The US won’t run out of food during the coronavirus pandemic

Why shoppers don’t need to panic-buy at the supermarket.

As the pandemic began, Americans lined up by the hundreds to panic buy staples like 20-pound bags of rice and peanut butter at Costco. Shelf-stable, freeze-dried provisions normally marketed to campers and doomsday survivalists flew off the shelves at outdoor companies. People continue to purchase and hoard so much food that even local food banks are having trouble sourcing items from grocery stores.

The indefinite closure of a processing facility operated by Smithfield Foods, one of the United States’ largest pork producers, after more than 640 workers have tested positive for the virus has raised new concern about potential pork shortages.

But experts say that the US food supply remains robust despite disruptions caused by coronavirus.

That doesn’t mean that a shopper will be able to walk into any supermarket at any time of day and find the items they’re looking for. Grocery stores have been facing spot shortages between restocking, which occurs overnight, so people might have better luck in finding what they need if they shop in the morning.

Still, the US Department of Agriculture hasn’t seen any nationwide shortages of food, an agency spokesperson told Vox.

“I want to assure you that American food supply is strong, resilient, and safe,” Secretary of Agriculture Sonny Perdue said in a press conference at the White House on Wednesday. “In the United States, we have plenty of food for all of our citizens.”

The food supply chain — the system that takes food from farm to fork through production, processing, distribution, and consumption — is designed to be
nimble. It’s largely self-sufficient: Most of what Americans eat comes from American growers, brokers, factories, warehouses, and distribution centers and is shipped on American trucks. Food production is also spread out across the country, meaning that crises in any one area won’t cripple the system. And many sectors don’t, for the most part, require intensive human labor, instead employing industrial-scale machinery.

Still, some food industries are hurting from the current crisis. Some meatpacking plants have shut down. Farmers are struggling to find buyers for their produce. The price of corn has plummeted, which could put some farms out of business and have a ripple effect on other food industries.

But the most pressing challenge lies not with America’s farmers, but with the supply chain itself. The supply chain has already had to adapt to America’s changing eating habits amid the pandemic — now, consumers are almost entirely dependent on supermarkets, rather than restaurants and the food service sector. The supply chain is still catching up to this sudden shift in demand, but most experts are optimistic that it can adapt.

The question, in other words, isn’t whether there will be enough food. It’s whether that food will end up where consumers can actually buy it.

“We admire the way that the system works,” Yossi Sheffi, a supply chain expert and the director of MIT’s Center for Transportation and Logistics, told Vox. “The virus is still moving from state to state and it’s not uniform all over the country, so the demand patterns are changing all the time. But at the end of the day, we don’t see it as a real danger that we will run out of food.”

There could be spot shortages of certain meats

The meat aisle in the grocery store might have some bare spots.

Few food businesses have been harder hit by coronavirus than meat processing plants, where livestock are typically slaughtered, hung up to bleed out, cut up into pieces, deboned and packaged for sale. There have been hundreds of reported coronavirus cases at processing plants across the country, from Colorado to Pennsylvania, and some plants have been forced to close — including Smithfield’s Sioux Falls, South Dakota, facility, which is now the biggest coronavirus hot spot in the country.

The workers in these plants are often low-income — one Smithfield employee reported making $17.70 an hour, though workers have been
offered a $500 bonus if they don’t miss any shifts in April. Their work is physically taxing even in the best of times as they lift and slice through heavy cuts of meat. Now, it’s also potentially life-threatening: one 64-year-old Smithfield worker reportedly died after contracting the virus.

The closure of such facilities is “pushing our country perilously close to the edge in terms of our meat supply” and will have repercussions for the farmers who depend on them, Kenneth M. Sullivan, Smithfield’s president and CEO, said in a statement Sunday.

“It is impossible to keep our grocery stores stocked if our plants are not running,” he said. “These facility closures will also have severe, perhaps disastrous, repercussions for many in the supply chain, first and foremost our nation’s livestock farmers. These farmers have nowhere to send their animals.”

The rapid spread of coronavirus through meat processing plants is particularly concerning given that, even under normal circumstances, these kinds of facilities are highly sanitized and contained due to federal requirements for pathogen control and food safety. Julie Anna Potts, president and CEO of the North American Meat Institute, said there is complete disinfection of the facilities every night after the last shift. Workers have to wear hard hats, safety goggles, frocks, and boots.

Now, they’re also wearing masks and face shields, when the plants can get ahold of them, and they have been practicing social distancing where possible in cafeterias and places where the workers put their protective equipment on. But on the processing floor, they’re standing shoulder-to-shoulder.

