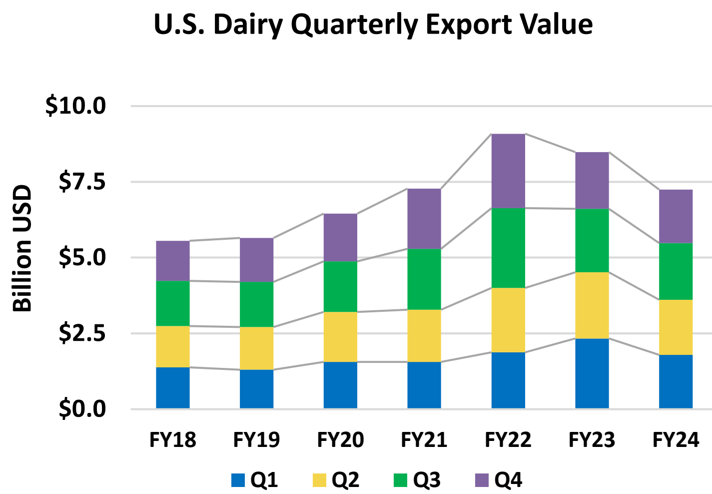
**United States Department of Agriculture** Foreign Agricultural Service

December 2023

# Dairy: World Markets and Trade

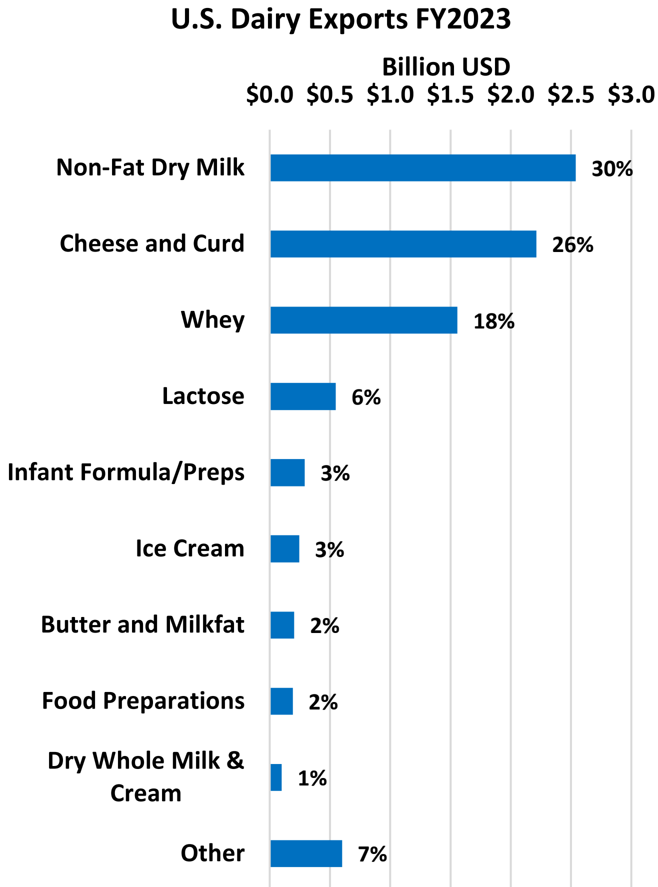
## U.S. Export Values Under Pressure in FY2024




FY2023 was a challenging year for U.S. dairy exporters, impacted by sluggish economic growth among importers and increased competition from New Zealand and the EU. However, a slightly weaker U.S. dollar in 2023 helped cushion losses in price competitiveness. Throughout the year, export values of non-fat dry milk (NDM), cheese, and whey remained lackluster, primarily due to weakening demand in China and Southeast Asia. Globally, higher interest rates impacted discretionary spending, particularly affecting dairy consumption, which is not a traditional staple of Asian diets – the most significant growth region for major exporters.

In 2024, U.S. exports are expected to face similar headwinds for much of the year. A combination of factors has impacted demand in key markets in Asia in 2023 and expected to continue into 2024. In 2023, after the end of COVID lockdowns, governments were under pressure to rein in fiscal spending and temper aggregate demand to combat high level of inflation. Central banks have raised interest rates to increase the cost of credit, leading to slowing private business investment for manufacturing exports in markets like the Philippines and Thailand. The resulting slowing of gross domestic product (GDP) and income growth has had spillover effects on discretionary spending. Consumers have also been grappling with high food inflation, substantial currency depreciation against the U.S. dollar that has also contributed to higher imported food prices, and high energy, all of which have put a dent in consumer purchasing power.

In China, the largest import market for dairy products, surplus raw milk production led to government subsidies to stabilize the domestic processing sector and resulted in reduced demand for imports of whole milk powder (mostly from New Zealand) and U.S. NDM. As China doesn’t produce meaningful amounts of higher value products like cheese or butter, surplus raw milk is purchased by dairy processors and converted into milk powder for storage in accordance with the "Fresh Milk Purchase and Sales Contract”. China whey imports also fell due




to weaker demand for infant formula use and swine feed, influenced by further declining birth rates and lower pork prices, respectively. Forecast declines in China's swine production are expected to lead to less feed use and therefore, whey. Large inventories of skim and whole milk powder will continue to limit export opportunities for the United States as well.

Year-over-year price declines for a number of U.S. dairy products are expected to persist early in 2024, pressuring export values. However, stronger demand for skim products is anticipated in the latter half of the year as U.S. price competitiveness improves. NDM and whey, pivotal for exports, are forecast to see sustained lower prices year over year in the first half of 2024, and volumes are expected to be weak due to soft demand from East and Southeast Asia.

The current WASDE projects average NDM prices at $1.17 per pound in FY2024, 8 percent lower than FY2023 levels. This decline is expected to be most pronounced in the first half of FY2024. Cheese prices are expected to average $1.71 per pound, down 8 percent from FY2023.

Expectations for only moderate growth in volumes of shipments and lower expected prices for dairy commodities through much of the year indicate that total dairy export values are forecast to contract in FY2024, most intensely in the first 2 quarters. FY2024 is forecast to resemble much of the monthly data in FY2023, in that signs of growth in some categories are invariably surmounted by declines in others. Gains in export values for cheese and infant formula are projected to be more than offset by declines in skim milk powder, whey, lactose and butter.

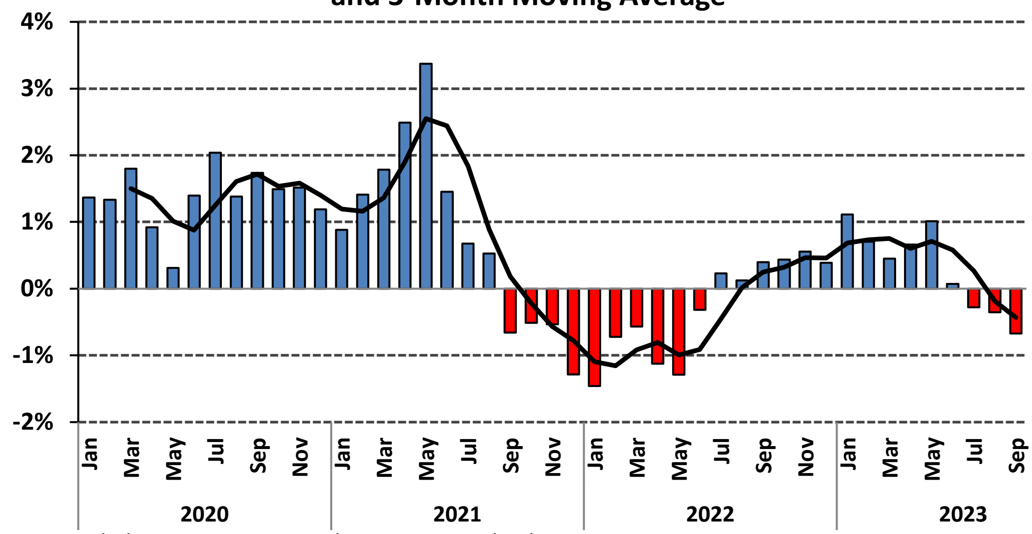
# Fluid Milk

**Milk Production Summary for Major Exporters (Million metric tons)**

| | 2022 | 2023 Forecast | 2024 Forecast | 2023-2024 Change |
|---|---|---|---|---|
| **Argentina** | 11.9 | 11.7 | 11.5 | **-2%** |
| **Australia** | 8.5 | 8.4 | 8.5 | **1%** |
| **European Union** | 144.4 | 144.8 | 144.6 | **0%** |
| **New Zealand** | 21.1 | 21.3 | 21.2 | **0%** |
| **United States** | 102.7 | 102.9 | 103.9 | **1%** |
| **Major Exporter Total** | **288.6** | **289.2** | **290.1** | **0%** |

Note: Data is rounded.

