



# PERSPECTIVE

August 2020

## 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



Dairy for life



# Welcome back to Perspective!

August 2020

The food & beverage industry has recognised protein as a popular ingredient for years, and the mainstream adoption of protein has resulted in a rapid increase of global consumption. It is also well known that protein is beneficial for the growth of muscle. However, muscle growth is not just for bodybuilders and athletes, it's also for recovering patients, the elderly and those with chronic illnesses.

People are also looking for ways to consume protein from vegetarian, and ready-to-drink sources. As a result, a debate that has arisen on whether dairy protein is better for muscle growth than non-dairy proteins such as collagen and soy. Research has shown that the dairy protein, whey, is one of the most effective proteins for muscle growth. We interviewed Dr. Stu Phillips to share the details of his research that demonstrated this in more detail.

Additionally, as the dairy industry continues to navigate COVID-19, our team are here to support you. As always, we are available to answer questions or provide guidance, and for the latest information on how Fonterra is responding to COVID-19 please refer to the webpage [here](#).

## Four key movements for the month:



**Production** – Beginning of 2020/21 season in New Zealand. Australia nears end of season on improved monthly production. EU monthly production slows, US improves.



**Exports** – New Zealand and Australia monthly exports decline and monthly increase from US and EU.



**Imports** – Latin America, Asia and Middle East and Africa imports show strong decline. China monthly imports improve.



**Prices** – **GDТ Event 265** saw the majority of products decline, resulting in the GDT price index dropping -5.1% to USD \$3,045/MT. The largest movements came from Whole Milk Powder, Butter Milk Powder & Lactose which moved -7.5%, -6.5% & +5.7% respectively.

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](mailto:nzmpbrand@fonterra.com) or through your account manager.

Kind Regards,

**Gillian Munnik**

**Director of Sales and Marketing Services**



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# Collagen vs Whey Protein:

## Head to head assessment for muscle growth



### Dr. Stuart Phillips (PhD)

Professor, Department of Kinesiology  
McMaster University



Dr. Stuart Phillips joined McMaster University in 1998 and is currently a full Professor in the Department of Kinesiology at McMaster University. He is Tier 1 Canada Research Chair in Skeletal Muscle Health in Aging. He is also the Director of the Physical Activity Centre of Excellence. Dr. Phillips is a fellow of the American College of Sports Medicine and the Canadian Academy of Health Sciences.

It is well understood that protein is beneficial for muscle growth, however it is one molecule of protein, in particular, that is crucial. Leucine is a key molecule for muscle growth, and some proteins contain more leucine than others.

Research shows that 2.5g of leucine per serving of protein is required to stimulate muscle protein synthesis (1). The chart to the right (figure 1) shows a range of ingredients that contain leucine, and that some proteins are more efficient in providing sufficient levels for muscle protein synthesis than others.

To further understand the differences between a proteins leucine content and the impact on our bodies, we interview Stu Phillips about his research comparing collagen and whey protein head-to-head for muscle growth.

### What is your research background?

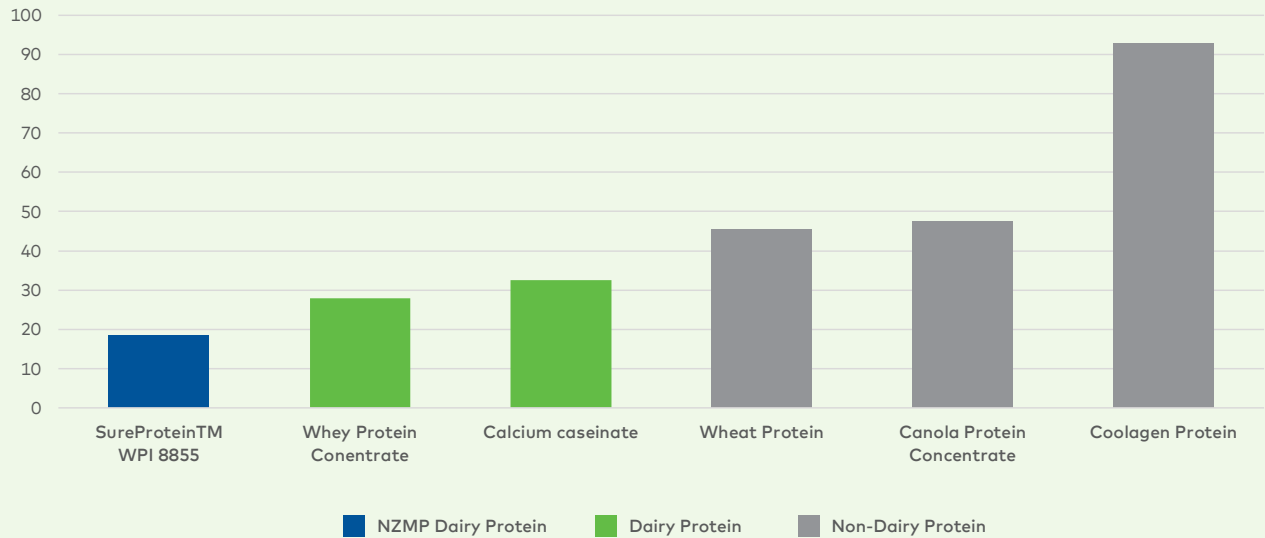
I have been with McMaster University now for 23 years, and my research focuses on skeletal muscle. In particular we consider what happens in the muscle during resistance exercise (loading), or during immobilisation or bed rest (unloading). And additionally, how age differences (with younger people and older people), influence this.

### You have released some recent research comparing Collagen Peptides and Whey Protein; can you tell us about it?

Recently a PhD student of mine, Dr. Sara Oikawa, did a great job comparing collagen peptides with whey protein to compare their impact on muscle protein synthesis. Collagen is a major component of connective tissues and of late, it has enjoyed somewhat of a renaissance for its potential bioactivity. As a non-dairy protein there has been interest in its comparison to dairy proteins, such as whey, for muscle growth properties.



