

US Dairy Products Report & Dry Product Stocks Analysis

September 2019



September 2019 Dairy Products Production

Commodity	Million Pounds	Metric Tons	vs. Last Year	vs. Last Month*	YTD vs. Last Year*
Natural American	418.1	189,627.9	-1.4%	-5.9%	-0.7%
Cheddar	288.4	130,828.8	-3.1%	-8.3%	-2.3%
Other American	129.6	58,799.2	+2.6%	-0.1%	+3.5%
Gouda	4.8	2,165.9	-2.0%	+2.4%	-26.2%
Mozzarella	374.7	169,961.5	+4.5%	+4.2%	+4.1%
Cream & Neufchatel	86.2	39,085.2	+9.7%	+2.0%	+3.4%
Parmesan	31.0	14,043.7	+17.0%	+1.5%	-1.1%
Total Cheese	1080.8	490,247.2	+2.1%	-0.5%	+1.1%
Butter	136.6	61,961.6	+1.2%	+2.8%	-0.6%
Dry Whey (human)	91.0	41,265.6	+31.8%	+12.6%	-5.0%
Whey Protein Concentrate (WPC) (human)	37.2	16,882.7	-9.3%	-0.0%	-7.1%
Whey Protein Isolates (90%+)	9.8	4,437.0	-6.4%	+7.2%	-0.2%
Lactose	96.2	43,639.7	+5.3%	+4.1%	+10.8%
Whole Milk Powder (WMP)	7.6	3,444.1	+31.4%	+1.9%	+1.8%
Non-Fat Dry Milk (NDM)	123.0	55,791.9	+7.9%	-5.0%	+2.3%
Skim Milk Powder (SMP)	48.8	22,152.1	+4.6%	-1.7%	-12.1%
Combined NDM/SMP	171.8	77,944.0	+6.9%	-4.1%	-1.1%

**normalized for 30 day months*

Key Takeaways

- While total cheese production remained higher versus prior year levels for the seventh consecutive month, trends reversed from August with Cheddar production dropping sharply while milk was instead pushed into Mozzarella.
- Butter production remained firm versus prior year for the fourth consecutive month as good production and stocks that refuse to decline continue to weigh domestic prices.
- Regardless of stronger nonfat dry milk output, September stocks dropped to the lowest level since October 2018.
- Dry whey production jumped to levels not observed since February 2018 and was the strongest for the month of September on record.

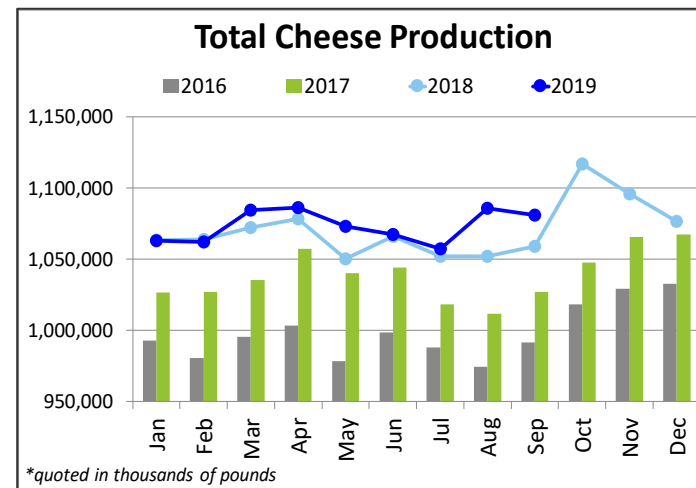
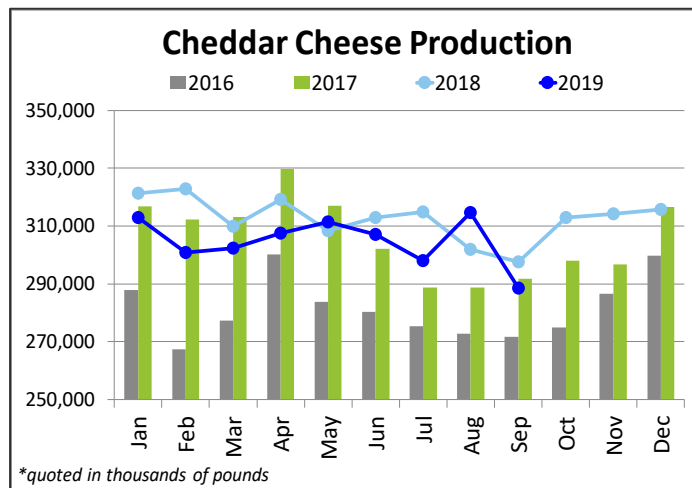
September 2019 Dry Product Stocks