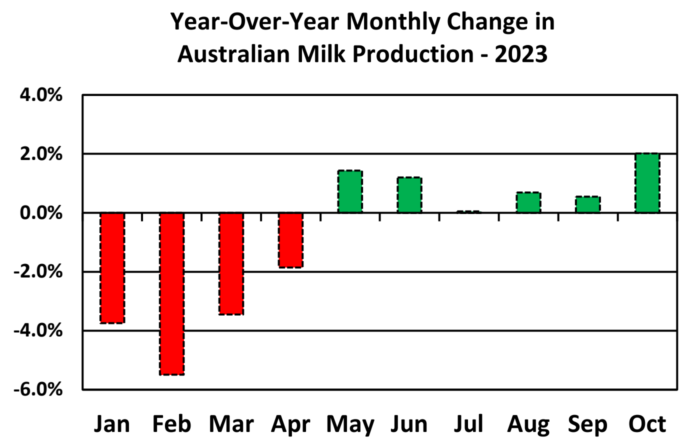
**Percent Change in Monthly Milk Production for Major Milk Producers and 3-Month Moving Average**




Note: --Includes, Argentina, Australia, EU, New Zealand, U.S.

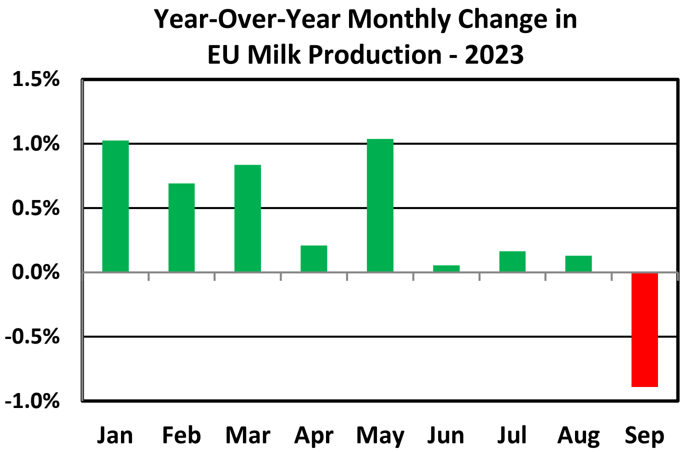
- In **Australia**, milk production is forecast to increase 1 percent to 8.5 million tons in 2024 as beef cattle prices have fallen and labor shortages abated. Both issues have been major contributing factors in the decline in milk production over the prior 3 years. A rebuild in the beef herd after multi-year droughts from 2017-2019 saw significant conversions of dairy farms into beef cattle farms, where operations are less labor intensive, and operating costs are more easily controlled. Over the last 18 months, beef cattle prices have retreated considerably as beef cattle supplies rebounded. Labor shortages continue to be an issue for Australian dairy farmers, but have also improved as the number of working holidaymakers has returned to pre-pandemic levels and workers entering as part of the Pacific Australia Labor Mobility (PALM) scheme are at record levels. The dual effects of improved labor availability and significantly weaker beef cattle prices have stifled the incentive for dairy farmers to transition to beef cattle farming.

Strong farmgate milk prices are expected to continue in 2024, providing further tailwinds for increased milk production. This surge in prices is fueled by a growing number of domestic processors vying for a diminishing milk pool. Australia consumes 65 percent of its production domestically and higher costs are passed to domestic wholesalers, particularly with short shelf-life products with limited import competition. The relatively high share of milk used domestically which limited exposure to lower international prices, coupled with ability to pass higher costs to domestic wholesalers intensified competition for milk supply, ultimately contributing to farm-gate milk prices this season that surpassed initial projections. This is evident in the price gap between Australian and New Zealand milk, where the former exports 35 percent of production, while the latter, heavily influenced by world export prices, exports 90 percent of its milk production.



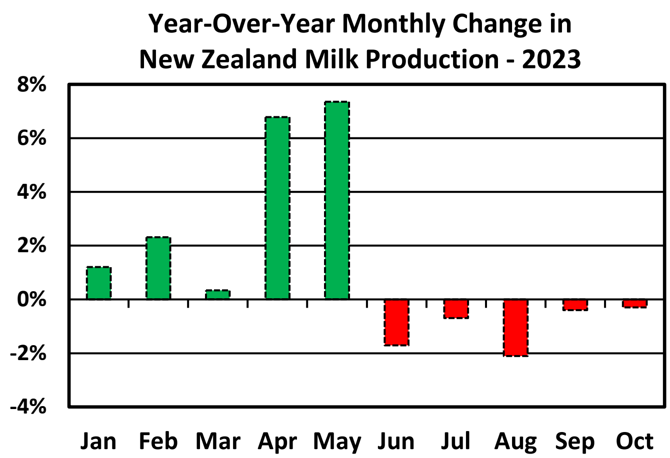

- **Argentina** milk production is forecast to fall over 2 percent in 2024 to 11.5 million tons. This would mark the second consecutive year of declines and an acceleration from the previous year's decline. Producer margins have come under substantial pressure from currency devaluation, which has raised the cost of feed and imported inputs for producers. These price increases are expected to curtail growth in output per cow in the coming year.

- In the **European Union**, a marginal decline in milk production is anticipated, with a decrease of 200,000 tons bringing the total to 144.6 million. A modest improvement in cow productivity is insufficient to counteract additional reductions in the dairy herd. Persistent declines in farmgate milk prices, coupled with consistently high production costs, continue to exert pressure on dairy farmers, particularly in major producing member states such as Germany, France, Spain, and Poland.



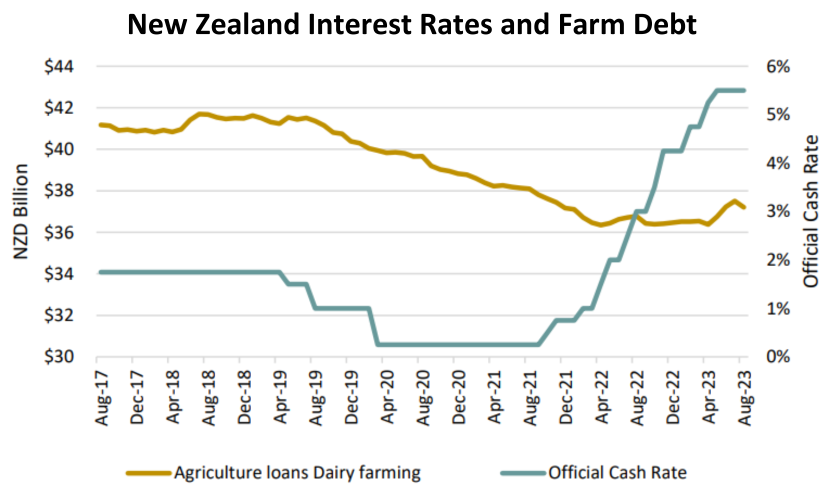

The impact is more pronounced among smaller farms that lack the capacity to capitalize on efficiencies of scale or organized negotiating power with processors to drive competition for portions of the milk pool. Notably, producers are also grappling with adherence to environmental regulations. Initiatives such as the Dutch government's nitrogen emissions cap and the Irish government's proposed voluntary payment scheme to incentivize dairy cow slaughter add further complexity. These factors are expected to lead to further market consolidation and closures among smaller producers. However, larger operators are anticipated to maintain herd numbers, thereby slowing the pace of herd reduction in 2024.