Figure 1: Grams of product required to meet 2.5g Leucine (2)



Dr. Sara Oikawa compared collagen peptides with whey protein to show the impact on muscle protein synthesis at baseline and with resistance exercise (3). Her study had subjects consume isonitrogenous quantities of whey or collagen, meaning the protein content was the same; however, there was a big difference in the quality between the two protein supplements.

As Figure 1 shows,  
**whey protein has a much higher leucine content than collagen.**

Leucine is the key amino acid to stimulate muscle growth and this was shown in the outcomes. When stimulated with exercise, whey is significantly more effective. Collagen is lower in leucine and is an incomplete protein (as it doesn't contain tryptophan naturally), therefore is not as effective at stimulating muscle growth.

We used a new testing method which shows muscle synthesis over days, and the chronic 5-day muscle growth was significantly higher with whey protein than with collagen supplementation.

**In line with our hypothesis, proteins that contain higher leucine, like whey, are superior in stimulating muscle protein synthesis.**

### Is leucine the only essential amino acid that matters?

The most correct statement is that for muscles, protein quality is linked directly with leucine content and essential amino acid profile. A protein will always be superior for muscle growth when it has a full essential amino acid profile and higher leucine levels.

**Like a light switch, rapidly digesting whey stimulates anabolism, then the rest of the essential amino acids provided are the supporting cast to enable muscle growth to continue.**

Considering that, you can't do a lot better than whey protein.

### What is your opinion on supplementing branched chain amino acids vs. using whole proteins?

In total there are 20 amino acids, and 9 that are considered essential. Some attempt to supplement 'incomplete proteins' with amino acids in an effort to improve them. The branched-chain amino acids (BCAAs) are a group of three essential amino acids: leucine, isoleucine and valine. As I mentioned





**collagen is an 'incomplete protein', whilst whey is a 'complete protein' because it contains all 9 essential amino acids.**

There's actually very little evidence that that a combination of branched chain amino acids would do anything superior to leucine alone. In reality, you need leucine and the full suite of the other essential amino acids to make things work.

There are a number of studies using crystalline leucine as a top-up to compensate for poorer quality proteins. These studies convincingly show you can make the protein perform better; however I think the major stumbling point is that out of all 20 amino acids, leucine has one of the most bitter taste profiles that you could imagine – and I should know as I have tasted them all!

**Whey (a complete protein) has a better sensory profile compared to individual amino acids, making it easier to develop a well-appreciated product using whey.**

There needs to be a consideration for product compliance as a key element for future success. Lower doses of whey protein are more effective and taste much better in products whilst still supporting muscle growth.

**Your team completed this research with older women, what was the reasoning behind this?**



In general, we see that young men and young women are similar in terms of their response to stimulus in creating new muscle. Beyond puberty with the associated hormonal changes, men and women's muscles are stimulated in very similar ways. Where things really diverge is after menopause, as women's hormones change significantly. Whilst bone is known as the key tissue which undergoes change with hormonal fluctuations, we see evidence that post-menopause there are also muscular problems.

In addition, much of the existing protein and muscle mass-related research has been done in men and we wanted to take into account the hormonal impact of menopause and determine if that was able to be overcome with certain proteins.

**We see in this study that with proteins of high quality, you can overcome the anabolic resistance typically seen in older women.**

### What is next for your research?

As a result of this research we have shown the proof of concept that whey protein is superior when compared to collagen peptides for muscle synthesis. The holy grail of geriatric care is to look to physical outputs – such as improvements in the 6 min walk test, sit to stand or functional outcome; that would be a great step forward if we could show whey protein to be effective in this regard.



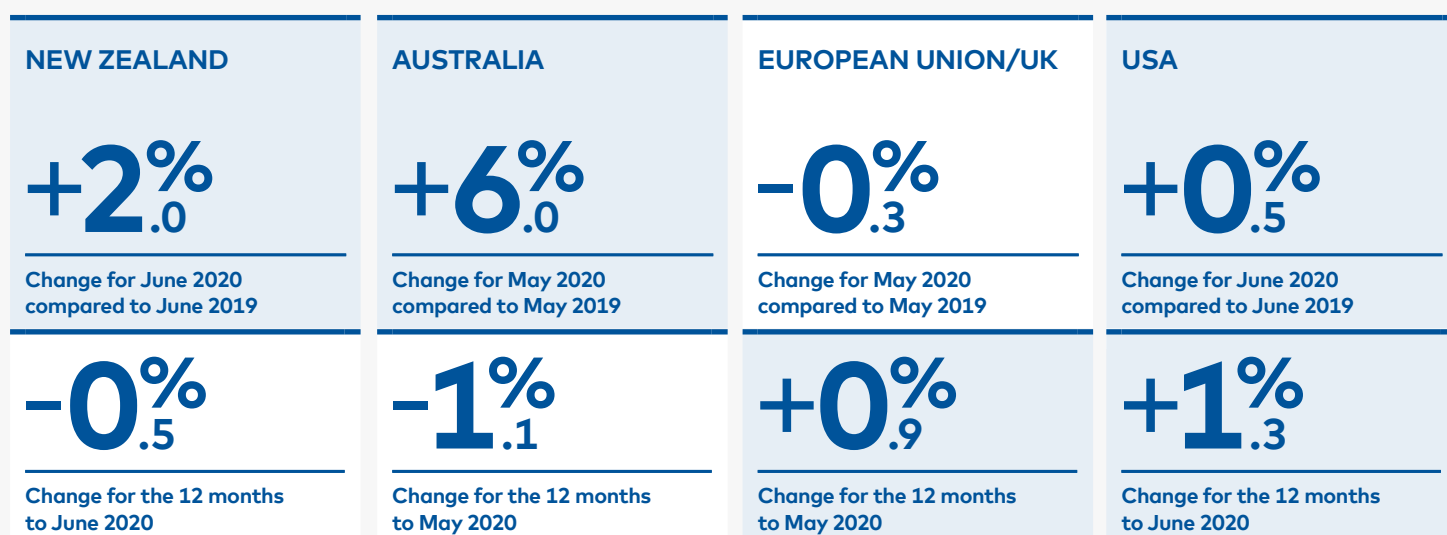
#### References:

1. Bauer et al 2013, Deutz et al 2014
2. <https://www.nzmp.com/global/en/resources/leucine-whitepaper.html>
3. <https://pubmed.ncbi.nlm.nih.gov/31919527/>





# Beginning of 2020/21 season in New Zealand. Australia nears end of season on improved monthly production. EU monthly production slows, US improves.