Commodity	Million Pounds	Metric Tons	vs. Last Year	vs. Last Month*
Dry Whey (human)	77.3	35,077.7	+14.0%	+10.3%
WPC (human)	62.9	28,509.6	+5.0%	+6.8%
WPI	19.5	8,826.0	-24.9%	-1.0%
Lactose	113.3	51,391.1	+38.8%	+0.9%
Buttermilk Powder	14.1	6,400.6	+15.5%	+2.3%
Nonfat Dry Milk	254.1	115,239.2	-2.9%	-5.8%
Whole Milk Powder	21.8	9,898.7	-33.0%	-12.5%

It was a mostly neutral report for the cheese market, with September production data helping to explain skyrocketing Cheddar prices over the past several weeks. **While total cheese production remained higher versus prior year levels for the seventh consecutive month, trends reversed from August with Cheddar production dropping sharply while milk was instead pushed into Mozzarella.** The September switch was a return to trends seen throughout the first several months of this year, when Mozzarella production was also emphasized at the expense of Cheddar.

Lower American-style production coupled with strong cheese exports in September plus continued good domestic demand have elevated CME spot block and barrel prices to five-year highs. Price increases in the CME barrel market have been especially astounding, with the barrel price gaining 47% or \$0.7625/lb. in just five weeks on limited trade volume, an unbelievable price climb.

HighGround views this USDA data release as mostly neutral to the market as lower Cheddar production is not new news. The market has been well supported in recent weeks due to this fact. With prices already at sky high levels, it is unlikely the market has much more tolerance for further price growth before values begin to retreat. However, what this report *does* provide is solid evidence regarding *why* the market has climbed to current levels: Cheddar production sank and was DOWN 3.1% versus prior year, stronger than the year-to-date 2.3% decline. In volume terms, the US produced 9.2 million pounds less Cheddar this September versus one year ago. **On a year to date basis, the US has produced a whopping...**



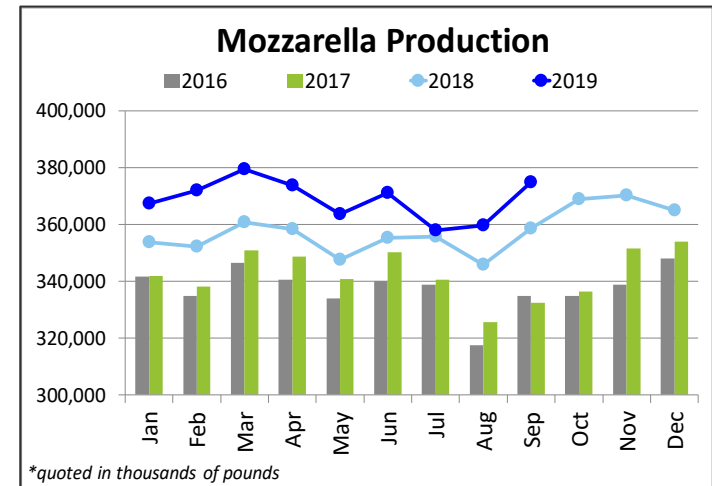
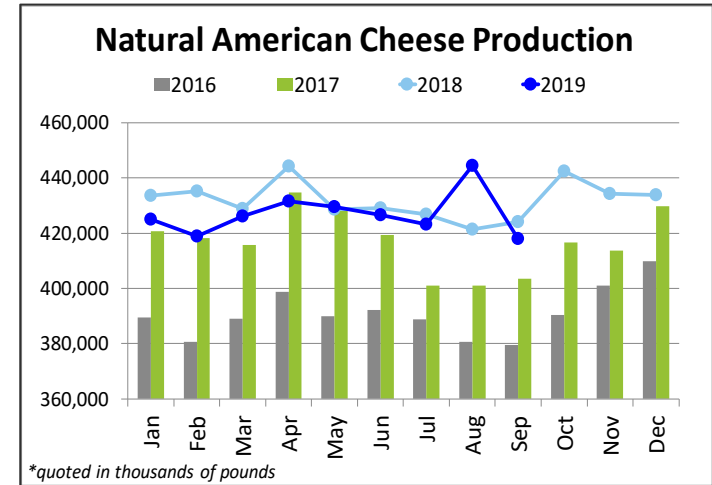
(All graphs in this report are in thousand pounds, adjusted for 30-day months unless stated otherwise)

64.6 million fewer pounds of Cheddar cheese this year versus the first nine months of 2018! In addition, the August-to-September Cheddar production decline was the steepest drop for those months since 1985 (-10.5%). Over the past five years, September Cheddar production has averaged a 0.3% INCREASE versus August instead of the decline. The September declines were driven by sharp falls in output from both California (-11.3%, -2.8 million pounds YoY) and Idaho (-17.7%, -6.9 million pounds YoY). Overall, a combination of the lower overall supply year to date coupled with the sharply lower Cheddar output in September created a perfect combination that spurred a supply shortage just as orders for holiday demand were peaking.