- In 2024, **New Zealand** milk production is projected to experience a marginal decline to 21.2 million tons, as dairy farmers are faced with several challenges. Factors most prominently contributing to this outlook include the impact of El Niño weather patterns, a reduction in farmgate milk prices, persistent on-farm inflation, and a shrinking dairy herd. New Zealand's pastoral-based production system heavily relies on adequate levels of rainfall to build feed reserves for spring. Forecast dry conditions during the summer months (December-February), according to the most recent seasonal climate outlook released by the National Institute of Water and Atmospheric Research, are expected to hamper pasture growth and the accumulation of feed reserves, particularly in the North Island, which constitutes 57 percent of the dairy herd.




Farmgate milk prices are also under pressure, with Fonterra recently reducing the mid-point payment being offered to producers for milk solids to NZ$6.75. This represents a 27-percent decline from the previous year and is NZ$1.00 less than the Winter offer. This coincides with the highest on-farm inflation in 40 years, affecting all farm inputs from energy to feed to labor.

Most prominent among heightened costs are interest rates on farm debt, propelled by significant hikes by the New Zealand Reserve Bank (RBNZ) in the official cash rate (the equivalent of the U.S. Federal Reserve's federal funds rate), which has doubled over the last 12 months. Notably, 80 percent of farming term liabilities in New Zealand are floating, subject to re-indexing based on the official cash rate every 6 months. While the RBNZ has declared a pause in rates after its latest hike in May 2023, historically, there is a 12-month lag in central bank interest rate changes and economic behavior, and, therefore, the repercussions of rate hikes are expected to reverberate throughout 2024.



Source: Reserve Bank of New Zealand

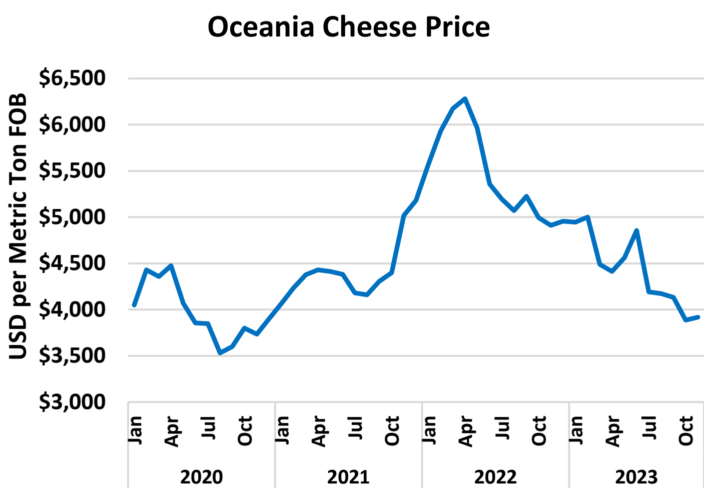
## Cheese

**Cheese Exports Summary for Major Exporters (1,000 tons)**

| | 2022 | 2023 Forecast | 2024 Forecast | 2023-2024 Change |
|---|---|---|---|---|
| **Australia** | 145 | 130 | 160 | **23%** |
| **Belarus** | 310 | 310 | 315 | **2%** |
| **European Union** | 1,336 | 1,355 | 1,380 | **1%** |
| **New Zealand** | 340 | 391 | 370 | **-5%** |
| **United Kingdom** | 176 | 175 | 180 | **6%** |
| **United States** | 451 | 430 | 466 | **8%** |
| **Major Exporter Total** | **2,758** | **2,791** | **2,871** | **3%** |

Note: Data is rounded.

- **Australia** is forecast to increase cheese production by 5 percent to 445,000 tons in 2024, continuing the industry-wide trend of milk processors funneling the larger milk pool toward cheese and away from other processed products. Over the past 12 months, prices for cheese were more resilient relative to other dairy commodities, declining at half the rate of skim milk powder and whey and less than butter. In a change from prior years' cheddar cheese production fell 3 percent, while all cheese production increased 6 percent in 2023. This may indicate a shift toward production of specialized cheeses varieties that cater more to export markets.




  Cheese exports are forecast to rebound significantly in 2024 after a weak 2023, supported by improving import demand and a regain in competitiveness in Japan, China, South Korea, and the Philippines.

- In the **European Union**, cheese production is forecast up marginally in 2024 despite weaker milk production as profitability is expected to remain higher compared to butter and milk powders. As the industry grapples with a reduced milk supply, processors are expected to funnel a larger share of the milk pool toward cheese production, prioritizing it over other dairy products. Additionally, slowing demand in China for milk powders may encourage an increased focus on cheese production. On the domestic front, heightened consumption is expected, driven by rising incomes, economic recovery, and the resurgence of the hospitality sector and tourism to pre-COVID levels.

EU cheese exports are estimated to climb by 1 percent in 2024, propelled by a global uptick in cheese demand. UK importers are actively seeking cost-effective EU products to offset higher exports.

- **New Zealand** cheese production surged in 2023, up 7 percent to 400,000 tons, as an unexpectedly strong year for milk production meant more manufacturing milk being pushed for processing. In 2024, production is forecast to remain unchanged, despite shrinking milk output. A larger percentage of the milk pool is being funneled to cheese production amid stronger demand from Japan, China and South Korea. Sustained investments over time by processors have greatly expanded New Zealand's processing output, in turn allowing exporters to meet rising demand from burgeoning Asian markets, especially for mozzarella. Cheese exports are forecast to decline in 2024, as increased competitiveness from Australia and the EU is expected to pressure market share in markets like China and Japan.

- In the **United States**, significant investments have been made in expanding processing capacity to meet growing domestic and global demand for cheese. In 2024, that expanded capacity and the accelerated growth in milk production is expected to drive a 2-percent increase in cheese production of 6.5 million tons. If realized, this would be a record on a milk fats equivalence basis for percentage of milk for manufacturing going toward the production of cheese. A slowdown in the growth of milk production in 2023, coupled with relatively strong domestic demand, limited exportable supplies and weakened U.S. price competitiveness in export markets. In 2024, larger supplies will support an 8-percent jump in exports to 466,000 tons. Higher import demand is expected from Japan, China, Mexico, South Korea, and the Philippines.