New Zealand milk production for the 12 months to June was 0.5% lower than last year.

New Zealand milk production<sup>1</sup> increased 2.0% on a litres basis in June compared to June last year. June typically represents around 1% of the season's production.

A warm start to winter and significant rainfall for many parts of the country have seen favourable conditions for the start of the new season.

Production for the 12 months to May was down 1.1% on the previous 12 months.

Australia milk production increased 6.0% in May compared to May last year.

Improving seasonal conditions stabilised production in the second half of the 2019/20 season and improved the outlook for the 2020/21 season.

Dairy Australia has moderated its milk production outlook for 2019/20 upwards to a drop of just 1-3% on last year.

EU milk production for the 12 months to May was up by 0.9% compared to the same period last year.

EU (including UK) milk production decreased by 0.3% in May compared to the same period last year.

The main regions showing a decline in production were Italy (down 7.5%), France (2.0%) and the UK (1.0%). Partially offsetting this decline were increased volumes in Ireland (up 3.5%) and Poland (1.8%).

The decline is likely related to the slow-down in foodservice and tourism-related consumption.

Milk production for the 12 months to June was 1.3% higher compared to the same period last year.

US milk production increased by 0.5% in June, compared to the same period last year.

US milk production improved year-on-year in June following May's slow-down due to production restriction programmes put in place.

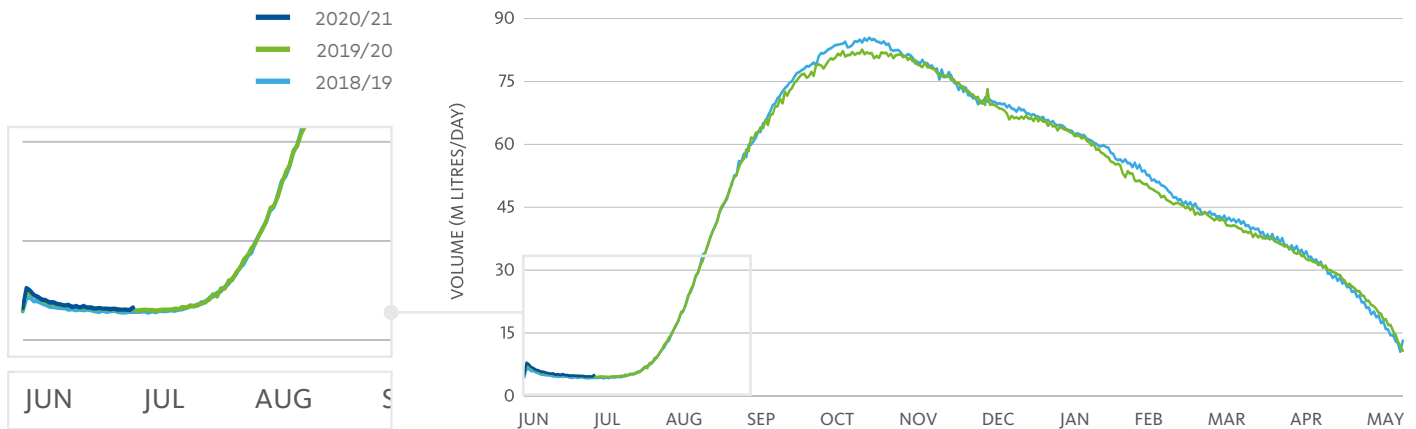
<sup>1</sup>: New Zealand production is measured in litres.

**Note:** 2020 production numbers include one extra day of production in February as 2020 is a leap year.

**Source:** Data from Global Trade Information Services and from government and industry websites, including USDA, Eurostat, High Ground Dairy, Dairy Australia and Dairy Companies Association of New Zealand



## FONTERRA MILK COLLECTION 2020/21 SEASON



## NEW ZEALAND COLLECTION

+2%.7

Change for June 2020 compared to June 2019

+2%.7

For the 2019/20 Season compared to the previous season

Fonterra's New Zealand collection for the first month of the 2020/21 season was 14.7 million kgMS, ahead 2.7% on the same month last season. This represents less than 1% of the full season forecast.

A relatively mild June across much of the country allowed some pastures to partially recover.

## AUSTRALIAN COLLECTION

-2%.0

Change for June 2020 compared to June 2019

-11%.8

For the 2019/20 season compared to the previous season

Fonterra's Australia collection in June was 6.8 million kgMS, a 2.0% decrease on June last year.

Full season collections reached 107.8 million kgMS, down 11.8% on the same period last season.

Volumes have been impacted by a combination of drought, high on-farm input costs in the first half and the highly competitive milk supply market, with losses primarily to milk brokers. Fonterra also made a conscious decision to purchase less third-party milk to focus on a value-add product mix.

Good autumn conditions for much of Australia and across key dairy regions in Victoria and Tasmania have improved milk production for the 2019/20 season and the outlook for 2020/21.







# New Zealand and Australia monthly exports decline and monthly increase from US and EU.

| NEW ZEALAND                              | AUSTRALIA                                | EUROPEAN UNION/UK                            | USA                                      |
|--|--|--|--|
| <b>-7%<sub>.6</sub></b>                  | <b>-18%<sub>.4</sub></b>                 | <b>+7%<sub>.0</sub></b>                      | <b>+14%<sub>.7</sub></b>                 |
| Change for May 2020 compared to May 2019 | Change for May 2020 compared to May 2019 | Change for April 2020 compared to April 2019 | Change for May 2020 compared to May 2019 |
| <b>-2%<sub>.7</sub></b>                  | <b>-8%<sub>.9</sub></b>                  | <b>+5%<sub>.4</sub></b>                      | <b>+4%<sub>.4</sub></b>                  |
| Change for the 12 months to May 2020     | Change for the 12 months to May 2020     | Change for the 12 months to April 2020       | Change for the 12 months to May 2020     |

Exports for the 12 months to May were down by 2.7%, or 34,427 MT, on the previous comparable period. This was primarily driven by butter, WMP and AMF.

