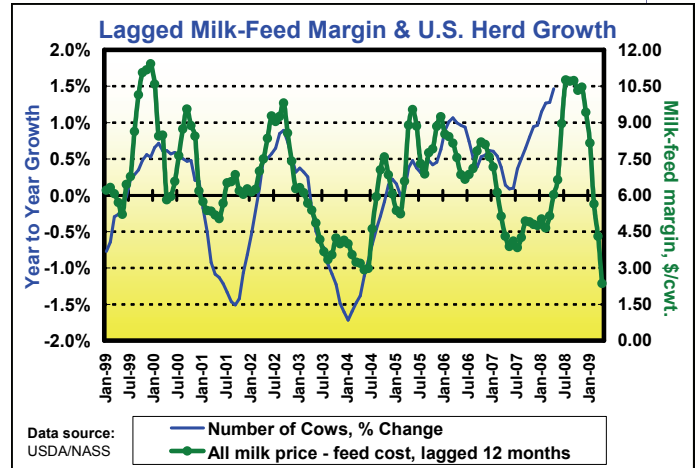


# Dairy Market Report



## Executive Summary

- ➔ U.S. daily commercial disappearance: skim solids up 4.0% in 1st quarter 2008; fat up 3.8%.
- ➔ Cheese stocks started May down 5%, butter stocks up 3%, from last year.
- ➔ April milk output up 2.2% from 2007: 1.5% more cows, 0.7% more milk/cow.
- ➔ Record cheese prices: May 23<sup>rd</sup>, blocks were up 45¢ to \$2.28½/lb., barrels up 50¢ to \$2.25; butter up 10¢ to \$1.49/lb., from our last report.



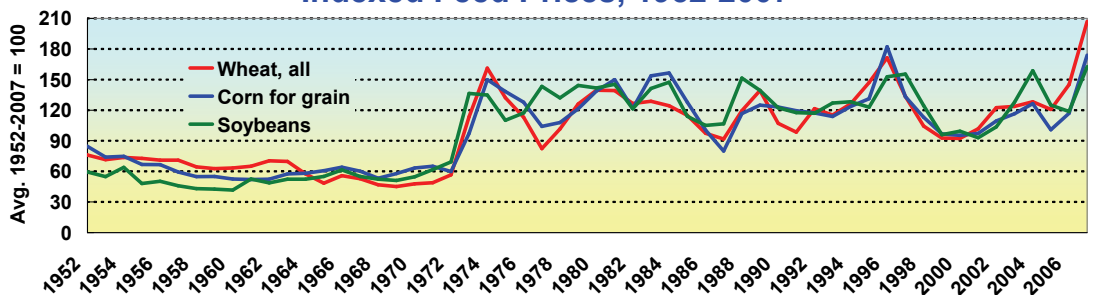
## Market Outlook

Milk production in March and April was up 2.0% and 2.2%, respectively, from a year ago. This growth is now down to the long-term trend, but it is based on below average milk per cow growth (0.7%) and above average growth in the number of cows in the milking herd (1.5%). Milk per cow responds irregularly but relatively quickly to poor dairy farm margins. Cow numbers, on the other hand, seem take about 12 months to respond to farm margins, but do so relatively consistently. In the graph above, the milk-feed price margin is the difference between the all-milk price per cwt. and 160 pounds of "16% mixed dairy feed" (about enough to produce 100 lbs. of milk). This has been "lagged" by 12 months to show how the high margins of fall 2001, for example, match the herd growth in the fall of 2002, or how the low margins of late 2002 and early 2003 led to a shrinking herd 12 months later.

If this relationship holds, it may be six or eight months or more before the growth in the U.S. herd peaks and the low margins dairymen have faced since early this year finally begin to slow the herd's growth. On the other hand, the margins projected for the indefinite future may be so low (thanks to skyrocketing feed costs) that they accelerate this process, and cow numbers may even begin falling before the end of the year. These low margins will continue to limit milk per cow this spring and summer. Together with the slowdown in cow number growth, this could push total milk production growth below 1% by late 2008, even before considering the impact of any potential CWT herd retirement.