# Butter (Includes Butteroil/AMF)

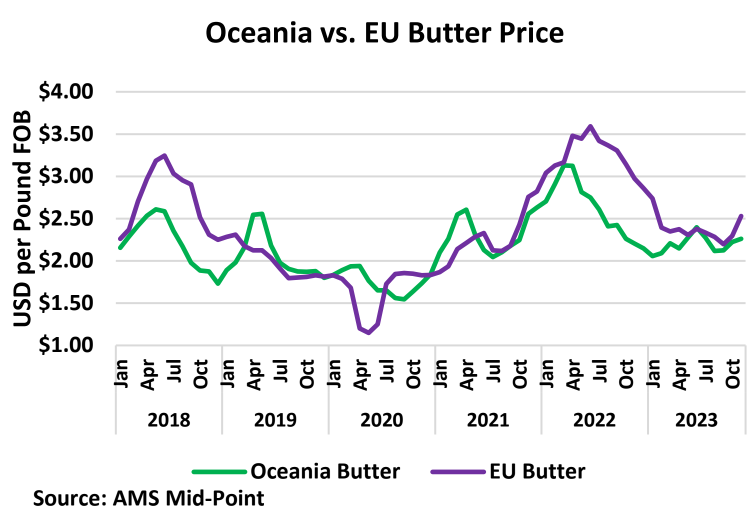
**Butter Exports Summary for Major Exporters (1,000 tons)**

| | 2022 | 2023 Forecast | 2024 Forecast | 2023-2024 Change |
|---|---|---|---|---|
| **Belarus** | 78 | 80 | 82 | **3%** |
| **European Union** | 255 | 285 | 275 | **-4%** |
| **New Zealand** | 494 | 520 | 480 | **-8%** |
| **United Kingdom** | 51 | 55 | 65 | **18%** |
| **United States** | 82 | 37 | 41 | **11%** |
| **Major Exporter Total** | **960** | **977** | **943** | **-3%** |

Note: Data is rounded.

- Butter production in the **European Union** is forecast to decline to 2.1 million tons in 2024, down 20,000 tons from 2023, as processors prioritize the smaller milk pool toward cheese production. Improving butter prices in 2024 are expected to dampen an expected shift away from butter production; however, domestic consumer preferences for healthier alternatives are expected to weigh on processors' motivation to expand production. In 2023, butter production from January through September was 2 percent higher year over year, despite the significant decline in butter prices globally. This trend is forecast to continue through the end of the year, resulting in an upward version to the previous production forecast, with butter production estimated at 2.1 million tons.

  EU butter exports are forecast to decline 4 percent to 275,000 tons because of lower production and stronger export competition, particularly from New Zealand. Butter prices bottomed out in September and are expected to stabilize throughout 2024; however, a price gap is beginning to emerge with Oceania. In November, EU prices were \$2.57/lb whereas Oceania prices were \$2.25/lb. This wedge is expected to persist through the year, constraining prospects for further export growth in major markets in East Asia.




- In **New Zealand** butter production is expected to continue growing again in 2024, up 3 percent to 525,000 tons. Volumes are expected to shift towards production of high milk fat products as demand for whole milk powder remains depressed in major markets including China, Indonesia, Bangladesh, and Singapore. However, processing capacity remains slow to respond to changes in market prices despite strengthening butter prices. Therefore, much of the ramp up in butter manufacturing is expected in the second half of the year. Exports are forecast to decline in 2024 relative to a strong export year in 2023 as exportable supplies remain relatively tight.

- Butter demand in **China** has grown tremendously over the last decade; however, in 2024, domestic consumption is forecast to show little growth as economic conditions weigh on demand from the food and service industry. Bakeries make up most butter use in China and, as economic prospects for the year have turned pessimistic, many have cut back on capacity utilization to save costs. Additionally, bakeries have reportedly opted to use more plant-based butter rather than dairy butter to cut costs. While China has made concerted efforts to become self-sufficient in dairy products, processing capacity remains a significant constraint to butter production, and imports remain the primary means of supply. Imports in 2024 are forecast to mirror domestic consumption and remain little changed, with New Zealand acting as the dominant supplier.

# Skim Milk Powder (SMP)

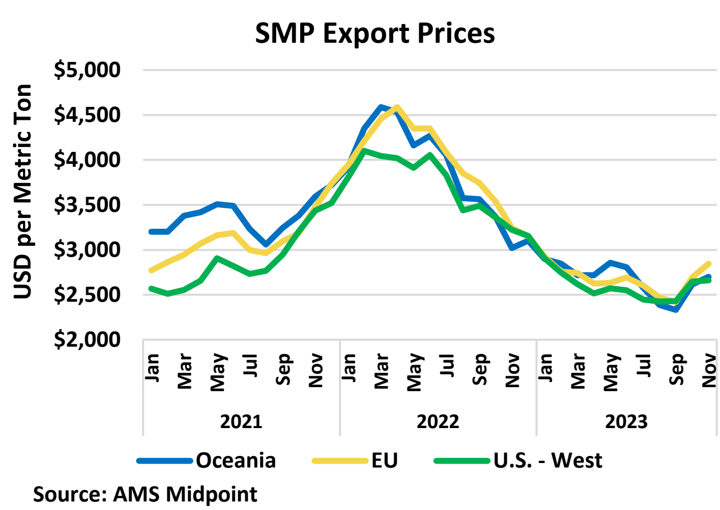
**SMP Exports Summary for Major Exporters (1,000 tons)**

| | 2022 | 2023 Forecast | 2024 Forecast | 2023-2024 Change |
|---|---|---|---|---|
| **Australia** | 154 | 125 | 125 | **0%** |
| **Belarus** | 123 | 123 | 125 | **2%** |
| **European Union** | 708 | 815 | 810 | **-1%** |
| **New Zealand** | 357 | 465 | 440 | **-5%** |
| **United States** | 827 | 810 | 838 | **3%** |
| **Major Exporter Total** | **2,169** | **2,338** | **2,338** | **0%** |

Note: Data is rounded.

- **Australia** exports of SMP are projected to hold steady at 125,000 tons in 2024, mirroring the underwhelming performance of exports in 2023, a period affected by reduced competitiveness stemming from high farmgate milk prices. Farmgate milk prices are expected to gradually ease in the latter half of 2024 and may provide short-term improvements in export competitiveness; however, a forecast 3-percent decline in SMP production to 140,000 tons will constrain exportable supplies and hence, exports. Australia already exports a significant portion of SMP production and is unable to expand exports without allocating larger portions of the milk pool to SMP production. However, the dairy industry is expected to increase cheese production due to higher returns.

- SMP production in the **European Union** is forecast at just under 1.5 million tons, a reduction of 3 percent from 2023, as lower milk production and weaker import demand from Asia encourages processors to shift processing milk into cheese production. Exports are also expected to decline 1 percent to 810,000 tons. China and Algeria are once again expected to be the EU's largest export markets for SMP. However, growth will be muted in 2024 by higher milk powder production in China and import controls in Algeria.




- SMP output in the **United States** is forecast to grow 11 percent in 2024 to 1.30 million tons, reflecting higher milk production and relatively large supplies of skim milk for drying. Exports are slated to grow 3 percent to 838,000 tons, a reversal from the modest decline in exports in 2023, reflecting larger exportable supplies and recovery in shipments to price sensitive markets in East and Southeast Asia. The gap between U.S. and EU prices has narrowed to parity over the course of 2023 and is expected to skew in favor of U.S. exports in 2024. In November, EU prices for SMP were quoted at $1.36/ pound FOB while the U.S. price for Western low-medium heat NDM FOB was quoted at $1.21/pound. In 2024, exchange rates are also forecast to shift in favor of U.S. exports as the U.S. Federal Reserve is expected to cut interest rates, improving purchasing power for U.S. dairy commodities, especially in a period of global economic uncertainty.

# Whole Milk Powder (WMP)

**WMP Exports Summary for Major Exporters (1,000 tons)**

| | 2022 | 2023 Forecast | 2024 Forecast | 2023-2024 Change |
|---|---|---|---|---|
| **Argentina** | 154 | 105 | 165 | **57%** |
| **Australia** | 58 | 45 | 40 | **-11%** |
| **European Union** | 236 | 260 | 250 | **-4%** |
| **New Zealand** | 1,328 | 1,350 | 1,325 | **-2%** |
| **Major Exporter Total** | **1,776** | **1,760** | **1,780** | **1%** |

Note: Data is rounded.

