# The Import Share of U.S.Consumed Food Continues To Rise 

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## Abstract

The import share of U.S. food consumption held steady at 8.8 percent from 1998 to 2000. Import share in 2000 is an average of the 12.3 percent share of U.S. consumption of food crops and crop products and the 4.2 percent share of animal products, including fish and shellfish. These import shares of the two major food groups are each weighed by their corresponding shares of total U.S. per capita food consumption. In 1992, overall imports were only 7 percent of U.S.-consumed food, but increased as both the U.S. economy and the dollar strengthened.

Keywords: Import share, food consumption, food imports.

Import share of U.S. food consumption steadily grows


## U.S. Food Imports Reflect More Grops and Less Meat <br> In American Diets

U.S. per capita food consumption grew from about 1,800 pounds per year in the early 1980s to more than 2,000 pounds in 2000. In this period, the average share of imports in U.S. food consumption climbed from around 7 percent to almost 9 percent. While the average U.S. resident consumed 20 percent more fruits, vegetables, and cereals over the past two decades, consumption of animal products increased by only 7 percent. In 2000, the U.S. import share of consumption for animal products was 4 percent, while the share for crops and products was 12 percent. Shares are up from 3 and 10 percent, respectively, in the early 1980s.

## The New American Diet

A gradual but unmistakable rise in the share of food crops and products and a decline in the share of meat and dairy products in U.S. food consumption occurred in the past 20 years. In 2000, crops and products made up 57 percent of the average U.S. diet, and animal products comprised the remaining 43 percent. These relative shares were 54 and 46 percent, respectively, in 1981.

Specifically, the consumption share of red meat and dairy products fell from 40 percent to 36 percent of the average U.S. diet from 1981 to 2000. On the other hand, the share of vegetables and grain cereals rose from 27 percent to 30 percent in the same period. Clearly, the perceived health-related benefits of more plant fiber and less animal fat in diets shaped the pattern of U.S. food consumption. These long-term trends, moreover, tend to favor more imports of foreign food products.

## Factors That Influence U.S. Food Imports

The import share of food consumption is the ratio of imported volume to total volume consumed as food. Year-to-year effects on the demand for food imports include short-term changes in domestic food supply, the cost of imported food, and taste references.

Longer term factors that drive import demand include income growth, exchange-rate appreciation, and changes in diet that increase the preference for food products not readily available in large quantities in the United States.

Among U.S. food imports, the fastest growing as a percentage of U.S. food consumption include red meats, fish, and shellfish. Also, imports of vegetables such as bell and chili peppers, tomatoes, potatoes, asparagus, onions, and olives have risen significantly since 1980. Further, the import shares of fruits and grain cereals jumped dramatically as U.S. tastes shifted. More reliable supplies from foreign sources, particularly during the off-season, improved shipping and storage technology, and wider U.S. ethnic diet preferences contributed to these import trends over time.

Helping drive the sharp rise in import share of U.S.consumed foods from 1996 to 2000 were the robust U.S. economy and the strong dollar. The increase in the import share of red meats from 6.5 percent to almost 9 percent (in carcass weight) during this period was also due to widespread liquidation of the U.S. cattle herd, which cut the supply of processing beef. Also, the economic recession in many Asian countries diverted Australian and New Zealand meat to the U.S. market.

The phased lifting of tariffs on Mexican fruit and vegetable exports to the United States as mandated by the North American Free Trade Agreement induced growers in Mexico to ship their produce across the U.S. border. Mexico is now the source of 27 percent of U.S. fruit imports and 38 percent of vegetable imports. Tomatoes and bell and chili peppers lead vegetable imports from Mexico. Off-season fruit imports from Chile and Argentina, and vegetable imports from Peru, Ecuador, and other South American countries are driving up overall U.S. import shares of these commodities. Excluding Mexico, Latin American countries supply an additional 40 percent of U.S. imported fruits, the largest share of which are bananas, grapes, and melons.

## Food Import Growth Patterns

Although U.S. per capita consumption of red meat dropped from an average 175 pounds per year in the early 1980s to 163 pounds in 2000, the import share of pork rose from 3 to 5 percent, while the share for lamb meat more than tripled between those years. Fish and shellfish import share reached 68 percent in 2000, up from 45 percent in 1980. Even beef's import share rose from 8 to 11 percent in that time span.

The import share of fruits also more than tripled from 6 percent in 1980 to 22 percent in 2000. Among the fastest growing are avocados, mangos, melons, grapes, and pears. For fruit juices-mainly orange, apple, and grape-overall import share rose from 12 to 32 percent in the past two decades. Among tree nuts, of which 39 percent were imported in 2000 versus only 26 percent in 1980, the import share of pecans shot up from 1.5 percent to 37 percent.

