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Report Highlights:

Domestic milk production is forecast to return to 2.03 million tons after spiking to 2.1 million tons in 2020. Milk production in 2020 benefited from favorable weather and higher price expectations. At the same time, COVID-19 related school closures resulted in weaker fluid milk demand. The resulting imbalance resulted in higher dried milk production and large dried milk stocks.

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

Executive Summary:

While raw milk production increased in 2020 due to favorable weather and price expectations, production is expected to generally decrease in coming years as the government tries to manage supply and decrease powdered milk stocks. Consumers enjoyed more milk-based beverages through the foodservice channel and consumed more flavored milk, while consumption of fresh milk declined. However, consumption of low-fat milk, organic milk and fortified milk grew. Hypermarkets and supermarkets will continue to be a major distribution channels for fresh milk in multipacks.

The cheese market continues to grow. Per capita cheese consumption has more than doubled in only ten years. Within the cheese market, processed cheese is showing fast growth. Consumption of cheese continues to increase in both the consumer market and food processing industry. Cheese is a popular snack for both kids and adults.

Dried milk stocks reached 11,537 tons in June 2020 despite government efforts to reduce stocks, up 24.1% from June 2019. Dairy product manufacturers, facing weak fluid milk and infant formula demand due to the low fertility rate, are working to diversify their business portfolio. COVID-19 related school closures also impacted milk demand. Processors are looking to target the adult and senior powdered milk market.

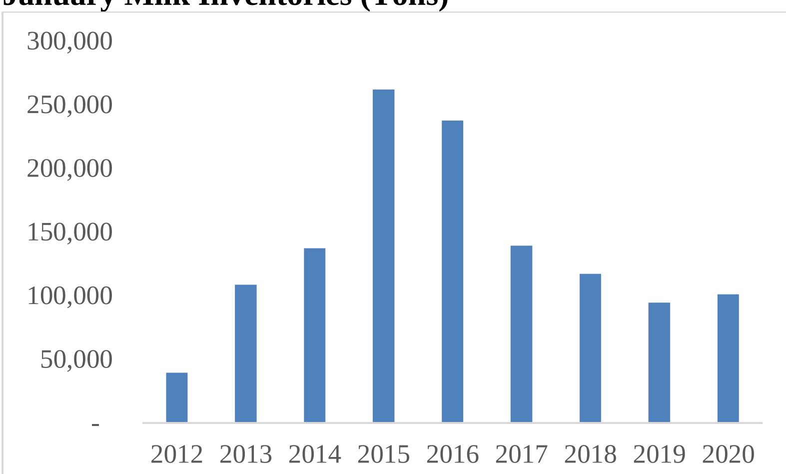
Commodities:
Dairy, Milk, Fluid

Production:

Domestic milk production is forecast to decrease 70,000 tons in 2021 to 2.03 million tons. The number of cows in production has been on a long run decline. 2020 forecast fluid milk production was raised 70,000 tons to 2.1 million tons. Industry increased production because it expected the government to increase the negotiated milk price in August 2020, but the price increase never materialized. Also, higher average temperatures helped increase production. 2019 fluid milk production was raised 14,000 tons to 2.049 million tons based on statistics from Korea's Ministry of Agriculture, Food and Rural Affairs (MAFRA).

Domestic milk production reached 2.21 million tons in 2014 and milk inventories reached a record 261,862 tons at the end of the year. The government has been working to address oversupply of raw milk in the market since 2014, and domestic raw milk production has been declining. As a result, milk inventories went below 100,000 tons in 2018 for the first time in five years. Milk inventories in January 2020 were at 101,167 tons, down more than half from January 2015. However, inventories grew quickly again in 2020 as domestic milk production increased at the same time demand dropped due to COVID-19 related school closures.

January Milk Inventories (Tons)



Source: MAFRA, Korea Dairy Industries Association

Consumption:

Domestic milk consumption is forecast to decline 71,000 tons in 2021 to 2.03 million tons on lower supply and less dried milk production. Estimated 2020 fluid milk consumption is raised 71,000 tons to 2.10 million tons as on higher milk production. Excess supply was turned into dried milk, resulting in higher forecast dried milk production.