Total New Zealand dairy exports decreased by 7.6%, or 21,733 MT, in May compared to the same period last year.

This was primarily driven by lower volumes of WMP to China and Bangladesh, down 6,944 MT, butter to China, down 6,293 MT, MPC to the US, down 3,600 MT, but partially offset by an increase in SMP, up 6,279 MT.

Exports for the 12 months to May were down 8.9%, or 70,244 MT, on the previous comparable period.

Australia dairy exports decreased by 18.4%, or 12,455 MT, in May compared to the same period last year.

This was primarily driven by fluid milk products, infant formula and WMP, down a combined 10,792 MT.

Declines were recorded across a broad range of products with SMP, infant formula, whey, cheese, butter and WMP down 82,244 MT and partially offset by fluid milk products, up 17,868 MT.

Exports for the 12 months to April were up 5.4%, or 301,234 MT, on the previous comparable period. Butter, cheese and fluid milk products were the main drivers of this growth, up a combined 223,238 MT.

EU (including UK) dairy exports increased by 7.0%, or 35,526 MT, in April compared to the same period last year.

This was mainly driven by increases in whey to China and SE Asia, butter to US and MENA, lactose to China and WMP to Oman, up a combined 33,835 MT. SMP and fluid milk products partially offset this increase, down 9,963 MT.

Exports for the 12 months to May 2020 were up 4.4%, or 100,698 MT on the previous comparable period, driven by SMP and WPC and lactose, up a combined 131,966 MT, and partially offset by decreases in whey, down 23,078 MT.

US dairy exports increased 14.7%, or 29,809 MT, in May compared to the same period last year.

May export volumes were driven by record volumes of SMP to SE Asia, MENA and China (up 15,596 MT), higher exports of lactose to SE Asia and China (up 5,682 MT) and higher volume of whey to China (up 4,815 MT).



# Latin America, Asia and Middle East and Africa imports show strong decline. China monthly imports improve

| LATIN AMERICA  | ASIA   | MIDDLE EAST & AFRICA  | CHINA   | RUSSIA  |
|--|--|---|---|---|
| <b>-12%<sub>.0</sub></b>   | <b>-14%<sub>.7</sub></b>   | <b>-7%<sub>.1</sub></b>   | <b>+3%<sub>.2</sub></b>   | <b>-5%<sub>.2</sub></b>   |
| Change for April 2020 compared to April 2019   | Change for April 2020 compared to April 2019   | Change for April 2020 compared to April 2019  | Change for May 2020 compared to May 2019  | Change for May 2020 compared to May 2019  |
| <b>-2%<sub>.7</sub></b>  | <b>-5%<sub>.0</sub></b>  | <b>-4%<sub>.3</sub></b>   | <b>+6%<sub>.2</sub></b>   | <b>+0%<sub>.0</sub></b>   |
| Change for the 12 months to April 2020   | Change for the 12 months to April 2020   | Change for the 12 months to April 2020  | Change for the 12 months to May 2020  | Import change for the 12 months to May 2020   |
| Imports for the 12 months to April 2020 were down 2.7%, or 52,602 MT, compared to the same period the previous year.   | Imports for the 12 months to April were down 5.0%, or 247,484 MT, compared to the same period the previous year.                                     | Imports for the 12 months to April 2020 were down 4.3%, or 177,507 MT, compared to the same period last year. This was driven by large decreases in fluid milk products, cheese and butter, down a combined 186,532 MT. | Imports for the 12 months to May were up 6.2%, driven by fluid milk products and WMP.   | Imports for the 12 months to March 2020 are flat with less than 0% movement or +149 MT compared to the same period the previous year. Russia import volumes were down -5.2% or -4,793 MT for May 2020 compared to the same month the previous year. |
| Latin America dairy import volumes <sup>1</sup> decreased 12.0%, or 18,444 MT, in April compared to the same period last year. This was driven by continued lower volumes of SMP and cheese to Mexico, and butter to Chile, down a combined 18,583 MT. | Asia (excluding China) dairy import volumes <sup>1</sup> decreased 14.7%, or 65,235 MT, in April compared to the same period last year.              | Middle East and Africa dairy import volumes <sup>1</sup> decreased 7.1%, or 28,223 MT, in April 2020 compared to the same period last year.   | China dairy import volumes increased by 3.2%, or 7,818 MT, in May compared to the same period last year.  |   |
| Decreases were driven primarily by infant formula, WMP, SMP and whey, down a combined 74,096 MT but largely offset by increases in WPC, up 18,916 MT.  | Decreases were recorded primarily in WMP to SE Asia, SMP and fluid milk products to the Philippines, and cheese to Japan, down a combined 57,385 MT. | Decreases were recorded principally in butter to Iran and Turkey and fluid milk product to Libya, down a combined 42,881 MT, and partially offset by increased volumes of SMP of 19,064 MT.                             | The increase was the result of higher volumes of whey, WMP, and lactose, up a combined 31,351 MT, and partially offset by a decrease in fluid milk products of 14,084 MT. |   |

<sup>1</sup>. Estimates are included for those countries that have not reported data.