Equally dramatic growth in import share of vegetables occurred since 1980. For fresh and frozen vegetables as a group, the share went up from 6 percent to 14 per-
cent in 2000. Potatoes' import share reached 14 percent in 2000, up from only 1 percent in 1980.
Asparagus' share grew more than fivefold from 11 percent to 59 percent. For olives (processed), the respective shares are 21 to 75 percent. And for artichokes and spices, the corresponding estimates more than doubled.

From less than 1 percent import share in 1980, wheat and rice expanded significantly to 9 and 10 percent, respectively, in 2000. Also, the import share of confectionery products quadrupled, as did malt beverages.

These rising trends in import shares of major foods are largely demand-driven, from both per capita U.S. income growth and the appreciation of the dollar over the past decade. At the same time, the need for export earnings has likewise induced foreign producers to supply the large U.S. market.

Note: Food consumption estimates reflect April 2002 Economic Research Service per capita food consumption and U.S. Census population data updates.

Table A—Summary Import Shares of U.S. Food Consumption ${ }^{1}$

| Food groups | $1981-85$ | $1986-90$ | $1991-95$ | 1996 | 1997 | 1998 | 1999 | 2000 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  | Percent |  |  |  |  |  |
| Total food consumption | 6.8 | 7.3 | 7.4 | 8.1 | 8.5 | 8.8 | 8.8 | 8.8 |
|  |  |  |  |  |  |  |  |  |
| Animal products ${ }^{2}$ | 3.2 | 3.4 | 3.2 | 3.2 | 3.2 | 4.0 | 4.2 | 4.2 |
| Red meat | 6.7 | 8.1 | 7.3 | 6.4 | 7.1 | 7.7 | 8.2 | 8.9 |
| Dairy products | 1.9 | 1.8 | 1.9 | 2.0 | 1.9 | 2.9 | 2.9 | 2.7 |
| Fish and shellfish | 50.9 | 56.0 | 56.0 | 58.5 | 62.1 | 64.7 | 68.1 | 68.3 |
| Animal fat | 0.5 | 0.7 | 1.4 | 1.4 | 2.3 | 2.3 | 2.5 | 2.8 |
|  |  |  |  |  |  |  |  |  |
| Crops and products ${ }^{3}$ | 9.9 | 10.6 | 10.6 | 11.9 | 12.5 | 12.4 | 12.1 | 12.3 |
| Fruits, juices and nuts | 12.0 | 16.5 | 15.5 | 14.9 | 16.7 | 16.9 | 18.2 | 18.7 |
| Vegetables | 4.8 | 6.1 | 5.9 | 7.8 | 8.0 | 9.0 | 8.9 | 8.8 |
| Vegetable oils | 15.7 | 19.7 | 19.3 | 19.2 | 20.9 | 21.0 | 17.9 | 20.2 |
| Grain cereals | 1.6 | 3.1 | 6.7 | 7.2 | 7.0 | 7.4 | 6.5 | 6.3 |
| Sweeteners and candy | 19.8 | 9.8 | 9.1 | 14.8 | 14.8 | 10.4 | 8.5 | 8.0 |

${ }^{1}$ Calculated from units of weight, weight equivalents, or content.
${ }^{2}$ Import shares of poultry and eggs are included, but negligible. Red meats are estimated from carcass weights.
${ }^{3}$ Includes coffee, cocoa, and tea whose import shares are 100 percent. Also includes crop content of beer and wine.
Data source: www.ers.usda.gov.

Table B—Shares of U.S. Per Capita Food Consumption ${ }^{1}$

| Food groups | $1981-85$ | $1986-90$ | $1991-95$ | 1996 | 1997 | 1998 | 1999 | 2000 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  | Percent |  |  |  |  |  |
| Total food consumption | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
|  |  |  |  |  |  |  |  |  |
| Animal products | 46.2 | 45.1 | 43.6 | 42.9 | 42.6 | 43.1 | 42.5 | 42.9 |
| Red meat | 9.4 | 8.7 | 8.1 | 7.9 | 7.7 | 7.9 | 7.7 | 7.9 |
| Dairy products | 30.6 | 29.8 | 28.3 | 27.8 | 27.7 | 27.9 | 27.7 | 27.7 |
| Poultry and eggs | 5.3 | 5.7 | 6.2 | 6.3 | 6.3 | 6.4 | 6.3 | 6.3 |
| Fish and shellfish | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Animal fat | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 |
| Crops and products | 53.8 | 54.9 | 56.4 | 57.1 | 57.4 | 56.9 | 57.5 | 57.1 |
| Fruits, juices and nuts | 14.4 | 14.1 | 13.8 | 13.7 | 14.2 | 13.9 | 14.2 | 13.8 |
| Vegetables | 19.1 | 19.6 | 20.6 | 21.1 | 20.9 | 20.7 | 20.9 | 20.6 |
| Vegetable oils | 3.0 | 3.0 | 3.1 | 2.8 | 2.8 | 2.8 | 2.9 | 3.2 |
| Grain cereals | 8.0 | 8.9 | 9.3 | 9.6 | 9.6 | 9.5 | 9.6 | 9.5 |
| Sweeteners and candy ${ }^{2}$ | 7.1 | 7.3 | 7.7 | 7.9 | 8.1 | 8.1 | 8.1 | 8.1 |
| Coffee, cocoa, tea | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| Beer and wine ${ }^{3}$ | 1.6 | 1.5 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |

${ }^{1}$ Calculated from weight in pounds.
${ }^{2}$ Sugar content of candy is subtracted to avoid double-counting.
${ }^{3}$ Includes crop content only.
Data source: www.ers.usda.gov (Jane Allshouse, 202-694-5449).

Table C-Import Share of U.S.-Consumed Food

| Selected items | 1980 | 1985 | 1990 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Imports ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Percent |  |  |  |  | Million \$ |
| Beef | 8.7 | 8.0 | 9.7 | 8.1 | 7.9 | 9.0 | 9.9 | 10.6 | 11.0 | 2,151.3 |
| Pork | 3.3 | 7.1 | 5.6 | 3.7 | 3.7 | 3.8 | 3.9 | 4.4 | 5.2 | 633.2 |
| Lamb | 9.4 | 9.2 | 11.4 | 18.5 | 21.9 | 25.2 | 31.3 | 31.3 | 35.6 | 206.7 |
| Fish and shellfish | 45.3 | 53.8 | 56.3 | 55.3 | 58.5 | 62.1 | 64.7 | 68.1 | 68.3 | 9,341.1 |
| Fresh and frozen | 56.8 | 62.8 | 65.8 | 66.0 | 70.6 | 74.3 | 76.6 | 78.5 | 81.7 | N.A. |
| Canned | 21.8 | 34.9 | 36.0 | 30.8 | 29.8 | 33.0 | 36.1 | 43.8 | 38.4 | N.A. |
| Dairy products | 1.7 | 2.0 | 1.9 | 1.9 | 2.0 | 1.9 | 2.9 | 2.9 | 2.7 | 1,650.7 |
| Cheese | 5.8 | 5.6 | 4.8 | 4.7 | 4.5 | 4.1 | 4.5 | 5.3 | 4.8 | 706.5 |
| Fruits-fresh and frozen | 5.8 | 9.0 | 13.2 | 15.4 | 16.5 | 17.6 | 19.1 | 21.0 | 21.8 | 2,028.5 |
| Citrus | 2.1 | 3.1 | 3.6 | 7.2 | 6.6 | 7.4 | 8.1 | 13.3 | 11.5 | 220.4 |
| Non-citrus | 7.3 | 10.8 | 16.0 | 18.0 | 19.8 | 21.2 | 22.8 | 22.9 | 24.9 | 1,808.1 |
| Apples | 4.0 | 5.9 | 4.3 | 6.1 | 7.7 | 7.3 | 7.0 | 6.6 | 7.2 | 99.6 |
| Avocados | 1.6 | 1.6 | 7.3 | 11.6 | 12.0 | 14.1 | 18.4 | 31.0 | 26.0 | 83.3 |
| Grapes | 12.6 | 29.6 | 41.1 | 41.8 | 37.8 | 41.9 | 42.8 | 43.1 | 44.3 | 548.4 |
| Melons | 10.5 | 9.6 | 15.4 | 17.0 | 18.6 | 21.9 | 24.8 | 23.0 | 25.7 | 276.7 |
| Pears | 3.4 | 6.8 | 11.4 | 11.6 | 14.1 | 20.9 | 16.0 | 21.1 | 21.2 | 77.2 |
| Strawberries | 22.1 | 10.0 | 13.0 | 12.3 | 10.6 | 8.5 | 10.1 | 14.9 | 11.8 | 85.5 |
| Fruits--processed | 1.7 | 2.2 | 2.6 | 2.6 | 2.8 | 2.8 | 2.6 | 3.1 | 3.1 | 681.2 |
| Fruit juices | 11.6 | 50.3 | 48.6 | 27.2 | 27.2 | 32.5 | 28.7 | 34.7 | 31.6 | 734.4 |
| Orange juice | 8.9 | 55.3 | 50.3 | 16.8 | 15.6 | 20.1 | 18.2 | 23.9 | 20.6 | 238.1 |
| Apple juice | 19.3 | 60.2 | 57.9 | 51.5 | 52.5 | 61.1 | 62.0 | 59.0 | 60.2 | 239.9 |
| Grape juice | 2.0 | 11.3 | 33.6 | 21.5 | 46.6 | 60.4 | 29.9 | 53.0 | 38.4 | 64.8 |
| Tree nuts | 25.5 | 26.7 | 35.6 | 33.6 | 43.4 | 43.8 | 41.4 | 45.7 | 38.5 | 718.2 |