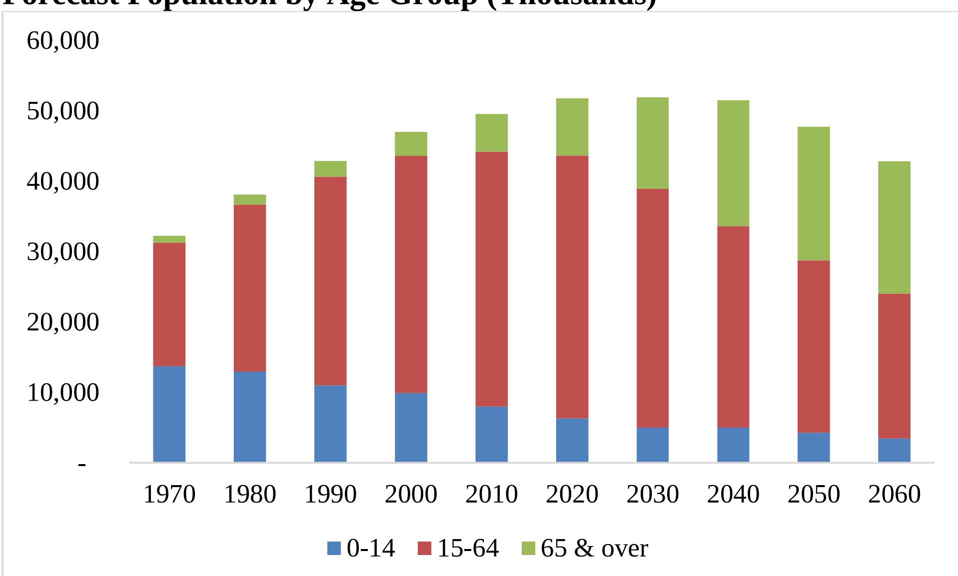
In 2020, dairy processing companies supplied more products through online and offline channels in the belief that consumption at home would increase during the COVID-19 pandemic. However, due to their aggressive marketing strategies to sell more volume, sales have increased but net profits have decreased compared to 2019.

Fluid milk use is expected to recover slightly in coming years as domestic dairy companies are introducing more milk-based beverages to the market. Fresh domestic milk remains popular for direct consumption, but it is not price competitive for use in further processing.

Low fertility rates are the primary force driving down milk consumption in Korea. In 2018 the fertility rate fell below one child per women, and it decreased further to 0.92 children per women in 2019. The number of children (age 0 to 14) dropped from 9.91 million in 2000 to 6.43 million in 2019. Statistics Korea forecasts that the population of children of age 0 to 14 will drop to 3.45 million by 2060. As children and teenagers are the main milk consumers in the Korean market, demand for fresh milk is expected to fall along with the drop in the number of children. Demand for processed milk in beverages targeting adults is expected to stay robust. As a result, sales of processed milk could exceed the sales of fresh milk in coming years.

