## The Poisoned Fruit of American Trade Policy

Produce Imports Overwhelm American Farmers and Consumers

## About Food \& Water Watch

Food \& Water Watch is a nonprofit consumer organization that works to ensure clean water and safe food. We challenge the corporate control and abuse of our food and water resources by empowering people to take action and by transforming the public consciousness about what we eat and drink. Food \& Water Watch works with grassroots organizations around the world to create an economically and environmentally viable future. Through research, public and policymaker education, media and lobbying, we advocate policies that guarantee safe, wholesome food produced in a humane and sustainable manner, and public, rather than private, control of water resources including oceans, rivers and groundwater.

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## Produce Imports Overwhelm American Farmers and Consumers

Executive Summary ..... iv
Introduction ..... 1
Escalating Imports ..... 3
Trade Deals Drive Imports. ..... 3
U.S. Companies Shift Production Overseas. ..... 5
Imports Make Up Increasing Share of Consumption. ..... 6
Limited Labeling Leaves Consumers Unaware ..... 8
Safety of Imported Produce ..... 8
Imported Produce: Higher Levels of Pesticides and Pathogens ..... 9
The Safety of Chinese Produce ..... 11
U.S. Farmers Face Deluge of Imports ..... 12
The Myth of Seasonal Imports. ..... 13
Promised Export Markets Never Materialized ..... 14
The Free Trade Princess Versus the Pea ..... 14
Recommendations. ..... 16
Methodology ..... 16
Appendix Table 1: U.S. Fruit, Vegetable and Processed Produce Imports and Import Share of Consumption. ..... 17
Appendix Table 2: 2007 Import Share of Consumption by Exporter and Produce Product. ..... 19
Endnotes ..... 20

## Executive Summary

Americans are consuming more imported fresh fruits and vegetables, frozen and canned produce, and fruit juice than ever before. An examination of U.S. consumption of produce that is commonly eaten as well as grown in America found that over the past 15 years Americans' consumption of imported fresh fruits and vegetables doubled, but border inspection has not kept pace with rising imports, and less than one percent of the imported produce is inspected by the federal government.

Food \& Water Watch studied fifty common fruit and vegetable products like fresh apples, frozen broccoli, fresh tomatoes, orange juice and frozen potatoes.

We found that:

- Imports made up one out of ten fresh fruits and one out of nine fresh vegetables Americans ate in 1993 ( 10.1 and 11.7 percent, respectively) but by 2007 the import consumption share doubled to more than one out of five fresh fruits and fresh vegetables (22.3 percent of fresh fruit and 23.9 percent of fresh vegetables).
- The share of imported processed (canned or frozen) produce tripled, from 5.2 percent of frozen packages or cans in 1993 to 15.9 percent in 2007.
- The share of imported fruit juice (orange, apple and grape) grew by 61 percent, from about a third of American consumption ( 30.8 percent) in 1993 to about half of consumption ( 49.5 percent) in 2007.
- On average, each American consumed 20 pounds of imported fresh fruit, 31 pounds of imported fresh vegetables and 24 pounds of imported processed produce and drank three gallons of imported juice in 2007.
- Imports of fresh fruits (except bananas), fresh vegetables and processed produce essentially tripled, rising from 10 billion pounds in 1990 to 30 billion pounds in 2007.
- Imported produce was more than three times more likely to contain the illness-causing bacteria Salmonella and Shigella than domestic produce, according to the latest FDA survey of imported and domestic produce. ${ }^{1}$ Imported fruit is four times more likely to have illegal levels of pesticides and imported vegetables are twice as likely to have illegal levels of pesticide residues as domestic fruits and vegetables. ${ }^{2}$


## The Food \& Water Watch 50 Crops

Apples, apple juice, apricots, artichokes (fresh and processed), asparagus, avocados, blueberries, broccoli, frozen broccoli, cantaloupe, carrots, frozen cauliflower, cherries (tart and sweet), cucumbers, pickles, eggplant, garlic (fresh and processed), grapes, grape juice, grapefruit, honeydew melons, kiwifruits, lemons, limes, mushrooms, processed mushrooms, canned olives, onions, oranges, orange juice, processed green peas (frozen and canned), peaches \& nectarines, pears, canned pears, bell peppers, potatoes, frozen potatoes, raisins, raspberries, snap beans (green or string beans), frozen snap beans, frozen spinach, squash, strawberries, frozen sweet corn, tangerines (includes tangelos and clementines), tomatoes, processed tomatoes and watermelon.


The hidden dangers on imported fruits and vegetables can enter U.S. supermarkets because the FDA inspects only the tiniest fraction of imported produce. Less than one percent of imported fresh produce shipments were inspected at the border in recent years. ${ }^{3}$ In 2007, the FDA performed only 11,000 border inspections on 33 billion pounds of imported fresh produce. ${ }^{4}$ Only 3 percent of FDA's food safety funding and only 4 percent of its food safety manpower were used to monitor domestic and imported fresh produce. ${ }^{5}$ Other findings include:

- International trade deals like the North American Free Trade Agreement, the World Trade Organization and a raft of regional and bilateral trade pacts have facilitated the surging imports of fruit and vegetable products. Although imported produce once consisted primarily of tropical fruits and fresh vegetables during the winter months, now Americans are eating more imported fruits and vegetables year round. Crops like tomatoes, cucumbers, potatoes and melons, which can be grown in the United States, are being replaced on store shelves by imports - during the U.S. growing season.
- While imports have skyrocketed, U.S. fruit and vegetable product exports have seen minimal growth over the past fifteen years. In 2007 the United States imported more fresh fruit than it exported for the first time; processed produce imports exceeded exports for the first time in 2002; and the gap between imports and exports of fresh vegetables and fruit juice has steadily grown for the past fifteen years.
- The new requirement of country-of-origin labeling (COOL) for fresh and frozen fruits and vegetables, which went into effect in October 2008, will help consumers choose fresh fruits and vegetables that are grown in America. But exemptions in the COOL regulations exclude large amounts of produce items from labeling requirements.

The federal government must act swiftly to protect consumers from unsafe imported produce and stop expanding a failed trade model. The FDA needs to drastically improve and increase its inspection of imported produce above the appallingly low level of one out of every 134 shipments of imported produce. Consumers need all imported produce - whether fresh, canned, frozen or otherwise processed - to be labeled with its country of origin. Finally, it is time for Congress to enact a moratorium on new free trade pacts that threaten consumers and undermine American farmers.


Americans are consuming more imported fresh fruits and vegetables, frozen and canned produce, and fruit juice than ever before. Food \& Water Watch studied fifty common fruit and vegetable products like fresh apples, frozen broccoli, fresh tomatoes, orange juice and frozen potatoes. We selected products that are not only commonly consumed in this country, but are grown domestically as well.

Since the early 1990 s, total fresh and processed fruit and vegetable imports have more than doubled, growing from 17 billion pounds in 1990 to 40 billion pounds in $2007 .{ }^{6}$ This figure includes the most popular fruit, bananas, which are almost entirely supplied by imports. Imports of other fresh fruits, fresh vegetables and processed produce essentially tripled, rising from 10 billion pounds in 1990 to 30 billion pounds in 2007.

These imports can be significantly riskier than domestic produce, according to the Food and Drug Administration, the federal agency that oversees produce safety. Imported produce was more than three times more likely to contain the illness-causing bacteria Salmonella and Shigella than domestic produce, according to the latest FDA survey of imported and domestic produce. ${ }^{7}$ FDA also found that imported fruit is four times more likely to have illegal levels of pesticides and imported vegetables are twice as likely to have illegal levels of pesticide residues as domestic fruits and vegetables. ${ }^{8}$

Import Share of U.S. Produce Consumption

$\square$ Juice $\square$ Fresh Vegetables $\square$ Fresh Fruit $\square$ Processed Produce

Source: USDA: figures for 50 studied products only.


Although domestic produce has not been free from problems with foodborne illness, most notably the $E$. coli outbreak tied to domestic spinach in 2006, outbreaks have often been imported into American grocery stores and restaurants. Several high-profile foodborne illness outbreaks have been traced to imported produce over the past decade. Between 2000 and 2002, cantaloupe from Mexico sickened hundreds, causing 18 hospitalizations and two deaths in four multi-state Salmonella outbreaks. ${ }^{9}$ In 2003, nearly 900 people were sickened with the liver disease hepatitis A and four people died after eating green onions from Mexico at restaurants in Pennsylvania, Georgia and Tennessee. ${ }^{10}$

The hidden dangers on imported fruits and vegetables can enter U.S. supermarkets because the FDA inspects only the tiniest fraction of imported produce. Less than one percent of imported fresh produce shipments were inspected at the border in recent years. ${ }^{11}$ In 2007, the FDA performed only 11,000 border inspections on 33 billion pounds of imported fresh produce. ${ }^{12}$ As a retired FDA associate commissioner testified to the Senate in 2007, the combination of surging food imports and an extremely low rate of border inspection make it "virtually certain that any given food shipment will enter the United States with no FDA inspection." ${ }^{13}$