Speaking of feed costs (again), it is worth noting the close long-run price relationship of various row crops. It has been argued that corn, wheat, and soybeans, are not substitutes for one another. Well, they are and they aren't. Most U.S. corn is grown for energy-rich feed; most soy is used for oil and protein-rich feed; and most, but not all, U.S. wheat is for food. In the short run, prices of these may move separately, based on different use values. However, they often compete for the same cropland; and as farmers shift to the more profitable crops, their long-run prices move together rather consistently, as the graph below shows. *dmr*

## Indexed Feed Prices, 1952-2007



Source: USDA/NASS

The Dairy Market Report is created for Dairy Management Inc.



### The Nutshell

#### Production v. last year:

- March Cheese ↓ 0.7%
- March Butter ↑ 11.5%
- Mar. NDM/SMP ↑ 38.8%
- March Whey ↓ 2.7%
- April Milk ↑ 2.2%

#### Prices:

	Mar.	Apr.
NASS		
Cheddar	1.96	1.82
Whey	0.24	0.26
Butter	1.25	1.35
NDM	1.25	1.25
Milk		
Cl. III	18.00	16.76
Cl. IV	14.17	14.56
All	18.10	18.00

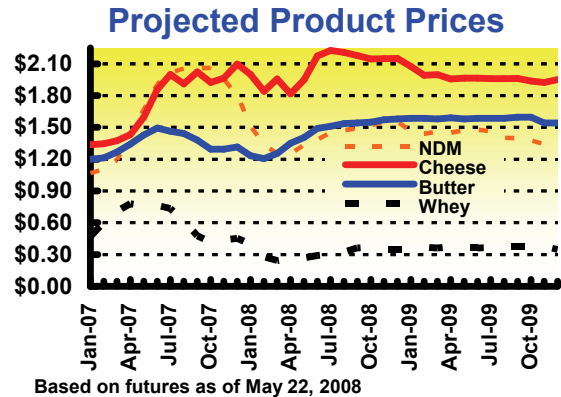
**Cheese and Whey**

Total U.S. **cheese production** (excluding cottage cheese) was 834 million lbs. in March, down 0.7% from a year ago and down 0.6% from February, on an average daily basis. Of this, American types totaled 340 million lbs., up 0.3% from last year, and down 0.4% (daily) from February. Italian types were 358 million lb., down 1.2% from last year and flat from February, on a daily basis.

Natural American cheese **stocks** were 545 million lbs. as May began, down 7% from a year ago. Stocks of other cheese, including Swiss, began May at 308 million lbs., nearly even with a year ago. Total cheese stocks are down 5% from a year ago, and up 3% from April 1.

For the three months ending February 2008, **commercial disappearance** of American cheese was 1.01 billion lbs., up 4.2% from a year ago (3.0% adjusted for leap day); other cheese was 1.54 billion lbs., up 4.8% (3.6% adjusted) from last year. The total was up 4.5% (3.4% adjusted).

**CME** cheese prices continued to rise. On May 23, blocks were up 45¢ from last month's report, to \$2.28½ per pound, and barrels were up 50¢ to \$2.25. Class III futures markets continue to rise, projecting near record levels later in the year, and cheese prices near



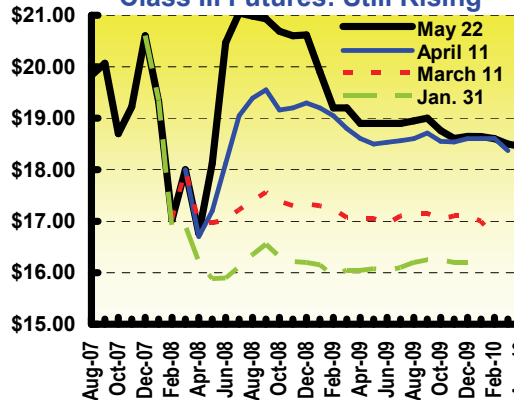
are exceeding world levels, and shortages of shipping containers are also hampering exports.

The **retail prices** in April 2007 were \$4.59 per lb. for cheddar cheese (up 14% from last year); and \$3.88 for American processed cheese (up 4%). (In March cheddar was \$4.57 and processed was 4.01.)

