

PERSPECTIVE



The latest insights into global dairy markets

Your regular global overview of the dairy industry along with trends in milk production, commodity prices and dairy trade.

Ingredients by Fonterra

Dairy for life



Welcome back to Perspective!

October 2019

There are assumptions out there that consumers should not be eating before sleep as this leads to weight gain and reduced ability to digest. With many of us so focused on health, mental wellness and nutrition, more attention is being given in the scientific community on how consumption of certain foods at various times of day impacts our bodies.

The reality is that recent studies have suggested consumption of dairy proteins pre-sleep for overnight recovery can lead to muscle reconditioning and improved physical performance. This understanding opens a whole new market of over-night nutrition, building a stronger body in your sleep.

This month Dr Richard Swinbourne from the Singapore Sport Institute, in collaboration with NZMP, will share insights on this emerging trend, and discuss how ingesting certain types of nutrition at night can benefit active lifestyle consumers.

Four key movements for the month:



Production – Australia's production continues to decline. EU and the US are flat, whilst New Zealand's season is still in the early stages.



Exports – EU export growth endures, whilst US, New Zealand and Australian exports decline.



Imports – Latin America, Asia and Middle East & Africa imports are declining. China, imports continue to show strong growth.



Prices – GDT Event 245 produced mixed results, resulting in the GDT price index up only +0.2% to USD \$3,306/MT. Butter, Cheddar, and WMP saw decreases, whilst BMP, Lactose and SMP saw increases. AMF remained flat at USD \$4,997/MT.

If you have suggestions for topics you would like to read about in Perspective, or any other general feedback, we would love to hear from you. You can contact us at nzmpbrand@fonterra.com or through your account manager.

Kind Regards,

Alex Turnbull

Director, NZMP Marketing



The Benefits of the 'Midnight Feast'



Dr Richard Swinbourne. PhD.





Dr Swinbourne is a New Zealand trained dietitian through the University of Otago and completed his Sports Dietitian course with Sport Dietitians Australia. Richard worked with the New Zealand Rugby Union as their High-Performance Nutritionist for National Teams between 2007-2014, including service delivery with the All Black 7s and New Zealand Women's 7s National teams. Richard proceeded to explore the world of sleep among elite athletes, completing his doctorate with the Auckland University of Technology. Richard's work was published in the European Journal of Sports Science in December 2015, titled 'Prevalence of poor sleep quality, sleepiness and obstructive sleep apnoea in athletes'. Richard is currently the Head of Sport Nutrition at the Singapore Sports Institute, and is enjoying applying both his nutrition and sleep science insights to pursue the emerging trend of pre-sleep protein ingestion.

Sport Singapore is a statutory board of the Ministry of Culture, Community and Youth, its core purpose is to inspire the Singapore spirit and transform Singapore through sport. Through innovative, fun and meaningful sporting experiences, their mission is to reach out and serve communities across Singapore with passion and pride. Sport Singapore uses sport to create greater sporting opportunities and access, more inclusivity and integration as well as broader development of capabilities.

An interview with Dr Richard Swinbourne on how pre-sleep protein ingestion builds stronger bodies during sleep.

The benefits of a night-time supply of dairy proteins for overnight recovery have been suggested to support muscle reconditioning and improve physical performance in athletes. We interview Dr Richard Swinbourne on this emerging 'over-night nutrition' trend and discuss how ingesting certain types of nutrition at night can benefit active lifestyle consumers.

Q. What introduced you to sport nutrition and sleep science and how do they relate?

At the age of twenty-one I was diagnosed with Type 1 diabetes. I started insulin and had to spend time with a dietitian, learning how to manage the condition with nutrition and lifestyle. I became fascinated with the powerful role nutrition plays in human health and wellness, and I was inspired to go on and study to be a dietitian.

I progressed into private practice and completed the Sport Dietitians Australia course, allowing me to work with endurance athletes and team sports such as rugby, teaching athletes about performance-based nutrition. I particularly enjoyed my time with the All Black Rugby Sevens team for seven years.

Interestingly, when I questioned the role of sleep for athletes, no one could tell me any answers at that time (circa 2010). Sleep for athletes had not been very well investigated at all! Thus I was stimulated to sidestep into the world of sleep physiology and I pursued a PhD in sleep science for athletic recovery and performance.

Interestingly, nutrition and sleep intersect and influence each other, and I have been able to combine both fields in my practice.

Nutrition can change the way we sleep, for better or worse depending on what and when we consume nutrients prior to sleep.

Conversely, sleep and fatigue can influence our metabolic health and food choices and plays a significant role in weight management and wellness.

