

## Overview

*Dairy cooperatives are once again leading efforts to curb milk production growth early this year, as they revive base plans imposed in 2020 to deal with output that grew by nearly 3 percent during last year's fourth quarter. That's removed some volatility from markets, with cheese and milk prices settling at relatively stable, but also relatively low, levels as domestic commercial use of milk in all products drop to nearly flat levels of growth and increases in exports also slow.*

*The Dairy Margin Coverage program margin dropped below the maximum \$9.50 per cwt coverage level to deliver a final monthly payment for 2020 of \$0.72 per cwt in December, bringing the average payments for the maximum coverage level during all of 2020 to \$0.73 per cwt. Payouts under the program, the main federal safety net for dairy producers, are expected for most of this year.*

*With year-end data now reported, the annual average U.S. all-milk price for 2020 was \$18.30 per cwt, 30 cents below 2019. But with the uncharacteristically high level of direct CFAP payments and payment disparities due to the high level of Class III milk depooled from federal orders last year, the all-milk price is less reflective of average farmer revenues than typical. Also, the number of licensed U.S. dairies declined to 31,657 in 2020, a decrease of 7.5 percent from the previous year. That is slower than the loss rate in 2019 but still above historical averages.*

## Commercial Use of Dairy Products

Sales of fluid milk from September through December returned to the longer-term historical trend of small declines that was interrupted during the early months of the pandemic. On a 3-month moving average basis, year-over-year change in total fluid milk use was consistently negative from the

end of 2009 until the onset of the pandemic in March last year. During that more than 10-year period, fluid use was down from a year earlier by an average of 1.8 percent. Then from March 2020 through August, 3-month YOY change was consistently positive and averaged 1.2 percent. On the same, 3-month moving average basis, the 2020 domestic

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Domestic Commercial Use	Oct–Dec 2020	Oct–Dec 2019	2019–2020 Change	Percent Change
	(million pounds)			
Total Fluid Milk Products	11,814	12,003	-189	-1.6%
Yogurt	1,071	1,006	65	6.5%
Butter	613	613	-1	-0.1%
American-type Cheese	1,318	1,330	-13	-0.9%
All Other Cheese	1,917	1,977	-60	-3.0%
Total Cheese	3,235	3,308	-73	-2.2%
Dry Skim Milk	168	145	23	15.6%
All Products (milk equiv., milkfat basis)	56,893	56,677	216	0.4%
All Products (milk equiv., skim solids basis)	44,623	44,699	-76	-0.2%
All Products (milk equiv., total solids basis)	48,436	48,410	26	0.1%

### Commercial Use of Dairy Products *from page 1*

consumption trends for other consumer products are: yogurt, consistently positive, averaging 5.6 percent; butter, strongly positive, averaging 10.3 percent, from April through August, then basically flat, on average, for the rest of the year; cheese, negative, averaging -2.2 percent, through June, then spiking quickly positive in July and slowly falling off and ending down in December; all dairy products, milk equivalent total solids basis, consistently negative, averaging -1.7 percent, through August, then consistently positive, averaging 0.7 percent, but dropping off during the fourth quarter.

## U.S. Dairy Trade

Total exports in 2020 were up by 12.3 percent in milk equivalent over 2019, which was enough to push up total consumption for the year by 1.1 percent as it offset declines in total domestic consumption of all dairy products, milk equivalent,

which fell by 0.8 percent. This included most government purchases under the Food Box and other programs. Total exports represented 15.7 percent of total consumption during 2020. Despite falling to a bit below a year ago in November and December, due largely to container shortage-related shipment delays from U.S. ports, this percentage growth for the year was a record for a calendar year, just beating 2018's 15.4 percent. Milk solids exported as a percent of total U.S. milk solids production was also a record in 2020, at 16.0 percent, just ahead of 2018's 15.8 percent.

For all of 2020, total imports of all dairy products, milk equivalent, were 3.3 percent below 2019.