Total **production** of dry **whey** for food was 90.8 million lbs. in March 2008, down 3% from a year ago. (See box.)

The manufacturers' **price** of whey was 27¢ per lb. the week of May 17, according to NASS' survey. WPC-34 prices are about \$1.08, per **Dairy Market News**. This is nearly 30¢ lower than nonfat dry milk spot prices, but nearly four times the Western sweet whey price of 28¢; a year ago, WPC-34 was selling for only two times the dry whey price, The **CME** dry whey futures project average whey prices of 32¢ in 2008, just over half the 2007 average. The international whey price is about 32¢ per lb. **dmr**

**Class III Futures: Still Rising**



\$2.15 in the summer months. (See graph on page 1.)

May 22 futures markets project the NASS cheese price to average nearly \$2.20 over the next 6

months (June through November), and near \$2 for all of 2008 and 2009. U.S. cheese **exports** in March were 26 million pounds, up 37% from a year ago and equivalent to a small but important 3% of U.S. production. High world prices have driven these exports, but these volumes may be at risk as U.S. spot prices

*“WPC-34 prices are nearly four times the sweet whey price; a year ago, WPC-34 was less than double the whey price.”*

Whey Products				
Product	March Production		April 1 Maker Stocks	
	Mil. lbs.	Change v 2007	Mil. lbs.	Change v 2007
Whey, food	90.8	-2.7	56.5	45.4
Whey, feed	5.6	10.7	3.4	14.5
WPC25-50	23.7	4.0	23.1	51.5
WPC50-90	12.2	-1.2	13.9	40.1
WPI90+	2.9	-12.4	n/a	n/a
<b>Total</b>	<b>135.1</b>	<b>-1.2%</b>	<b>96.9</b>	<b>44.6%</b>

## Butter

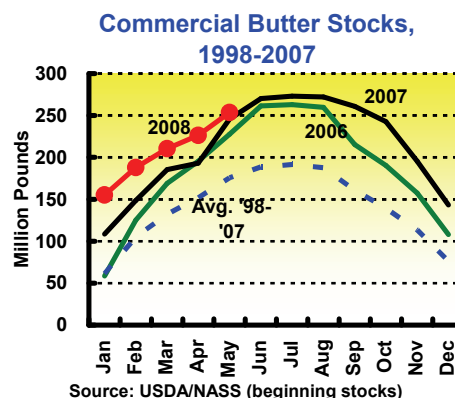
March U.S. [butter production](#) was 154 million lbs., up 11½% from a year ago. U.S. [stocks](#) began May at 253 million lbs., up only 3% from last year, but still well above the seasonal average. (See graph.)

[Commercial disappearance](#) of butter in the three months ending with February was 394 million lbs., up 11% from a year ago (10% adjusted for leap day). Average daily disappearance of all milkfat was up 3.8% for the same three months.

The [retail](#) butter price averaged \$3.19 per lb. in April 2008, up 12%

from 2007. (In March, retail butter was \$2.98.)

The [CME](#) butter price was up 10¢ to \$1.49 on May 23. Futures project NASS butter at \$1.53 for the six months through November, \$1.43 for all 2008, and \$1.58 for 2009. [Net butter exports](#) totaled nearly 50 million pounds in the first quarter, compared with 25 million through all of 2007. Current butter prices now depend upon this export market, but world prices are now only about 10¢ above U.S. prices. **dmr**



Source: USDA/NASS (beginning stocks)

## Dry Milk Powders

U.S. [nonfat dry milk production](#), including protein-standardized "skim milk powders" was 169 million lbs. in March, up 39% from a year ago.