The porous border inspection system can allow foodborne illness outbreaks like the 2008 tomato fiasco when FDA and the Centers for Disease Control struggled to cope with a nationwide Salmonella outbreak that was ultimately traced to Mexican produce (jalapeño peppers, Serrano peppers
and/or tomatoes). ${ }^{14}$ Federal authorities were notified of widespread cases of a rare strain of Salmonella in May 2008 and initially issued a nationwide warning to consumers against eating any tomatoes in early June. The alert was eventually expanded to jalapeño and Serrano peppers in July. ${ }^{15}$ It was the largest foodborne illness outbreak in a decade and sickened more than 1,400 consumers in 43 states and Washington, DC, causing 286 hospitalizations and possibly contributing to two deaths. ${ }^{16}$

The FDA and CDC had trouble identifying the source of the Salmonella outbreak. Finding the source of the tainted produce was stalled by FDA's lack of knowledge of the fruit and vegetable industry. Most fresh produce is combined with products from different farms at packing facilities that sort vegetables based on size, quality and ripeness, which allows cross-contamination of foodborne illnesses like Salmonella and complicates the process of finding the ultimate source of contamination. ${ }^{17}$ During the agency's three-month investigation, the FDA investigated hundreds of American farms without finding traces of Salmonella. In late July, FDA's food safety director admitted that, "Domestically grown products are not tracing back at all to the outbreak." ${ }^{18}$ It took two months for FDA to isolate the strain of Salmonella from the outbreak to two Mexican farms and a produce packing facility that combined vegetables from many farms for export to the United States. ${ }^{19}$ Although the FDA did find the Salmonella strain, it never identified the source of the tainted peppers and never exonerated tomatoes as a possible cause of the outbreak. The agency's bungled efforts to expeditiously trace the source of the Salmonella outbreak basically ruined the tomato season for American farmers.


The recurring problems with imported food and FDA's inability to prevent dangerous food products from being imported into America's grocery stores has undermined consumer confidence in the food supply. More than half of Americans do not believe there are enough border inspectors to ensure the safety of imported food, according to a July 2008 Associated Press/Ipsos poll. ${ }^{20}$ The FDA's mismanaged response to the Mexican tomato and pepper Salmonella outbreak highlighted the risks imported fruits and vegetables can pose to consumers. According to a 2008 Hart/Public Opinion Strategies poll, 61 percent of Americans think that the government is doing too little to ensure that imported fresh fruit and vegetable products are free of contamination. ${ }^{21}$

The increase in imported fruit and vegetable products also undermines American farmers. The fruit and vegetable products studied in this report are temperate crops that are produced all across America. Rising imports are displacing domestic farm products from supermarket shelves. While imports have skyrocketed, U.S. fruit and vegetable product exports have seen minimal growth over the past fifteen years. In 2007 the United States imported more fresh fruit than it exported for the first time; processed produce imports exceeded exports for the first time in 2002; and the gap between imports and exports of fresh vegetables and fruit juice has steadily grown for the past fifteen years.

## Escalating Imports

The global trade in produce has grown faster than the trade in other agricultural commodities since the 1980s, ${ }^{22}$ and U.S. imports of fruit and vegetable products accelerated in the late 1990s, coinciding with a period when a series of new trade deals went into effect. ${ }^{23}$ From 1990 to 2007, total U.S. imports of fresh fruit (excluding bananas), fresh vegetables and processed produce tripled from 10 billion pounds to 30 billion pounds. ${ }^{24}$ This trade involves shipping items by freighter from halfway across the world to U.S. supermarkets. Some high-value imported vegetables like asparagus ${ }^{25}$ and fruits like mangoes, ${ }^{26}$ raspberries and cherries $^{27}$ are even shipped to the United States by air.

Imports of the fifty fruit and vegetable products studied by Food \& Water Watch grew dramatically over the past fifteen years. Fresh fruit and fresh vegetable imports grew by two and a half times between 1993 and 2007. Fresh fruit imports rose from 2.4 billion pounds in 1993 to 6.0 billion pounds in 2007. ${ }^{28}$ Fresh vegetable imports grew from 3.7 billion pounds to 9.3 billion pounds over the same period. ${ }^{29}$ Processed (frozen and canned) produce imports tripled from 2.2 billion pounds in 1993 to 7.3 billion pounds in

## Produce with Largest Import Increase

|  | 1993 | $\mathbf{2 0 0 7}$ | Increase |
| :--- | ---: | ---: | ---: |
|  | (millions of pounds <br> imported) |  |  |
| Frozen Spinach | 0.0 | 54.8 | $\mathrm{~N} / \mathrm{A}$ |
| Canned Pears | 0.3 | 77.8 | $25,833 \%$ |
| Fresh Avocadoes | 18.1 | 769.1 | $4,149 \%$ |
| Fresh Mushrooms | 3.3 | 70.0 | $2,021 \%$ |
| Fresh Raspberries | 2.3 | 26.5 | $1,052 \%$ |
| Fresh Oranges | 22.8 | 247.2 | $984 \%$ |
| Snap Beans, Frozen | 12.3 | 123.9 | $907 \%$ |
| Fresh Cherries | 3.6 | 33.7 | $848 \%$ |
| Fresh Lemon | 16.1 | 122.4 | $660 \%$ |
| Fresh Tangerine/ <br> Tangelo | 40.4 | 268.1 | $564 \%$ |
| Frozen Potatoes | 581.0 | 3407.0 | $486 \%$ |
| Fresh Broccoli | 31.8 | 184.4 | $480 \%$ |
| Fresh Strawberries | 31.4 | 157.7 | $402 \%$ |

2007. ${ }^{30}$ Fruit juice imports (apple, orange and grape juice) grew by 81 percent from 557.9 million gallons in 1993 to 1.0 billion gallons in 2007. ${ }^{31}$

The imports of some specific products examined by Food \& Water Watch surged dramatically between 1993 and 2007. In the early 1990s, the United States did not import any frozen spinach, but in 2007, the United States imported 54.8 million pounds of frozen spinach. Canned pear imports jumped 259-fold from 300 thousand pounds in 1993 to 77.8 million pounds in 2007. Fresh mushroom, fresh avocado, fresh orange and frozen snap bean imports grew by more than ten-fold over the past fifteen years (avocado imports rose from 18.1 million pounds in 1993 to 769.1 million pounds in 2007; fresh mushroom imports grew from 3.3 million pounds to 70.0 million pounds; orange imports grew from 22.8 million pounds to 247.2 million pounds; and frozen snap bean imports climbed from 12.3 to 123.9 million pounds). Fresh cherry, lemon, tangerine and tangelo, frozen potato, fresh broccoli and fresh strawberry imports increased more than five-fold over the past fifteen years.

## Trade Deals Drive Imports

A 2007 USDA report found that trade agreements have facilitated significant growth in the amount of fruit and vegetable imports into the United States over the past 15

years. ${ }^{32}$ Trade deals like NAFTA, the WTO and other bilateral and regional free trade agreements lowered the import tax (known as a tariff) on fruit and vegetable products.

NAFTA demonstrated that even small reductions in tariff rates can spur significant agricultural imports from Mexico's vibrant fruit and vegetable sector. A 2007 Texas A\&M University study found that for every percentage point decrease in U.S. tariffs under NAFTA, agricultural imports from Mexico increased by 5.5 percent between 1994 and 2006. ${ }^{33}$ For example, prior to 1995, there was a U.S. tariff of between 1.3 C and 2.1¢ per pound of imported tomatoes (depending on the season), but under NAFTA tomatoes entered the United States duty-free. ${ }^{34}$ By 1999, USDA estimated that NAFTA increased tomato imports 8 to 15 percent higher than they would have been without NAFTA; potato imports were 5 to 10 percent higher and cantaloupe imports were 17 to 25 percent higher than they would have been without NAFTA. ${ }^{35}$

Many of the United States' trade agreements were made with Central and South American fruit and vegetable powerhouses. In 2004, the Chile free trade agreement went into effect, allowing Chile's fruit sector to ship more grapes, cherries, peaches and berries to the United States. The trade pacts with Caribbean countries and the four Andean nations (Bolivia, Colombia, Ecuador, and Peru) also lowered U.S. agricultural tariffs and increased imports from these regions. ${ }^{36}$ The Grocery Manufacturers of America pushed for the Central American Free Trade Agreement in 2004 to gain "new avenues for imports of key ingredients for food processors" ${ }^{37}$ and promoted the Peru trade deal to get "access to duty-free imports of seasonal vegetables." ${ }^{38}$

The creation of the World Trade Organization in 1995 made it easier for countries worldwide to export fruit and vegetable products to the United States. After the WTO went into effect, the number of countries exporting the fifty foods we examined increased by nearly a third. In 1993, 85 countries exported these products, but by 2007, 110 different countries were exporting these fruits and vegetables to the United States - a 29 percent increase. In 2000, the United

## 110 Exporters of 50 Produce Products, 2007 <br> (descending export volume)

Mexico, Canada, China, Brazil, Chile, Argentina, Guatemala, Costa Rica, Peru, Honduras, Spain, Italy, New Zealand, Ecuador, Turkey, Thailand, South Africa, Belize, Dominican Republic, India, Australia, Netherlands, Greece, Morocco, Bahamas, Israel, South Korea, Nicaragua, BelgiumLuxemburg, Germany, Indonesia, Hong Kong, Japan, France, Poland, Philippines, Colombia, Egypt, Panama, Jamaica, Taiwan, Malaysia, Vietnam, El Salvador, Portugal, United Kingdom, Iran, Bulgaria, Singapore Trinidad and Tobago, Denmark, Lebanon, Ukraine, Barbados, Switzerland, Austria, Pakistan, Macedonia, Croatia, Russian Federation, Bangladesh, Uruguay, Guyana, Bosnia and Herzegovina, Syria, Jordan, Ireland, Hungary, Tunisia, Leeward-Windward Islands, Sweden, Serbia, Venezuela, Armenia, Azerbaijan, Malawi, Ghana, Togo, Georgia, Côte D'Ivoire, Sierra Leone, The Gambia, Cameroon, Haiti, Lithuania, Sri Lanka, Nigeria, Czech Republic, Mozambique, Eritrea, Slovenia, Pacific Islands (other), Cyprus, Burkina Faso, Latvia, Cambodia, United Arab Emirates, Moldova, Uzbekistan, Afghanistan, Belarus, Senegal, Mongolia, Tajikistan, Montenegro, Kyrgyzstan, Saudi Arabia, Norway and Romania.