- **New Zealand** WMP production is forecast to decline to just under 1.4 million tons in 2024, reflecting a smaller milk pool and lower profitability for WMP production relative to other products. Higher returns are anticipated for specialty products such as protein concentrates, whey and anhydrous milk fat. Lower WMP output is expected to negatively impact shipments, with exports forecast to decline by 2 percent. Forecast weaker import demand from China and stagnant demand from Algeria and Indonesia are also expected to weigh on exports.

- **China** imports of WMP are forecast to fall by 3 percent in 2024 to 425,000 tons due to a build-up of stocks in 2023 and developing consumer preference for raw milk products over reconstituted products. Significant surplus in raw milk production has forced the government to implement subsidy policies to stabilize the domestic processing sector, encouraging greater production of whole milk powder. As China does not produce meaningful amounts of higher value products like cheese or butter, most dairy companies process raw milk into milk powder for storage in accordance with the "Fresh Milk Purchase and Sales Contract".

## U.S. DAIRY EXPORT FORECASTS:

### U.S. Dairy Products Export Forecast - Calendar Year 2023-2024

| | 2023(For) | Milk Equivalent (Mil. Lbs.) Fat | Skims | 2024 (For) | Milk Equivalent (Mil. Lbs.) Fat | Skims |
|---|---|---|---|---|---|---|
| NON-FAT DRY AND SKIM MILK PWDR | 809,663 MT | 346 | 18,802 | 837,500 MT | 355 | 19,493 |
| MILK POWDER > 1.5% MILK FAT | 27,781 MT | 394 | 459 | 35,750 MT | 500 | 586 |
| BUTTER/MILKFAT/SPREADS | 36,809 MT | 1,640 | 8 | 41,400 MT | 1,851 | 9 |
| CHEESE AND CURD | 430,480 MT | 6,281 | 3,603 | 465,500 MT | 6,781 | 3,693 |
| FLUID PRODUCTS 4/ | 183,088 Liters | 528 | 381 | 188,700 Liters | 485 | 391 |
| DRIED WHEY PRODUCTS | 560,376 MT | 627 | 12,279 | 626,000 MT | 751 | 14,321 |
| LACTOSE | 477,443 MT | 24 | 11,566 | 497,000 MT | 16 | 12,064 |
| OTHER DAIRY PRODUCTS | 214,395 MT | 715 | 2,891 | 225,000 MT | 681 | 2,642 |
| TOTAL - Billion Pounds | | 10,554 | 49,989 | | 11,422 | 53,198 |

Note: 1) CY 2023 includes actual exports through October 2023
2) Milk Equivalent figures are rounded and totals may not add up.
3) Forecasts assume current policy
4/ Includes milk based drinks, fluid whey, cream and fluid milk

## EXPORTS ON A MILK EQUIVALENT BASIS THROUGH OCTOBER 2023:

| Top Dest. -M.E. Milkfat Basis (Mill. lbs) | 2023 | |
|---|---|---|
| MEXICO | 2,439 | 27% |
| CANADA | 1,577 | 18% |
| SOUTH KOREA | 643 | 7% |
| JAPAN | 603 | 7% |
| CHINA (MAINLAND) | 422 | 5% |
| AUSTRALIA | 413 | 5% |
| Other | 2,869 | 32% |
| TOTAL | 8,967 | |

| Top Dest.-M.E. Skim Basis (Mill. lbs) | 2023 | |
|---|---|---|
| MEXICO | 11,670 | 28% |
| CHINA (MAINLAND) | 7,985 | 19% |
| PHILIPPINES | 2,755 | 7% |
| INDONESIA | 2,403 | 6% |
| JAPAN | 1,867 | 4% |
| CANADA | 1,709 | 4% |
| Other | 13,461 | 32% |
| TOTAL | 41,851 | |

Additional Resources:

For additional information, please contact Jeffrey Dwyer at 202-690-0755 or Jeffrey.Dwyer2@usda.gov

Subscription services for FAS circulars can be obtained at: https://public.govdelivery.com/accounts/USDAFAS/subscriber/new

Individual FAS country reports covering dairy are available at: https://gain.fas.usda.gov/#/

The USDA Production, Supply and Demand database is available at: https://apps.fas.usda.gov/psdonline/app/index.html#/app/home
A monthly “Livestock, Dairy, and Poultry Outlook” for the United States published by the

Economic Research Service is available at: https://www.ers.usda.gov/publications/.

U.S. trade data is available on the Global Agricultural Trade System (GATS):
https://apps.fas.usda.gov/gats/default.aspx

The next publication of this circular will be on July 23, 2024.

## Fluid Milk - Cow Numbers: Summary For Selected Countries

**1,000 Head**

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 Dec |
|---|---|---|---|---|---|---|
| **Cows In Milk** | | | | | | |
| India | 54,600 | 56,450 | 58,000 | 59,500 | 61,000 | 61,500 |
| European Union | 21,029 | 20,766 | 20,514 | 20,213 | 20,088 | 20,000 |
| Brazil | 16,500 | 16,400 | 16,646 | 16,896 | 17,065 | 17,300 |
| Mexico | 6,500 | 6,550 | 6,600 | 6,650 | 6,700 | 6,750 |
| China | 6,100 | 6,150 | 6,200 | 6,400 | 6,500 | 6,450 |
| Russia | 6,711 | 6,615 | 6,495 | 6,430 | 6,350 | 6,290 |
| New Zealand | 4,946 | 4,922 | 4,904 | 4,875 | 4,800 | 4,750 |
| United Kingdom | 1,879 | 1,867 | 1,856 | 1,867 | 1,856 | 1,840 |
| Argentina | 1,598 | 1,610 | 1,562 | 1,546 | 1,530 | 1,499 |
| Belarus | 1,498 | 1,485 | 1,480 | 1,475 | 1,470 | 1,465 |
| Ukraine | 1,970 | 1,789 | 1,722 | 1,591 | 1,400 | 1,300 |
| Australia | 1,440 | 1,385 | 1,365 | 1,335 | 1,270 | 1,250 |
| Canada | 968 | 972 | 980 | 975 | 970 | 970 |
| Japan | 730 | 715 | 726 | 737 | 715 | 710 |
| Korea, South | 204 | 202 | 204 | 203 | 200 | 195 |
| Taiwan | 62 | 63 | 65 | 66 | 66 | 65 |
| Philippines | 11 | 11 | 11 | 12 | 11 | 10 |
| **Subtotal** | 126,746 | 127,952 | 129,330 | 130,771 | 131,991 | 132,344 |
| **United States** | 9,337 | 9,392 | 9,449 | 9,402 | 9,400 | 9,360 |
| **Total** | 136,083 | 137,344 | 138,779 | 140,173 | 141,391 | 141,704 |