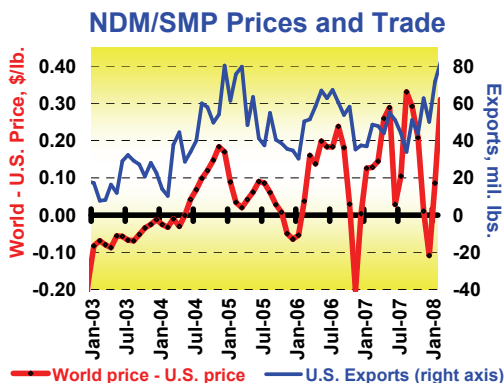
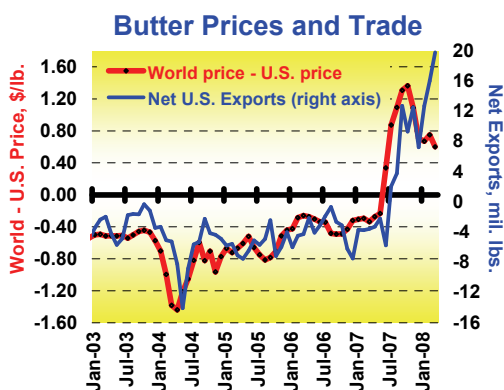
April 1 manufacturers' stocks of (only) nonfat dry milk were 155 million lbs., up 7% from last year.

The [CME](#) prices of extra grade and grade A nonfat dry milk were \$1.45 (up 15¢ from our last report) on May 23, 16¢ above the average surveyed U.S. manufacturers' [price](#) of \$1.29 the week of May 17.

Skim powder prices are near

\$1.60 in both Oceania and Western Europe, per [USDA](#). Exports have been heavy, reflecting U.S. powders' competitive pricing, although this advantage is also narrowing. (See graph.)

Overall U.S. [commercial disappearance](#) of nonfat dry milk (including exports, but excluding modified "skim milk powders") in the three months ending February was 329 million lbs., up 15% from a year ago, according to USDA. For the same quarter, average daily commercial disappearance of all skim solids was up 4.0%. **dmr**



## Yogurt, Ice Cream, and Fluid Milk

U.S. [yogurt production](#) was 318 million lbs. in March, up 0.6% from last year. Yogurt production and consumption have doubled in 8 years, and tripled in the last 15.

March [ice cream production](#) was down 5% from a year ago to 107 million gallons. Ice cream mix production was 41 million gallons, down 6½%. For the year to date, ice cream production was down 3% and mix was down 5%. April's

[retail](#) ice cream price was \$4.20 per ½-gallon, up 11% from last year.

March [fluid milk sales](#) fell only 0.7% from a year ago (calendar-adjusted), though the [retail](#) price of whole milk rose 23% to \$3.78 per gallon. April fluid milk was \$3.80, up 21% **dmr**

### U.S. Fluid Milk Sales

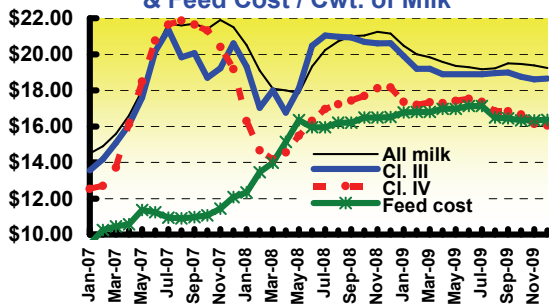
Product	March 2008		Year to Date	
	Mil. lbs.	%	Mil. lbs.	%
Whole Milk	1,276	-8.1	3,829	-6.3
Flavored Whole Milk	49	-19.1	146	-18.0
Organic Whole Milk	33	25.5	95	28.6
Reduced Fat Milk (2%)	1,535	-1.0	4,573	0.9
Low Fat Milk (1%)	572	-1.9	1,701	1.3
Fat-Free Milk (Skim)	694	-2.8	2,071	-0.1
Flavored Fat-Reduced	331	-9.1	1,036	-2.5
Organic Fat-Reduced	110	28.1	335	32.8
Buttermilk	54	16.3	155	17.1
<b>Total (including "Other")</b>	<b>4,666</b>	<b>-3.4</b>	<b>13,979</b>	<b>-0.9</b>
<b>Total (calendar adjusted)</b>	<b>4,728</b>	<b>-0.7</b>	<b>13,826</b>	<b>-1.2</b>

Source: USDA/AMS, Dairy Market News

## Milk and Feed

U.S. [milk production](#) was 16.45 billion lbs. in March, up 2.0% from 2007, and 16.11 billion pounds in April, up 2.2% based on 0.7% more milk per cow and 1.5% more cows. The herd growth shows momentum from the last year of good milk returns. Feed costs are soaring, though, and the slower growth of milk per cow reflects producers cutting rations. USDA [projects](#) 2.3% growth for 2008. We project lower growth, as high feed costs undercut the current high milk prices.