Q. What is the role of sleep on health, and how does this affect athlete performance?

Adults need between 7.5 to 8.5 hours of sleep per night. However, we get 2 hours less sleep now per night on average than our grandparents.

Most of us intuitively understand how important sleep is, poor sleep results in fatigue and being 'run-down', however humans are unique in that we often choose to ignore our sleep needs.

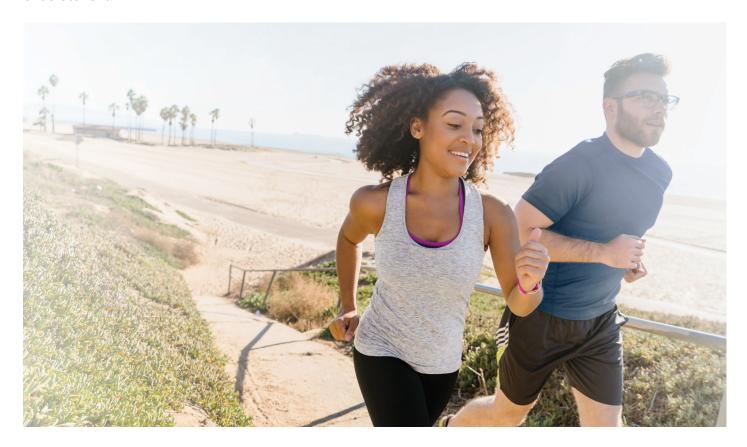
We often evade sleep doing other things, from work and 'all-nighters' to socialising, dealing with stresses and watching blue-light saturated screens. In fact, we are the only species to intentionally ignore our sleep needs to do other things, and this is hurting us.

Just as we perform multiple tasks when awake, sleeping performs multiple functions in the body and brain overnight. However, as fundamental as sleep is to keep us healthy, scientists are still trying to understand it.

Sleep is essential for healthy brain function, and a stable mood as we bathe our brains with spinal fluid during sleep, washing away toxins that built up during the day. An accumulation of these amyloid plaques (toxins) from sleep deprivation has been linked to Alzheimer's disease later in life. Our immune cells have a party at night when we sleep, actively protecting our bodies and creating a healthy heart, blood pressure, and improving reaction time. Of course, athlete's need the things provided by a healthy immune system to perform at elite optimal standards.

Importantly for athletes, sleep is recovery; we build and repair muscles and joints and grow and heal bones in our sleep too.

Sleep is essentially a legal performance enhancing drug that athletes (and non-athletes) can overdose on, freely acquire, and reap huge health and performance benefits from. Of special interest to adolescents, young adults, and parents too, is the notion that we can get more grade A's with more ZZZ's. Sleep plays a primary role in learning, memory, and academic performance. Facts well established by research.



Q. What are some of the benefits of consuming dairy protein before sleep?

Nutrition and sleep have a symbiotic relationship, nutrition can improve sleep, and sleeping improves our ability to absorb nutrition.

- Protein foods like dairy, seafood and pumpkin seeds are rich in tryptophan, which we use to make melatonin before and during sleep.
- Protein also supplies the amino acids to build and repair muscle tissue overnight. We release growth hormone and testosterone in large amounts during sleep, driving muscle protein synthesis.
- Other micronutrients found in dairy such as magnesium and calcium are also important for sleep processes.

Studies have clearly shown we can digest and absorb large amounts of protein overnight, and none of it is wasted.

but rather it is all built into our muscles by morning. One study on active subjects lifting weights for 12 weeks has shown that muscles not only get bigger, but also stronger with dairy protein consumption before sleep. Those consuming protein before bed simply outperformed those who didn't.

Q. Since you first started working in sport nutrition years ago, what have been the most exciting developments in this area?

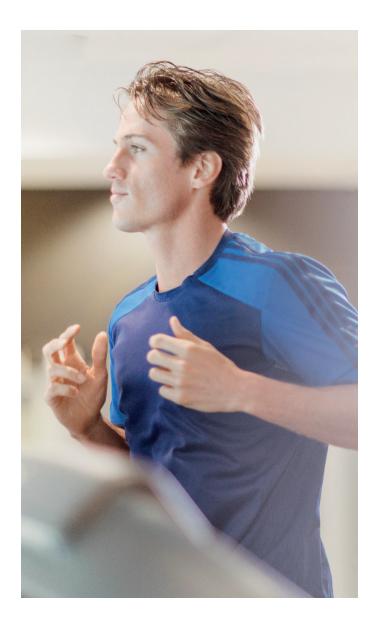
Years ago, nutrition was all about fuelling your body with "real food" based diets. Then we went through a phase where supplements, pills and fad-diets ruled. It is really pleasing to see the "real food" nutrition making a comeback, with all of it's amazing benefits.

