

OVERVIEW

Reduced milk production and strong domestic consumption are showing up in dairy product production and inventory levels, offsetting weaker exports and setting the stage for the milk price rebound long foreseen in dairy futures markets and beginning to show up in dairy statistics.

U.S. consumers continued their strong uptake of dairy products during the summer, as domestic use of milk in all products rose by 3.3 percent during the June through August period. Weakness in world dairy demand, meanwhile, has dropped the share of its milk solids production the United States exported this year by about a full percentage point below the record levels of the previous two years. Still, this year's rate has remained firmly in the mid-16 percent range, well above its stagnant 15 percent average during 2013-2020.

COMMERCIAL USE OF DAIRY PRODUCTS

Domestic use of milk in all dairy products continues to show strong growth, although, when combined with the double-digit percentage drop in total exports, total commercial domestic and foreign use grew year-over-year by only half a percent during the June-August period.

Butter and yogurt contributed to the strong showing, but domestic cheese consumption languished, as did fluid milk, which has resumed its longer-term pattern of slow decline following the pandemic disruptions.

DOMESTIC COMMERCIAL USE	JUN-AUG 2023	JUN-AUG 2022	2022-2023 CHANGE	PERCENT CHANGE
	(million pounds)			
Total Fluid Milk Products	10,102	10,260	-158	-1.5%
Yogurt	1,227	1,179	48	4.1%
Butter	548	486	63	12.9%
American-type Cheese	1,361	1,350	12	0.9%
All Other Cheese	1,959	1,992	-33	-1.6%
Total Cheese	3,321	3,342	-21	-0.6%
Dry Skim Milk	169	223	-54	-24.1%
All Products (milk equiv., milkfat basis)	56,987	55,798	1,189	2.1%
All Products (milk equiv., skim solids basis)	46,548	44,798	1,750	3.9%
All Products (milk equiv., total solids basis)	49,772	48,161	1,612	3.3%



U.S. DAIRY TRADE

Double-digit percentage drops from a year earlier are still being posted for most U.S. dairy product exports as the retrenchment of international dairy demand continues. Non-American-type cheese, dry skim milk, and lactose were the only major product categories to fare relatively well during June-August. The above-listed product categories represent 93 percent of total U.S. milk solids exported and 78 percent of the total value of all U.S. exports during 2023, year-to-date through August.

Slightly lower U.S. butter prices compared to a year earlier during June-August, coupled with strong butter demand in Europe heading into its holiday season, may explain the drop in U.S. butter imports during the period. During January-August this year, 83 percent of all U.S. butter imports came from Europe, 75 percent from Ireland alone. U.S. imports of milk protein concentrate have been slowly increasing in recent years and have shown particularly large spikes around the turn of this year and again this past July. MPC is mostly being imported from New Zealand and Ireland.

U.S. DAIRY EXPORTS	JUN-AUG 2023	JUN-AUG 2022	2022-2023 CHANGE	PERCENT CHANGE
(metric tons)				
Butter	7,059	18,317	-11,259	-61%
Anhydrous Milk Fat/Butteroil	1,777	4,427	-2,650	-60%
American-type Cheese	18,294	23,823	-5,529	-23%
Cheddar Cheese	18,109	23,604	-5,495	-23%
All Other Cheese	91,462	95,732	-4,270	-4%
Total Cheese	109,756	119,555	-9,799	-8%
Dry Skim Milk	202,890	198,725	4,165	2%
Whole Milk Powder	7,798	10,653	-2,855	-27%
Dry Whey	37,919	60,908	-22,989	-38%
Whey Protein Concentrate/Isolate	56,163	63,303	-7,139	-11%
Lactose	118,784	120,643	-1,859	-2%
Percent of U.S. Milk Solids Exported	16.6%	18.9%	-2.3%	-12%

U.S. DAIRY IMPORTS	JUN-AUG 2023	JUN-AUG 2022	2022-2023 CHANGE	PERCENT CHANGE
(metric tons)				
Butter	10,742	13,177	-2,436	-18%
Cheese	48,041	49,064	-1,023	-2%
Dry Skim Milk	161	116	44	38%
MPC (all protein levels)	19,430	11,404	8,027	70%
Casein	12,529	17,967	-5,438	-30%
Percent of U.S. Milk Solids Imported	3.4%	3.5%	-0.1%	-3%



MILK PRODUCTION

Milk production was down over a year earlier during June-August as the industry experienced its second year in a row with an episode of annually lower output, this one likely shorter than last year's. Milk solids production growth continues to outpace milk production growth by about

an entire percentage point, as high butter prices this year strongly encourage dairy farmers to continue boosting their butterfat and protein test levels, despite remaining under pressure from high feed costs.

MILK PRODUCTION	JUN-AUG 2023	JUN-AUG 2022	2022-2023 CHANGE	PERCENT CHANGE
Cows (1,000 head)	9,385	9,411	-26	-0.3%
Per Cow (pounds)	6,052	6,070	-18	-0.3%
Total Milk (million pounds)	56,799	57,116	-317	-0.6%
Total Milk Solids (million pounds)	7,372	7,337	34	0.5%

DAIRY PRODUCTS

Total U.S. cheese production was down from a year earlier during June-August. Cheddar production weakened, along with milk production, during the period, leaving American-types flat while mozzarella and total Italian-types have been

below year-ago levels for six months now. Butter production growth has moderated during the period, while dry skim milk production continues to drop and whey products continue to grow.