States approved a trade deal with China that paved the way for China to join the WTO and allowed China's share of U.S. produce imports to rapidly expand. China's share of the studied produce imports rose five-fold in seven years, from 3.1 percent in 2000 to 15.3 percent in 2007. China is now one of the five largest exporters of these products to the United States.

## U.S. Companies Shift Production Overseas

Trade agreements also allow American firms to establish low-cost export platforms to ship fruit and vegetable products back to the U.S. market. Lower U.S. tariffs combined with loosened investment rules encourage U.S. food processing companies to invest in factories overseas and shutter plants in the United States. Foreign plants operate under generally weaker environmental and workplace safety regulations in the developing world, which reduces production costs for American-owned factories. Lower labor costs in developing countries have been a key factor in U.S. food processing companies' foreign investments and plant relocations. ${ }^{39}$

Several large American food-processing companies invested in Mexico as NAFTA went into effect to take advantage of lower wages and weaker environmental rules. Green Giant began to shift its production from California to Mexico in 1990, eventually closing a Watsonville, California frozen food factory in 1993 as NAFTA was being debated in Congress. ${ }^{40}$ Green Giant's Mexican workers earned about $\$ 4.30$ each day compared to the $\$ 7.60$ an hour workers earned in the Watsonville plant. ${ }^{41}$ Companies producing other kinds of food, such as Tyson Foods and Sara Lee, also invested in Mexico as NAFTA began to go into force. ${ }^{42}$ Between 1993

Top 20 Produce Exporters to United States

| Exporter | 2007 Imports (million pounds) | Top Products |
| :---: | :---: | :---: |
| Mexico | 8484.7 | Tomatoes, watermelons, limes, orange juice, squash |
| Canada | 4387.9 | Frozen potatoes, fresh potatoes, processed tomatoes, fresh tomatoes, carrots |
| China | 4193.2 | Apple juice, garlic, processed mushrooms, canned peaches, processed tomatoes |
| Brazil | 2712.4 | Orange juice, apple juice, grapes, onions, watermelon |
| Chile | 2232.2 | Grapes, apples, avocadoes, apple juice, peaches/nectarines |
| Argentina | 841.2 | Apple juice, pears, raisins, garlic, blueberries |
| Guatemala | 792.0 | Cantaloupe, processed mushrooms, frozen broccoli, watermelon, fresh snap beans |
| Costa Rica | 699.3 | Orange juice, cantaloupe, squash, carrot, watermelon |
| Peru | 413.3 | Asparagus, onion, artichokes, tangerines/tangelos, grapes |
| Honduras | 343.3 | Cantaloupes, watermelon, eggplant, orange juice, squash |
| Spain | 336.7 | Tangerines/tangelos, oranges, canned olives, lemons, artichokes |
| Italy | 292.4 | Processed tomatoes, kiwifruit, oranges, apples, artichokes |
| New Zealand | 240.9 | Apples, kiwifruits, onions, apple juice, pears |
| Ecuador | 138.1 | Processed mushrooms, frozen broccoli, processed peas, onions, artichokes |
| Turkey | 125.9 | Apple juice, processed tomatoes, processed mushrooms, lemons, canned olives |
| Thailand | 121.6 | Processed tomatoes, canned peaches, canned pears, processed peas, processed mushrooms |
| South Africa | 110.3 | Oranges, raisins, tangerines/ tangelos, orange juice, apple juice |
| Belize | 95.7 | Orange juice, processed tomatoes |
| Dominican Republic | 92.8 | Avocadoes, processed tomatoes, orange juice, bell peppers, tomatoes |
| India | 86.8 | Pickles, processed mushrooms, processed tomatoes, processed peas, apple juice |

and 1999, U.S. private investment in Mexico's food processing industry doubled from $\$ 2.3$ billion to $\$ 5.3$ billion. ${ }^{43}$ Between 1999 and 2006, U.S. companies and individuals quadrupled this investment again by pouring another $\$ 13$ billion into Mexico's food industry. ${ }^{44}$

As U.S. investments in overseas processed fruit and vegetable operations increased over the past decade, the share of imports that are essentially shipments between food company affiliates or subsidiaries increased. These are the different corporate divisions shipping ingredients or products to one another across national borders. For example, Del Monte Foods Company, which owns the Del Monte processed produce brand and the Contadina processed tomato brand, operates a food processing plant in Venezuela and two processing plants in Mexico as well a fruit packing operation in Mexico. ${ }^{45}$

The share of processed fruit and vegetable imports that come from foreign operations of U.S. companies and transnational corporate affiliates has been rising. Between 2000 and 2007, the share of processed fruit and vegetable imports between these subsidiaries grew by more than a fifth, from 28.2 percent of processed produce imports in 2000 to 34.5 percent in 2007.46 About half ( 48.6 percent) of the processed fruit and vegetable imports from NAFTA partners Mexico and Canada between 2000 and 2007 were from corporate affiliates. This means that every other can of imported tomato paste or imported package of frozen sweet corn was manufactured at a U.S.-owned factory in Mexico or Canada and shipped to the United States. These export platforms for U.S. companies have also emerged under trade deals with China and Chile. Imports of processed

## Share of Processed Produce Imports from Corporate Affiliates in China



produce from corporate affiliates in China nearly quadrupled from 5.1 percent in 2000 to 20.4 percent in 2007. The share of inter-corporate processed produce imports from Chile rose 74 percent from 5.8 percent in 2000 to 10.1 percent in 2007.

The development of export platforms and increasing intrafirm imports further clouds the origin of some processed fruits and vegetables. When American brands export canned produce from factories in the developing world to U.S. supermarkets, consumers may be unaware they are eating fruits or vegetables that were grown, processed and packaged overseas because the label or packaging is a familiar brand they assume is still made in the United States.

## Imports Make Up Increasing Share of Consumption

At the same time that imports of fruits and vegetables were surging, U.S. consumers have steadily increased their consumption of fruits and vegetables. The combined effect of these two trends is that U.S. consumers are more exposed to risks posed by imported produce than ever before.

Consumers are eating more fruits and vegetables today than twenty years ago, rising from about 600 pounds of potatoes, vegetables, citrus fruit and non-citrus fruit in the mid-1970s to more than 700 pounds per person in 2004. ${ }^{47}$ Americans ate twice as much of the imported stud-

| Crop or Product | Odds That It Is <br> Imported |
| :--- | :--- |
| Limes | $100 \%$ |
| Frozen Broccoli | 4 out of 5 |
| Apple juice, asparagus, <br> frozen cauliflower, processed <br> mushrooms, kiwifruit | 3 out of 4 |
| Artichoke, canned olives, <br> avocado | 3 out of 5 |
| Grapes, garlic, cucumbers, <br> grape juice | 1 out of 2 |
| Blueberry, eggplant, squash | 2 out of 5 |
| Tomato, bell pepper, cantaloupe | 1 out of 3 |
| Tangerine, honeydew melon, <br> orange juice | 1 out of 4 |
| Frozen spinach, pear, frozen <br> potato, frozen snap (string) <br> beans | 1 out of 5 |
| Watermelon, apricot | 1 out of 6 |
| Raspberry | 1 out of 7 |
| Onion | 1 out of 8 |
| Raisin, canned peach, lemon | 1 out of 9 |
| Snap (string) bean, processed <br> pea, peach or nectarine, <br> broccoli | 1 out of 10 |
| Mushroom | 1 out of 11 |
| Pickle, canned pear, carrot, <br> cherry, | 1 out of 12 |
| Strawberry, processed tomato, <br> potato | 1 out of 13 |
| Apple, orange | 1 out of 15 |
| Grapefruit, frozen sweet corn | 1 out of 20 |
|  |  |

ied produce products in 2007 period as they ate in 1993. Imports made up one out of ten fresh fruits and one out of nine fresh vegetables Americans ate in 1993 (10.1 and 11.7 percent, respectively) but by 2007 the import consumption share doubled to more than one out of five fresh fruits and fresh vegetables ( 22.3 percent of fresh fruit and 23.9 percent of fresh vegetables). The share of imported processed (canned or frozen) produce tripled, from 5.2 percent of frozen packages or cans in 1993 to 15.9 percent in 2007.