Dairy's impact on the gut microbiome has been a great focus, linked to immune health and even brain function and mood.

Fermented foods, including yoghurts and cheese, as natural sources of probiotics have become very popular as a result, as well as prebiotics to feed the good flora in our gut.

Nutrient timing, the manipulation of nutrient availability around exercise, has shown us we can enhance certain exercise and metabolic adaptations such as enhanced aerobic adaptations by training without carbohydrates.

Nutritional science is currently experiencing a focus on high plant intakes for health and performance (as well as better sleep), highlighting the role of phytonutrients and antioxidants. Alongside this, there has been a concurrent change in attitude towards saturated fat intake from healthy free range animals and dairy foods, recognising these are in fact healthy for us in moderation. Lastly, for me, I have to mention the understanding of the importance of sleep for weight loss and diabetes prevention in the general population, the third vital ingredient beside nutrition and exercise for wellness success.





Q. Having lived and travelled extensively in the South East Asia market, what can you share about trends in health and wellness and the role dairy can play here?

I think there has been an increased focus on individual wellness and wellness means many things to many people. Some of the trends I have been noticing are;

- Sleeps impact on health is a huge focus in Asia
- Stress management through mindfulness is popular, learning stillness in such a noisy world.
- The protein story is strengthening, with a bigger focus on getting high quality protein at meals, snacks and after exercise.
- Vegetarian diets are gaining popularity, so people are looking for sources of protein outside meat.
- Weight management interest is ongoing, people wanting to lose fat and gain muscle tone and strength.

 Gut health and encouraging healthy gut flora, by nourishing the microbiome with probiotics is also trending strongly.

Dairy plays a role in many of these health trends, from playing a key role in a healthy vegetarian diet, to providing a source of probiotic strains for the gut and high protein for growing muscles and shrinking waistlines.

Milk is the perfect sport drink, proven as the most hydrating fluid available, high in water, higher in electrolytes than leading sport drinks, and very effective for post exercise muscle protein synthesis.

Dairy is even being considered for its lipid content and cognitive benefits for the brain. It is quite an amazing and dynamic food for the health-conscious consumer.



Still early in new Zealand season. EU and US production flat. Australia continues to decline.

NEW ZEALAND

+2%

Production change for the 12 months to August 2019

New Zealand milk production for the 12 months to August was 2% higher than the same period last year.

New Zealand milk production was up 0.8% in August compared to the same period last year although it is still early in the season. Season-to-date production represents less than 9% of seasonal production.

AUSTRALIAN COLLECTION

-8%

Production change for the 12 months to July 2019

Production for the 12 months to July was down 8.4% on the previous 12 months.

Australia milk production decreased 8.4% in July compared to the same period last year.

Dairy Australia is forecasting 2019/20 season production to decline by 3% to 5%.

EUROPEAN UNION

+0%

Production change for the 12 months to July 2019

EU milk production for the 12 months to July was stable with a movement of 0.1% compared to the same period last year.

EU milk production increased 0.5% in July compared to the same period last year.

Growth continues in Ireland, up 10.4% in July 2019, driven by a return to more normal weather conditions following challenging conditions in 2018.

Key exporting countries where production declined were Germany (1.2%), France (1%) and The Netherlands (1.5%) as very dry conditions were reported for the month of July.

UNITED STATES

+0%

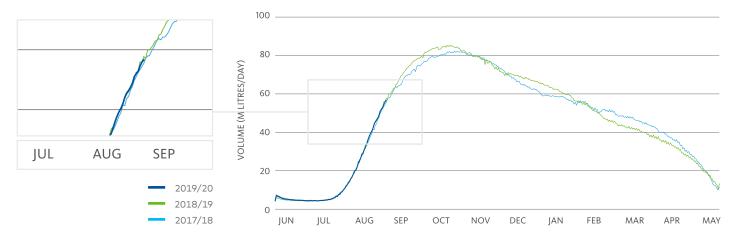
Production change for the 12 months to August 2019

Milk production for the 12 months to August was 0.3% higher compared to the same period last year.

US milk production increased slightly by 0.2% in August, compared to the same period last year.

Growth continues to be limited by record low cow numbers as poor on-farm profitability is leading to an increase in culling.

FONTERRA MILK COLLECTION 2019/20 SEASON



NEW ZEALAND COLLECTION

+**1**%

Increase for August 2019 compared to August 2018

+2%

Season to date
1 June to 31 August

Fonterra's total New Zealand collection for August, was 97.6 million kgMS, up 1.1% on the same month last season.

Season-to-date collection was 130.3 million kgMS, up 2% on last season. These volumes are still small in the context of the full season as is usual for this time of the year.