Sources: Data from Global Trade Information Services; EU Milk Market Observatory; FAO; Highground Trading Group





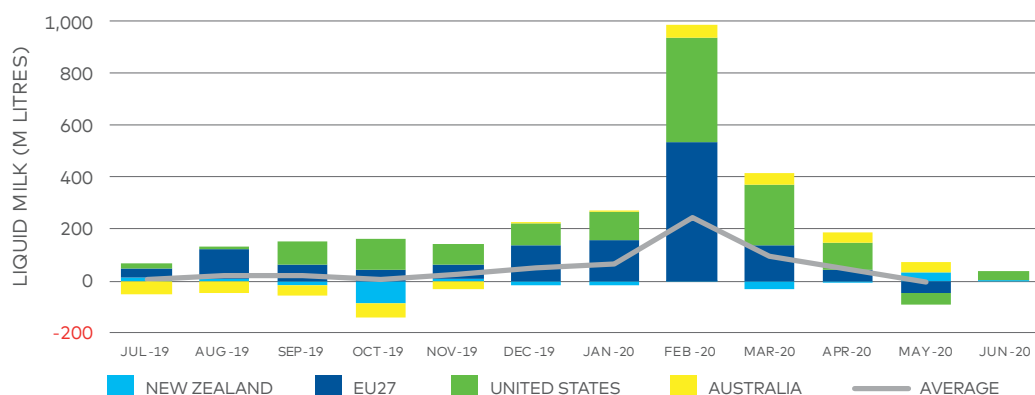
## Global Dairy Market

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.

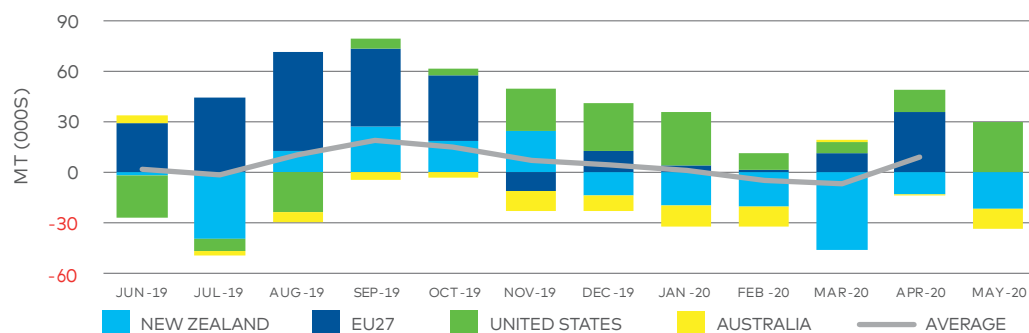
The absolute size of the bars represent the change in imports, exports or production, relative to the same period the previous year.

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

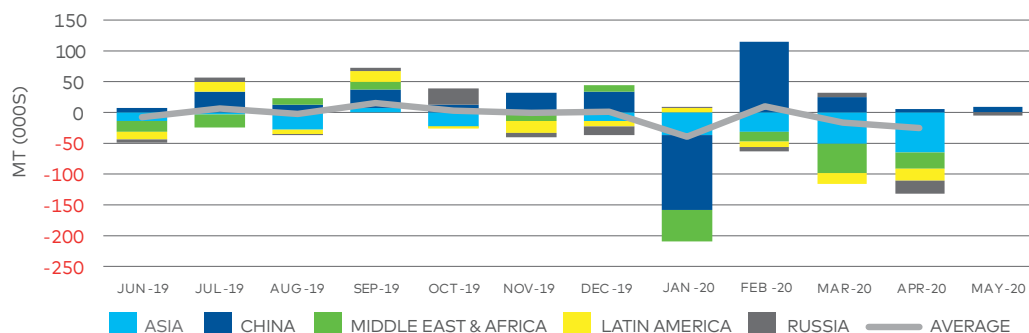
### PRODUCTION



### EXPORTS



### IMPORTS





## Food Price

The FAO Food Price Index (FFPI) rose 1.2% to 94.2 points in July. Rising for a second consecutive month, July's value is nearly 1% above the level seen at the same time last year.

Meanwhile, the FAO Dairy Price Index was also up in July, rising 3.5% to 101.8 points. Quotations for all dairy products in the index rose last month, moving the overall value back above pre-pandemic levels. Milk powder quotations rose on account of strong import demand by Asian buyers. Quotations for butter and cheese also continued to increase, however they still remain below their pre-pandemic levels.

Source: FAO



## Economic

Composite leading indicators (CLIs) point to significant improvement from the slowdown at the height of the Covid-19 crisis in April, however, recovery remains fragile with uncertainty around potential future lockdowns.

CLIs have rebounded strongly in most of the OECD's large economies but they remain well below long-term trends. Similar patterns are also visible among the major emerging economies. The CLI in China is back above pre-crisis levels, however, the CLI remains close to the crisis low in India.

It should be noted again that the CLIs should be interpreted with care in the current circumstances, given there's still considerable uncertainty around lockdowns and the transitions out of them.

Source: OECD



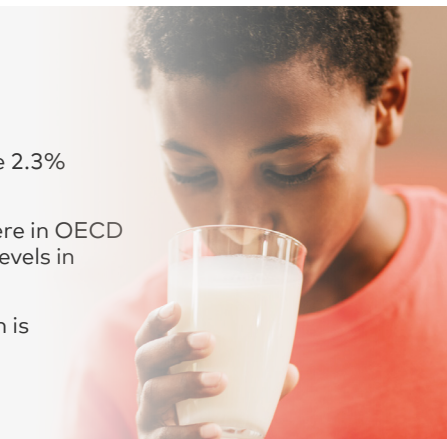
## Consumer

The Economist Intelligence Unit believes global output will contract by 5% this year, down from the 2.3% growth originally forecast before the Covid-19 outbreak.

GDP is expected to contract in all regions around the world, with the drop in output especially severe in OECD countries. As far as the G7 economies go, the EIU predicts Germany's output will be back to 2019 levels in 2021, however the rest will recover more slowly.

The United States' output is expected to contract by 5.3% this year, while China's real GDP growth is predicted to drop to 1.4%.

Source: Economist Intelligence Unit



## Weather

A warm start to winter and significant rainfall for many parts of the country have seen favourable conditions for the start of the new season in New Zealand.

Meanwhile, June saw below-normal rainfall in large portions of Australia's wheat belt. More rain would be welcome there to allow areas in the east to further recover from severe, long-term drought.

