### Forecast Update – Feb. 9, 2024

#### Cheese

No changes to this week's forecast

- 1. USDA issued a bid on Friday for Cheddar 2# loaf cheese that could impact markets.
- 2. With the end of the Super Bowl, the cheese season is over until April / May
- 3. Slowing Cheddar cheese production could cause markets to rise later in the year.

#### Butter

No change to the forecast despite lower spot prices on Friday. Prices tend to get toppy near the \$2.80/lb – this run was consistent.

- 1. Cream is reportedly widely available today. Still, buyers are looking to secure sufficient supplies as most have lower butter availability later in the year to lower milk production and more milk moving to cheese. That could create near-term volatility.
- 2. Ceres estimated December 2023 butter commercial disappearance to be strong based on USDA data that could cause prices to firm again.

NDM

No change this week – prices moderated after following GDT higher.

1. Maintained somewhat flat 1H prices and raised 2H price expectations.

Whey

There are no changes to the whey forecast.

1. Stocks tightened at the end of last year. Demand for WPC80 remains strong, but the gap between US and EU prices could cause prices to pull back. The current pricing pattern is similar to last winter/spring.

# Weekly Markets

|        |               | This Week's Avg | Last Week's Avg. | WoW Chg. |
|--------|---------------|-----------------|------------------|----------|
| Market |               | (US\$/lb)       | (US\$/lb)        | (US¢/lb) |
| CME    | Blocks        | \$1.6105        | \$1.6450         | -3.45    |
|        | Barrels       | \$1.5770        | \$1.5280         | 3.90     |
|        | Butter        | \$2.7440        | \$2.7720         | -2.80    |
|        | NDM           | \$1.2175        | \$1.2280         | -1.05    |
|        | Whey          | \$0.5075        | \$0.4765         | 3.10     |
| DMN    | C Mostly NDM  | \$1.2100        | \$1.2100         | 0.00     |
|        | W Mostly NDM  | \$1.2050        | \$1.2050         | 0.00     |
|        | C Mostly Whey | \$0.4560        | \$0.4235         | 3.25     |
|        | W Mostly Whey | \$0.4650        | \$0.4500         | 1.50     |
|        | WPC           | \$0.9900        | \$0.9850         | 0.50     |
|        | Lactose       | \$0.2900        | \$0.2850         | 0.50     |
|        |               |                 |                  |          |

### Spot markets

Milk

- Reports of tighter-than-expected milk were prevalent again this week. Milk is incredibly tight, with several reporters noting poor feed quality and lower margins impacting output-per-cow. That may be slowing milk to manufacturing plants compared to last year.
- Those notes are like other regions milk remains tighter than expected and has curbed substantial class price discounts this year.
- Outside of Oceania, milk production remains stunted compared to last year. The Americas and Europe lagged the previous year. Europe and the United States are seasonally rising, but milk is reportedly less than a year ago. China's milk is ahead of last year, but minimally.
- Widespread European farm protests are impacting as various European nations look to blunt some of the new farm-to-fork policies that looked to clamp down on nutrients and CO2e emissions.

## Market updates

China's December 2023 milk production was 6.86 billion pounds, 2.98% more than in 2022. That was a good-sized recovery in YoY performance but reflected a nearly 4% decline from November.