## Cows Milk Production and Consumption: Summary For Selected Countries

1,000 Metric Tons

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 Dec |
|---|---|---|---|---|---|---|
| **Cows Milk Production** | | | | | | |
| European Union | 143,060 | 145,436 | 144,833 | 144,378 | 144,800 | 144,600 |
| India | 92,000 | 93,800 | 96,000 | 97,000 | 99,000 | 99,500 |
| China | 32,012 | 34,400 | 36,830 | 39,200 | 41,000 | 41,500 |
| Russia | 31,154 | 32,010 | 32,020 | 32,150 | 32,300 | 32,500 |
| Brazil | 24,262 | 24,965 | 24,845 | 23,660 | 24,700 | 25,200 |
| New Zealand | 21,896 | 21,980 | 21,995 | 21,051 | 21,300 | 21,200 |
| United Kingdom | 15,429 | 15,447 | 15,428 | 15,447 | 15,500 | 15,600 |
| Mexico | 12,650 | 12,750 | 12,850 | 12,980 | 13,250 | 13,500 |
| Argentina | 10,640 | 11,445 | 11,900 | 11,904 | 11,700 | 11,500 |
| Canada | 9,903 | 10,035 | 10,157 | 10,178 | 10,265 | 10,310 |
| Australia | 8,832 | 9,099 | 9,067 | 8,450 | 8,400 | 8,500 |
| Belarus | 7,394 | 7,765 | 7,830 | 7,910 | 7,980 | 8,050 |
| Japan | 7,314 | 7,438 | 7,515 | 7,630 | 7,250 | 7,230 |
| Ukraine | 9,646 | 9,258 | 8,800 | 7,780 | 6,900 | 6,500 |
| Korea, South | 2,035 | 2,088 | 2,030 | 2,040 | 2,020 | 1,980 |
| Taiwan | 410 | 437 | 450 | 460 | 465 | 470 |
| Philippines | 17 | 17 | 16 | 17 | 17 | 17 |
| **Subtotal** | 428,654 | 438,370 | 442,566 | 442,235 | 446,847 | 448,157 |
| **United States** | 99,084 | 101,292 | 102,646 | 102,722 | 102,921 | 103,874 |
| **Total** | 527,738 | 539,662 | 545,212 | 544,957 | 549,768 | 552,031 |
| **Fluid Use Dom. Consum.** | | | | | | |
| India | 79,000 | 81,000 | 83,000 | 85,000 | 87,050 | 89,000 |
| European Union | 23,373 | 24,106 | 23,951 | 23,800 | 23,700 | 23,650 |
| China | 13,200 | 13,000 | 15,595 | 16,250 | 16,720 | 17,000 |
| Brazil | 10,900 | 11,170 | 11,120 | 10,564 | 11,000 | 11,300 |
| Russia | 7,270 | 7,080 | 6,990 | 6,900 | 6,800 | 6,700 |
| United Kingdom | 6,423 | 6,385 | 6,261 | 6,281 | 6,200 | 6,170 |
| Mexico | 4,190 | 4,145 | 4,150 | 4,166 | 4,210 | 4,260 |
| Japan | 4,000 | 4,020 | 4,050 | 4,065 | 3,850 | 3,730 |
| Ukraine | 4,967 | 5,025 | 4,960 | 4,387 | 3,851 | 3,490 |
| Canada | 2,816 | 2,844 | 2,751 | 2,721 | 2,705 | 2,685 |
| Australia | 2,536 | 2,528 | 2,490 | 2,450 | 2,430 | 2,410 |
| Argentina | 1,645 | 1,800 | 1,900 | 1,800 | 1,750 | 1,600 |
| Korea, South | 1,574 | 1,523 | 1,542 | 1,535 | 1,520 | 1,495 |
| Belarus | 1,055 | 1,075 | 1,085 | 1,080 | 1,075 | 1,070 |
| New Zealand | 520 | 525 | 530 | 535 | 535 | 535 |
| Taiwan | 443 | 475 | 479 | 480 | 485 | 500 |
| Philippines | 117 | 119 | 110 | 137 | 125 | 129 |
| **Subtotal** | 164,029 | 166,820 | 170,964 | 172,151 | 174,006 | 175,724 |
| **United States** | 21,050 | 21,027 | 21,000 | 20,900 | 20,650 | 20,400 |
| **Total** | 185,079 | 187,847 | 191,964 | 193,051 | 194,656 | 196,124 |

## Cheese Production and Consumption: Summary For Selected Countries

**1,000 Metric Tons**

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 Dec |
|---|---|---|---|---|---|---|
| **Production** | | | | | | |
| European Union | 10,155 | 10,362 | 10,401 | 10,340 | 10,390 | 10,420 |
| Russia | 983 | 1,059 | 1,075 | 1,085 | 1,100 | 1,115 |
| Brazil | 770 | 790 | 790 | 745 | 770 | 780 |
| Canada | 515 | 523 | 522 | 517 | 522 | 530 |
| United Kingdom | 472 | 488 | 503 | 515 | 520 | 530 |
| Argentina | 523 | 488 | 530 | 535 | 520 | 480 |
| Mexico | 437 | 446 | 448 | 455 | 465 | 474 |
| Australia | 364 | 379 | 393 | 400 | 425 | 445 |
| New Zealand | 365 | 350 | 380 | 375 | 400 | 400 |
| Belarus | 300 | 346 | 355 | 370 | 380 | 380 |
| Others | 285 | 289 | 296 | 267 | 254 | 259 |
| **Total Foreign** | 15,169 | 15,520 | 15,693 | 15,604 | 15,746 | 15,813 |
| **United States** | 5,959 | 6,005 | 6,242 | 6,379 | 6,400 | 6,545 |
| **Total** | 21,128 | 21,525 | 21,935 | 21,983 | 22,146 | 22,358 |
| **Total Dom. Consumption** | | | | | | |
| European Union | 9,019 | 9,183 | 9,212 | 9,191 | 9,200 | 9,230 |
| Russia | 1,231 | 1,338 | 1,363 | 1,390 | 1,430 | 1,480 |
| Brazil | 795 | 817 | 817 | 774 | 808 | 823 |
| United Kingdom | 790 | 783 | 749 | 750 | 780 | 790 |
| Mexico | 551 | 549 | 568 | 597 | 633 | 644 |
| Canada | 539 | 555 | 562 | 559 | 566 | 581 |
| Argentina | 461 | 420 | 457 | 435 | 440 | 395 |
| Australia | 297 | 305 | 330 | 330 | 365 | 380 |
| Japan | 346 | 335 | 335 | 326 | 297 | 314 |
| China | 127 | 143 | 194 | 165 | 197 | 208 |
| Others | 555 | 595 | 621 | 567 | 542 | 543 |
| **Total Foreign** | 14,711 | 15,023 | 15,208 | 15,084 | 15,258 | 15,388 |
| **United States** | 5,751 | 5,745 | 5,964 | 6,055 | 6,106 | 6,231 |
| **Total** | 20,462 | 20,768 | 21,172 | 21,139 | 21,364 | 21,619 |

## Cheese Trade: Summary For Selected Countries

**1,000 Metric Tons**

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 Dec |
|---|---|---|---|---|---|---|
| **Total Exports** | | | | | | |
| European Union | 1,348 | 1,402 | 1,385 | 1,336 | 1,355 | 1,380 |
| New Zealand | 335 | 323 | 361 | 340 | 391 | 370 |
| Belarus | 244 | 275 | 298 | 310 | 310 | 315 |
| United Kingdom | 206 | 190 | 154 | 176 | 175 | 180 |
| Australia | 160 | 153 | 157 | 145 | 130 | 160 |
| Argentina | 61 | 70 | 78 | 82 | 82 | 87 |
| Russia | 26 | 30 | 35 | 40 | 45 | 50 |
| Others | 30 | 35 | 35 | 38 | 37 | 41 |
| **Total Foreign** | 2,410 | 2,478 | 2,503 | 2,467 | 2,525 | 2,583 |
| **United States** | 357 | 355 | 402 | 451 | 433 | 466 |
| **Total** | 2,767 | 2,833 | 2,905 | 2,918 | 2,958 | 3,049 |
| **Total Imports** | | | | | | |
| United Kingdom | 524 | 485 | 400 | 411 | 435 | 440 |
| Russia | 273 | 311 | 326 | 345 | 375 | 375 |
| Japan | 303 | 292 | 288 | 274 | 250 | 265 |
| European Union | 212 | 223 | 196 | 187 | 165 | 190 |
| Mexico | 121 | 114 | 132 | 156 | 180 | 185 |
| China | 115 | 129 | 176 | 145 | 172 | 180 |
| Korea, South | 131 | 148 | 157 | 154 | 142 | 145 |
| Others | 277 | 309 | 339 | 321 | 339 | 339 |
| **Total Foreign** | 1,956 | 2,011 | 2,014 | 1,993 | 2,058 | 2,119 |
| **United States** | 139 | 128 | 145 | 143 | 134 | 144 |
| **Total** | 2,095 | 2,139 | 2,159 | 2,136 | 2,192 | 2,263 |