## Milk Production

Total U.S. milk production was 2.8 percent above a year earlier during the fourth quarter of 2020. Compared with growth of total commercial use in the domestic and export

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U.S. Dairy Exports	Oct–Dec 2020	Oct–Dec 2019	2019–2020 Change	Percent Change
		(metric tons)		
Butter	6,588	4,274	2,315	54%
Anhydrous Milk Fat / Butteroil	1,223	1,080	143	13%
Cheddar Cheese	7,230	9,067	-1,837	-20%
American–type Cheese	7,295	9,210	-1,915	-21%
All Other Cheese	67,148	73,629	-6,481	-9%
Total Cheese	74,442	82,839	-8,396	-10%
Dry Skim Milk	197,795	207,038	-9,243	-4%
Whole Milk Powder	9,991	10,834	-843	-8%
Dry Whey	58,020	34,758	23,262	67%
Whey Protein Concentrate / Isolate	55,817	48,338	7,479	15%
Lactose	85,181	94,231	-9,050	-10%
Percent of U.S. Milk Solids Exported	15.6%	15.4%	0.2%	1%

U.S. Dairy Imports	Oct–Dec 2020	Oct–Dec 2019	2019–2020 Change	Percent Change
		(metric tons)		
Butter	6,615	6,676	-60	-1%
Cheese	48,729	47,869	860	2%
Dry Skim Milk	51	67	-16	-24%
MPC (all protein levels)	10,074	12,149	-2,075	-17%
Casein	13,742	15,882	-2,140	-13%
Percent of U.S. Milk Solids Imported	3.0%	3.4%	-0.4%	-12%

**Milk Production** *from page 2*

markets of just 0.1 percent during the period, this provided a recipe for prices to fall at the end of 2020 and for prices and margins to stay depressed for the near future. Cow numbers were up over a year earlier by 82,000 during the fourth quarter.

## Dairy Products

Fourth quarter production data indicates that the additional milk coming from U.S. dairy farms is flowing heavily into American-type cheese and butter and nonfat dry milk production. Lower production of other types of cheese and

of skim milk powder would appear to reflect, respectively, lower food service use during the fall pandemic surge and reduced skim milk powder exports during the last months of 2020.

## Dairy Product Inventories

Commercial stocks of the major dairy products were mostly higher at the end of 2020, as would be expected by comparing the fourth quarter production and commercial use data. Butter stocks were in excess of typical days of total commercial use for the month of December by two weeks. But stocks of butter, both types of cheese and dry

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Milk and Dairy Products Production	Oct–Dec 2020	Oct–Dec 2019	2019–2020 Change	Percent Change
<b>Milk Production</b>				
Cows (1,000 head)	9,429	9,347	82	0.9%
Per Cow (pounds)	5,892	5,781	111	1.9%
Total Milk (million pounds)	55,557	54,037	1,520	2.8%
Total Milk Solids (million pounds)	7,292	7,040	251	3.6%
<b>Dairy Products Production</b>				
		(million pounds)		
<b>Cheese</b>				
American Types	1,371	1,334	37	2.8%
Cheddar	983	949	34	3.6%
Italian Types	1,411	1,441	-30	-2.1%
Mozzarella	1,101	1,144	-43	-3.8%
Total Cheese	3,359	3,354	4	0.1%
Butter	544	509	36	7.0%
<b>Dry Milk Products</b>				
Nonfat Dry Milk	502	436	66	15.1%
Skim Milk Powder	151	163	-13	-7.8%
Dry Whey	226	246	-20	-8.1%
Whey Protein Concentrate	122	124	-3	-2.0%

Dairy Product Inventories	Dec 2020	Nov 2020	Dec 2019	2019–2020 Change
		(million pounds)		
Butter	274	252	190	44%
American Cheese	802	762	750	7%
Other Cheese	595	585	572	4%
Dry Skim Milk	292	258	260	12%
Dry Whey	66	67	71	-8%

**Dairy Product Inventories** *from page 3*

skim milk were all lower than the levels they reached during the initial onslaught of the pandemic last April and May.

## Dairy Product and Federal Order Class Prices

Monthly average survey prices for cheese were relatively stable from December to January, after having fallen from their November highs. January prices for nonfat dry milk continued to show the steady improvement they have experienced

starting last May, while dry whey prices have continued to increase since last September. Both have benefitted from, and been driven by, improvements in world market prices for dry skim milk and whey products during the pandemic. Monthly survey prices for butter have pulled back from the highs in the \$1.70s they reached last June and July. The monthly Class III and Class IV prices for January and December reflect the respective price movements of cheese and butter/nonfat dry milk during those months, while the January advance-priced Class I mover reflected the drop in cheese prices from November to December.