Overall, most regions have come through winter reasonably well. August saw a lot of days with rainfall recorded, although total rainfall was only marginally above August last season. Cow condition is good, and pasture cover also generally positive, resulting in milk volumes slightly above production for the same month last season.

AUSTRALIAN COLLECTION

-25%

Decrease for August 2019 compared to August 2018

-27%

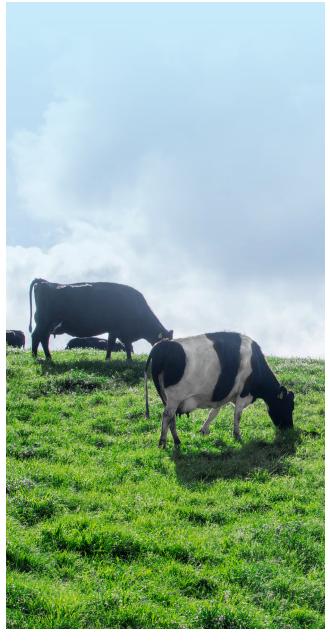
Season to date 1 July to 31 August

Fonterra's milk collections in August were 7 million kgMS, down 25.5% on August last season.

Fonterra collections across Australia for the two months to 31 August reached 12.4 million kgMS, down 27.5% on the same period last season.

The combination of high onfarm input costs, challenging seasonal conditions and heightened competition for milk continues to impact Fonterra's milk supply.

Dairy Australia is forecasting 2019/20 production to decline by 3% to 5% on prior season.



Monthly exports from New Zealand, Australia and the US decline. EU exports continue to grow.

NEW ZEALAND

Export change for the 12 months to **July 2019**

Exports for the 12 months to July were up 6.8%, or 219,726 MT, on the previous comparable period. This was primarily driven by WMP and fluid milk products, up a combined 198,077 MT.

Total New Zealand dairy exports decreased by 11.7%, or 36,417 MT, in July compared to the same period last year. This was primarily driven by WMP and butter down a combined 43,137 MT. This was partially offset by an increase in SMP exports, up 8,985 MT.

AUSTRALIA

Export change for the 12 months to July 2019

Exports for the 12 months to July were up 4.6%, or 34,798 MT, on the previous comparable period.

Fluid milk products, infant formula and butter were the main drivers of this 12-month growth, up a combined 59,325 MT, while WMP and cheese declined by 22,849 MT.

Australia dairy exports decreased by 1.9%, or 1,140 MT, in July compared to the same period last year. This was primarily driven by SMP, whey, WMP and cheese, down 5,776 MT and largely offset by an increase in fluid milk products.

EUROPEAN UNION

Export change for the 12 months to June 2019

Exports for the 12 months to June were up, 5.4%, or 285,597 MT, on the previous comparable period. SMP fluid milk products and lactose were the main drivers of this growth, up a combined 325,347 MT. This was partially offset by a decline in WMP, down 69,048 MT.

EU dairy exports increased by 6.7%, or 29,128 MT, in June compared to the same period last year. This was primarily driven by SMP and fluid milk products, up 28,180 MT.

UNITED STATES

Export change for the 12 months to July 2019

Exports for the 12 months to July 2019 were down 7.4%, or 179,086 MT on the previous comparable period.

The decrease was driven by whey, SMP, WPC and lactose, down a combined 197,780 MT.

US dairy exports decreased 4.0%, or 7,539 MT, in July compared to the same period last year. SMP and whey were the main drivers of this decline, down a combined 8,550 MT. African Swine Fever continues to have a negative impact on whey exports to China.

Monthly imports into China show strong growth. Latin America, Asia and Middle East & Africa down.

LATIN AMERICA

+2%

Import change for the 12 months to June 2019

Imports for the 12 months to June 2019 were up 2.8%, or 52,824 MT, compared to the same period the previous year. Increases were recorded across a broad range of products with SMP, fluid milk products, and WMP up by a combined 63,439 MT.

Latin America dairy import volumes¹ decreased 7.5%, or 12,132 MT, in June compared to the same period last year. This was driven by declines in cheese, WMP and whey, down a combined 14,164 MT. Mexico and Peru are the main countries behind these declines.

ASIA

+5%

Import change for the 12 months to June 2019

Imports for the 12 months to June were up 5.6%, or 261,529 MT, compared to the same period the previous year. Growth continues across a broad range of products with fluid milk products, SMP, WMP and lactose up a combined 238,526 MT

Asia (excluding China) dairy import volumes¹ decreased 4.4% or 16,969 MT, in June compared to the same period last year. Decreases were recorded across a broad range of products with WMP, infant formula, cultured products, SMP and whey down 15,566 MT.