DAIRY PRODUCTS PRODUCTION	JUN-AUG 2023	JUN-AUG 2022	2022-2023 CHANGE	PERCENT CHANGE
Cheese			(million pounds)	
American Types	1,401	1,398	3	0.2%
Cheddar	976	1,000	-24	-2.4%
Italian Types	1,448	1,461	-13	-0.9%
Mozzarella	1,143	1,163	-20	-1.7%
Total Cheese	3,481	3,493	-12	-0.4%
Butter	461	454	8	1.7%
Dry Milk Products				
Nonfat Dry Milk	427	468	-42	-8.9%
Skim Milk Powder	155	181	-26	-14.2%
Dry Whey	256	240	16	6.7%
Whey Protein Concentrate	125	108	17	15.8%

DAIRY PRODUCT INVENTORIES

Butter stocks in cold storage were drawn down in August as commercial use outpaced production. Stock levels of cheese were more stable from the month and year earlier, while dry

skim milk stocks declined and whey stocks grew, mirroring their respective rates of production change.



DAIRY PRODUCT INVENTORIES	AUG 2023	JUL 2023	AUG 2022	2022-2023 CHANGE
	(million pounds)			
Butter	289	329	278	4%
American Cheese	849	842	842	1%
Other Cheese	640	651	640	0%
Dry Skim Milk	274	293	320	-14%
Dry Whey	89	87	67	32%

DAIRY PRODUCT AND FEDERAL ORDER CLASS PRICES

The monthly NDPSR prices mostly increased by modest amounts from August to September. The same could be said for Class IV and Class II prices, while the Class III price rose by \$1.20/cwt over the month.

Retail prices for most of the major dairy product categories in September were well below their respective levels a year earlier. By contrast, the aggregate measures of retail prices for all items and for all food and beverages continued to

rise in September. Both inflation measures hit all-time high levels that month, with both up 3.7 percent over a year ago. However, the category of frozen dairy products reversed a gradual retail price decline in recent months, and posted an all-time high 4.5 percent higher than a year ago. This was in marked contrast to most of the individual dairy product consumer price indices, which have been dropping from highs reached between late 2022 and early this year.

DAIRY PRODUCT AND FEDERAL ORDER PRICES	SEP 2023	AUG 2023	SEP 2022	2022-2023 CHANGE
NDPSR Dairy Product Prices	(per pound)			
Butter	\$2.753	\$2.667	\$3.116	-\$0.362
Cheddar Cheese	\$1.937	\$1.835	\$1.950	-\$0.014
40-Pound Blocks	\$1.990	\$1.863	\$1.884	\$0.106
500-Pound Barrels	\$1.862	\$1.776	\$1.983	-\$0.121
Nonfat Dry Milk	\$1.116	\$1.137	\$1.580	-\$0.465
Dry Whey	\$0.295	\$0.262	\$0.490	-\$0.195
Federal Order Class Prices for Milk	(per hundredweight)			
Class I Base	\$18.90	\$16.62	\$23.62	-\$4.72
Class II	\$19.98	\$19.91	\$26.51	-\$6.53
Class III	\$18.39	\$17.19	\$19.82	-\$1.43
Class IV	\$19.09	\$18.91	\$24.63	-\$5.54
Retail Dairy Product Prices				
Fluid Whole Milk (per gallon)	\$3.965	\$3.927	\$4.181	-\$0.216
Lowfat Fluid Milk (per gallon)	\$3.639	\$3.596	\$3.808	-\$0.169
Cheddar Cheese (per pound)	\$5.846	\$5.897	\$6.084	-\$0.238
Butter (per pound)	\$4.407	\$4.411	\$4.718	-\$0.311



MILK AND FEED PRICES

The August Dairy Margin Coverage (DMC) margin rose by \$2.94/cwt from July to reach \$6.46/cwt in August, 2023's second highest margin after January and the first monthly increase in the margin this year. As is often the case whenever there is a large monthly movement in the margin, the milk price was the main driver of the change. The U.S. average all-

milk price added \$2.30/cwt to July's level to reach \$19.70/cwt in August, which was also the first monthly increase in the milk price this year. The August monthly feed cost shed \$0.64/cwt of milk in August, mostly due to a drop in the price of corn, although soybean meal and premium alfalfa prices were down slightly as well.

MILK AND FEED PRICES	AUG 2023	JUL 2023	AUG 2022	2022-2023 CHANGE
Producer Prices				
All Milk (per cwt.)	\$19.70	\$17.40	\$24.10	-\$4.40
Feed Prices				
Corn (per bushel)	\$5.73	\$6.22	\$7.24	-\$1.51
Soybean Meal (per ton)	\$439	\$443	\$511	-\$72
Premium Alfalfa Hay (per ton)	\$282	\$288	\$343	-\$61
Feed Prices (per cwt of milk)				
Corn	\$6.15	\$6.67	\$7.77	-\$1.62
Soybean Meal	\$3.23	\$3.26	\$3.76	-\$0.53
Premium Alfalfa Hay	\$3.86	\$3.95	\$4.70	-\$0.84
DMC Feed Cost* (per cwt.)	\$13.24	\$13.88	\$16.22	-\$2.99
DMC Margin* (per cwt.)	\$6.46	\$3.52	\$8.08	-\$1.61

*DMC calculations are not revised

LOOKING AHEAD

USDA remains cautious in its outlook for next year. Its October World Agricultural Supply and Demand (WASDE) report projects calendar-year 2024 U.S. milk prices will average \$20.55/cwt, roughly equal to this year's prices. CME Group dairy futures have been more optimistic since WASDE began its projections for next year, foreseeing 2024 average milk prices between \$1.25/cwt and almost \$2/cwt higher than USDA. The October WASDE also foresees U.S.

milk production increasing next year by 1.2 percent.

The August jump in the DMC margin was the first of several that futures markets have been expecting for many weeks, with the margin expected to surpass the maximum \$9.50/cwt DMC Tier 1 coverage level during some or all of the fourth quarter. So far this year, the program has made substantial payments at that coverage level every month.



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