**Projected Milk Prices & Feed Cost / Cwt. of Milk**



Based on futures as of 5/22/2008; non-feed costs not shown.

April's Class III price was announced at \$16.76 per hundredweight, down \$1.24 from March, and up 67¢ from a year ago. May will be back up, to about \$18.20. Class III [futures](#) prices for the next six months (June through November) averaged \$20.79 per hundredweight on May 22, and project averages of \$19.55 for 2008 and \$18.99 for 2009. USDA [forecasts](#) \$17.25 in 2008 and \$17.30 in 2009. The Class III price is the minimum price paid for cheese milk pooled on Federal orders.

The April Class IV price was \$14.56

per hundredweight, up 39¢ from March, but down \$1.56 from a year ago. May's Class IV is projected up again to about \$15.30. [Futures](#) markets project Class IV milk to average about \$17.00 for the next six months, \$16.40 for 2008 and \$17.00 for 2009. USDA forecasts \$15.75 in 2008 and \$17.05 in 2009. The Class IV price is the minimum price for pooled milk used to make butter or milk powder.

April component prices: \$1.4748 per lb. (up 11¢ from March) for butterfat in Class III, Class IV, and producer milk; \$3.7579 (down 58¢) for protein in Class III and producer milk; \$1.0827 (nearly unchanged) for total nonfat solids in Class IV milk; and \$0.0622 (up 1¢) for other solids in Class III and producer milk.

April's Class II price was down 34¢ to \$15.29 per hundredweight. This is the minimum price for pooled milk used to make soft dairy products and in most food processing. May is projected near \$15.55.

The May Class I base price was down \$1.99 to \$16.62, and 70¢ above last May. June's Class I base price is back up to \$18.18 (34¢ higher than last June.) These are based on cheese/whey values. The Class I base price plus a location differential is the minimum price processors pay at the plant for bottling milk pooled on

a [Federal order](#).

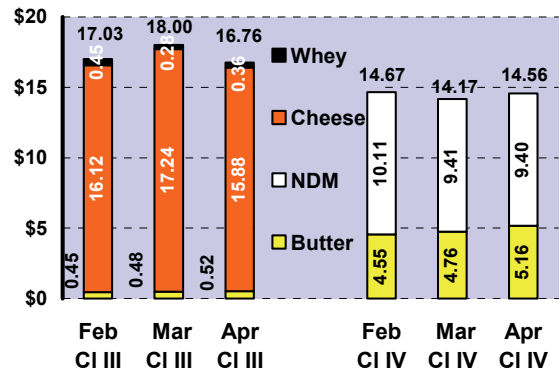
April's [all-milk price](#) was \$18.00, down 10¢ from March, but up \$1.40 from a year ago. May is projected at \$17.80. Futures project the next six months at \$20.60, 2008 at \$19.85, and 2009 at \$19.55.

**Feed costs** continue to be the downside of dairy farmer's bottom line. April's \$11.80/bu. NASS [soybean price](#) is a record (after March's record was revised down to \$11.50), and soybean [futures](#) are over \$13 for every contract month through 2011. April's [corn price](#) of \$5.13/bu. is another record; and [corn futures](#) are over \$6.00/bu. for every contract month from this July through 2010. April's milk-feed price ratio was a record-low 1.90, despite historically high milk prices; and it projected to be 1.8 in May, despite milk price increases for the month.

This will restrain growth in milk per cow, and eventually reverse the growth in the national milking herd.

dmr

**Class Price Breakdown**



Contact: Roger Cryan,  
V.P., Milk Mktg. & Econ.  
National Milk Producers  
Federation  
[rcryan@nmpf.org](mailto:rcryan@nmpf.org)  
[www.nmpf.org](http://www.nmpf.org)



Dairy Management Inc.™ 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®, the National Dairy Council®, and the U.S. Dairy Export Council®.



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