MIDDLE EAST & AFRICA

-10%

Import change for the 12 months to June 2019

Imports for the 12 months to June 2019 were down 10.7%, or 446,460 MT, compared to the same period last year. The decrease has been driven largely by cheese, WMP, SMP fluid milk products and other powders, down a combined 393,905 MT.

Middle East and Africa dairy import volumes1 decreased 9.4% or 28,764 MT in June 2019 compared to the same period last year. Decreases were recorded principally in cheese, fluid products, butter and SMP, down a combined 19,858 MT. Algeria imports remain low as the country experiences economic uncertainty, driving weaker demand for powders.

CHINA

+9.3

Import change for the 12 months to July 2019

Imports for the 12 months to July were up 9.3%, or 258,982 MT compared to the same period last year.

Strong demand out of China continued with imports across all key categories; WMP, fluid milk products and SMP were up a combined 328,473 MT.

China dairy import volumes increased 14%, or 32,847 MT, in July compared to the same period last year. This was driven mainly by increases in fluid milk products, up 32,749 MT, and smaller increases in SMP, infant formula but partially offset by decreases in butter and whey, which were down by 12,574 MT.

RUSSIA

-10[%]

Import change for the 12 months to July 2019

Imports for the 12 months to June 2019 were down -10.3% or -113.028 MT compared to the same period the previous year. This was mainly driven by Cultured Products, Fluid and Fresh Dairy, Infant formula, lactose, MPC, Whey and WPC being down a combined -194,456 MT. Offset by Cheese, AMF, WMP and Butter being up a combined 67,033

Russia import volumes were down -2.8% or -240 MT for July 2019 compared to the same month the previous year.





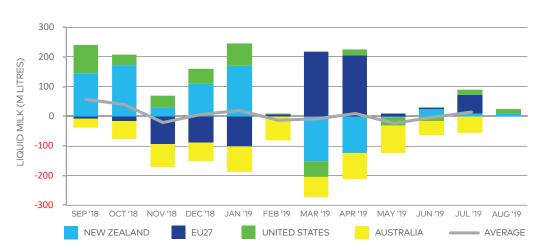
Global Dairy Market

The charts on the right illustrate the year-on-year changes in imports, exports and production for a range of countries that are important players in global dairy trade.

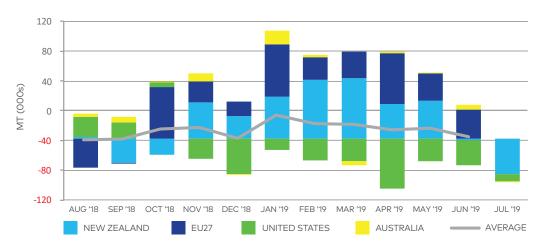
The absolute size of the bars represents the change in imports, exports or production, relative to the same period the previous year.

Averages are shown where data is complete for the regions presented.

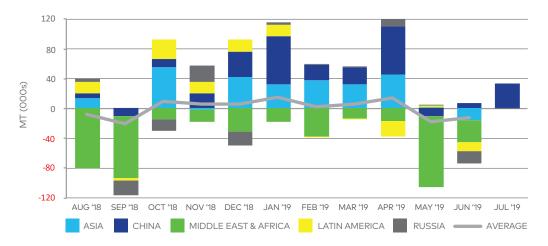
PRODUCTION



EXPORTS



IMPORTS





Food Price

The FAO Food Price Index (FFPI) averaged nearly 170 points in September, which is unchanged from August, but 3.3% up on the same time last year. While sugar prices fell sharply, that decline was almost entirely offset by higher prices for vegetable oils and meat.

Meanwhile, the FAO Dairy Price Index averaged 193.4 points in September, down 0.6% in August, but up 1.3% in September 2018. Price quotations for cheese and butter fell, while Skim Milk Powder (SMP) and Whole Milk Powder (WMP) price quotations firmed on strong import demand.

Source: FAC





Economic

Composite leading indicators (CLIs) are pointing towards easing growth momentum in the US and the euro area, particularly in Germany.

Stable growth momentum is, however, expected in the OECD area as a whole, as well as in France and Canada. The UK's assessment is also still for stable growth momentum, but with large margins of error, due to continued Brexit uncertainty.

Among the major emerging economies, stable growth momentum is expected for Brazil, Russia and China's industrial sector. However, India is showing signs of easing growth momentum off the back of a sharp decline in the automotive industry.