|        |   | That left China's 2023 production 3.3% more than 2022 - a notable slowdown from the  |  |  |
|--------|---|--|--|--|
|        |   | previous three-year's pace.  |  |  |
|        |   | China's milk price fell again. In January, milk was \$3.65/yuan, an 11% decline from 2023.   |  |  |
|        | Spot  | CME block markets pulled back this week while barrel declines were more modest.  |  |  |
|        | markets   | As has been the case for months, blocks and barrels have struggled to maintain higher prices  for every a week. Prices appear to be in retreat again.  |  |  |
|        |   | <ul> <li>for over a week. Prices appear to be in retreat again.</li> <li>After spot markets, USDA released a sizeable bid for what appears to be incremental cheese.</li> </ul>                  |  |  |
|        |   | That may provide a level of support for prices; it could cause prices to rise next week. The focus   |  |  |
|        |   | was Cheddar 2# loaf cheese – that could help remove up to 11 million pounds of cheese this   |  |  |
|        |   | spring. At least, it could support post-demand season cheese near current levels.  |  |  |
|        |   | Reports continue to indicate that cheesemakers are worried about availability later in the year,   |  |  |
|        |   | and those that can age cheese are getting a head start; however, reports indicate that near-<br>term cheese availability is adequate to meet all demand. That may also explain the volatile      |  |  |
|        |   | markets.   |  |  |
|        |   | There are additional reports that Central cheese is displacing some western outlets creating a   |  |  |
|        |   | bit of spot pressure.  |  |  |
|        | Market  | US December 2023 cheese production totaled 1.21 billion pounds - 0.9% more than the previous   |  |  |
|        | updates year. Ultimately, the United States produced 0.3% more cheese compared to 2022. That may explain recent reports that milk is tighter and cheese processors are growing concerned about availability year. |  |  |  |
|        |   | this year.   |  |  |
| e.     |   | Mozzarella output was 403.6 million pounds and 1.05% more than the previous year. 2023   |  |  |
| ees    | vs. 2022 production was nearly unchanged -0.07%  • Cheddar cheese production was 336.5 million pounds and -1.96% compared to 2  |  |  |  |
| Ç      |   | <ul> <li>Cheddar cheese production was 336.5 million pounds and -1.96% compared to 2022. YTD</li> <li>Cheddar cheese production was up 0.6% compared to 2022.</li> </ul>                         |  |  |
|        |   | More milk continues to move to Other American-style cheese, with December 2023 output  |  |  |
|        |   | up 6.4% compared to the previous year. 2023 output was up 3.3% compared to 2022.   |  |  |
|        |   | Parmesan production was 41.3 million pounds in December 2023, 3.6% less than the   |  |  |
|        |   | previous year. 2023 output slipped 2% behind 2022. In December 2023, US cheese imports totaled 37.1 million pounds, up 15.3% compared to the prior   |  |  |
|        |   | year. That put 2023 imports modestly ahead of 2022 - up 2.4%.  |  |  |
|        |   | Most of that cheese came from double-digit increases from the EU27, except for the   |  |  |
|        |   | Netherlands.   |  |  |
|        |   | <ul> <li>Imports from Switzerland and the United Kingdom were also lower.</li> <li>In December 2023, US cheese exports totaled 81.5 million pounds, 0.9% more than the previous year.</li> </ul> |  |  |
|        |   | 2023 exports were 3.5% less than 2022. While last year was less than the scorching pace set in 2022,   |  |  |
|        |   | it was well above the five-year average pace.  |  |  |
|        |   | Cheddar cheese exports were down 17.2%, but still an improvement from the previous three   |  |  |
|        |   | <ul> <li>months.</li> <li>Grated cheese exports continue to outpace the previous year by 57% in December.</li> </ul>   |  |  |
|        |   | <ul> <li>Exports to Mexico in December 2023 were up 20% compared to 2022.</li> </ul>   |  |  |
|        |   | Exports to South Korea and Australia remained lower - down 24% and 39%, respectively.  |  |  |
|        | Spot  | Once again, higher spot butter markets met their match, and the closer prices moved toward   |  |  |
|        | markets   | \$2.80/lb – a level that seems to be a hard ceiling this winter but one that will likely be tested   |  |  |
|        |   | repeatedly throughout this year.  • Cream is still widely available with surpluses in the East, which differs from the past few  |  |  |
|        |   | seasons. Multipliers are low, with USDA reporting western multipliers sub-1.00 this week – an  |  |  |
|        |   | indication that cream is floating around, and bulk butter processors are not keen on building  |  |  |
| į      |   | inventory at current spot price levels.  |  |  |
| Butter |   | Given the pre-Easter price declines, it seems reasonable to expect a post-Easter price reduction to be in the cards this year.   |  |  |
| B      |   | <ul> <li>to be in the cards this year.</li> <li>Like other products, many are concerned about tighter milk supplies and more milk headed to</li> </ul>   |  |  |
|        |   | cheese/whey.   |  |  |
|        | Market  | In December 2023, US butter production totaled 196.3 million pounds - 4.4% more than the previous  |  |  |
|        | updates   | year. Despite higher production, the butter did not wind up in cold storage last year. In the end, the   |  |  |
|        |   | United States produced 2.7% more butter compared to 2022 - still little consolation for processors concerned that butter production could slow further this year.                                |  |  |
|        |   | California produced nearly 1% more butter than the previous year.  |  |  |
|        |   |  |  |  |