The plants are doing everything in their power to diminish the spread of the virus and stay open in order to support the food supply, so the onus now falls on local officials to better enforce social distancing in the communities outside the plants, Potts said.

The plant closures have a ripple effect on the whole meat supply chain. Farmers raise hogs, for example, to reach a specific weight and, when they’re market-ready, they leave the barns for slaughter, with other pigs right behind them. There’s little room for error because farmers can’t hold them in feed lots or in pasture like cattle.

Livestock farmers, therefore, depend on processors to stay operational.
“The animals don’t stop growing,” Potts said. “They need a place to go, and our facilities are where they go in the normal course of things.”

Due to plant closures, farmers are now stuck with livestock they can’t sell. That’s already caused livestock prices to drop precipitously — even though the price of processed meat has gone up. Trade groups estimate the consequent losses at $13.6 billion for the cattle industry and $5 billion for the hog industry, and they’re calling on the Trump administration to deliver additional aid.

Kentucky Rep. Thomas Massie has warned that these losses may force farmers to resort to extreme measures to deal with the surplus.

“I’m afraid you’re going to see … cattle and hogs being euthanized or incinerated and buried while we have shortages at the supermarket,” he said.

However, the National Pork Board, the industry group for pork farmers, told NPR that euthanasia would be an “absolute last, last choice for anyone.”

In addition to plant closures, beef and cattle farmers are also bracing for potential feed shortages. Feed usually includes what’s called “dried distillers grains,” a byproduct of ethanol production. That ingredient is suddenly in short supply because production of ethanol, a component of most gasoline sold in the US, has slowed as Americans have been ordered to stay at home. That means some livestock producers won’t be able to send their animals to the slaughterhouse on time and might be looking to slow down their feeding rates.

But even in spite of these challenges, industry analysts say the US is still producing large amounts of meat and grocery store refrigerators are remaining stocked.

“Will we perhaps see places where it’s hard to get a pork tenderloin? I’m not saying, no, we won’t see that, but it won’t be widespread,” Bobby Martens, an agricultural supply chain expert and professor at Iowa State University, told Vox. “But it also depends on how the coronavirus continues to spread, and if areas continue to be shut down for long periods of time, that could change.”

Plant agriculture is suffering from fewer buyers and lower prices

Much like livestock farmers who don’t know where to send their animals, farmers of fresh produce from Florida to Arizona are facing the prospect of
having to toss huge shares of their crops this year because they can't find buyers amid the pandemic.

In Florida, zucchini, cabbage, tomatoes, and green beans have been left to rot in the field because they can no longer sell to restaurants, theme parks, or schools that have closed. Farmers in the state have already donated more than one million pounds to food banks and asked the US Department of Agriculture to buy their crops and distribute them to people in need. The state has even launched a program aiming to connect consumers directly with farmers to buy perishable fruits and vegetables, as well as seafood, poultry, and dairy. But even so, the farmers are still facing surpluses and food waste.

Farmers of leafy greens in Yuma, Arizona, who also rely on the food service industry, are similarly facing the prospect of leaving their crops unharvested.

Certain kinds of plant agriculture have been harder hit than others. Mature avocados can be left on the trees, which offers some harvesting flexibility and time to find buyers amid the pandemic. And almonds, being shelf-stable, can weather delays in the supply chain.

But produce farmers in places like Florida and California are also concerned about possible shortages of seasonal workers, many of whom come to the US from Mexico on H-2A visas for temporary agricultural workers.

The US State Department recently eased restrictions on these workers, who numbered more than 250,000 in 2019, eliminating requirements that they show up for in-person interviews. That means that farms should still be able to access these workers, despite the fact that the agency shut down visa processing across Mexico. The Department of Homeland Security also announced on Wednesday that it would allow H-2A workers to more easily switch employers and stay in the US beyond the three-year period that their visas remain valid.

Still, farmers worry about visa processing delays, and about the prospect that fewer workers may want to risk coming to the US this year amid the pandemic.

The Families First Coronavirus Response Act signed by President Donald Trump last month requires employers to provide paid leave to H-2A workers exhibiting symptoms of Covid-19, those who are quarantined or those who have to care for family members suffering from Covid-19. But that might not go far enough in protecting H-2A workers.
Indeed, the Mexican Consulate in Los Angeles has raised concerns about farmworker safety during the crisis, noting they typically share tight quarters in housing provided by employers, often crowd onto buses to commute to the fields, and work in close proximity when picking, harvesting, cleaning, and packing produce. Marcela Celorio, the consul general, wrote in a Los Angeles Times op-ed that agricultural workers should be prioritized for coronavirus testing and have access to protective gear, as well as soap and water.