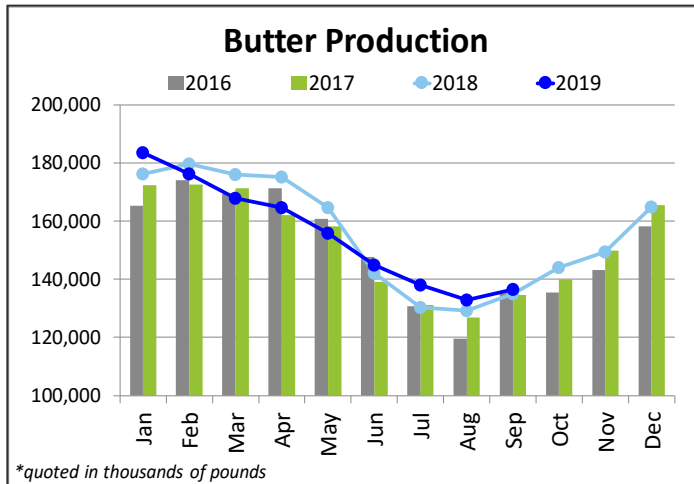
Opposite the Cheddar declines, the Mozzarella gains continue to impress. Mozzarella output posted the strongest YoY gain since May; year to date production remains UP a sharp 4.1%. Non-Cheddar American style output has climbed higher versus last year for four consecutive months but was not strong enough to keep overall American-style in the green.

On a state level basis, new capacity is driving total cheese expansion. Production was UP 25.6% in South Dakota (Agropur expansion), UP 14.7% in Iowa (AMPI), and UP 6.4% in New Mexico (Glanbia/DFA). The 0.9% decline in California output was balanced by the 0.7% increase in Wisconsin.

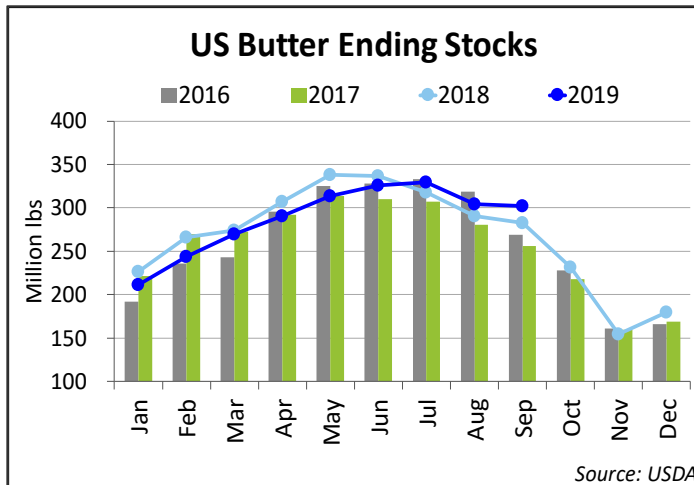
HighGround Take: The lower Cheddar output into September clarifies the supply situation that has led to the current CME cheese price increases. Looking ahead, HighGround is concerned about a sharp, sustained decline in cheese prices once supplies become available to fulfill current demand. At recent cheese price highs, many end users have shifted to hand-to-mouth purchasing. It is likely that demand will pull back to watch how low prices might fall before end users step back into the market to buy. It is likely cheese prices will fall below the \$2.00/lb. mark by mid-December, and possibly sink lower still into early 2020.



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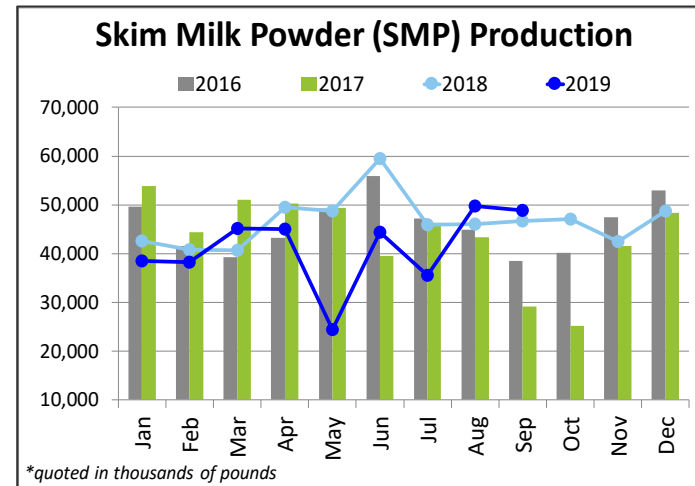
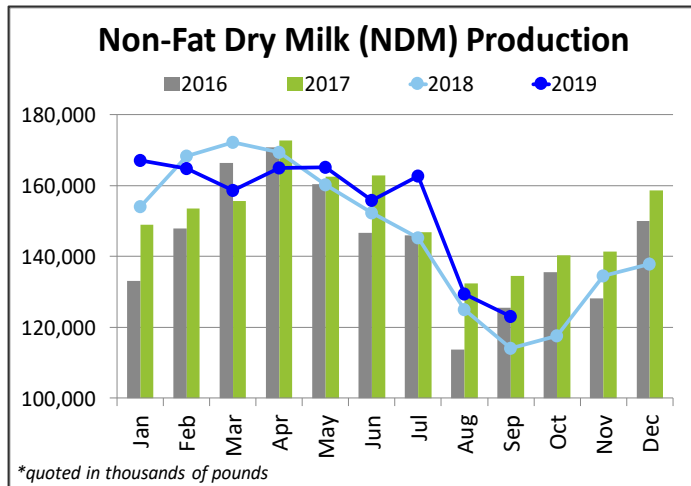