| Pecans | 1.5 | 2.3 | 21.5 | 43.8 | 53.8 | 34.1 | 46.6 | 51.7 | 36.8 | 68.3 |
| Wine | 20.6 | 23.1 | 13.0 | 15.8 | 18.8 | 23.0 | 20.7 | 19.9 | 21.4 | 2,191.9 |
| Vegetables-fresh, frozen | 5.9 | 8.0 | 9.6 | 11.2 | 13.6 | 13.3 | 15.5 | 14.7 | 14.0 | 2,793.4 |
| Asparagus | 10.8 | 16.2 | 29.8 | 53.3 | 48.8 | 49.3 | 54.4 | 57.0 | 59.0 | 117.9 |
| Cucumbers | 36.0 | 36.3 | 33.7 | 38.3 | 42.9 | 38.1 | 40.2 | 39.7 | 41.1 | 169.2 |
| Onions | 5.5 | 8.7 | 10.1 | 10.2 | 12.6 | 11.2 | 11.9 | 11.4 | 9.3 | 146.4 |
| Peppers, bell \& chili | 26.5 | 23.7 | 19.7 | 19.1 | 19.8 | 22.5 | 24.8 | 24.4 | 19.6 | 428.2 |
| Potatoes | 1.2 | 3.8 | 6.8 | 6.8 | 11.0 | 10.2 | 14.5 | 14.0 | 14.3 | 408.6 |
| Squash | N.A. | N.A. | 19.8 | 24.3 | 29.4 | 29.3 | 30.0 | 29.3 | 27.1 | 117.9 |
| Tomatoes | 22.8 | 23.3 | 22.0 | 27.5 | 34.0 | 35.8 | 39.0 | 32.0 | 31.9 | 692.2 |
| Vegetables-processed | 3.1 | 6.7 | 3.6 | 3.5 | 3.3 | 3.9 | 3.9 | 4.8 | 3.9 | 1,996.9 |
| Artichokes | 19.6 | 24.0 | 20.3 | 32.3 | 39.7 | 42.6 | 50.6 | 41.4 | 40.5 | 66.4 |
| Mushrooms | 31.2 | 30.7 | 24.2 | 34.9 | 25.6 | 33.3 | 35.7 | 24.1 | 32.5 | 113.9 |
| Olives | 20.8 | 40.5 | 44.8 | 57.0 | 33.7 | 50.2 | 59.9 | 47.9 | 74.6 | 192.8 |
| Vegetable oils | 15.6 | 17.6 | 18.0 | 19.8 | 19.2 | 20.9 | 21.0 | 17.9 | 20.2 | 1,359.2 |
| Olive oil ${ }^{2}$ | 96.6 | 98.2 | 103.1 | 109.6 | 106.5 | 105.9 | 104.9 | 104.4 | 104.4 | 384.2 |
| Canola oil ${ }^{2}$ | 100.0 | 100.0 | 105.4 | 87.5 | 97.5 | 98.1 | 85.5 | 81.7 | 69.1 | 250.5 |
| Spices | 4.8 | 7.3 | 7.2 | 7.1 | 8.9 | 8.5 | 11.0 | 13.9 | 13.9 | 66.8 |
| Wheat | 0.3 | 2.1 | 4.1 | 6.9 | 9.3 | 9.4 | 10.4 | 9.3 | 8.7 | 252.3 |
| Rice | 0.3 | 3.4 | 5.1 | 7.2 | 10.3 | 9.0 | 9.4 | 8.3 | 9.6 | 178.6 |
| Barley | 3.3 | 3.5 | 7.7 | 23.7 | 21.4 | 23.4 | 17.5 | 16.1 | 17.0 | 79.8 |
| Cane and beet sugar | 45.4 | 34.9 | 29.9 | 19.6 | 29.3 | 28.4 | 22.0 | 18.2 | 16.4 | 542.3 |
| Confectionery products | 2.4 | 4.4 | 5.6 | 7.3 | 7.2 | 7.8 | 8.5 | 10.1 | 11.1 | 732.2 |
| Malt beverages | 2.6 | 4.2 | 4.5 | 5.8 | 6.5 | 7.2 | 8.3 | 9.0 | 9.9 | 2,095.7 |

${ }^{1}$ Average annual U.S. import value for fiscal years 1999 to 2001; N.A. $=$ not available.
${ }^{2}$ When some imports are re-exported and consumption falls below import levels, import share exceeds 100 percent.
Data source: www.ers.usda.gov.