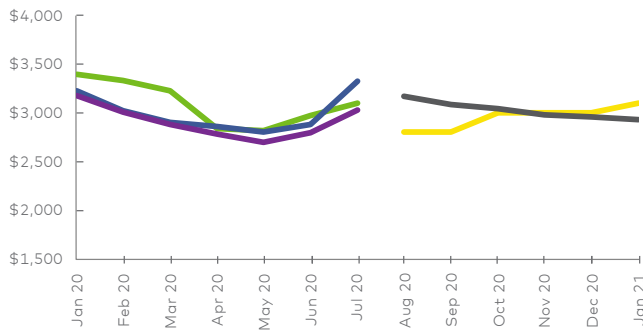
In Europe, a wet June across central and eastern growing areas contrasted with dry conditions in parts of Spain, France, Germany and Poland.

Source: World Agricultural Weather Highlights USDA oCOE, Fonterra Ingredients Australia





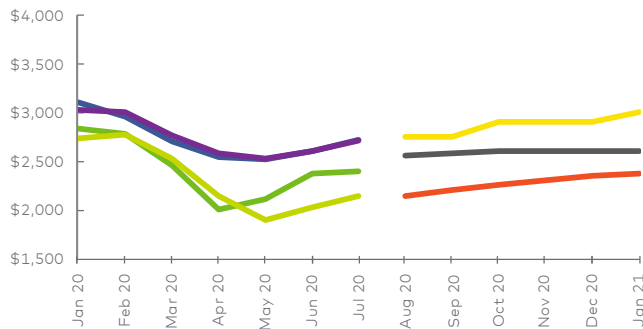
## WMP



WMP prices increased again across the board for July. The largest increase coming from GDT up +15.2% to USD \$3,320/MT. USDA Oceania & Dutch Dairy Board rose +8.3% and +4.3% respectively.

Futures and forecasts for the next six-months have also revised up slightly. Rabobank Oceania has increased +1.7%, predicting a slight upturn towards October. NZX Futures has increased theirs a further +3.5% from last perspective to an average USD \$3,025/MT.

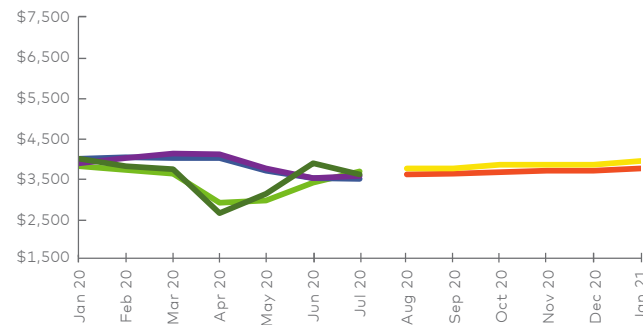
## SMP



SMP prices have increased across the board. Dutch Dairy Board is up +0.9% to USD \$2,395/MT. USDA Oceania increased +4.3% to USD \$2,713/MT and GDT showed an uplift of +4.3% to USD \$2,716/MT. USDA NASS increased +6% to USD \$2,143/MT.

However, the Forecast and futures have showed some mixed results. Rabobank Oceania has stayed true to previous projections at USD \$2,867/MT. CME Futures has decreased its 6-month average -3.2% to USD \$2,270/MT. NZX Futures has decreased -0.1% to USD \$2,589/MT.

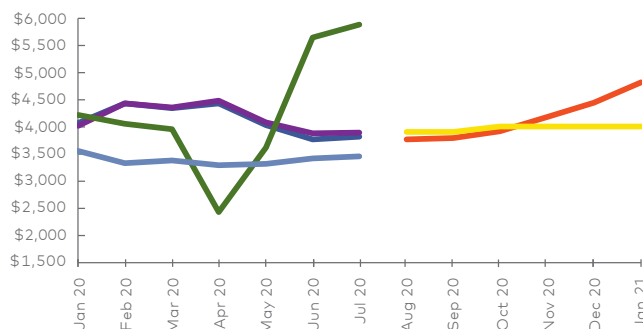
## BUTTER



There were mixed movements this month in the Butter prices. USDA Oceania showed a +1.7% increase to USD \$3,700/MT and GDT both dropped again to USD \$3,621/MT. CME Spot decreased -7.4% to USD \$3,740/MT and Dutch Dairy Board showed a +8.2% uptake to USD \$3,807/MT

As a result, we see CME Futures revise their average down -8.7% to USD \$3,808 /MT and Rabobank Oceania average prices remain flat at USD \$3,983/MT.

## CHEESE



July brings more mixed results for cheese prices with CME Spot continuing to climb with a +4.2% increase to USD \$5,876/MT. GDT increased +1.4% to USD \$3,807/MT and USDA Oceania stayed flat at USD \$3,881/MT. EU commission rose +1.4% to USD \$3,454/MT.

CME Futures 6-month average has also been revised down -0.7% to USD \$4,147/MT and Rabobank Oceania's average holds at USD \$3,967/MT.

### Actuals

GDT Fonterra Dutch Dairy Board USDA Oceania  
USDA NASS CME Spot EU Commission

### Forecasts

NZX Futures CME Futures  
Rabobank Oceania



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# GDT Results

## TRADING EVENT 265

# -5.1%

Change in GDT Price Index from previous event

# USD 3,045

Average price (USD/MT, FAS)