The share of imported fruit juice (orange, apple and grape) grew by 61 percent, from about a third of American consumption ( 30.8 percent) in 1993 to about half of consumption ( 49.5 percent) in 2007. Sixty-one percent of the apple juice Americans drink now comes from China, 53 percent of grape juice comes from Argentina and 23 percent of orange juice comes from Brazil.

In 1993, imports supplied half of American consumption for only five of the studied products - limes, frozen broc-

2007 Per Capita Consumption of Imported Produce

| Product | Total Imported <br> Consumption <br> (Lbs.) | Largest <br> Exporter | Consumption <br> from Largest <br> Exporter (Lbs.) |
| :--- | :---: | :---: | :---: |
| Frozen <br> Potatoes | 11.27 | Canada | 11.2 |
| Fresh Tomato | 7.82 | Mexico | 6.9 |
| Fresh <br> Potatoes | 3.66 | Canada | 3.7 |
| Fresh Grapes | 4.30 | Chile | 3.1 |
| Fresh <br> Cucumbers | 3.35 | Mexico | 2.8 |
| Fresh <br> Watermelon | 2.98 | Mexico | 2.6 |
| Fresh Limes | 2.42 | Mexico | 2.4 |
| Processed <br> Tomatoes | 5.77 | Italy | 2.3 |
| Fresh Squash | 1.89 | Mexico | 1.8 |
| Fresh Bell <br> Peppers | 2.42 | Mexico | 1.7 |
| Fresh <br> Cantaloupe | 3.37 | Guatemala | 1.6 |
| Fresh <br> Avocado | 2.55 | Mexico | 1.6 |
| Frozen <br> Broccoli | 2.34 | Mexico | 1.6 |
| Garlic | 1.66 | China | 1.5 |
| Apple Juice <br> (gallons) | 1.80 | China | 1.3 |
| Orange Juice <br> (gallons) | 1.31 | Brazil | 1.0 |
| Fresh Apples | 1.42 | Chile | 0.9 |
| Processed <br> Mushrooms | 1.14 | China | 0.6 |
| Fresh Broccoli | 0.61 | Mexico | 0.6 |
| Fresh Onion | 3.05 | Mexico | 0.6 |
| Fresh <br> Strawberries | 0.52 | Mexico | 0.5 |
| Fresh Carrots | 0.82 | Canada | 0.5 |
| Frozen Sweet <br> Corn | 0.62 | Canada | 0.5 |
| Fresh <br> Asparagus <br> Tangerine and <br> Tangelo | 0.86 | Peru | 0.5 |
|  | Spain | 0.5 |  |
|  | 0.90 | Mres |  |

coli, artichokes, apple juice and processed mushrooms.
But by 2007, imports supplied more than half of American consumption of 14 crops or products. Now, at least every other selection of limes, frozen broccoli, canned olives, apple juice, kiwifruit, frozen cauliflower, fresh asparagus, processed mushrooms, artichokes, fresh avocadoes, fresh grapes, garlic, fresh cucumbers and grape juice is imported.

These trends have real-life implications. On average, each American consumed 20.2 pounds of the studied imported fresh fruit, 30.7 pounds of imported fresh vegetables, and 24.2 pounds of imported processed produce and drank 3.3 gallons of imported juice in 2007.48 Americans consumed, on average, 14.9 pounds of Canadian potatoes ( 11.2 frozen and 3.7 fresh pounds), 7 pounds of Mexican fresh tomatoes, 2.3 pounds of Italian processed tomatoes, 3.1 pounds of Chilean grapes, 1.6 pounds of Guatemalan cantaloupe, and 1.3 gallons of Chinese apple juice. ${ }^{49}$

## Limited Labeling Leaves Consumers Unaware

Although newly required country-of-origin labels will help consumers navigate the fresh produce aisle, the rules are not going to be fully in force until the spring of 2009 and will only apply to some produce. Fresh fruits and vegetables are supposed to be labeled with their countries of origin, but not all processed produce will be required to bear a label. Frozen produce that contains a single variety will get a country-of-origin label, but frozen produce that contains more than one fruit or vegetable is not required to be labeled. So, a package of frozen corn or a package of frozen lima beans would have to bear a country-of-origin label, but a package of frozen succotash would not. This exemption is not limited to the frozen food aisle, unfortunately, but also means that fresh produce items that contain more than one ingredient, such as fruit salad or bagged salad mixes, are also not required to be labeled. Canned or other processed food is also exempt from the country-of-origin rules.

The limited application of country-of-origin labeling for processed produce will keep consumers from knowing that 42 percent of the processed mushrooms eaten in America are from China, 20 percent of canned olives are from Spain, 11 percent of the canned peaches and 8 percent of the canned pears are from China, or 3 percent of the pickles are from India. ${ }^{50}$

## Safety of Imported Produce

High-profile outbreaks of foodborne illness caused by imported and domestic produce have highlighted the potential hazards posed by fruits and vegetables. Fresh produce presents unique food safety considerations for growers, shippers and regulators. Polluted irrigation water, contamination from livestock operations, inadequate sanitation conditions for farm workers, cross-contamination in packing and processing plants, and breakdowns in cold storage
during long distance shipping can expose fresh produce to pathogens and allow them to multiply to dangerous levels. ${ }^{51}$ And because fresh produce is often eaten raw, the opportunity to kill bacteria through cooking is lost.

Between 1990 and 2005, it is estimated that fresh fruits and vegetables were responsible for 13.2 percent of all foodborne illnesses, causing 453 foodborne illness outbreaks that caused 20,900 illnesses. ${ }^{52}$ Fresh produce is a significant source of Salmonella infections, causing an estimated 36,000 cases of Salmonella each year. ${ }^{53}$ Regulators can have difficulty responding to foodborne illnesses outbreaks caused by fresh produce, as the 2008 Mexican tomato or pepper Salmonella outbreak demonstrated. The sources of half of all produce foodborne illness outbreaks are never traced back to their packing house, supermarket or farm source because perishable fresh fruits and vegetables are often eaten or thrown away before they can be tested and positively linked to a source. ${ }^{54}$

Imported fruits and vegetables have potentially higher risks than domestic produce. Imported produce from some developing countries may be grown under less sanitary conditions and face weaker environmental rules and indifferent regulatory oversight. For example, when investigating the conditions at Mexican farms that were the source of several Salmonella outbreaks, FDA found that the "Mexican cantaloupe are indeed manufactured, processed, or packed under gross insanitary conditions" with inadequate environmental safeguards on the farms or regulatory oversight by the Mexican government. ${ }^{55}$ Similarly, USDA found that China's farmland in many rural areas is "dangerously polluted" but nonetheless operates under weak environmental rules that are barely enforced. ${ }^{56}$



## Imported Produce: Higher Levels of Pesticides and Pathogens

The increased risk of foodborne illness and adulteration in imported produce has been documented by FDA studies. Indeed, a recent FDA internal document released to Food \& Water Watch under a Freedom of Information Act request admitted that "To the best of our knowledge, approximately half of the foods that have been associated with foodborne illness have been imported." ${ }^{57}$

The most recent FDA survey of foodborne illness-causing bacteria on produce found that Salmonella and Shigella were three times more common on imported produce than on domestic produce (4.0 percent of imported produce and 1.2 percent of domestic produce). ${ }^{58}$ A 2006 FDA study also found that imported fruit was four times more likely to violate U.S. pesticide standards than domestic fruit (3.6 percent of imported fruit versus 0.9 percent of domestic fruit) and imported vegetables were more than two times more likely to have illegal levels of pesticides than domestic vegetables ( 5.4 percent of imports versus 2.4 percent of domestic). ${ }^{59}$

Despite FDA's own findings that imports are significantly more likely to harbor foodborne hazards, FDA has failed to strengthen inspections of imported foods at the border. FDA dedicates a tiny portion of its resources to overall produce safety and inspects virtually none of the imported produce that enters the U.S. food supply. The Government Accountability Office reported in September 2008 that FDA's total food safety budget has been stagnant and only a small proportion of those resources are used to ensure the safety of produce. FDA's food safety budget has remained flat since 2002 at about $\$ 600$ million (in constant, inflation-adjusted dollars). ${ }^{60}$ Only 3 percent of this funding and only 4 percent of its food safety manpower were used to monitor domestic and imported fresh produce. ${ }^{61}$

Resources dedicated to border inspections have been declining, which has allowed the overwhelming majority of produce to enter the country without even a cursory examination. The number of FDA food-import inspectors has fallen by twenty percent between 2003 and 2007.62 In 2007, there were only 1,317 FDA field inspectors to monitor all of the FDA-regulated imports ${ }^{63}$ - fruits, vegetables, processed food, dairy products and baby food as well as pharmaceuticals, medical devices, pet food and other products. ${ }^{64}$

These FDA inspectors examine a miniscule fraction of imported fruit and vegetable shipments. Between 2002 and 2007, FDA border inspectors examined only 0.75 percent of fresh fruit and vegetable import shipments - or only one in 134 shipments. ${ }^{65}$ (Shipments can be of any size, from a refrigerated truckload of tomatoes to a single crate of papayas on a flight from India.) FDA sends an even smaller portion of shipments to the laboratory to test for foodborne illness, pesticides or excessive levels of chemicals like lead or arsenic. Only one out of 437 shipments ( 0.23 percent) were tested at FDA laboratories for foodborne risks that cannot be seen by the naked eye, such as Salmonella or pesticide contamination. ${ }^{66}$

