs. Industrial monoculture depletes soils, reduces biodiversity, reduces consumer choices, pollutes waters with fertilizer and poison runoff, destroys ecosystems, eliminates small farmers, destroys farm communities, and reduces connections between human beings and beings we eat.<sup>505</sup>

One of the big monoculture crops in the U.S. is corn. The U.S. produces far more cheap corn than we eat as corn. So, people have figured out how to process and use corn for other roles in our food system, like feeding animals, sometimes in unnatural and unhealthy ways, and producing ingredients like high fructose corn syrup, an unhealthy sweetener pervasive in processed foods and drinks, and a major contributor to the U.S. obesity epidemic, and to medical conditions like diabetes.<sup>506</sup> We consume an average of 60 pounds (27 Kg) a year per person in the U.S. It makes us fat and likely harms memory.<sup>507</sup>

Capitalism 101 is basically "control and exploit." Monolithic agribusinesses have figured out how to genetically and otherwise engineer plants and seeds, get patents on them, which they claim have benefits, like drought or pest resistance, and claim license fees on any plants with their proprietary DNA. Those are then approved, sold and spread, often without real study of long-term impacts or claims.<sup>508</sup>

Most vegetables and fruits in our grocery stores are grown using insecticides, herbicides and poisons to manage yields and profits. We eat them, and those poisons get in our bodies, harming our health.

Industrial agriculture and our food systems in general are highly dependent on petrochemicals. Petrochemicals are heavily used for fertilizers, to operate farm machinery, and in transporting produce. A third of all U.S. fruits and vegetables are produced in California's central valley<sup>509</sup> and transported to production plants and consumers all across the country, for example. In 2015, we imported \$110 billion, and we exported \$130 billion of foods.<sup>510</sup> That depends on oil and contributes to global climate change, which is, in turn, a huge threat to agriculture and food supplies, as water supplies, sunlight, temperatures, ecosystems, and insect and bird populations and patterns change. A downward spiral.

U.S. meat and egg production typically involves abuses to animals, kept tightly penned in prison-like conditions, fed unnaturally, dosed with hormones, vitamins and antibiotics<sup>511</sup> to reduce illness and death in cramped conditions, and to cause them to mature and fatten unnaturally and quickly. 99% of chickens, 90% of pigs, and 78% of beef cattle in the U.S. are in animal factory operations.<sup>512</sup> Healthy?

Meat processing is a horror movie of gore, in slaughterhouse gulags of fear and suffering, where humans are driven inhumanely to increase industrial line rates in very dangerous conditions, and meat quality degrades as animals release adrenaline and other fear-driven biochemicals as they're mass murdered.<sup>513</sup> Individual slaughterhouses kill hogs at the rate of 22 per minute, chickens at 175 per minute.<sup>514</sup> "Animal agriculture is responsible for 18% of greenhouse gas emissions, more than combined exhaust from all transportation"; "2,500 gallons of water are needed to produce 1 pound of beef"; "5 tons of animal waste is produced per person in the US" per year; "80% of antibiotics sold in the US are for livestock".<sup>515</sup>

Foods are then processed and packaged in industrial manufacturing facilities to maximize shelf-life and ease of consumption, so foods can be shipped all over the country, processed in distribution centers, stocked and wait on shelves for consumers to buy and eat. That involves radiation and all kinds of chemical additions, often with hazardous health effects inadequately overseen or regulated by government, pressured to allow them by powerful and influential agricultural and food concerns.<sup>516</sup> Citizens have difficulty even getting government to require disclosure of the genetic modifications, or pesticide, chemical, preservative and poison content in foods.<sup>517</sup> Don't look behind the curtain!

Food packaging pervasively uses plastics and other toxic materials that enter landfills and end up in landscapes, oceans and waterways, where they leach into food chains, after leaching into foods we eat.