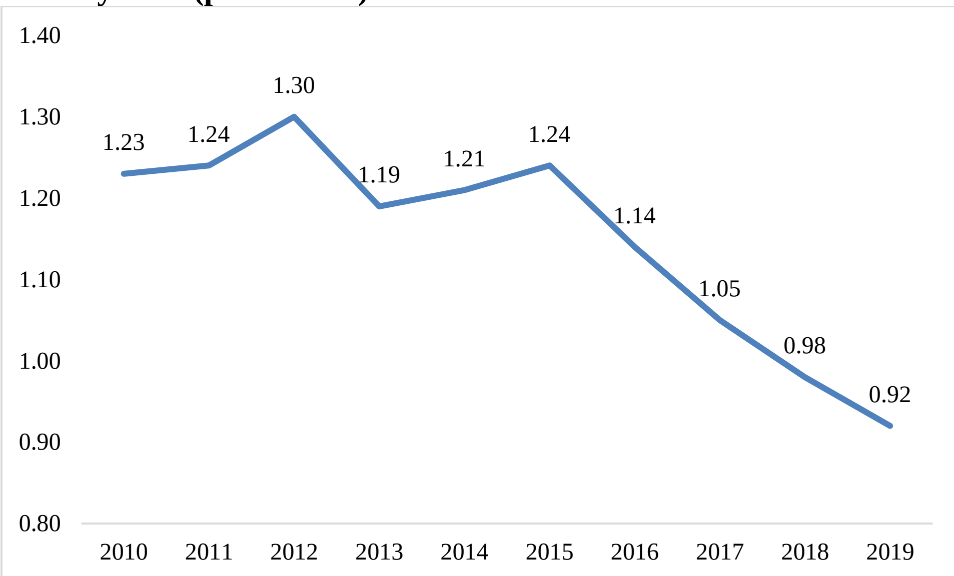
With the rise in income and increased interest in health, consumers continue to seek out premium products such as organic, antibiotic-free, and animal welfare approved milk products. The organic milk market is expected to reach 95 billion Korean Won ($86 million) in 2018, up from only 5 billion Korean Won a decade before. Korean consumers are anxious about food safety issues and parents want to provide their children with the best products available.

Forecast Population by Age Group (Thousands)



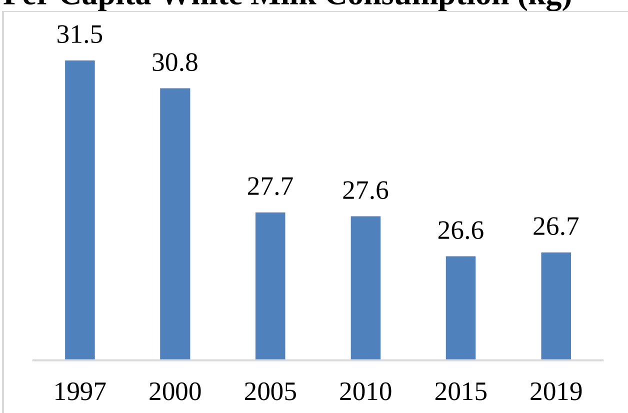
Source: Statistics Korea

Fertility Rate (per woman)



Source: Statistics Korea

Per Capita White Milk Consumption (kg)



Source: MAFRA

Marketing:

Hypermarkets and supermarkets are the main distribution channels for fresh milk products. Fresh milk and flavored milk drinks are mainly sold in multipacks at hypermarkets and supermarkets, targeting families. Online retailers have become a growing sales channel for milk products. While consumers refrained from purchasing milk products online in the past, they can now be safely delivered to homes through quick delivery services offered by most retailers. Consumers can receive their purchases well packed in insulated packages within a few hours.

In Korea, milk sales to primary schools account for around 5.5% of domestic consumption. However, sales have dropped along with the falling birth rate. The share of fresh milk products sold through direct selling (home delivery) also declined, as fewer consumers drink milk on a daily basis. The share of fresh milk products sold at convenience stores and mixed retailers has increased.