Although FDA testing rose after border security improved after September $11^{\text {th }}$, the number of border inspections has fallen over the past three years, while fresh fruit and vegetable imports have continued to rise. Between 2005 and 2007, FDA produce inspections fell 34 percent from a high of 16,583 in 2005 to 11,014 in $2007 .{ }^{67}$ Over the same period, the volume of fresh fruit and vegetable imports grew by 13 percent from 29 billion pounds in 2005 to 33 billion pounds in 2007. ${ }^{68}$

These GAO figures are likely an overestimation of inspections because of the way FDA shares inspection data. GAO counted each category of examination (for example, for pesticides, Salmonella, lead or low-acid canning violations) as a unique border inspection even though FDA often per-


forms multiple examinations on the same shipment. Food \& Water Watch's examination of refusal data for the 50 studied produce products found that one in eight (12.5 percent) of individual shipments were examined for more than one violation and these shipments accounted for a quarter (25.0 percent) of the reasons for refusals. ${ }^{69}$

The low level of overall imported produce oversight is reflected in the tiny number of imports of the 50 studied products in this report that were refused at the border. Although the United States has imported 164 billion pounds of this produce and 7 billion gallons of juice between 1997 and 2006, the FDA refused only 4,876 shipments of these products for food safety concerns. ${ }^{70}$ (Border refusals include produce shipments that fail border inspections or laboratory tests as well as any product that is subject to an FDA "Import Alert" which allows inspectors to reject a shipment without any inspection because of previously identified problems, like the 2008 temporary ban on imported tomatoes from Mexico.) The number of tons of imported produce that enters the United States for every shipment that is refused has been rising over the past eight years, ${ }^{71}$ because the number of refusals declined by 35.3 percent from 694 in 1999 to 449 in 2006 while imports grew steadily. In 1999, the FDA admitted 10,775 tons of produce for every shipment it rejected but by 2006 it admitted 23,211 tons for every rejection.

Pesticides were the top reason for border refusals of these 50 products, accounting for almost half of the FDA refusals between 1997 and 2006. ${ }^{72}$ Pesticide violations nearly tripled from 21.4 percent of the refusals in 1997 to 62.8 percent of the refusals in 2006. FDA rejected almost 800 shipments of eggplants from the Dominican Republic alone
for pesticide violations over the decade but bell peppers from Mexico, squash from Guatemala and fresh tomatoes from Spain were repeatedly rejected for pesticide violations as well.

Although increasing the number of border inspections to strengthen import safety oversight would be a commonsense approach to an unnecessary health risk, FDA adamantly refuses to acknowledge the value of import inspections. The U.S. Health and Human Services Secretary Michael Leavitt has stated, "We cannot inspect our way to product safety." ${ }^{73}$ But the paltry level of border inspections suggests that the FDA has not even tried to strengthen the safety of the food supply through a more rigorous inspection regime.

The failure of FDA to interdict hazardous produce imports has significant and real risks for consumers because the fresh produce that is most commonly associated with foodborne illnesses include several fruits and vegetables that are often imported. More than a third of the tomatoes and cantaloupes Americans ate in 2007 were imported ( 38.5 and 34.0 percent, respectively) and imports of these crops have been associated with Salmonella outbreaks. The 2008 Salmonella outbreak sickened 1,400 people in the United States. Between 2000 and 2002, there were four Salmonella outbreaks traced to Mexican cantaloupe that each sickened between 35 to 50 consumers, causing at least 18 hospitalizations and two deaths in 2001. ${ }^{74}$ About one in five ( 21.7 percent) raspberries Americans eat are imported and in 1997 imported raspberries caused an outbreak of cyclospora that sickened nearly 1,500 people. ${ }^{75}$


Source: Food \& Water Watch; figures for 50 studied produce products only.

## The Safety of Chinese Produce

Over the past decade, China has become a significant supplier of imported produce to the United States. The value of imported Chinese fruit and nuts quadrupled between 2000 and 2005 and the value of vegetable imports nearly tripled. ${ }^{76}$ China is likely to be a major player in global vegetable markets for years to come - between 2000 and 2004, China added 5.7 million acres of vegetable production, more than the United States' entire vegetable acreage (3.7 million acres) in $2002 .{ }^{71}$

But China's food exports have been dogged by safety problems. In 2007, the FDA banned the import of five kinds of fish from China because of illegal residues of veterinary drugs and fungicides. ${ }^{78}$ In 2008, the industrial chemical melamine was found in dairy products from China that were used as ingredients in cookies and candies that were exported to the United States, a disturbing repeat of the previous year's discovery that pet food ingredients were tainted with the industrial contaminant. ${ }^{79}$ Problems have been found on fruits and vegetable products as well. High levels of pesticides were found on a Chinese shipment of frozen spinach to Japan in 2002. ${ }^{80}$ In the wake of the global melamine-tainted dairy product scandal in 2008, dozens of Japanese consumers were admitted to the hospital after eating frozen green beans contaminated with pesticides from China. ${ }^{81}$

China's farm and food processing sectors are plagued with problems that contribute to safety concerns for consumers. China has banned far fewer pesticides than the United States or Europe, meaning that pesticides that are banned in America may be immigrating to the United States on Chinese crops. ${ }^{82}$ The USDA reported that produce from China presents significant risks, noting, "Chinese fruits and vegetables often have high levels of pesticide residues, heavy metals and other contaminants. Water, soil, and air are dangerously polluted in many rural areas as a result of heavy industrialization and lax environmental regulation. ${ }^{183}$

The food processing industry in China includes more than a million factories that operate in a Wild West business environment where shortcuts like doctoring watered-down milk with industrial chemicals like melamine are all too common and enforcement of rules is virtually nonexistent. A 2007 survey of Chinese processed food factories found that industrial ingredients like dyes, mineral oils and formaldehyde were used to produce flour, candies, pickles, biscuits, mushrooms and bean curd. ${ }^{84}$ The inspection director of China's General Administration of Quality Supervision stated, "These are not isolated cases." ${ }^{85}$

## U.S. Farmers Face Deluge of Imports

American fruit and vegetable farmers are threatened by the rising volume of imported produce - and the foodborne illness outbreaks caused by imports. The U.S. consumer market is the primary destination for American fruit and vegetable production. ${ }^{86}$ Imports can displace domestic production in the produce aisle and contribute to a decline in the number of farms and the reduction of cultivated acres. Imported unsafe produce also undercuts domestic producers if consumers shy away from produce altogether because of the possibility that it may be tainted. ${ }^{87}$ For example, U.S. tomato growers lost an estimated $\$ 200$ million when consumers were deterred from eating safe American tomatoes at the height of the season in the 2008 Salmonella outbreak related to tomatoes or peppers grown in Mexico. ${ }^{88}$

The 50 products studied in this report are all temperate or sub-tropical crops (like citrus fruits) that are cultivated commercially in the United States. Rising imports of these crops has contributed to the decline in cultivated fruit and vegetable acreage for these crops in this country. The United States lost more than a quarter million ( 261,500 ) cultivated fruit and vegetable acres - a 4.3 percent slide - between 1993 and 2007 as imports of these products nearly tripled. ${ }^{89}$ The acreage decline has been steeper over
U.S. Cultivated Produce Acreage
(millions of acres)


Source: USDA; figures for studied products only.
the past decade, as trade deals like NAFTA became fully implemented. Between 1998 and 2007, cultivated produce acreage fell by more than 733,100 , an 11.1 percent decline. Fresh vegetable acreage dropped by 338,200 acres (14.1 percent), fruit acreage fell by 323,100 acres ( 10.0 percent), and processed vegetable acreage declined by 71,800 acres (7.4 percent). ${ }^{90}$


Rising Import Consumption Drives Down Domestic Cultivation

|  | Imports (million Lbs.) |  | Import Consumption |  | Cultivated Acres |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Years/Change | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 7}$ | Percent | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 7}$ | Percent | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 7}$ | Percent |
| Asparagus | 109.8 | 269.2 | $145.1 \%$ | $54.4 \%$ | $77.9 \%$ | $43.2 \%$ | 74,430 | 38,200 | $-48.7 \%$ |
| Carrots | 179.2 | 245.5 | $37.0 \%$ | $6.8 \%$ | $9.1 \%$ | $33.2 \%$ | 112,100 | 86,200 | $-23.1 \%$ |
| Garlic | 256.1 | 494.7 | $93.2 \%$ | $35.9 \%$ | $55.5 \%$ | $54.6 \%$ | 38,000 | 29,810 | $-21.6 \%$ |
| Grapefruit | 11.3 | 47.5 | $320.4 \%$ | $0.7 \%$ | $5.6 \%$ | $702.3 \%$ | 169,900 | 88,600 | $-47.9 \%$ |
| Oranges | 88.2 | 247.2 | $180.3 \%$ | $2.2 \%$ | $11.0 \%$ | $402.2 \%$ | 830,000 | 668,000 | $-19.5 \%$ |
| Processed green peas | 56.2 | 95.4 | $69.8 \%$ | $6.1 \%$ | $10.3 \%$ | $68.2 \%$ | 273,900 | 207,400 | $-24.3 \%$ |
| Peach (fresh \& canned) | 126 | 317.1 | $151.7 \%$ | $5.8 \%$ | $13.2 \%$ | $128.3 \%$ | 159,200 | 134,140 | $-15.7 \%$ |
| Tangelos \& tangerines | 85.3 | 268.1 | $214.3 \%$ | $14.2 \%$ | $34.7 \%$ | $143.6 \%$ | 53,700 | 41,100 | $-23.5 \%$ |

The crops that faced some of the highest levels of import competition and significant growth in the import share of American consumption had steeper declines in cultivated acres. For example:

Grapefruit acreage declined by nearly half (47.9 percent) between 1998 and 2007 as imported grapefruit increased four-fold and the share of imported grapefruit Americans ate rose eight-fold.