## Butter Production and Consumption: Summary For Selected Countries

**1,000 Metric Tons**

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 Dec |
|---|---|---|---|---|---|---|
| **Production** | | | | | | |
| India | 5,850 | 6,100 | 6,300 | 6,500 | 6,750 | 6,900 |
| European Union | 2,125 | 2,173 | 2,141 | 2,090 | 2,100 | 2,080 |
| New Zealand | 525 | 500 | 470 | 500 | 510 | 525 |
| Russia | 268 | 282 | 270 | 275 | 280 | 285 |
| Mexico | 231 | 233 | 235 | 236 | 245 | 250 |
| United Kingdom | 194 | 194 | 212 | 205 | 215 | 225 |
| Canada | 112 | 118 | 122 | 120 | 125 | 130 |
| Belarus | 116 | 120 | 121 | 123 | 125 | 127 |
| China | 110 | 108 | 109 | 109 | 110 | 115 |
| Brazil | 85 | 82 | 82 | 81 | 81 | 82 |
| Others | 254 | 270 | 254 | 230 | 216 | 215 |
| **Total Foreign** | 9,870 | 10,180 | 10,316 | 10,469 | 10,757 | 10,934 |
| **United States** | 905 | 973 | 936 | 934 | 955 | 965 |
| **Total** | 10,775 | 11,153 | 11,252 | 11,403 | 11,712 | 11,899 |
| **Domestic Consumption** | | | | | | |
| India | 5,803 | 6,081 | 6,289 | 6,458 | 6,725 | 6,870 |
| European Union | 1,900 | 1,909 | 1,927 | 1,910 | 1,870 | 1,870 |
| Russia | 384 | 402 | 393 | 389 | 400 | 410 |
| Mexico | 277 | 266 | 256 | 245 | 265 | 270 |
| China | 198 | 230 | 246 | 260 | 246 | 253 |
| United Kingdom | 195 | 203 | 212 | 207 | 213 | 210 |
| Canada | 141 | 141 | 147 | 150 | 160 | 165 |
| Australia | 104 | 106 | 95 | 91 | 92 | 95 |
| Japan | 83 | 79 | 81 | 85 | 92 | 94 |
| Brazil | 89 | 85 | 88 | 86 | 87 | 86 |
| Others | 201 | 200 | 180 | 164 | 168 | 165 |
| **Total Foreign** | 9,375 | 9,702 | 9,914 | 10,045 | 10,318 | 10,488 |
| **United States** | 940 | 978 | 981 | 924 | 1,004 | 1,009 |
| **Total** | 10,315 | 10,680 | 10,895 | 10,969 | 11,322 | 11,497 |

Note: Butter includes butter, butteroil and anhydrous milk fat on a butter equivalent basis.

## Butter Trade: Summary For Selected Countries

**1,000 Metric Tons**

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 Dec |
|---|---|---|---|---|---|---|
| **Total Imports** | | | | | | |
| China | 91 | 123 | 139 | 153 | 138 | 140 |
| Russia | 117 | 128 | 122 | 120 | 125 | 125 |
| European Union | 77 | 52 | 51 | 75 | 55 | 65 |
| Australia | 40 | 43 | 37 | 41 | 50 | 55 |
| United Kingdom | 74 | 74 | 55 | 53 | 53 | 50 |
| Canada | 25 | 24 | 28 | 33 | 37 | 36 |
| Taiwan | 24 | 22 | 24 | 24 | 26 | 25 |
| Mexico | 59 | 42 | 23 | 9 | 20 | 20 |
| Japan | 25 | 18 | 12 | 10 | 14 | 16 |
| Brazil | 5 | 3 | 7 | 6 | 6 | 5 |
| Others | 5 | 12 | 11 | 3 | 2 | 2 |
| **Total Foreign** | 542 | 541 | 509 | 527 | 526 | 539 |
| **United States** | 66 | 70 | 69 | 80 | 84 | 87 |
| **Total** | 608 | 611 | 578 | 607 | 610 | 626 |
| **Total Exports** | | | | | | |
| New Zealand | 509 | 466 | 439 | 494 | 520 | 480 |
| European Union | 302 | 316 | 265 | 255 | 285 | 275 |
| Belarus | 67 | 69 | 78 | 78 | 80 | 82 |
| United Kingdom | 73 | 65 | 55 | 51 | 55 | 65 |
| Argentina | 15 | 21 | 31 | 29 | 23 | 30 |
| India | 47 | 20 | 11 | 42 | 25 | 30 |
| Australia | 18 | 16 | 22 | 15 | 9 | 13 |
| Ukraine | 16 | 9 | 9 | 13 | 7 | 5 |
| Russia | 2 | 3 | 3 | 3 | 3 | 3 |
| China | 3 | 1 | 2 | 2 | 2 | 2 |
| Others | 16 | 14 | 4 | 2 | 1 | 2 |
| **Total Foreign** | 1,068 | 1,000 | 919 | 984 | 1,010 | 987 |
| **United States** | 26 | 27 | 58 | 82 | 43 | 46 |
| **Total** | 1,094 | 1,027 | 977 | 1,066 | 1,053 | 1,033 |

## Nonfat Dry Milk Production and Consumption: Summary For Selected Countries

**1,000 Metric Tons**

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 Dec |
|---|---|---|---|---|---|---|
| **Production** | | | | | | |
| European Union | 1,556 | 1,590 | 1,504 | 1,517 | 1,520 | 1,480 |
| India | 635 | 660 | 680 | 700 | 730 | 760 |
| New Zealand | 375 | 362 | 330 | 390 | 390 | 425 |
| Brazil | 158 | 161 | 164 | 157 | 162 | 163 |
| Japan | 125 | 140 | 150 | 160 | 150 | 158 |
| Australia | 150 | 155 | 157 | 155 | 145 | 140 |
| Belarus | 126 | 126 | 122 | 125 | 125 | 127 |
| Others | 421 | 432 | 424 | 420 | 440 | 474 |
| **Total Foreign** | 3,546 | 3,626 | 3,531 | 3,624 | 3,662 | 3,727 |
| **United States** | 1,107 | 1,209 | 1,249 | 1,195 | 1,130 | 1,230 |
| **Total** | 4,653 | 4,835 | 4,780 | 4,819 | 4,792 | 4,957 |
| **Total Dom. Consumption** | | | | | | |
| India | 601 | 636 | 653 | 686 | 739 | 745 |
| European Union | 835 | 795 | 748 | 845 | 740 | 710 |
| Mexico | 340 | 353 | 382 | 378 | 427 | 438 |
| China | 358 | 355 | 446 | 359 | 384 | 369 |
| Brazil | 183 | 187 | 188 | 182 | 197 | 188 |
| Indonesia | 187 | 196 | 197 | 214 | 184 | 184 |
| Algeria | 145 | 145 | 145 | 170 | 175 | 175 |
| Others | 762 | 774 | 781 | 735 | 666 | 709 |
| **Total Foreign** | 3,411 | 3,441 | 3,540 | 3,569 | 3,512 | 3,518 |
| **United States** | 422 | 384 | 374 | 366 | 324 | 391 |
| **Total** | 3,833 | 3,825 | 3,914 | 3,935 | 3,836 | 3,909 |