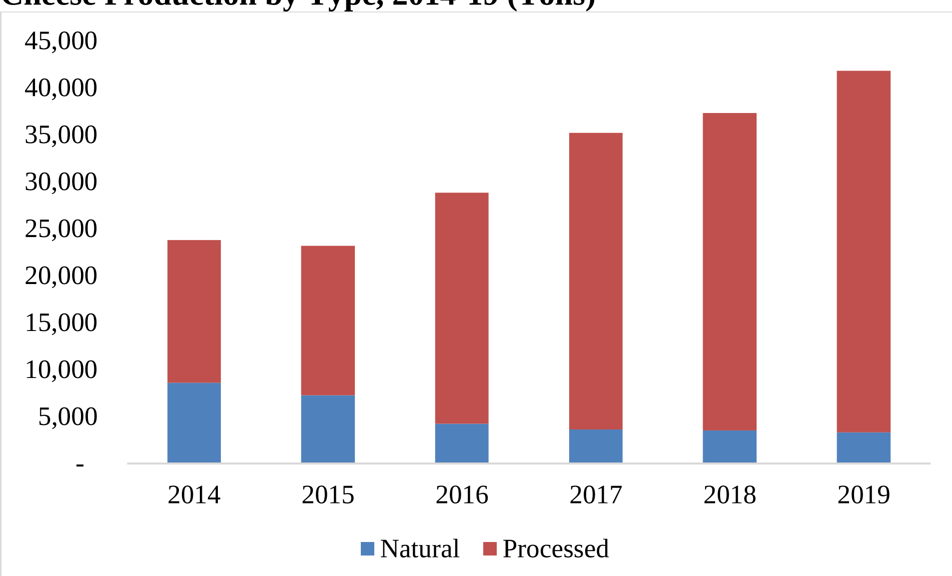
Commodities:
Dairy, Cheese

Production:

Domestic cheese production is forecast to increase 2,000 tons in 2021 to 47,000 tons as processed cheese production continues to grow. Estimated 2020 cheese production is raised to 45,000 tons based on growing production trends. 2019 cheese production is raised to 41,491 tons based on dairy statistics from MAFRA. Very little cheese is made with domestic milk due to its cost. The local raw milk price is 1,044 won/liter, more than three times the price of imported raw milk.

In contrast to fresh cheese production, processed cheese production has grown rapidly in recent years. Between 2014 and 2019 fresh cheese production dropped 59 percent while processed cheese production increased 123 percent. Domestic cheese manufacturers have been launching new products to boost sales. The Korean dairy sector is dominated by large companies due to high initial investment costs. Major dairy companies include Seoul Dairy Cooperative, Maeil Dairies, Namyang Dairy Products, and Dongwon F&B.

Cheese Production by Type, 2014-19 (Tons)



Source: MAFRA

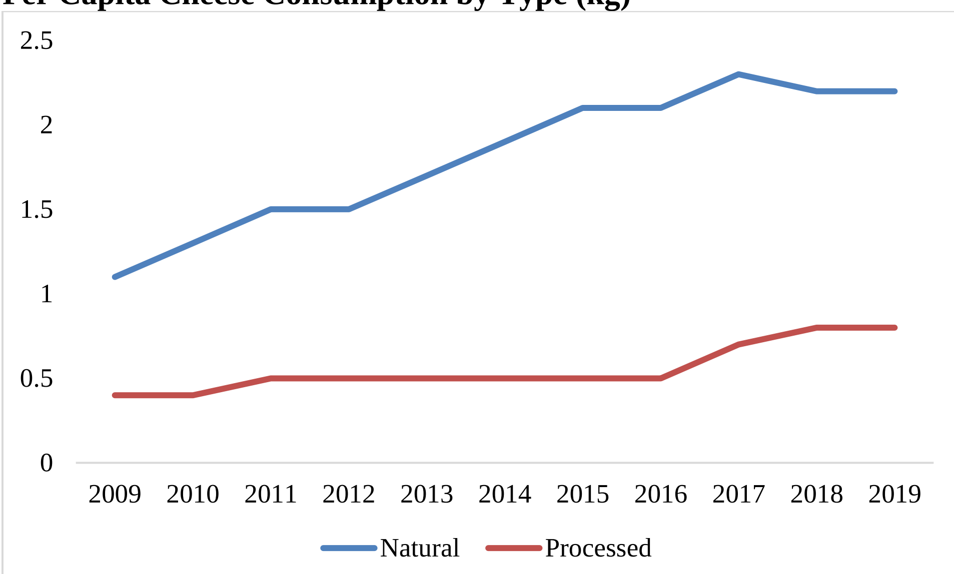
Consumption:

Cheese consumption is forecast to increase 8.1 percent in 2021 to 200,000 tons. Per capita cheese consumption has doubled over the last ten years. Consumer tastes are becoming more westernized and more product using cheese are being introduced to the market. As a result, cheese consumption is expected to continue to increase both for direct consumption and in the food processing industry. Estimated 2020 cheese consumption is raised 5,000 tons to 185,000 tons based on rising consumption trends. 2019 cheese consumption is unchanged at 166,000 tons based on dairy statistics from MAFRA.