“[B]ecause of the structure of agricultural work, it is extremely difficult for the migrant population to maintain social distancing to avoid transmission of the coronavirus,” she said. “Their current working and living conditions mean even a few infections could spread with frightening speed.”

Declining corn prices could have a ripple effect

Corn farmers in the Midwest and Great Plains aren’t likely to be as affected by possible labor shortages as other kinds of produce farmers because they can plant, fertilize, and harvest crops with industrial-scale machinery. That also means that the prospect of coronavirus spreading on the farms themselves isn’t as likely as in other agricultural industries that employ more human labor.

So far, planting season, which runs through late May, is proceeding on schedule, with farmers racing to get seed in the ground and to get shipments of fertilizers, herbicides, and pesticides.

But corn farmers face other vulnerabilities, in part because much of the nation’s corn crop isn’t actually used to feed people. About 40 percent of US corn is converted into ethanol and another 36 percent is used as animal feed. The remaining share of the corn crop is either exported or sent to Americans’ tables — more often than not, in the form of high-fructose corn syrup.

Amid coronavirus, farmers are facing plummeting corn prices, leaving them in dire financial straits. The USDA is now estimating the average corn price at $3.60 per bushel — a decline of 20 cents per bushel from previous estimates. That’s a big difference when multiplied over the more than 2 billion bushels that will be produced this year.

Corn was vulnerable to price fluctuations even before coronavirus hit. But since the onset of the pandemic, there has been less corn traded globally. Oil prices and demand for petroleum products have also declined rapidly, driving down the price of ethanol as a fuel additive. That’s bad news for cattle farmers who rely on corn to feed their animals.
“Many farmers are probably approaching this growing season knowing that they’re not in a position to break even if corn prices stay at this level,” Martens said. “There’s not a lot of bullish upside for corn until people start driving and using oil again, and then we could see some upside in the ethanol area.”

The Department of Agriculture has about $49 billion in federal aid as part of the coronavirus relief package signed by Trump last month to help preserve farm income and prices and ensure that America is producing enough food, as well as support an emergency fund for dairy and livestock producers, fruit and vegetable growers, and fresh food markets.

The government can step in with more stimulus for the corn industry. They could create programs that offer direct payments to farmers or mandate that they plant less corn next year to deal with the low commodity prices. There’s also insurance, usually based on previous years’ prices, but it will not significantly bridge the gap in finances that farmers are facing.

The supply chain is already adapting

One of the biggest disruptions to the food supply chain stemming from coronavirus is the rapid shift from consumers eating outside their homes — in restaurants or school cafeterias — to almost entirely at home. The food they eat, no matter where they consume it, may have the same origins in terms of where it was processed or farmed, but the supply chains are totally different.

Most obviously, the food is packaged differently. Food service might be able to afford a truckload of french fries or a bushel of tomatoes, but the average consumer can’t. Products marketed to the food service industry also don’t usually abide by the Agriculture Department and Food and Drug Administration’s nutrition labeling guidelines for consumer sales. And producers who normally market to the food service industry would have to find new distributors in order to sell products to grocery stores instead.

“It’s not a shortage of food, but it’s about addressing getting the food to the right parts of the chain that need it,” Martens said. “It’s not an easy switch when it happens this rapidly.”

That’s why there are surpluses across agricultural industries: dairy farmers dumping as much as 3.7 million gallons of milk daily into lagoons and manure pits, a chicken processor destroying 750,000 unhatched eggs weekly, and an Idaho farmer digging a large ditch to bury 1 million onions.
To avoid this massive food waste and keep grocery store shelves stocked, the supply chain has had to adjust. Some restaurants have started selling fresh produce to their customers in an effort to stay afloat, acting like a supermarket. Producers have cut down on the variety of products they offer in order to maximize efficiency. Distributors have sought to free up trucking capacity by keeping drivers on the road for longer: whereas they were previously only allowed to drive for 11 hours a day, the Department of Transportation changed its policy so they can now drive for 14 hours. The administration also started classifying people who work at truck stops as essential workers.

Going forward, Rep. Massie says he’s proposing a bill that “would let ... local meat packers sell cuts of meat individually instead of having to sell half a cow or a quarter of a cow,” helping to ameliorate packaging issues.

In the meantime, consumers will also have to adjust. Their preferred food items, package sizes, and brand names might not be available temporarily. The developed world has gotten used to the idea of being able to walk into the grocery store and pick up anything — but that’s a luxury, Sheffi said.

“It’s less convenient, but let’s also remember that most of humanity has never had this, even today,” he said. “In the US, everything is available, whatever you want. Let’s get a grip — food will continue flowing.”