Peach acreage declined by 15.7 percent, losing more than 25,000 acres between 1998 and 2007, as fresh and canned peach imports and the import share of consumption more than doubled.

Processed (Canned and Frozen) Pea acreage declined by a quarter from 273,800 prior to 1995 to 207,400 today. In 1998, about one out of 18 ( 6.1 percent) frozen packages or cans of green peas that Americans ate were imported, but after imports grew by 70 percent, one in ten ( 10.3 percent) of the processed pea products Americans consumed were imported in 2007.

Carrot acreage declined by nearly a quarter (23.1 percent) as imports and the import share of consumption grew by at least a third.

## The Myth of Seasonal Imports

Many free trade proponents have contended that produce imports complement domestic production by providing fresh produce during the winter months, when domestic production ends. This proposition suggests that American producers are not displaced by imports because the competitive crops enter the U.S. marketplace when farms are dormant during the winter. Of course, winter imports do
compete head to head with the winter fruit and vegetable production in Florida. ${ }^{91}$

When NAFTA and the WTO went into effect in the mid 1990s, the majority of produce imports did enter during the winter. ${ }^{92}$ But now imports that compete with domestic crops enter the U.S. market year round. In 2006, the USDA reported, "Increasingly, fruit imports have been rising during the primary U.S. growing seasons. ${ }^{93}$ Trade proponents have often used the example of seasonal fresh grape imports to explain the complementary benefits of produce imports, but now even grapes are actively competing against domestic production during the U.S. harvest season. ${ }^{94}$

The share of non-tropical fruit and vegetable imports (those that compete with domestically produced crops) entering during the U.S. harvest season between May and October has been growing. Between 1990 and 2007, the share of non-tropical fruits and vegetables that entered during the summer rose by 9 percent from 40 percent in 1990 to 44 percent in 2007.95 The volume of these summer imports increased faster than the overall growth in imports.

Asparagus provides a telling example for other fruit and vegetable farmers. Proponents of asparagus trade under NAFTA and the U.S.-Peru Free Trade Agreement initially claimed that fresh asparagus imports would complement the domestic fresh production of asparagus by providing consumers with fresh asparagus year-round. Instead, Peru grew to become a year-round producer and exporter of fresh asparagus, even shipping fresh asparagus during the growing season when California growers produce most of the fresh asparagus for the American market. ${ }^{96}$ In 2003, California asparagus farmers had to plow their crops under because asparagus prices were too low to cover the cost of harvesting the crop. ${ }^{97}$

## Promised Export Markets Never Materialized

Free trade proponents also promised U.S. fruit and vegetable growers that export opportunities would expand significantly with new trade agreements. As NAFTA was going into effect, the USDA acknowledged that vegetable imports would increase but predicted that vegetable "trade will remain more or less in balance" (with exports keeping pace with imports) and fruit "imports and exports [would] grow rapidly, particularly for fresh fruit." ${ }^{\text {" }}$

The reality did not live up to USDA's prediction. American producers faced growing low-cost import competition but any growth in fresh produce exports never made up for the lost domestic market. While imports have skyrocketed, U.S. fruit and vegetable product exports have seen minimal growth over the past fifteen years. Between 1993 and 2007, fresh fruit, fresh vegetable and processed produce exports (not including juice) increased by about a third (growing 35 percent) while imports increased more than two and a half times (growing by 170 percent). Fresh fruit exports only increased by 4 percent between 1993 and 2007 and fresh vegetable exports increased by 14 percent over the

## The Free Trade Princess Versus the Pea

Family farmers that grow vegetables and fruits are finding it increasingly difficult to make ends meet in the face of rising low-cost produce imports. These producers are the farmer canaries in the free trade coal mine. Florida tomato and bell pepper producers were hard hit by surging imports from Mexico after NAFTA went into effect. California's garlic growers have been nearly overwhelmed by garlic imports from China. Apple juice from China and asparagus from South America and Mexico have surged after trade deals allowed low-priced imports to undercut American farmers.

While these stories are well-known, farmers in the Upper Midwest and Pacific Northwest have seen frozen and canned green pea imports steadily increase and threaten their livelihoods. Green peas are among the most common vegetables present in processed foods ranging from frozen vegetable mixes to potpies to TV dinners. Consumers might not think too much about the humble pea, but the farmers who harvest peas weigh their planting decisions carefully. Every year, Washington state farmer Gary Nibler prioritizes which crops to plant based on anticipated crop prices and potential income from different crops. Washington state, traditionally a rich source of vegetables, has been shifting farmland to wheat, soybeans, and corn, but Nibler still relies on green peas for a significant portion of his income.

Rising pea imports are changing this equation. Processed pea (both frozen and canned) imports increased by 70 percent over the past decade, rising from 56.2 million pounds in 1998 to 95.4 million pounds in 2007. These growing imports are replacing American canned and frozen peas in the grocery store. In 1998, imported processed peas
made up about one out of sixteen packages of processed peas Americans ate but by 2007 one out of ten processed pea packages were imported. The increased market share captured by imports from Canada, China, Ecuador, Thailand and Peru displaces pea production in the United States. Cultivated acreage of peas destined for the processing plant declined by a quarter between 1998 and 2007.

In Washington state alone, farmers harvested 16,600 fewer acres of peas for processing in 2007 than in 1998. ${ }^{99}$ According to Nibler, foreign imports have been competing against domestic peas and undercutting prices creating "a decline in income with [few] options to offset it." ${ }^{100}$ Processed pea imports are only likely to increase more rapidly after the Peru trade pact was passed in 2007. Peru is already the fourth largest source of processed peas to the U.S. market, and as the Peru trade deal goes into effect over the coming years, these imports are only likely to increase.


fifteen-year period while imports for fresh fruits and vegetables increased by two and a half times ( 150 percent and 148 percent, respectively). Although processed produce exports nearly doubled (growing by 96 percent) processed produce imports more than tripled (increasing 229 percent). Orange, apple and grape juice exports declined by 8 percent between 1993 and 2007 while imports increased by 81 percent. Producers of 16 of the studied crops saw exports decline between 1993 and 2007. Apple juice, avocado and asparagus exports fell by more than half and cucumber, grape juice, garlic and fresh orange exports fell by more than a third.

These individual product trends added up to the United States becoming a net importer of many commonly farmed - and consumed - fruit and vegetable products. The USDA's promised "balance" between exports and imports was a mirage for farmers. The United States exported 2.5 billion pounds more fresh and processed fruits and vegetables than it imported in 1993 (but imported 402 million gallons more juice than it exported). By 2007, the United States imported 7.9 billion pounds more fresh and processed produce and 868 million gallons more juice than it exported. In 2007 the United States imported more fresh
fruit than it exported for the first time; processed produce imports exceeded exports for the first time in 2002. The gap between imports of fresh vegetables and fruit juice and exports has steadily grown for the past fifteen years.


Source: USDA; figures for 50 studied products only, excluding juices.

## Recommendations

The Federal government must act swiftly to protect consumers from unsafe imported produce and stop expanding a failed trade model.

- The USDA should close loopholes in the current country-of-origin labeling rules and expand them to processed fruit and vegetable products. In 2007, the United States imported 6.5 billion pounds of processed fruit and vegetable products, but the new country-of-origin labeling requirements do not apply to the processed produce, canned fruits and vegetables, or frozen vegetable mixes. COOL must be expanded to cover all imported fruit and vegetable products.
- FDA must adequately inspect imported produce products. FDA currently inspects less than one in a hundred shipments of imported fresh produce and dedicates paltry funding and staff resources to ensure produce imports are adequately inspected. The 2008 Salmonella outbreak from Mexican produce demonstrates the considerable costs of the broken border inspection system.
- FDA must propose in its budget and Congress must provide adequate funding for FDA to conduct at least annual inspections of domestic food establishments and annual visits to facilities in countries that export to the United States. These visits should include audits by FDA employees of the exporting countries' food safety regulations and enforcement system as well as visits to eligible exporting establishments.
- FDA should establish a separate Imports Regulatory Division to coordinate all import food safety issues, including laboratory testing.
- The United States should take a strategic pause in any new bilateral or regional free trade agreements. There should be a moratorium on free trade agreements until import inspectors can cope with rising levels of imported produce and low-priced imported produce can be adequately monitored for unfair trade practices.
- WTO negotiators should remove agriculture from the Doha Round WTO negotiations. The WTO's Agreement on Agriculture has been a failure for fruit and vegetable farmers in the United States and has encouraged the development of export platforms in the developing world that benefit from low wages and weak environmental standards to ship low-cost fruit and vegetable products to the United States.
- The federal government should aggressively enforce unfair trade remedy laws against exporters that ship artificially low-priced fruit and vegetable products, exporters that unfairly benefit from government support, and import surges that collapse produce prices in the U.S. market.