Cheese has become a popular snack for both kids and adults. Cheese is considered a nutritious snack for kids in Korea, and per capita cheese consumption is the highest among toddlers (age 1-2). Manufacturers are launching products targeted at kids. Cubed and portion cheese products are also a popular snack amongst adults to consume with alcohol. Soft cheese, ricotta, brie and cheese that can be grilled have also increased in popularity. Mozzarella cheese is widely consumed due to the continued popularity of pizzas.

Cheese is also commonly used in the food processing industry and in prepared foods. Packaged prepared meals are increasingly being sold in convenience stores, bakery stores, hypermarkets, and coffee shops, either for takeout or eat in. Food processors are launching hot and spicy packaged convenience food products with cheese ingredients.

Per Capita Cheese Consumption by Type (kg)



Source: Korea Dairy Industries Association

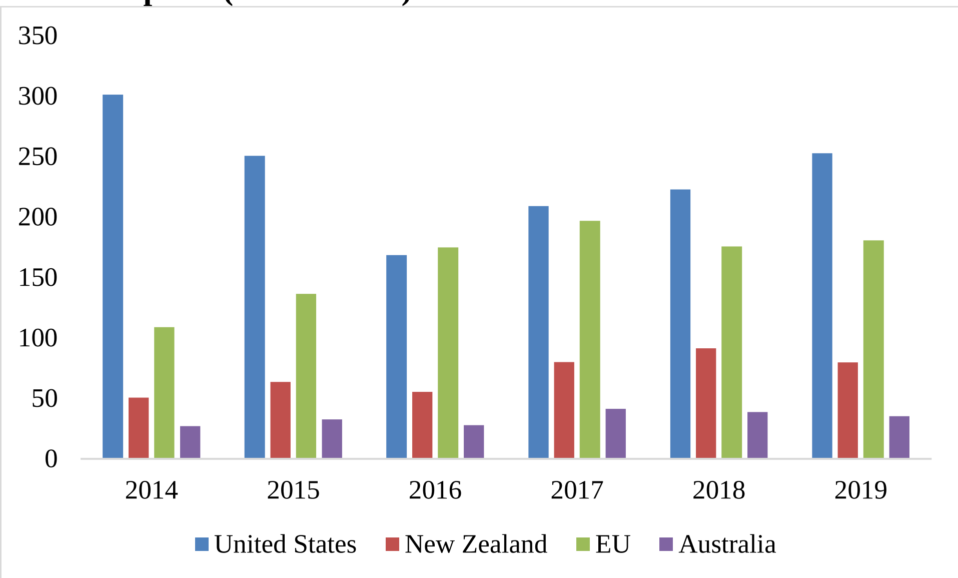
Trade:

Cheese imports are forecast to grow 5,000 tons in 2021 to reach 150,000 tons based on continued consumption growth and limited domestic production. Estimated 2020 cheese imports are unchanged at 145,000 tons. In 2019 the top cheese exporters to Korea by value were the United States (46%), European Union (33%), New Zealand (14%), and Australia (6%). The United States expanded its share from 42% in 2018 to 46% in 2019. Korea has free trade agreements with all of these countries, causing the price of imported cheese to drop in the market.

Tariff reductions and tariff rate quota (TRQ) increases under the U.S.-Korea Free Trade Agreement (KORUS FTA) have helped boost U.S. cheese exports. Korea imported 61,423 tons ($252.8 million) of cheese from the United States in 2019. However, the market is highly competitive. The European Union signed a free trade Agreement with Korea in 2011 before the KORUS FTA was implemented in 2012, giving it an advantage in the market. In addition, Korea became a target export market for the European Union after Russia put restrictions on European agricultural exports. Korea implemented FTAs with New Zealand and Australia in 2016, resulting in more cheese imports from these countries as well.