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Dairy Product and Federal Order Prices	Jan 2021	Dec 2020	Jan 2020	2020–2021 Change
<b>NDPSR Dairy Product Prices</b>				
		(per pound)		
Butter	\$1.455	\$1.443	\$1.915	-\$0.461
Cheddar Cheese	\$1.650	\$1.643	\$1.809	-\$0.159
40-Pound Blocks	\$1.717	\$1.771	\$1.900	-\$0.182
500-Pound Barrels	\$1.560	\$1.494	\$1.687	-\$0.127
Nonfat Dry Milk	\$1.135	\$1.095	\$1.245	-\$0.111
Dry Whey	\$0.460	\$0.417	\$0.337	\$0.123
<b>Federal Order Class Prices for Milk</b>				
		(per hundredweight)		
Class I Mover	\$15.14	\$19.87	\$19.01	-\$3.87
Class III	\$16.04	\$15.72	\$17.05	-\$1.01
Class IV	\$13.75	\$13.36	\$16.65	-\$2.90
<b>Retail Dairy Product Prices</b>				
Fluid Whole Milk (per gallon)	\$3.468	\$3.535	\$3.253	\$0.215
Lowfat Fluid Milk (per gallon)	\$3.045	\$3.118	\$2.953	\$0.092
Cheddar Cheese (per pound)	\$5.656	\$5.540	\$5.204	\$0.452
Butter (per pound)	\$3.644	\$3.533	\$3.864	-\$0.220

Milk and Feed Prices	Dec 2020	Nov 2020	Dec 2019	2019–2020 Change
<b>Producer Prices</b>				
All Milk (per cwt.)	\$18.50	\$21.30	\$20.70	-\$2.20
<b>Feed Prices</b>				
Corn (per bushel)	\$3.97	\$3.79	\$3.71	\$0.26
Soybean Meal (per ton)	\$397	\$388	\$300	\$97
Alfalfa Hay (per ton)	\$186	\$184	\$188	-\$2
DMC Feed Cost (per cwt.)	\$9.72	\$9.43	\$8.75	\$0.97
DMC Margin (per cwt.)	\$8.78	\$11.87	\$11.95	-\$3.17

### Dairy Product and Federal Order Class Prices *from page 4*

Retail prices for fluid milk remained relatively stable during the months bracketing the turn of the year, following a rise of more than 10 percent from last summer. Retail prices for cheddar cheese had remained relatively constant since last summer, but then rose by more than 10 cents a pound in the new year. Retail butter did basically the same, starting back in late summer last year.

## Milk and Feed Prices

The December DMC margin fell by \$3.09 per cwt from its November high to \$8.78 per cwt, which generated a final 2020 monthly payment of \$0.72 per cwt for coverage at the maximum \$9.50 per cwt level. Average payments for all of 2020 at this coverage level were \$0.73 per cwt. Deconstructed into its individual components, the November to December

change in the margin, on a per hundredweight of milk basis, was: milk price, -\$2.80; corn price, +\$0.19; soybean meal price, +\$0.07; alfalfa hay price, +\$0.02 (totals don't add due to rounding).

## Looking Ahead

The futures markets in late February are predicting an annual average all-milk price of around \$18.00 per cwt for 2021. The current USDA World Agricultural Supply and Demand Estimates forecast was \$17.15 per cwt, which was down by 50 cents from January's forecast. The DMC Decision Tool is currently offline, but with the monthly price outlook remaining below \$18.00 per cwt for the first half of the year and feed costs closing in on \$10.00 per cwt, DMC margins are expected to result in significant payments for \$9.50 coverage for the foreseeable future.

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**Dairy Management Inc.**<sup>TM</sup> and state, regional, and international organizations work together to drive demand for dairy products on behalf of America's dairy farmers, through the programs of the American Dairy Association<sup>®</sup>, the National Dairy Council<sup>®</sup>, and the U.S. Dairy Export Council<sup>®</sup>.

The **National Milk Producers Federation (NMPF)** is a farm commodity organization representing most of the dairy marketing cooperatives serving the U.S.