Butter production remained firm versus prior year for the fourth consecutive month as good production and stocks that refuse to decline continue to weigh domestic prices. It was a disappointing third quarter for market bulls who had expected stronger prices into the fall; production has grown in recent months and demand has not materialized to pull stocks lower throughout summer and fall as would typically be expected. In September, butter output turned higher versus the prior month for the first time since January as seasonally expected; production will continue climbing through early 2020 in line with annual patterns. While output remained higher year over year, it was the lowest gain of the past four-month streak of expanded output. In addition, the 2.8% August-to-September output climb was well below the 7.4% five-year average build.



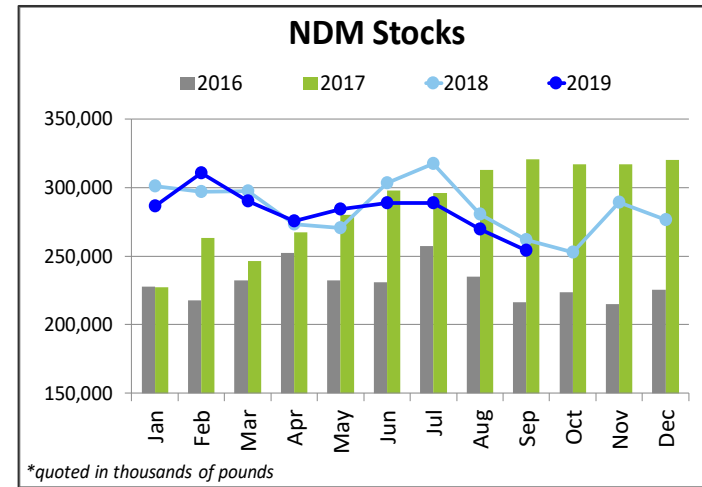
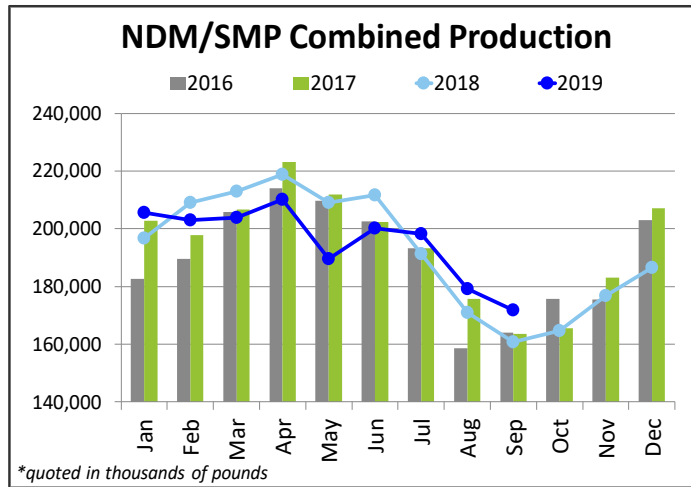
Gains in the Atlantic region spurred national production higher. Output in the region climbed a whopping 22.3% or 2.3 million pounds versus prior year, pushed higher by a 55.9% or 2.6-million-pound output gain in Pennsylvania. Both other regions showed lower output with the Central region dropping 1.1% and Western production falling 0.3% year over year.

HighGround Take: Butter production continues higher and stocks are declining but in slower-than-usual fashion. Output is climbing seasonally with the industry watching cold storage data closely over the next few weeks with eyes beginning to turn to the 2020 production and demand cycle. HighGround believes prices will sink below the \$2.00/lb. in the coming weeks and reach five-year lows during Q1 2020 as supplies continue to exceed overall demand.



Nonfat dry milk production continued above prior year levels into September, surging 7.9% higher year over year but remaining DOWN versus output in both 2017 and 2016. On a year to date basis, output remains higher. September production dropped lower versus August, moving against the five-year average 0.7% climb into September versus the prior month. Traditionally, August usually marks the lowest production month of the year for NDM, but this year it is likely that September will mark the yearly low before output climbs higher into Q4.