The KORUS FTA created a zero-duty tariff-rate quota for cheeses covered under tariff lines 0406101000, 0406200000, 0406300000 and 0406900000. The in-quota amount was 8,867 tons in 2020. All U.S. cheese will enter duty-free by 2026. The Korea Dairy Industries Association administers the TRQs and allocates the in-quota quantity to historical and new importers through a licensing system.

Cheese Imports (million USD)



Source: Korea Customs Office 2016, HS 0406, Cheese and Curd

Cheese Tariff Phase-Out Schedule under KORUS FTA

HS Code	Description	Base Rate	2012	2013	2014	2015	2016	2017	2018	2019	2020
0406101000	Fresh Cheese	36.0%	33.6%	31.2%	28.8%	26.4%	24.0%	21.6%	19.2%	16.8%	14.4%
0406102000	Curd	36.0%	32.4%	28.8%	25.2%	21.6%	22.8%	19.2%	15.6%	7.2%	3.6%
0406200000	Grated or powdered cheese of all kinds	36.0%	33.6%	31.2%	28.8%	26.4%	24.0%	21.6%	19.2%	16.8%	14.4%
0406300000	Processed cheese, not grated or powdered	36.0%	33.6%	31.2%	28.8%	26.4%	24.0%	21.6%	19.2%	16.8%	14.4%
0406400000	Blue-veined cheese	36.0%	32.4%	29.0%	25.4%	21.8%	18.2%	19.2%	15.6%	7.2%	3.6%
0406900000	Cheese, NES, including cheddar	36.0%	33.6%	31.2%	28.8%	26.4%	24.0%	21.6%	19.2%	16.8%	14.4%
	TRQ Volume		7,000	7,210	7,426	7,649	7,878	8,115	8,358	8,609	8,867

	(MT)										

Commodities:

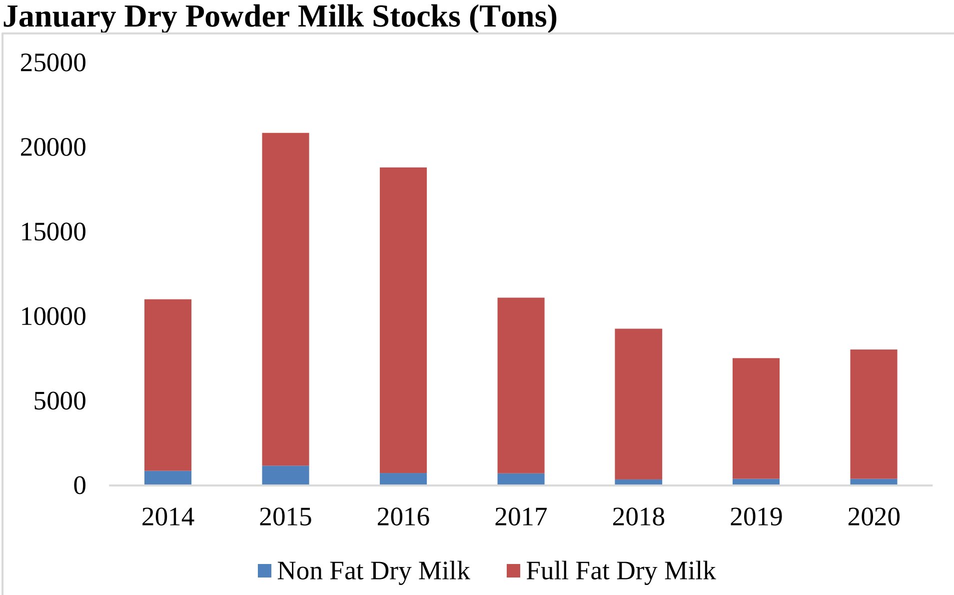
Dairy, Milk, Nonfat Dry

Production:

Forecast local nonfat dry milk (NFDM) production is forecast to return to 8,000 tons in 2021, down 4,000 tons from 2020 as milk production is expected to drop back to normal levels. Forecast 2020 NFDM production is raised 4,000 tons to 12,000 tons. Raw milk production increased in 2020 due to warmer average winter temperatures. However, consumption dropped as schools closed due to COVID-19. The excess milk was turned into dried milk. Manufacturers have been implementing aggressive marketing efforts to manage raw milk inventories, but consumption has failed to keep up with production. As a result, NFDM stocks started to increase again after decreasing for several years. Stock reached 11,537 tons in June 2020, up 24% from June 2019.

The government implemented a policy to increase milk production in 2010 after 30,000 milk cows were slaughtered due to the outbreak of foot and mouth disease. The policy resulted in excess milk production in 2014 and 2015. The excess milk was turned into NFDM, and NFDM stocks increased from 7,053 tons in 2013 to 17,532 ton in 2014. The government has sought to manage milk production and decrease NFDM stocks since 2014. As a result, NFDM production is expected to gradually decrease over the next several years. The industry is targeting 5,000 to 6,000 tons as a normal range for inventories.

January Dry Powder Milk Stocks (Tons)



Source: Korea Dairy Industries Association

Consumption:

Domestic consumption is forecast to stay flat at 28,000 tons in 2021. Estimated 2020 NFDM consumption is lowered 1,000 tons to 28,000 tons based on dairy statistics published by MAFRA. Lower demand for infant formula is driving down demand for NFDM. NFDM is primarily used in baked goods, infant formula, and as an ingredient in other dairy products.

The fertility rate has steadily declined. According to Statistics Korea, the number of births in Q3 2020 was 69,105, down 6.2% from Q3 2019. This was the lowest number recorded since 1981. Dairy product manufacturers, facing weak fluid milk and infant formula demand, are working to diversify their business portfolio.

Processors are looking to target the adult and senior powdered milk market. In 2018, Maeil Dairies was the first to enter the market by launching a brand for nutritional meals for adults called 'Selects,' and a powdered milk product for adults called 'Core Protein.' Namyang launched a powdered milk product for adults in 2019, and Lotte Food and Ildong Food also entered the market with similar products in 2020.

Trade:

NFDM imports are forecast to remain flat in 2021 at 20,000 tons. Estimated 2020 and 2019 NFDM imports are unchanged at 20,000 and 24,000 tons.

NFDM Tariff and TRQ Schedule on Korea-USFTA Implementation

HS Code	Description	Base Rate	2012	2013	2014	2015	2016	2017	2018	2019	2020
040210	In powder, fat content not exceeding 1.5%	176%	176%	176%	176%	176%	176%	176%	176%	176%	176%
	Duty free quota (MT)*		5,000	5,150	5,304	5,463	5,628	5,797	5,971	6,150	6,334

* Additional compound increase of 3% every year

The TRQ is allocated through an Imports Rights Auction (IRA). The quasi-government Korea Agro Fisheries & Food Trade Corporation (also known as the "aT Center") manages these auctions. The Korea Customs Service reimburses the 176 percent out-of-quota tariff to importers when they have reexported processed dairy-based products made from imported NFDM. Korean dairy manufacturing companies are looking forward to expanding market opportunities for exporting to China. Local food processors import NFDM for processing into infant formula, bakery use, and re-export.

Dairy, Milk, Fluid	2019		2020		2021	
Market Year Begins	Jan 2019		Jan 2020		Jan 2021	
Korea, Republic of	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Cows In Milk (1000 HEAD)	204	205	203	204	0	203
Cows Milk Production (1000 MT)	2035	2049	2030	2100	0	2030
Other Milk Production (1000 MT)	0	0	0	0	0	0
Total Production (1000 MT)	2035	2049	2030	2100	0	2030
Other Imports (1000 MT)	10	10	11	11	0	10
Total Imports (1000 MT)	10	10	11	11	0	10
Total Supply (1000 MT)	2045	2059	2041	2111	0	2040
Other Exports (1000 MT)	10	10	11	10	0	10
Total Exports (1000 MT)	10	10	11	10	0	10
Fluid Use Dom. Consum. (1000 MT)	1575	1560	1580	1550	0	1550
Factory Use Consum. (1000 MT)	460	489	450	551	0	480
Feed Use Dom. Consum. (1000 MT)	0	0	0	0	0	0
Total Dom. Consumption (1000 MT)	2035	2049	2030	2101	0	2030
Total Distribution (1000 MT)	2045	2059	2041	2111	0	2040