WMP

## -7.5%

\$3,003

AMF

## +3.0%

\$3,994

SMP

## -4.6%

\$2,583

BUTTER

## -2.8%

\$3,438

CHEDDAR

## -5.3%

\$3,568

LACTOSE

## +5.7%

\$1,349

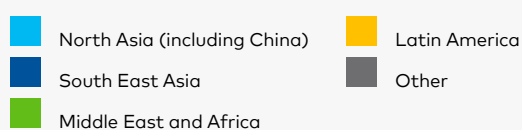
BMP

## -6.5%

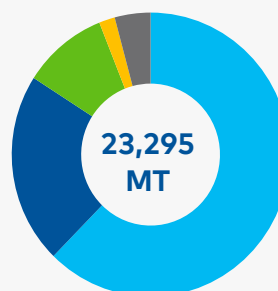
\$2,259

## GDT SALES BY DESTINATION

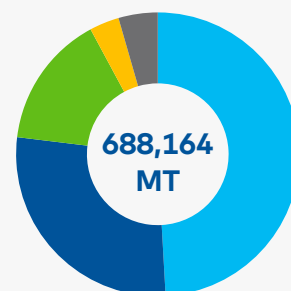
### TRADING EVENT 264



### Trade Event 264



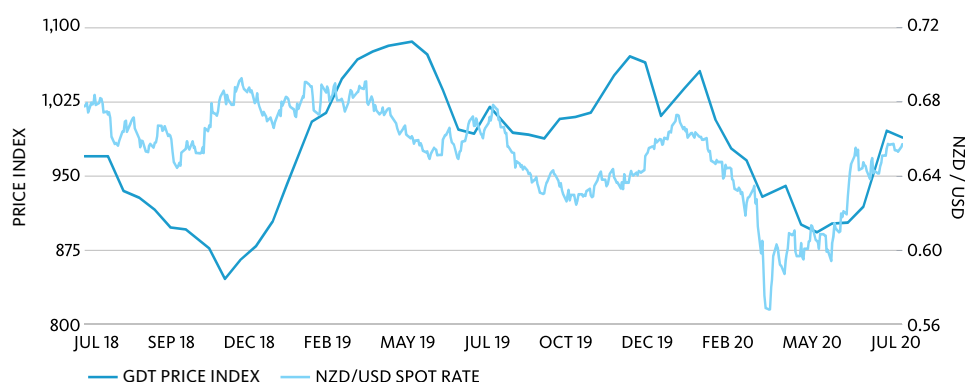
### Financial Year to Date



The next trading event will be held on 18 August 2020.  
Visit [www.globaldairytrade.info](http://www.globaldairytrade.info) for more information.

## Dairy commodity prices and New Zealand dollar trend

Financial markets are steady as they weigh the dichotomy between improving economic performances post-lockdowns, and an increasingly worrying picture of global health outcomes as COVID-19 spreads further. The NZD continues to find relative stability around 66 US cents.







# USDA, Dairy Outlook

Published July 16, 2020

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## Recent Development

Wholesale prices for cheddar cheese, butter and non-fat dry milk rose substantially from April to June. Those price rises are largely due to a decline in milk production from April to May, an increase in foodservice demand, Government purchases of dairy products, and relatively high exports. The all-milk price forecast for 2020 is now \$18.25 per hundredweight (cwt), up \$1.60 on last month's forecast. For 2021, the all-milk price forecast is also up by \$0.85 to \$17.05 per cwt.

The Covid-19 pandemic has brought greater volatility in dairy product prices, especially cheese. In recent weeks, wholesale cheddar cheese prices have continued a steep rise from very low prices in April and early May. The price of 40-pound blocks, as reported in the USDA National Dairy Products Sales Report (NDPSR), rose to a new record of \$2.5947 per pound for the week ending July 4. The price of 500-pound barrels (adjusted to 38% moisture) also rose to \$2.3927 per pound. The wholesale butter price was up to \$1.8427 per pound for the week ending June 20 but declined for the following two weeks. The price was \$1.7966 per pound for the week ending July 4. The nonfat dry milk (NDM) price has risen from a low point of \$0.8398 per pound in the week ending May 16 to \$0.9767 for the week ending July 4. Meanwhile, the price of dry whey fell from a high point of \$0.0389 per pound for the week ending May 16 to \$0.3378 for the week ending July 4.

Spot prices for cheese sold on the Chicago Mercantile Exchange (CME) have been very high recently. Average prices for 40-pound blocks and 500-barrels of cheddar cheese for the week ending July 10 were \$2.7785 and \$2.3760 per pound, respectively. For the same week, average CME prices for butter, NDM, and dry whey were \$1.7095, \$1.0250, and \$0.2925 per pound, respectively.

May is usually the peak month for milk production in the US, however this wasn't the case this year. According to USDA National Agricultural Statistics Service (NASS), May's milk production totalled 18.840 billion pounds. Daily milk production decreased by 14 million pounds from April

to May, which represents a record April-to-May decline. And daily milk production in May was 7 million pounds less than May 2019. It was the largest year-on-year decline for any month since March 2004. The milking herd numbered 9.370 million head in May, down 11,000 on April. Milk per cow averaged 64.9 pounds per head per day, which was down 1.4 pounds on April.

US dairy exports were relatively strong in May. On a milk-fat milk-equivalent basis, they totalled 910 million pounds, up 214 million on the previous month and 54 million higher than May last year. On a skim-solids milk-equivalent basis, May exports totalled 4.397 billion pounds, up 532 million on April and 767 million higher than May 2019. Exports of dry skim milk products reached a record monthly high of 174.5 million pounds in May. Cheese exports totalled 78.5 million pounds, up 19.6 million on April and 5.7 million higher than May 2019. Exports of butterfat products (butter, anhydrous milk fat and butteroil) totalled 4.9 million pounds in May, up 1.5 million on April, but down 0.4 billion on May last year.

US dairy imports on a milk-fat basis were 574 million pounds in May, up 42 million on April, but 79 million less than May 2019. On a skim-solids basis, May imports totalled 521 million pounds, up 52 million on April but down 37 million on the same time last year. Butter imports reached a record 11.3 million pounds, up 3.8 million on April and 2.7 million more than May 2019. About 92% of May's butter imports came from Ireland.







## Dairy forecasts for 2020

Published July 16, 2020

Expectations for 2020's milk production are significantly lower than previously expected due to the downturn in milk production from April to May. The milk production forecast for 2020 is now 221.5 billion pounds, down 1.0 billion pounds from last month's forecast. Compared to 2019, this would be an increase of 1.1%, adjusted for leap year. Milk cows are forecast to average 9.370 million head for the year, down 5,000 from the previous forecast. The milk per cow estimate has also been lowered by 105 pounds per head to 23,635 pounds.