SMP production climbed above prior year levels as well but for just the third time this year, following August's YoY growth. SMP output remains DOWN 12.1% on a year to date basis. Stronger SMP production into August and September correlate well with the jump in exports: US NDM/SMP exports jumped to an 18-month high as global demand continues strong.

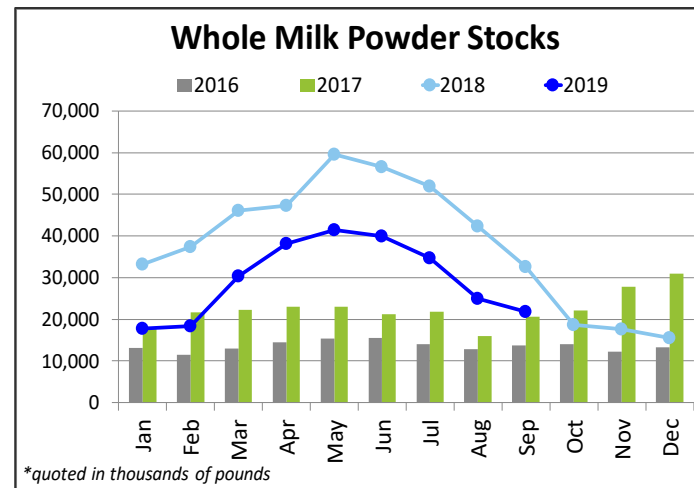
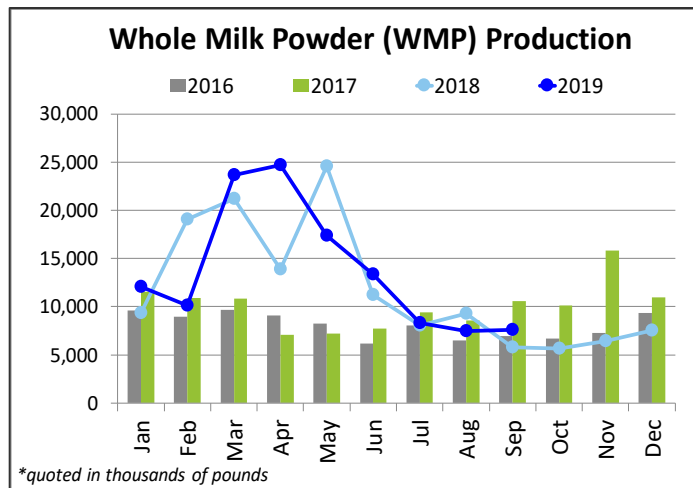


Output on a combined basis was UP versus prior year for the third consecutive month. However, both domestic and export demand remains strong. Even with the higher production in recent months, stocks have dropped lower for three consecutive months after the most recent June peak. **September stocks dropped to the lowest level in nearly one year, since October 2018. Since June, 34.8 million pounds of NDM have moved out of storage, even through the US has produced an additional 26.3 million pounds in Q3 versus in 2018.**

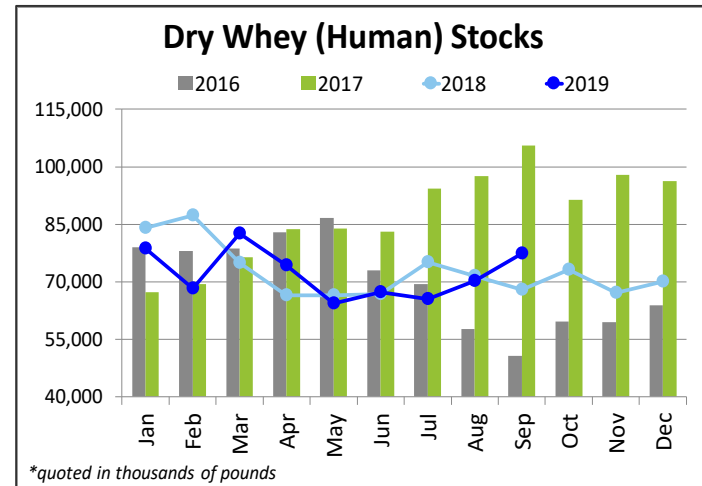
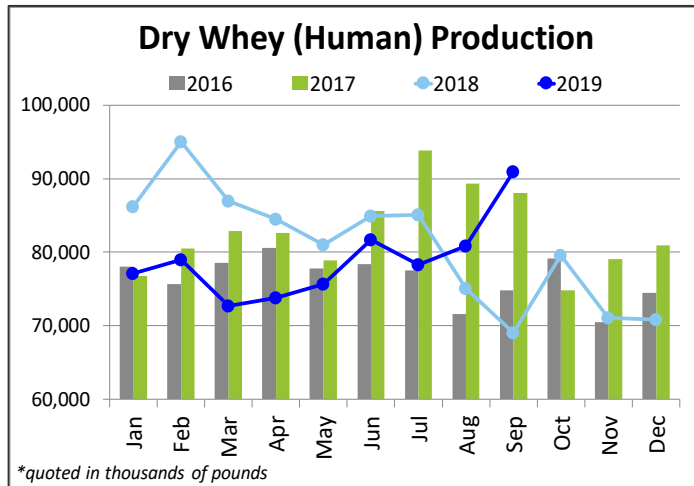
HighGround remains bullish for NDM prices. Stocks dropping lower against three months of stronger production means end users continue to demand product, even with prices at multi-year highs. Even with the domestic price climbs, the US remains among the lowest-priced source country in the world. EU prices and GDT SMP values continue to move up, with demand not flinching at the price climbs. While a slight correction is possible (in line with most bull markets), any price correction will be short lived before values start climbing once again. HighGround believes the market will move slowly but steadily higher throughout the entirety of 2020.