Source: OECL





Consumer

The EIU is now predicting global growth of 2.9% for 2019 and 3.2% for 2020. Consumer confidence in the US has been affected by the escalating trade war with China, so the forecast for US growth in 2020 has been revised down to 1.6% from 1.7%. Global trade uncertainty has also seen the EIU revise their real GDP growth forecasts for the eurozone to 1.3%, down from 1.4%.

Source: Economist Intelligence Unit





Weather

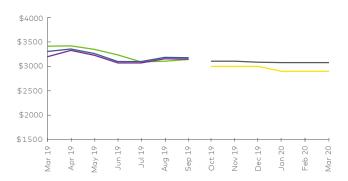
August saw above average temperatures in parts of Southland, North Otago, Taranaki, Whanganui, southern Hawke's Bay, Waikato and the Coromandel. Conversely, parts of the West Coast, Tasman, Marlborough and Wairarapa had below average temperatures. Meanwhile, soil moisture was near normal for most of New Zealand.

In Australia, persistent dryness continued in drought-stricken southern Queensland and New South Wales through August. Meanwhile, rainfall was near to below normal in Victoria and South Australia.

Weather conditions were variable across Europe. Rain eased drought from southern Germany through to Hungary and southern Poland, while unfavourable dryness intensified drought from north-eastern France into north-eastern Germany and north-western Poland.

Source: World Agricultural Weather Highlights USDA oCOE, NIWA

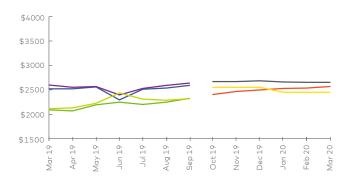
WMP



WMP prices are very tight across the board following minor changes in September. Prices range from USD \$3,144/MT to USD \$3,178/MT.

Futures and forecasts for the next six-months are mixed and tracking below current market. Rabobank Oceania's drops its average -4.3% to USD \$2,950/MT. NZX Futures has increased +3.2% to an average USD \$3,088/MT.

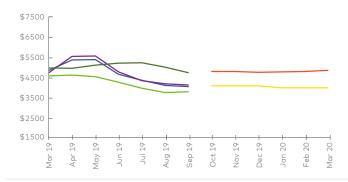
SMP



Prices for September are up across the board. USDA Oceania increased +1.8% to USD \$2,638/MT and Dutch Dairy Board showed a +3.5% uplift to USD \$2,327/MT. USDA NASS increased +1.3% to USD \$2,313/MT. GDT showed a +2.1% uplift to USD \$2,593/MT

Forecast and futures show moderate uplift on previous SMP prices predicted, with the average 6-month price forecast now between USD \$2,499/MT and USD \$2,664/MT.

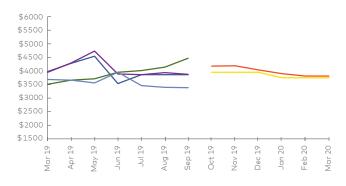
BUTTER



There were continued decreases in the butter prices in September, apart from a slight +0.7% uplift in Dutch Dairy Board to USD \$3,789/MT. USDA Oceania, GDT and CME Spot dropped to USD \$4,138/MT, \$4,068/MT and \$4,777/MT Respectively.

Average futures and forecasts for the next six-month period have also been revised down with CME Futures dropping another -2.6% to USD \$4,831/MT and Rabobank Oceania average prices dropping -11.3% to USD \$4,050/MT.

CHEESE



Mixed results are reported in September, the EU commission and GDT hold flat at USD \$3,384/MT and \$3,866/MT respectively. CME spot price is up a further +8% to USD \$4,473/ MT and USDA Oceania dropped -1.6% to USD \$3,875/MT.

CME Futures average is up +1.8% to USD \$3,987/MT and Rabobank Oceania average prices stay flat at USD \$3,850/MT.

Actuals



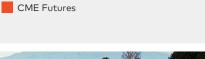


USDA Oceania EU Commission

Forecasts



Rabobank Oceania





Risk and Commercial Solutions

Take control of price and supply.



GDT Results

TRADING EVENT 245

+0.2%

Change in GDT Price Index from previous event

USD 3,306

Average price (USD/MT, FAS)

WMP

-0.2%

\$3,141

AMF

 $0.0^{\%}$

\$4,997

SMP

+2.7%

\$2,674

BUTTER

-0.2%

\$4,125

RENNET CASEIN

+0.7%

\$6,683

CHEDDAR

-3.4%

\$3,717

LACTOSE

-1.8%

\$784

BUTTER MILK POWDER

+6.7%

\$2,670

GDT SALES BY DESTINATION

TRADING EVENT 244





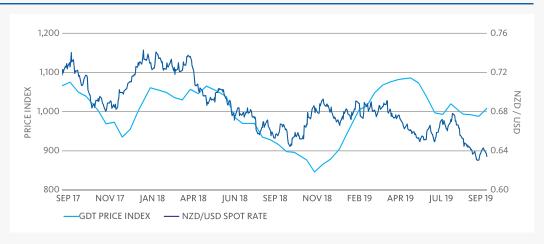
The next trading event will be held on 1 October 2019. Visit **www.globaldairytrade.info** for more information.