Dairy export forecasts for 2020 have been raised due to higher expected exports of dry skim milk products, butterfat products, lactose and cheese. The forecast for 2020 exports on a milk-fat basis is 9.1 billion pounds, up 0.2 billion on last month's prediction. On a skim-solids basis, exports are now forecast at 45.8 billion pounds, 0.7 billion higher than forecast last month. The forecast for 2020 imports on a milk-fat basis has increased to 7.0 billion pounds, up 0.2 billion on last month's forecast. This is due to higher than

expected butter imports. The annual forecast for 2020 imports on a skim-solids basis remains unchanged at 5.8 billion pounds.

The cheese price forecast for 2020 has been raised to \$1.905 per pound, up 24.5 cents on last month's forecast. The butter price forecast has also been increased to \$1.685 per pound, up 0.5 cents. With higher expected exports, the NDM price forecast has been raised to \$1.040 per pound, up 4.0 cents. Meanwhile, the dry whey price forecast for 2020 has been lowered 0.5 cents to 0.355 per pound.

The Class III price forecast for 2020 has been raised \$2.35 to \$18.00 per hundredweight (cwt) due to the higher expected cheese price. Higher expected butter and NDM prices have also resulted in an increased Class IV price of \$13.95 per cwt, up \$0.40 on last month's forecast. The all-milk price forecast for 2020 is now \$18.25 per cwt, up from June's forecast of \$16.65.

# Blimling, Forecast Update

Published July 2, 2020

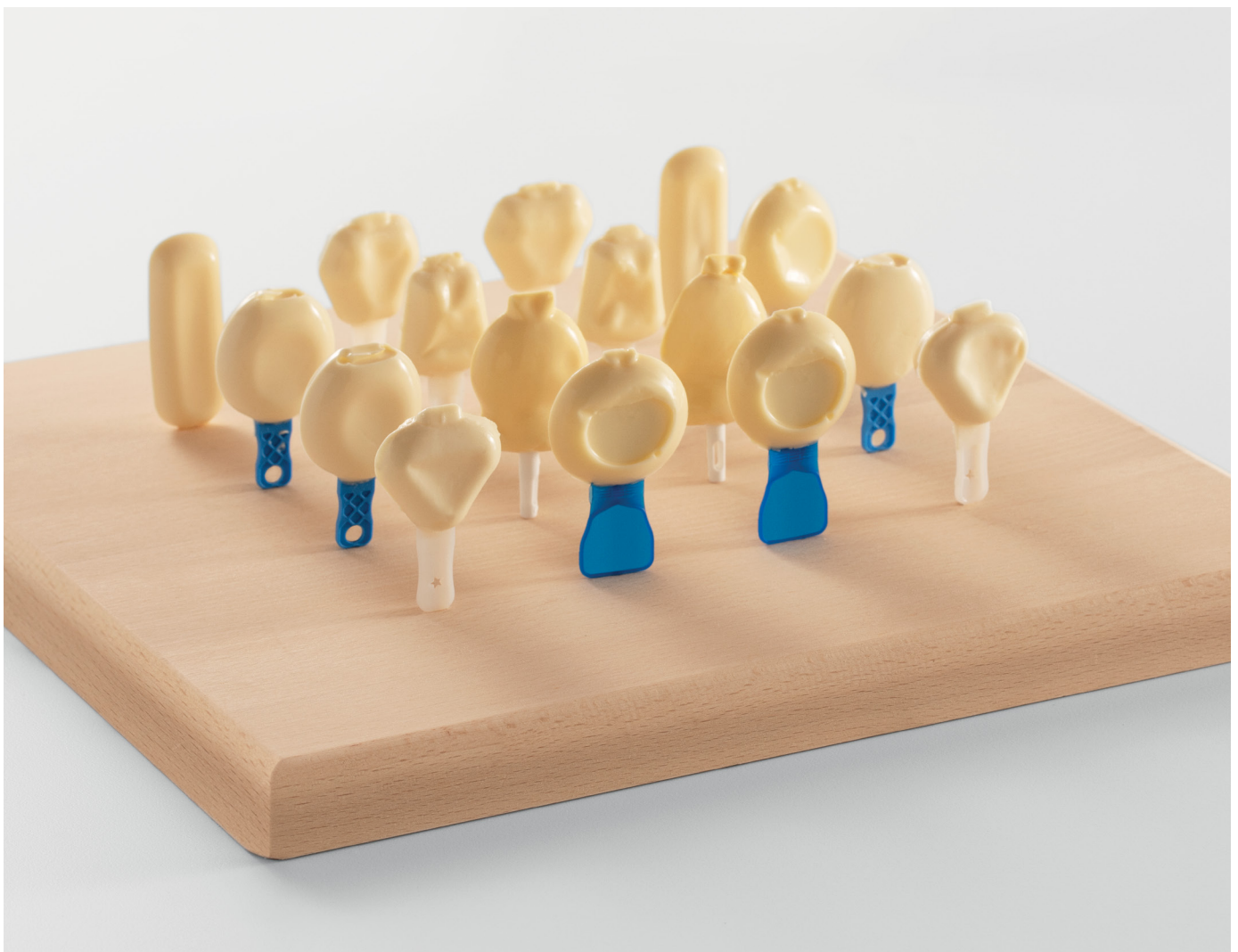
Blimling expects cheese prices to start moving lower sooner rather than later – and when that happens, they pick prices to drop quickly as buyers step back and wait. They say 2021 could bring further price erosion due to lingering demand destruction and new capacity.

Meanwhile, butter prices are predicted to stay relatively stable in the near term with upside tempered by plentiful bulk supplies. Blimling expects increased upside risk into year-end.

NDM prices have found some semblance of stability and are expected to keep bouncing around \$1.00 in the near

term. There is upside risk on the table heading into year-end if Mexico demand resurfaces and more milk diverts into cheese production.

Finally, dry whey prices have stayed mostly calm throughout 2020 and Blimling says to expect more of the same. They say heavy whey inventories combined with weak high protein prices will likely cap upward price potential in the near to medium term. But with China appearing to be back in the mix, any substantial uptick in demand could lift prices.





**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.