WMP production was sharply higher versus prior year but is being compared to excessively low September 2018 output. The production trend is largely in line with prior year movements even though the strong YoY September production increase appears intense. August marked the lowest output month of the year with volumes moving slightly higher into September. HighGround expects volumes will largely remain close to current levels throughout the remainder of the year before moving sharply higher into Q1, in line with the Spring Flush. Stocks have declined for four consecutive months, indicating decent demand, and have remained below prior year levels for 12 consecutive months now.

HighGround Take: HighGround continues to be bullish within the nonfat dry milk market. Global demand remains strong while production and stocks continue to remain below demand. While September output was good, US stocks continued to move lower, indicating continued sales. Global prices will likely continue to move higher in alignment as end users search for product from all three key exporting regions. A slow and steady price climb continues within this market, pushing prices to multi-year highs.

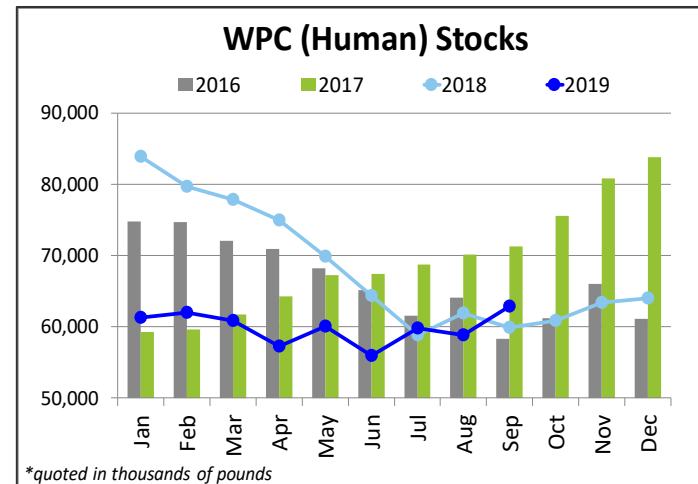
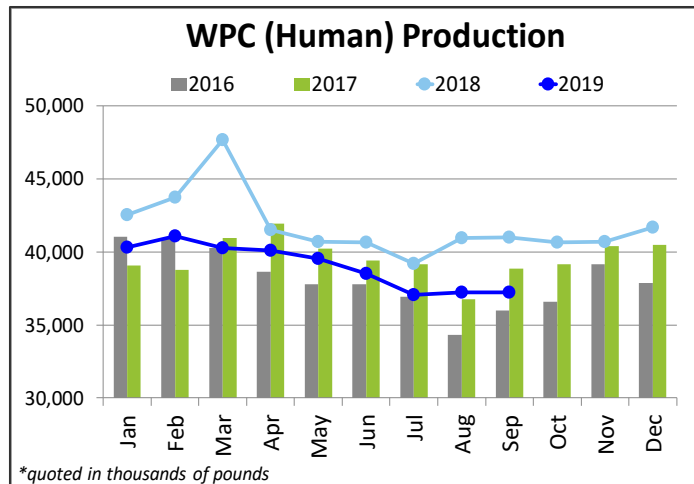


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Dry whey production jumped to levels not observed since February 2018 and the strongest for the month of September on record, paired with continued losses into the export market; Q3 2019 dry whey exports to China fell 43% or 16,353MT (36 million pounds) – almost as much as additional product that the US made available in September alone. In addition, less milk was directed into higher protein whey/whey protein concentrates, all of which have experienced a deterioration in price over the past month. CME October dry whey averaged \$0.3004 per pound, a 21% fall from September and the lowest monthly figure since March 2018, the beginning of the contract's life. Now into the first week of November, CME spot prices continue to hang near all-time lows, averaging just \$0.2794 per pound. Alternatively, the spike in cheese prices for the past three months has translated into strong cheese volumes and increased availability.