Dairy, Cheese	2019		2020		2021	
Market Year Begins	Jan 2019		Jan 2020		Jan 2021	
Korea, Republic of	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	8	8	13	14	0	18
Production (1000 MT)	40	41	43	45	0	47
Other Imports (1000 MT)	131	131	145	145	0	150
Total Imports (1000 MT)	131	131	145	145	0	150
Total Supply (1000 MT)	179	180	201	204	0	215
Other Exports (1000 MT)	0	0	0	1	0	1
Total Exports (1000 MT)	0	0	0	1	0	1
Human Dom. Consumption (1000 MT)	166	166	180	185	0	200
Other Use, Losses (1000 MT)	0	0	0	0	0	0
Total Dom. Consumption (1000 MT)	166	166	180	185	0	200
Total Use (1000 MT)	166	166	180	186	0	201
Ending Stocks (1000 MT)	13	14	21	18	0	14
Total Distribution (1000 MT)	179	180	201	204	0	215

Dairy, Milk, Nonfat Dry	2019		2020		2021	
Market Year Begins	Jan 2019		Jan 2020		Jan 2021	
Korea, Republic of	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	8	8	7	7	0	11
Production (1000 MT)	8	8	8	12	0	8
Other Imports (1000 MT)	24	24	20	20	0	20
Total Imports (1000 MT)	24	24	20	20	0	20
Total Supply (1000 MT)	40	40	35	39	0	39
Other Exports (1000 MT)	0	0	0	0	0	0
Total Exports (1000 MT)	0	0	0	0	0	0
Human Dom. Consumption (1000 MT)	33	33	29	28	0	28
Other Use, Losses (1000 MT)	0	0	0	0	0	0
Total Dom. Consumption (1000 MT)	33	33	29	28	0	28
Total Use (1000 MT)	33	33	29	28	0	28
Ending Stocks (1000 MT)	7	7	6	11	0	11
Total Distribution (1000 MT)	40	40	35	39	0	39

Korea's Key Dairy Product Import (Metric Ton)

	2015		2016		2017		2018		2019	
	U.S.	Total	U.S.	Total	U.S.	Total	U.S.	Total	U.S.	Total
Cheese HS 0406	54,821	111,522	39,966	109,621	49,012	125,002	53,359	123,850	61,432	131,354
NFDM HS 0402.10	5,660	21,260	5,882	20,610	7,473	23,187	8,061	24,775	7,293	23,765
WFDM HS 0402.21	39	2,035	235	3,498	292	4,625	157	5,282	460	5,207
Mixed Milk	1,059	31,127	660	38,394	781	46,957	833	53,971	486	57,264
HS 0404.90	5	22,649	43	28,429	737	34,917	4	41,192	3	43,952
HS 1901.90.20	1,054	8,476	617	9,965	44	12,040	829	12,779	483	13,312
Butter HS 0405.10	1,135	3,412	537	5,189	624	5,119	976	6,807	1,364	9,791
Whey Powder HS 0404.10	15,073	34,419	12,271	35,444	11,658	33,728	15,102	34,633	16,532	38,372
Ice Cream HS 2105	1,104	5,661	1,146	6,308	1,332	7,409	1,477	7,917	1,903	7,513
Total	78,913 (38%)	209,413	60,697 (28%)	215,981	71,172 (29%)	246,027	79,965 (30%)	264,492	89,470 (33%)	273,266

Source: Korea Customs Office

Attachments:

No Attachments