## Nonfat Dry Milk Trade: Summary For Selected Countries

**1,000 Metric Tons**

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 Dec |
|---|---|---|---|---|---|---|
| **Total Imports** | | | | | | |
| Mexico | 361 | 309 | 338 | 333 | 380 | 390 |
| China | 344 | 336 | 426 | 335 | 355 | 340 |
| Indonesia | 188 | 197 | 199 | 215 | 185 | 185 |
| Algeria | 120 | 144 | 138 | 165 | 175 | 175 |
| Philippines | 177 | 179 | 168 | 190 | 135 | 160 |
| Russia | 88 | 60 | 59 | 55 | 50 | 50 |
| European Union | 56 | 36 | 32 | 36 | 35 | 40 |
| Brazil | 25 | 26 | 24 | 25 | 35 | 25 |
| Taiwan | 23 | 24 | 25 | 25 | 23 | 24 |
| Australia | 15 | 16 | 14 | 15 | 14 | 15 |
| Others | 119 | 106 | 78 | 59 | 40 | 42 |
| **Total Foreign** | 1,516 | 1,433 | 1,501 | 1,453 | 1,427 | 1,446 |
| **United States** | 1 | 1 | 1 | 1 | 1 | 1 |
| **Total** | 1,517 | 1,434 | 1,502 | 1,454 | 1,428 | 1,447 |
| **Total Exports** | | | | | | |
| European Union | 945 | 831 | 788 | 708 | 815 | 810 |
| New Zealand | 373 | 352 | 326 | 357 | 465 | 440 |
| Australia | 128 | 129 | 156 | 154 | 125 | 125 |
| Belarus | 124 | 123 | 120 | 123 | 123 | 125 |
| United Kingdom | 82 | 72 | 52 | 47 | 75 | 82 |
| Canada | 47 | 40 | 19 | 30 | 26 | 30 |
| Argentina | 22 | 28 | 21 | 28 | 18 | 27 |
| Ukraine | 20 | 16 | 13 | 22 | 25 | 23 |
| India | 8 | 5 | 45 | 28 | 1 | 10 |
| Japan | 0 | 0 | 1 | 11 | 6 | 10 |
| Others | 68 | 6 | 9 | 10 | 8 | 8 |
| **Total Foreign** | 1,817 | 1,602 | 1,550 | 1,518 | 1,687 | 1,690 |
| **United States** | 701 | 810 | 893 | 827 | 812 | 835 |
| **Total** | 2,518 | 2,412 | 2,443 | 2,345 | 2,499 | 2,525 |

## Whole Milk Powder Production And Consumption: Summary For Selected Countries

**1,000 Metric Tons**

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 Dec |
|---|---|---|---|---|---|---|
| **Production** | | | | | | |
| New Zealand | 1,490 | 1,570 | 1,600 | 1,400 | 1,400 | 1,325 |
| China | 1,052 | 992 | 1,010 | 1,050 | 1,175 | 1,175 |
| European Union | 697 | 736 | 663 | 616 | 620 | 610 |
| Brazil | 596 | 590 | 594 | 568 | 566 | 585 |
| Argentina | 188 | 213 | 234 | 240 | 190 | 225 |
| Mexico | 120 | 122 | 123 | 124 | 125 | 125 |
| Belarus | 45 | 49 | 57 | 57 | 60 | 62 |
| Indonesia | 82 | 85 | 96 | 59 | 61 | 60 |
| Chile | 70 | 73 | 58 | 59 | 57 | 59 |
| Russia | 65 | 55 | 52 | 55 | 55 | 55 |
| Others | 77 | 58 | 65 | 47 | 43 | 42 |
| **Total Foreign** | 4,482 | 4,543 | 4,552 | 4,275 | 4,352 | 4,323 |
| **United States** | 64 | 63 | 67 | 62 | 48 | 50 |
| **Total** | 4,546 | 4,606 | 4,619 | 4,337 | 4,400 | 4,373 |
| **Total Dom. Consumption** | | | | | | |
| China | 1,722 | 1,585 | 1,807 | 1,746 | 1,582 | 1,625 |
| Brazil | 657 | 678 | 640 | 644 | 721 | 709 |
| European Union | 424 | 418 | 376 | 400 | 380 | 380 |
| Algeria | 250 | 256 | 240 | 260 | 260 | 260 |
| Indonesia | 135 | 134 | 153 | 154 | 134 | 134 |
| Mexico | 106 | 105 | 116 | 126 | 125 | 127 |
| Russia | 110 | 94 | 80 | 78 | 75 | 77 |
| Argentina | 84 | 80 | 73 | 70 | 80 | 75 |
| Chile | 71 | 75 | 68 | 51 | 55 | 57 |
| Australia | 33 | 40 | 40 | 35 | 38 | 40 |
| Others | 145 | 114 | 102 | 100 | 87 | 89 |
| **Total Foreign** | 3,737 | 3,579 | 3,695 | 3,664 | 3,537 | 3,573 |
| **United States** | 36 | 34 | 33 | 40 | 33 | 25 |
| **Total** | 3,773 | 3,613 | 3,728 | 3,704 | 3,570 | 3,598 |

## Whole Milk Powder Trade: Summary For Selected Countries

**1,000 Metric Tons**

| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 Dec |
|---|---|---|---|---|---|---|
| **Total Imports** | | | | | | |
| China | 671 | 644 | 849 | 699 | 445 | 425 |
| Algeria | 233 | 251 | 221 | 250 | 260 | 260 |
| Brazil | 61 | 89 | 52 | 82 | 156 | 125 |
| Indonesia | 54 | 51 | 63 | 94 | 75 | 75 |
| Australia | 37 | 43 | 37 | 40 | 47 | 45 |
| Taiwan | 32 | 36 | 36 | 36 | 32 | 34 |
| Russia | 46 | 31 | 28 | 25 | 25 | 25 |
| European Union | 42 | 27 | 11 | 20 | 20 | 20 |
| Philippines | 32 | 29 | 19 | 14 | 10 | 10 |
| Chile | 3 | 9 | 6 | 3 | 2 | 4 |
| Others | 19 | 5 | 10 | 5 | 4 | 6 |
| **Total Foreign** | 1,230 | 1,215 | 1,332 | 1,268 | 1,076 | 1,029 |
| **United States** | 9 | 13 | 9 | 13 | 12 | 12 |
| **Total** | 1,239 | 1,228 | 1,341 | 1,281 | 1,088 | 1,041 |
| **Total Exports** | | | | | | |
| New Zealand | 1,536 | 1,516 | 1,624 | 1,328 | 1,350 | 1,325 |
| European Union | 315 | 345 | 298 | 236 | 260 | 250 |
| Argentina | 97 | 148 | 145 | 154 | 105 | 165 |
| Belarus | 23 | 27 | 37 | 36 | 40 | 42 |
| Australia | 42 | 37 | 51 | 58 | 45 | 40 |
| Chile | 4 | 2 | 2 | 11 | 4 | 6 |
| China | 1 | 1 | 2 | 3 | 13 | 5 |
| Mexico | 17 | 20 | 14 | 2 | 3 | 2 |
| Russia | 0 | 1 | 1 | 2 | 2 | 2 |
| Ukraine | 9 | 4 | 4 | 3 | 3 | 2 |
| Others | 1 | 3 | 7 | 7 | 2 | 2 |
| **Total Foreign** | 2,045 | 2,104 | 2,185 | 1,840 | 1,827 | 1,841 |
| **United States** | 39 | 39 | 40 | 39 | 29 | 36 |
| **Total** | 2,084 | 2,143 | 2,225 | 1,879 | 1,856 | 1,877 |