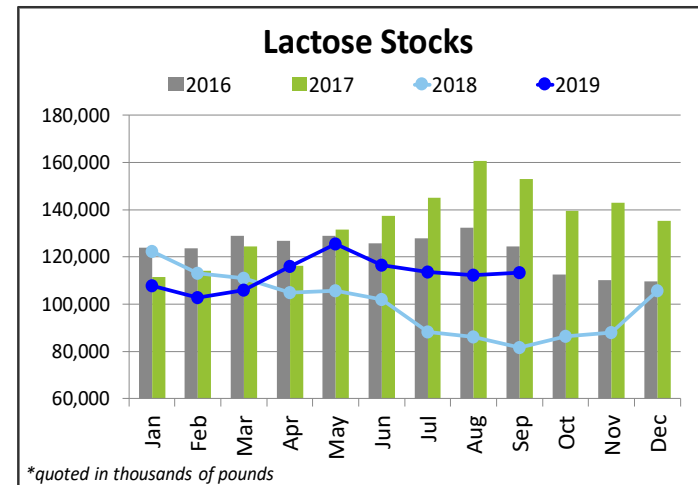
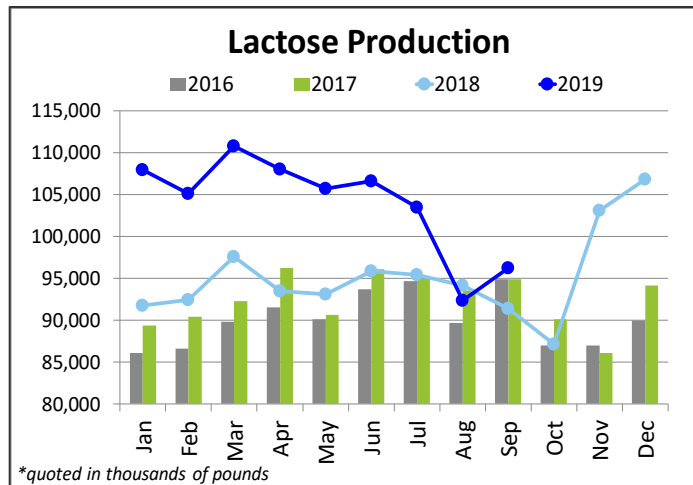
Over the first several months of this year, Wisconsin had been reporting lower dry whey production, an attempt to mitigate the loss of global demand, though as a result utilized liquid whey toward higher protein whey products, which previously commanded a premium. Now that the premium has subsided, the ability to produce dry whey more affordably left manufacturers little choice other than to move back toward dry whey production, even though demand has not increased and surely knowing the price would collapse further in response.



HighGround Take: Stocks continue to build as global demand falters though HighGround views the report as neutral as these fundamentals have clearly already been baked into current price levels. The lack of improvement into the export market will prove to continue to build inventories in the US until demand returns from Asia. Strong production will exacerbate this situation. The market will be well supplied with plentiful and cheap dry whey for the near term.

Total WPC output continued its downward trend versus prior year (DOWN -9.3%), with year to date output remaining lower (DOWN 7.1%) versus last year. September output was exactly in line versus the prior two months. Output has remained lower versus prior year for nine consecutive months. Both low protein (25-49.9%) and higher protein (50-89.9%) WPC output was DOWN on a year over year basis.

Even with production lower, stocks have trended higher in recent months. WPC in storage in September marked the largest volume this calendar year and the largest amount in storage since December. While stocks moved slightly lower in August, volumes moved UP 6.8% in September versus the month prior. Prices have dropped quickly in recent months reflecting the lower demand and good supplies; HighGround sees little chance for a price recovery as long as stocks are strong enough to keep up with demand, even in light of lower output.