36,666 MT



Dairy commodity prices and New Zealand dollar trend

A reduction in the New Zealand Official Cash Rate coupled with global trade tensions stemming from ongoing concerns for US-China trade relations resulted in the New Zealand dollar weakening over the month of August.



USDA, Dairy Outlook

Published September 2019



Price movements for dairy products from the week ending August 3 to the week ending September 7 were mixed. The butter price fell 9.1 cents to \$2.2748 per pound. The price for 40-pound cheddar cheese blocks rose 7.8 cents to \$1.9167 per pound, while the price for 500-pound barrels (adjusted to 38% moisture) fell 2.7 cents to \$1.7333 per pound. The price for non-fat dry milk (NDM) rose 2.6 cents to \$1.0494 per pound, while the dry whey price also rose slightly to \$0.3681 per pound.

USDA, National Agricultural Statistics Service (NASS) has estimated July US milk production at 18.330 billion pounds, around the same as July 2018. Milk cow numbers fell to 9.310 million head, which is 9,000 fewer than the previous month – and the lowest number since January 2016. However, milk production per cow was 1,969 pounds in July, 17 pounds higher than the same time last year.

Dairy exports on a milk-fat milk-equivalent basis totalled 711 million pounds in July, 105 million lower than June and 162 million lower than July 2018. Meanwhile, exports on a skim-solids milk-equivalent basis were 3.348 billion pounds,

81 million higher than June, but 165 million lower than July last year. Exports of cheese, butterfat products and whey products all fell from June to July, while exports of non-fat dry milk/skim milk powder and lactose increased.

Most major dairy product imports strengthened in July. On a milk-fat basis, dairy imports were 656 million pounds, which was 15 million higher than June. On a skim-solids basis, dairy imports were up 83 million pounds to 597 million. Imports of butterfat decreased by 2 million pounds from June to July, however imports of milk protein products were up by 5 million pounds.

July ending stocks mostly reflect tightening markets for dairy products. On a milk-fat basis, July ending stocks were 18.386 billion pounds, down 361 million on the same time last year. On a skim-solids basis, July ending stocks were 11.119 billion pounds, 523 million lower than July 2018. Butter was the exception to the downward trend for most products, with a year-on-year increase of 11.4 million pounds.





Dairy forecasts for 2019

With the milking herd shrinking in July, the forecast for the size of 2019's herd has been lowered by 10,000 to 9.325 million. However, July's continued growth in milk yield and improved returns in the second half of the year have seen an increase in the milk per cow forecast to 23,375 for 2019. Therefore, milk production is now forecast at 218.0 billion pounds for 2019, 0.1 billion pounds higher than previously predicted.

Meanwhile, the import forecast on a milk-fat milkequivalent basis for the year is 7.0 billion pounds, down 0.2 billion from the last forecast. This is due to lower than expected butterfat imports. The export forecast is also down slightly to 9.3 billion pounds, due to a weaker outlook for butterfat products exports. Ending stocks on a milk-fat basis are unchanged, forecast at 13.0 billion pounds.

On a skim-solids milk-equivalent basis, 2019's import forecast is up 0.4 billion pounds to 5.9 billion, due to higher

than expected imports of milk protein products. The export forecast is down 0.4 billion pounds to 40.2 billion, with exports of dry whey and whey products still falling year on year. The forecast for ending stocks on a skim-solids basis remains unchanged at 10.0 billion pounds.

Dairy product price forecasts for 2019 are mostly higher than previous forecasts. Price predictions for cheddar cheese, NDM and dry whey have all been lifted, however the butter price forecast for the year has been lowered by 5.5 cents to \$2.265 per pound, due to recent price decreases and a higher ending stock level for July.

The Class III price forecast for 2019 has been raised by 15 cents to \$16.45 per cwt, while the Class IV price forecast is down 15 cents to \$16.15 per cwt. The all-milk price forecast for the year is \$18.35 per cwt, up 5 cents on last month's prediction.

Blimling, Forecast Update

Published September 4, 2019

Blimling's latest forecast notes that butterfat tests in the US continue to rise. Average butterfat reached 3.90% through July, up 0.03% from last year. That minor uptick increased average butterfat solids in farm milk by 40 million pounds year-to-date – which is enough extra fat for 290 loads of cream or 7 million pounds of butter per month.