People buy and drink bottled water that often costs more per gallon than gasoline,<sup>518</sup> is often no better than tap water, and uses 50 million barrels of oil a year for its plastic bottles, with only 1 in 6 recycled.<sup>519</sup> U.S. people buy 29 billion bottles of water a year. 2 million tons of them are already in landfills, taking up to 1,000 years to decompose, leaching poisons into environments and causing various health issues, like reproductive ills and cancer. It takes 3 times the amount of water in a plastic bottle to produce that plastic bottle of water. Fill a plastic water bottle a quarter of the way; that's about how much gasoline it took to make the bottle. It takes 2,000 times as much energy to make bottled water than tap water. Every second, 1,000 people open a bottle of water in the U.S.<sup>520</sup>

The same is true of all kinds of other drinks, particularly sweet "sodas", which are major contributors to obesity and illness according to independent studies, but not according to industry sponsored studies.<sup>521</sup> Sodas have many health risks.<sup>522</sup> Yet, we spend more money on them than for any other food.<sup>523</sup> They're about a fourth of what we drink, sometimes pretending to be healthy with diet versions, though the aspartame artificial sweetener in many is linked with about a hundred different health problems.<sup>524</sup>

Around the world, people buy about a million plastic bottles a minute, creating an environmental crisis that may rival climate change. More than 480 billion plastic bottles were sold in 2016, less than half were collected for recycling, and only 7% of those collected became new bottles. 5-13 million tons of plastics enter oceans every year; by 2050 it's estimated plastics in oceans will outweigh fish; and people who eat seafood already eat up to 11,000 tiny pieces of plastic annually.<sup>525</sup> An average U.S. person throws away 185 pounds of plastic every year. Worldwide, we use 500 billion plastic bags a year, more than a million a minute. There are already about 46,000 pieces of plastic, on average, per square mile of our oceans. 93% of U.S. people age 6 or older test positive for plastic chemical BPA.<sup>526</sup>

Fast food chain restaurants hawk often unhealthy, but cheap, excessively packaged processed foods in astonishing volumes. Fast food leads to many health problems, including obesity, diabetes, asthma, depression, infertility, acne and cavities.<sup>527</sup> Researchers link a 36% increase in mortality from all causes to every 10% increase in fast food restaurant density.<sup>528</sup> Almost half of street litter is from fast food.<sup>529</sup> A quarter of U.S. people<sup>530</sup> and more than a third of U.S. children eat fast food every day.

U.S. people spend 10% of disposable income on fast food.<sup>531</sup> The U.S. fast food industry brings in about \$200 billion (17% of FADS) in revenues annually,<sup>532</sup> employs about 3.7 million people<sup>533</sup> and pays them an average of \$13,000 a year.<sup>534</sup> The poverty level for a single person is about \$12,500; for two people about \$16,000; and for 3 about \$19,000.<sup>535</sup> 70% of fast food workers are 20 years old or older, and the median age is 28; 1 in 4 have at least 1 child.<sup>536</sup> That is inadequate pay for most people's costs to live.

One in four U.S. children suffer from "food insecurity," "living without consistent access to enough nutritious food to live a healthy life,"<sup>537</sup> while one in three is overweight or obese.<sup>538</sup> Half of U.S. children are eligible for free or subsidized food in schools, because they're poor.<sup>539</sup> The U.S. often feeds unhealthy food to its children in schools, and to the world's biggest population of inmates in prisons.<sup>540</sup>

Many are ignorant of where food comes from. It's common for the 80% of U.S. urban people<sup>541</sup> to have never seen a farm, growing food or farm animal. Unhealthy food complicity comes from that ignorance.

In Europe, these practices have been labeled "Frankenstein Foods," and Europeans are resisting having these foods forced on them in big business back room deals, as things are often done in the U.S.<sup>542</sup>

These low-quality foods and unhealthy practices produce unhealthy people, animals, insects, soils and ecosystems. They've contributed to catastrophic collapses in bee populations and their critical pollenization services. They've created obesity, diabetes and other health problem epidemics, destroyed livelihoods of millions of small farmers and local food system operators, reduced most of the diversity of our foods, and destroyed farm communities across the U.S. They add hugely to global climate change through heavy use of fossil fuels, transportation and deforestation. They concentrate wealth and power and contribute to wealth and income inequality, social injustice, government corruption and market manipulations, and they drain public tax resources unnecessarily.

We can't fix the whole system ourselves, but we can change what we think and how we live, right? Plant a garden; care for the soil and plants with only natural stuff; make and eat healthy food from it! Filter tap water, carry it in and drink from a stainless-steel water bottle, instead of buying bottled drinks! Buy, eat and drink healthy stuff from sustainable permaculture farms, not industrial junk and drinks! Don't eat or drink stuff with a chemical name on its label! Prepare and share healthy natural foods! Bring your lunch, rather than eat fast foods! Patronize farmer's markets! Don't waste foods! Change!

## Endnotes

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