### Pennsylvania produced nearly 6% more butter compared to December 2022. Despite higher butterfat prices last year, cream cheese/Neufchatel output was 0.2% behind 2022, and sour cream increased nearly 1%. Regular hard ice cream production fell in December, down 11% compared to 2022. That was the most significant December YoY decline since 2016. That put 2023 ice cream production at 1.5% less than in 2022. Ice cream mix (regular) suffered a similar fate, with December 2023 falling 11.6% compared to 2022. YTD production was 4.4% lower than in 2022. US December 2023 butterfat exports totaled 5.9 million pounds, 45% lower than the previous year. Comparatively expensive US butter stayed home last year as export volumes fell 55% compared to 2022. Lower volumes to Canada, Mexico, and South Korea tumbled double-digits lower. In December 2023, US butterfat imports totaled 17.1 million pounds, 1.7% less than the previous year. That puts the total 2023 imports 10.8% higher than 2022. In December 2023, imports from Ireland increased nearly 28% compared to 2022. But, imports from New Zealand fell 38.5% compared to 2022. Spot CME spot markets peaked on Tuesday after the higher Global Dairy Trade (GDT) results. Prices pulled back into the end of the week. markets Data suggests that NDM/SMP production could remain tight this year. However, the rapid appreciation of CME spot prices put US prices in the pole positions, which is unusual for this time of the year. The Feb. 6 GDT results likely supported nearby spot and futures prices in the upper teens and low 120s this winter. GDT SMP ended up 4.6% at \$2,638/MT (\$1.25/lb); WMP up 3.4% at \$3,463/MT (\$1.57/lb). Futures pulled back – that may provide opportunities for coverage later in the year. Market In December 2023, the United States produced 146.4 million pounds of NDM - 12.7% less than the prior year. That caused 2023 production to fall 4.5% behind the pace set in 2022. Flat milk production updates and more milk moving to cheese vats constrained output last year - very different from the end of 2022 when milk flowed away from vats to driers. US SMP production totaled 48.3 million pounds in December 2023, which was 24.25% less than in 2022. Similarly, the 2023 output was 16.6% less than 2022. Some milk migrated to MPC - production was 18.1 million pounds in December 2023 and 2.45% more than in 2022. 2023 output was just shy of 2022, down 0.4%. NDM Manufacturers held stocks as of Dec. 31, 2023, 203.3 million pounds - 20.5% lower than the previous year. There was a 2.7MM pound decline from November to December - that is unusual as stocks typically build. Ceres estimates that stocks reflected 43 days of production on hand - the lowest point of 2023, reflecting fresh supplies. That may explain why domestic prices have been slowly rising - it may also reflect a shift. Last year, brokers kept holding modest, pushing more products to manufacturers, resulting in higher reportable stocks. China's December 2023 milk production was 6.86 billion pounds, 2.98% more than in 2022. That was a good-sized recovery in YoY performance but reflected a nearly 4% decline from November. That left China's 2023 production 3.3% more than 2022 - a notable slowdown from the previous three-year's pace. China's milk price fell again. In January, milk was \$3.65/yuan, an 11% decline from 2023. US NDM/SMP December 2023 exports totaled 144.4 million pounds, 0.8% more than the previous year. That put 2023 exports 2.9% behind the 2022 pace. That was a good performance, given fewer imports from China last year upended global markets. Exports to China, Mexico, the Philippines, and Colombia fell in December.

Increases in Vietnam, Thailand, Egypt, and Honduras offset that.

|      | Spot<br>markets   | <ul> <li>CME spot markets increased this week while European prices pulled back – like last year. For a time, US prices gapped European prices until US prices moved lower in the spring.</li> <li>WPC demand remains positive – give lower milk in Brazil that may mean more export</li> </ul>  |
|------|-------------------|--|
|      |                   | <ul> <li>opportunities this year.</li> <li>USDA reports of declining stocks could support winter prices. After a year of lofty whey and derivative stockpiles, demand for WPC80 and WPI has cleared out some of that product.</li> <li>While the news is positive, absent European prices lifting – US products could be viewed as expensive overseas.</li> </ul>  |
| Whey | Market<br>updates | <ul> <li>US Dec. 2023 whey production totaled 70.4 million pounds, 6.1% less than 2022. YTD production was 1.2% more than the prior year.</li> <li>US Dec. 2023 WPC (25-49.9) production totaled 12.6 million pounds, 17.8% less than 2022. YTD production was 4.6% more than 2022.</li> <li>US Dec. 2023 WPC (50-89.9) output was 29.6 million pounds, 11.9% more than 2022. YTD production was 11.6% more than in 2022.</li> <li>US Dec. 2023 lactose output was 90.9 million pounds, 1.7% more than 2022. YTD production was 1.2% less than the prior year.</li> <li>US Dec. 2023 whey stocks totaled 69.4 million pounds on Dec. 31, 0.2% less than the previous year.</li> <li>US Dec. 2023 WPC (25-49.9) stocks totaled 25.1 million pounds on Dec. 31, 14.4% less than the previous year.</li> <li>US whey exports totaled 34.1 million pounds in Dec. 2023 - 13.9% less than 2022.</li> <li>US (&lt;80% protein) exports totaled 26.5 million pounds in Dec. 2023 - 0.7% less than in 2022.</li> <li>US (&gt;80% protein) exports totaled 14.6 million pounds in Dec. 2023 - 11.6% less than in 2022.</li> </ul> |