Methodology: Food \& Water Watch analyzed import, export and domestic consumption data from the 2008 USDA Vegetable and Melon and Fruit and Tree Nut situation and outlook reports. Import data from specific countries and crops was downloaded from the USDA Foreign Agriculture Service trade database categorized by appropriate harmonized tariff classification. In two cases, the harmonized tariff classification does not delineate specific products (honeydew melons are not isolated in the harmonized tariff codes and canned black olives are identified but canned green olives are not). For import consumption shares, specific country and product import weights were converted to fresh-weight equivalent for processed produce using USDA conversion factors for the appropriate products. Acreage data was drawn from the USDA situation and outlook reports as well as from the annual vegetable and fruit summary reports. The data on FDA produce refusals was compiled from data provided to Food \& Water Watch under a Freedom of Information Act request and the specific products were identified based on FDA's internet-based product code builder.

## Appendix Table 1

U.S. Fruit, Vegetable and Processed Produce Imports and Import Share of Consumption

|  | Imports (millions of pounds) |  |  |  | Import Share of U.S. Consumption |  |  | 2007 Per Capita Import Consumption (pounds) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1993 | 2007 | Increase | \% Change | 1993 | 2007 | \% Change |  |
| Total Fresh Fruit | 2424.6 | 6072.9 | 3648.3 | 150.5\% | 10.1\% | 22.3\% | 120.5\% | 20.2 |
| Total Fresh Vegetables | 3735.0 | 9273.1 | 5538.1 | 148.3\% | 11.7\% | 23.9\% | 103.4\% | 30.7 |
| Total Processed Produce | 2216.0 | 7280.4 | 5064.4 | 228.5\% | 5.2\% | 15.9\% | 206.8\% | 24.2 |
| Total Juice (millions of gallons) | 557.9 | 1010.7 | 452.8 | 81.2\% | 30.8\% | 49.5\% | 60.5\% | 3.3 |
| Apple Juice | 213.1 | 539.8 | 326.7 | 153.3\% | 52.8\% | 81.6\% | 54.5\% | 1.8 |
| Apple, Fresh | 259.4 | 427.9 | 168.5 | 65.0\% | 5.2\% | 8.0\% | 52.1\% | 1.4 |
| Apricots, Fresh | 2.2 | 3.8 | 1.6 | 72.7\% | 6.5\% | 8.1\% | 23.0\% | 0.0 |
| Artichoke, All Uses | 128.1 | 367.4 | 239.3 | 186.8\% | 57.0\% | 75.3\% | 32.1\% | 1.2 |
| Asparagus, Fresh | 69.3 | 269.2 | 199.9 | 288.4\% | 47.0\% | 77.9\% | 65.9\% | 0.9 |
| Avocado, Fresh | 18.1 | 769.1 | 751.0 | 4149.2\% | 3.2\% | 70.9\% | 2099.6\% | 2.6 |
| Blueberry, Fresh | 17.5 | 77.4 | 59.9 | 342.3\% | 25.5\% | 44.8\% | 75.4\% | 0.3 |
| Broccoli, Fresh | 31.8 | 184.4 | 152.6 | 479.9\% | 3.7\% | 10.1\% | 176.4\% | 0.6 |
| Broccoli, Frozen | 442.9 | 699.5 | 256.6 | 57.9\% | 74.9\% | 86.6\% | 15.5\% | 2.3 |
| Cantaloupe, Fresh | 458.1 | 1012.3 | 554.2 | 121.0\% | 20.4\% | 34.0\% | 66.5\% | 3.4 |
| Carrots, Fresh | 141.4 | 245.5 | 104.1 | 73.6\% | 5.0\% | 9.1\% | 82.5\% | 0.8 |
| Cauliflower, Frozen | 76.7 | 86.8 | 10.1 | 13.2\% | 42.9\% | 78.8\% | 83.9\% | 0.3 |
| Cherry, Fresh (tart and sweet) | 3.6 | 33.7 | 30.1 | 847.6\% | 2.2\% | 7.5\% | 249.1\% | 0.1 |
| Cucumber, Pickle | 16.7 | 82.4 | 65.7 | 393.4\% | 1.5\% | 7.8\% | 424.3\% | 0.3 |
| Cucumbers, Fresh | 502.3 | 1012.5 | 510.2 | 101.6\% | 37.0\% | 53.1\% | 43.5\% | 3.3 |
| Eggplant, Fresh | 40.1 | 111.0 | 70.9 | 176.9\% | 32.7\% | 42.0\% | 28.5\% | 0.4 |
| Garlic, All Uses | 118.4 | 494.7 | 376.3 | 317.8\% | 26.1\% | 55.5\% | 112.8\% | 1.7 |
| Grape, Fresh | 714.1 | 1291.2 | 577.1 | 80.8\% | 38.8\% | 56.6\% | 45.8\% | 4.3 |
| Grape, Juice | 46.8 | 71.9 | 25.1 | 53.6\% | 47.9\% | 54.5\% | 13.7\% | 0.2 |
| Grapefruit, Fresh | 27.4 | 47.5 | 20.1 | 73.4\% | 1.7\% | 5.6\% | 225.4\% | 0.2 |
| Honeydew | 118.4 | 186.3 | 67.9 | 57.3\% | 26.2\% | 29.3\% | 11.8\% | 0.6 |
| Kiwi, Fresh | 54.7 | 112.9 | 58.2 | 106.4\% | 41.6\% | 80.5\% | 93.6\% | 0.4 |
| Lemon, Fresh | 16.1 | 122.4 | 106.3 | 660.2\% | 2.4\% | 14.5\% | 513.8\% | 0.4 |
| Limes, Fresh | 190.5 | 723.2 | 532.7 | 279.6\% | 77.3\% | 100.8\% | 30.4\% | 2.4 |
| Mushroom, Fresh | 3.3 | 70.0 | 66.7 | 2021.2\% | 0.6\% | 8.9\% | 1300.6\% | 0.2 |
| Mushroom, Processed | 233.8 | 338.0 | 104.2 | 44.6\% | 52.6\% | 76.3\% | 44.9\% | 1.1 |
| Olives, Canned | 118.3 | 202.7 | 84.4 | 71.3\% | 27.2\% | 86.1\% | 216.2\% | 0.7 |
| Onion, Fresh | 510.2 | 920.6 | 410.4 | 80.4\% | 11.4\% | 14.1\% | 23.1\% | 3.0 |
| Orange Juice | 298.0 | 399.0 | 101.0 | 33.9\% | 22.8\% | 32.0\% | 40.3\% | 1.3 |
| Orange, Fresh | 22.8 | 247.2 | 224.4 | 984.2\% | 0.6\% | 11.0\% | 1672.4\% | 0.8 |
| Green Pea, Frozen and Canned | 55.2 | 95.4 | 40.2 | 72.8\% | 6.1\% | 10.3\% | 66.7\% | 0.3 |
| Peach \& Nectarine, Fresh | 91.9 | 131.6 | 39.7 | 43.2\% | 6.0\% | 9.7\% | 61.3\% | 0.4 |
| Peach, Canned | 48.3 | 185.5 | 137.2 | 284.1\% | 3.7\% | 17.8\% | 386.2\% | 0.6 |

## Appendix Table 1 (continued)

|  | Imports (millions of pounds) |  |  |  | Import Share of U.S. Consumption |  |  | 2007 Per Capita Import Consumption (pounds) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1993 | 2007 | Increase | \% Change | 1993 | 2007 | \% Change |  |
| Pear, Fresh | 142.8 | 236.9 | 94.1 | 65.9\% | 17.7\% | 24.7\% | 39.5\% | 0.8 |
| Pears, Canned | 0.3 | 77.8 | 77.5 | 25833.3\% | 0.0\% | 10.8\% | 34155.7\% | 0.3 |
| Peppers, Bell, Fresh | 268.8 | 726.4 | 457.6 | 170.2\% | 16.8\% | 35.6\% | 111.3\% | 2.4 |
| Potatoes, Fresh | 712.6 | 1105.8 | 393.2 | 55.2\% | 5.5\% | 9.3\% | 71.0\% | 3.7 |
| Potatoes, Frozen | 581.0 | 3407.0 | 2826.0 | 486.4\% | 4.2\% | 21.6\% | 417.3\% | 11.3 |
| Raisins | 14.8 | 63.6 | 48.8 | 329.7\% | 3.6\% | 14.1\% | 294.7\% | 0.2 |
| Raspberry, Fresh | 2.3 | 26.5 | 24.2 | 1052.2\% | 7.8\% | 21.7\% | 177.4\% | 0.1 |
| Snap Beans, Fresh | 25.3 | 70.1 | 44.8 | 177.1\% | 6.4\% | 10.6\% | 65.5\% | 0.2 |
| Snap Beans, Frozen | 12.3 | 123.9 | 111.6 | 907.3\% | 2.7\% | 19.4\% | 612.0\% | 0.4 |
| Spinach, Frozen | 0.0 | 54.8 | 54.8 | N/A | 0.0\% | 25.5\% | \#DIV/0! | 0.2 |
| Squash, Fresh | 242.9 | 565.7 | 322.8 | 132.9\% | 24.5\% | 42.0\% | 71.4\% | 1.9 |
| Strawberries, Fresh | 31.4 | 157.7 | 126.3 | 402.2\% | 3.3\% | 8.1\% | 142.8\% | 0.5 |
| Sweet Corn, Frozen | 74.8 | 185.7 | 110.9 | 148.3\% | 3.0\% | 6.2\% | 108.2\% | 0.6 |
| Tangerine and Tangelo, Fresh | 40.4 | 268.1 | 227.7 | 563.6\% | 8.4\% | 34.7\% | 315.1\% | 0.9 |
| Tomato, Fresh | 922.4 | 2360.7 | 1438.3 | 155.9\% | 21.7\% | 38.5\% | 77.2\% | 7.8 |
| Tomatoes, Processed | 555.7 | 1740.9 | 1185.2 | 213.3\% | 2.8\% | 8.4\% | 198.3\% | 5.8 |
| Watermelon, Fresh | 216.2 | 902.7 | 686.5 | 317.5\% | 5.9\% | 18.4\% | 214.3\% | 3.0 |