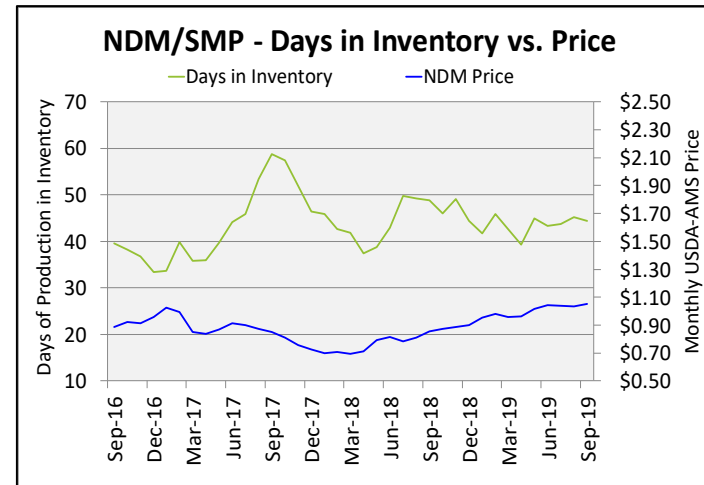
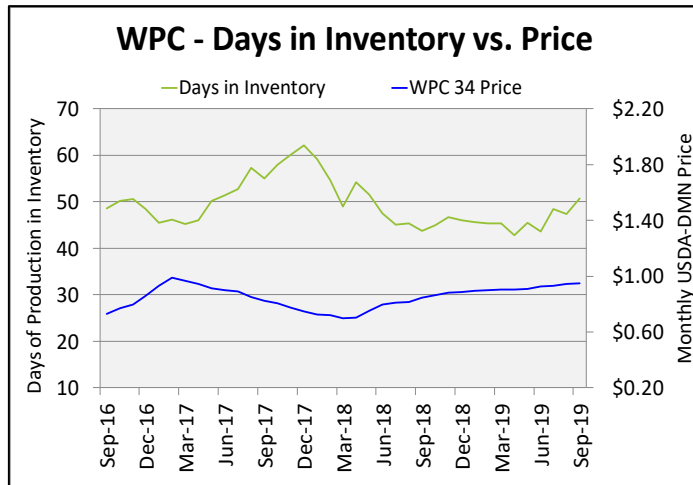
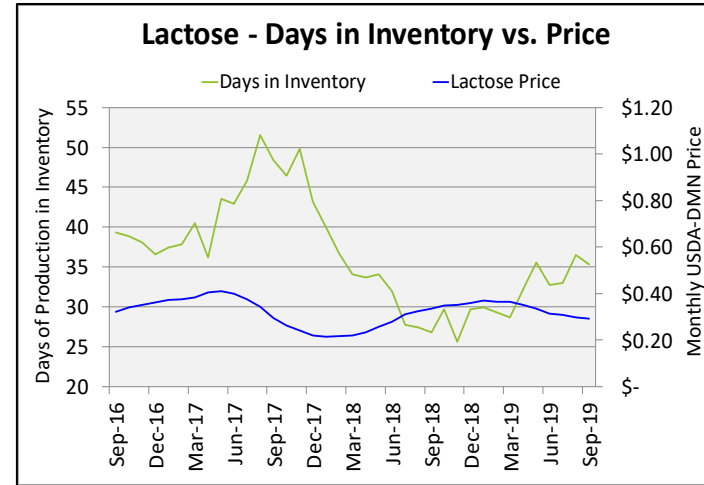
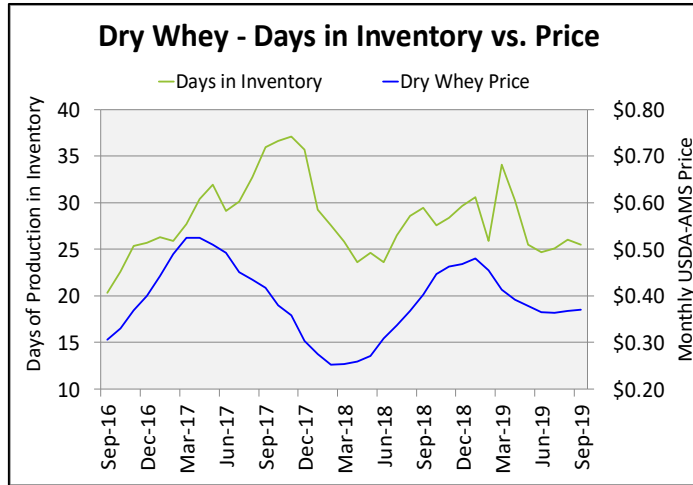


Lactose production climbed higher in September versus prior month (UP 4.1%) after two consecutive months of declines. September output was the highest for the month on record even as it marked the second lowest production month of the year to date. On a year to date basis, lactose output remains at record highs, UP 10.8% versus prior year.

Stocks moved up slightly after three slight but consecutive month-over-month declines. More alarming is the year over year rise; total product in storage is now UP 38.8% above prior year levels, the largest disparity versus prior year since October 2014. Total stocks were UP 31.7 million pounds versus prior year even though total stocks remain lower versus levels seen in 2015-2017.

HighGround Take: Record high production continues and will keep prices capped in the near term. Lactose in storage remains well above prior year levels, leaving a comfortable cushion should demand increase. Overall, this market remains mostly neutral with little chance for prices to climb higher if record production and adequate stocks remain available.

US Dry Product Stocks: Days in Inventory vs. Price



About HighGround Dairy

HighGround Dairy launched in 2012 by industry veteran, Eric Meyer. Affiliated with HighGround Trading LLC, Eric is the President of its Dairy Division which services all those interested in trading dairy futures and options markets. Through the brokerage division and its related consulting company, HighGround Advisory Group, it specializes in dairy hedging, risk management and market analysis services for farmers & cooperatives, processors, manufacturers, distributors, traders and end-users.

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