Blimling puts this increased production down to five years of strong butterfat pricing. With that pricing incentive in place, producers have adjusted rations and altered decisions around genetics to boost fat tests and pay prices. So long as butter remains valuable, this trend towards higher butterfat components should continue.

Meanwhile, near-term constraints and seasonally stronger demand should keep cheese prices propped up, however Blimling notes soothed fears around supply into 2020 has taken some risk out of the first half.

Strong butter stock position heading into the holiday season will likely limit upside into year-end, but budget buying will be supportive into the new year.

The NDM/SMP market could remain under pressure by larger-than-expected global supply overhang, however stronger domestic demand and risk of reduced supply could push US prices higher into early 2020.

Finally, whey prices will likely remain depressed into 2020, due to weak global demand and increased potential for greater domestic production.





Fonterra draws the information in this update from a variety of principally external sources listed below. Also included are defined acronyms for better understanding.

AMF Anhydrous Milk Fat

BMP Butter Milk Powder

CME Chicago Mercantile Exchange

DDB Dutch Dairy Board

EIU Economist Intelligence Unit

FAO United Nations Food and Agriculture Organisation

Farmgate Milk Price The price for milk supplied in New Zealand to Fonterra by farmer shareholders

Fluid and Fresh Dairy The Fonterra grouping of fluid milk products (skim milk, whole milk and cream pasteurised or UHT processed), concentrated milk products (evaporated milk and sweetened condensed milk) and yoghurt

FTA Free Trade Agreement

GDI Global Dairy Intelligence group, Fonterra Cooperative Group Limited. GDI provides insights to Fonterra management based on a model of the global dairy market developed by GDI and populated with publicly available data. The model outputs referenced in this report do not reflect Fonterra's non-public production or sales data

GDP Gross Domestic Product

GDT Global Dairy Trade auction platform

GDT Price Index is an index that provides a measure of the weighted average percentage change in the movement in price of all products sold on GDT. This provides a simple measure of changes in dairy price between trading events

IMF International Monetary Fund

Informa Informa Economics Inc., Dairy Group, Global Dairy Market Report

LME Liquid Milk Equivalent

MAT Moving Annual Total (this is data averaged across the 12 month period)

MEA Middle East and Africa

NDM Non-fat Dry Milk

NZX NZ Stock Exchange

OECD Organisation for Economic Co-operation and Development

Q[1] [First] Quarter

Reference Products The dairy products used in the calculation of the Farmgate Milk Price, which are currently WMP, SMP, BMP, butter and AMF

SEA South East Asia

Season New Zealand: A period of 12 months to 31 May in each year. Australia: A period of 12 months to 30 June in each year

SMP Skim Milk Powder

TE GDT Trading Event

USDA NASS US Department of Agriculture National Agricultural Statistics Service

USDA Oceania US Department of Agriculture Agricultural marketing service price series for specific products in the Oceania region

WMP Whole Milk Powder

YOY Year-on-year

YTD Year to date



Tracking the global dairy market Production, Export and Import charts

The production, export and import charts illustrate year-on-year changes in production, exports and imports for a range of countries that are important players in global dairy trade.

The absolute size of the bars represents the change in production, exports or imports compared to the same month the previous year. The portion of the bar below zero represents a year-on-year decrease and the portion above the line shows the year increase for that country. Where countries are not shown this is likely due to the data not yet being available.

Weather Source (Page reference – 13)

Comments on weather are obtained from various government weather sites as well as independent reports including Martell Crop Projections. Global milk production data is sourced from government and industry websites including US Department of Agriculture (USDA), EuroStat, Dairy Australia, Dairy Companies Association of New Zealand (DCANZ) and others.







Important note: The information and commentary contained in this 'Perspective from NZMP' is based on publicly available official government statistics; industry association reports; other published industry reports together with data and insights developed by Fonterra's Global Dairy Intelligence group ('GDI'). These sources are identified as appropriate in this 'Perspective from NZMP'. GDI insights and data are derived from a global dairy market model populated by publicly available data. The model inputs and outputs do not reflect Fonterra's non-public production, pricing or sales data. Fonterra Co-operative Group Limited and its group members involved in the manufacture or sale of NZMP branded products ('Fonterra') has provided this 'Perspective from NZMP' for informational purposes only. It does not constitute recommendations or advice for the purposes of making financial decisions regarding trading in dairy products or commodities, or dealing in financial instruments relating to dairy commodities. Although every effort is made to ensure the accuracy of reproducing and interpreting such information, no warranty or representation of such is made and Fonterra shall have no liability in respect of any reliance placed on such information in the formulation of any business decision.