## Appendix Table 2

|  | Largest Exporter |  |  | Second Largest Exporter |  |  | Third Largest Exporter |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Country | Volume (million Ibs.) | \% of Domestic Consumption | Country | Volume (million lbs.) | \% of Domestic Consumption | Country | Volume (million lbs.) | \% of Domestic Consumption |
| Apple Juice | China | 403.1 | 60.9\% | Argentina | 77.7 | 11.7\% | Chile | 29.1 | 4.4\% |
| Apple, Fresh | Chile | 272.3 | 5.1\% | New Zealand | 104.1 | 1.9\% | Canada | 68.5 | 1.3\% |
| Apricots, Fresh | Chile | 3.2 | 13.0\% | New Zealand | 0.8 | 3.2\% |  |  |  |
| Artichoke, All Uses | Peru | 49.4 | 10.1\% | Spain | 30.1 | 6.2\% | Chile | 27.5 | 5.6\% |
| Asparagus, Fresh | Peru | 154.8 | 44.8\% | Mexico | 114 | 33.0\% | Canada | 2.3 | 0.7\% |
| Avocado, Fresh | Mexico | 483.6 | 44.6\% | Chile | 246.3 | 22.7\% | Dominican Republic | 33.9 | 3.1\% |
| Blueberry, Fresh | Chile | 37.8 | 22.5\% | Canada | 27.3 | 16.3\% | Argentina | 11.5 | 6.9\% |
| Broccoli, Fresh | Mexico | 172.7 | 9.5\% | Canada | 11.6 | 0.6\% |  |  |  |
| Broccoli, Frozen | Mexico | 476 | 58.9\% | Guatemala | 111.4 | 13.8\% | Ecuador | 71.7 | 8.9\% |
| Cantaloupe, Fresh | Guatemala | 487 | 16.4\% | Honduras | 247.7 | 8.3\% | Costa Rica | 245.5 | 8.3\% |
| Carrots, Fresh | Canada | 159.3 | 5.9\% | Mexico | 73.7 | 2.7\% | Costa Rica | 10.7 | 0.4\% |
| Cauliflower, Frozen | Mexico | 56.7 | 51.5\% | Guatemala | 15.8 | 14.4\% | China | 11.7 | 10.6\% |
| Cherry, Fresh | Chile | 27.3 | 7.1\% | Canada | 4.9 | 1.3\% | Argentina | 0.9 | 0.2\% |
| Cucumber, Pickle | India | 37.5 | 3.5\% | Canada | 3.8 | 0.4\% | Poland | 2.8 | 0.3\% |
| Cucumbers, Fresh | Mexico | 839.3 | 44.1\% | Canada | 115.6 | 6.1\% | Honduras | 43.5 | 2.3\% |
| Eggplant, Fresh | Mexico | 85.4 | 32.3\% | Honduras | 22.3 | 8.4\% | Canada | 1.7 | 0.6\% |
| Garlic, All Uses | China | 458.8 | 51.4\% | Mexico | 18.7 | 2.1\% | Argentina | 14.3 | 1.6\% |
| Grape, Fresh | Chile | 942.7 | 41.3\% | Mexico | 303.9 | 13.3\% | Brazil | 24.4 | 1.1\% |
| Grape, Juice | Argentina | 69.1 | 52.3\% | Chile | 2.9 | 2.2\% | Canada | 2.5 | 1.9\% |
| Grapefruit, Fresh | Bahamas | 31.8 | 3.7\% | Mexico | 11.1 | 1.3\% | Israel | 0.5 | 0.1\% |
| Kiwi, Fresh | Chile | 45.4 | 32.4\% | New Zealand | 40.7 | 29.0\% | Italy | 23.8 | 17.0\% |
| Lemon, Fresh | Mexico | 89.1 | 10.6\% | Chile | 60.8 | 7.2\% | Spain | 33.5 | 4.0\% |
| Limes, Fresh* | Mexico | 705.8 | 98.3\% | Guatemala | 8.3 | 1.2\% | Colombia | 4.8 | 0.7\% |
| Mushroom, Fresh | Canada | 50.4 | 6.4\% | China | 9.6 | 1.2\% | Mexico | 4.2 | 0.5\% |
| Mushroom, Processed | China | 187.5 | 42.3\% | India | 43.6 | 9.8\% | Indonesia | 31 | 7.0\% |
| Olives, Canned | Spain | 48.1 | 20.4\% | Morocco | 25.5 | 10.8\% | Argentina | 6.8 | 2.9\% |
| Onion, Fresh | Mexico | 469.3 | 7.2\% | Canada | 154.3 | 2.4\% | Peru | 139.8 | 2.1\% |
| Orange Juice | Brazil | 292.4 | 23.4\% | Mexico | 70.4 | 5.6\% | Costa Rica | 50 | 4.0\% |
| Orange, Fresh | Australia | 63.9 | 2.8\% | South Africa | 63.2 | 2.8\% | Spain | 50.5 | 2.2\% |
| Pea, Green Processed | Canada | 42.5 | 4.6\% | China | 16 | 1.7\% | Ecuador | 11 | 1.2\% |
| Peach \& Nectarine, Fresh | Chile | 127.9 | 9.3\% | Mexico | 2.4 | 0.2\% | Argentina | 0.8 | 0.1\% |
| Peach, Canned | China | 118.8 | 11.4\% | Greece | 55.8 | 4.7\% | Thailand | 36.7 | 3.1\% |
| Pear, Fresh | Argentina | 115.4 | 12.0\% | Chile | 54.2 | 6.3\% | China | 33.2 | 3.8\% |
| Pears, Canned | China | 56.8 | 7.9\% | Thailand | 21.5 | 3.2\% | Spain | 2.7 | 0.4\% |
| Peppers, Bell, Fresh | Mexico | 524.8 | 25.7\% | Canada | 157.1 | 7.5\% | Netherlands | 21.1 | 1.0\% |
| Potatoes, Fresh | Canada | 1105.6 | 9.3\% |  |  |  |  |  |  |
| Potatoes, Frozen | Canada | 3391.1 | 21.5\% |  |  |  |  |  |  |
| Raisins | Chile | 27.2 | 6.0\% | Argentina | 15 | 3.5\% | South Africa | 12.4 | 2.9\% |
| Raspberry, Fresh | Mexico | 19.1 | 14.6\% | Chile | 7.1 | 5.4\% | Canada | 5.1 | 3.9\% |
| Snap Beans, Fresh | Mexico | 54.1 | 8.2\% | Guatemala | 14.4 | 2.3\% | Canada | 0.5 | 0.1\% |
| Snap Beans, Frozen | Canada | 26.5 | 4.1\% | China | 8.9 | 1.6\% | France | 5.4 | 1.0\% |
| Spinach, Frozen | China | 32.2 | 15.0\% | Mexico | 20.6 | 15.8\% | Belgium-Luxemburg | 0.9 | 0.7\% |
| Squash, Fresh | Mexico | 528.5 | 39.2\% | Costa Rica | 14.7 | 1.0\% | Honduras | 7.4 | 0.5\% |
| Strawberries, Fresh | Mexico | 156.6 | 8.5\% | China | 0.5 | 0.0\% | Canada | 0.4 | 0.0\% |
| Sweet Corn, Frozen | Canada | 151.9 | 5.0\% | Peru | 12 | 0.4\% | Vietnam | 7 | 0.3\% |
| Tangerine \& Tangelo, Fresh | Spain | 140.6 | 18.2\% | Chile | 26.4 | 3.3\% | Peru | 24.4 | 3.0\% |
| Tomato, Fresh | Mexico | 2093.7 | 34.2\% | Canada | 246.2 | 4.1\% | Netherlands | 11.3 | 0.2\% |
| Tomatoes, Processed | Italy | 689 | 3.3\% | Canada | 494.8 | 2.6\% | Mexico | 203.9 | 1.1\% |
| Watermelon, Fresh | Mexico | 779.5 | 15.9\% | Guatemala | 49.5 | 1.0\% | Honduras | 39.8 | 0.8\% |

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