

NOVEMBER 2019

Global Dairy UPDATE







 New Zealand 12-month production flat on last period. Increase in monthly US and EU production. Australia continues to decline.



 Exports from New Zealand and the EU show strong growth and an increase in monthly US exports. Australia monthly exports continue to decline.



• Imports into China continue to grow. Asia and Latin America monthly imports down. Middle East & Africa imports grew in August.



 Fonterra's season-to-date milk collection across New Zealand reached 525 million kgMS, flat on last season. Australia milk collection decreased 13.0% to 13.5 million kgMS. • First quarter business update.

Visit our website for more details –

• Fonterra and BY-HEALTH partner in health and wellness research.



- Sweet success with reducing sugar.
- Helping our farmers 'Plant for Good'.



• The next issue of the Global Dairy Update will be published on 31 January 2020.

Key Dates



December 2019 to February 2020 Application Period to Supply Fonterra Late March 2020 FY20 Interim Results Announcement 20 April 2020 Share Standard Compliance 2019/20 Season

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Global Production





To view a chart that illustrates year-on-year changes in production –

New Zealand 12-month production flat on last period. Increase in monthly US and EU production. Australia continues to decline

NEW ZEALAND

2.6%

Change for October 2019 compared to October 2018

0.0%

Change for the 12 months to October 2019

New Zealand milk production was down

2.6% on a litres basis (down 1.5% on a milk solids basis) in October compared to the same period last year, with last October being a record month in terms of volume production.

Some dryness in Waikato and wet conditions in the lower South Island are likely to have had some impact on peak production figures.

New Zealand milk production for the 12 months to October was flat on last year.

Fonterra collections are reported for October, see page 5 for details.

AUSTRALIA

4.5%

Change for September 2019 compared to September 2018

6.6%

Change for the 12 months to September 2019

Australia milk

production decreased 4.5% in September compared to the same period last year.

Production for the 12 months to September was down 6.6% on the previous 12 months.

Milk production continues to contract and farmers face an outlook of dry conditions for the rest of the year. Water costs remain elevated and feed production is mixed, with southern areas faring better than their northern counterparts.

Fonterra collections in Australia are reported for October, see page 5 for details.

EUROPEAN UNION

0.8%

Change for September 2019 compared to September 2018

0.1%

Change for the 12 months to September 2019

EU milk production

increased by 0.8% in September compared to the same period last year.

Production growth can be seen from key milk producing countries such as Germany (1.1%), Spain (3.2%), The Netherlands (1.7%) and France (0.7%).

EU milk production is likely to drop off in the later part of the year due to seasonal fluctuations.

EU milk production for the 12 months to September was relatively flat compared to the same period last year.

USA

1.3%

Change for October 2019 compared to October 2018

0.1%

Change for the 12 months to October 2019

US milk production

increased by 1.3% in October, compared to the same period last year.

A return to herd size expansion and a continued increase in milk per cow in October is driving production higher and may indicate a sustained return to production growth in the coming months.

Milk production for the 12 months to October was 0.1% lower compared to the same period last year.

¹ New Zealand production is measured in litres.

Global Exports





To view a chart that illustrates year-on-year changes in exports –

Exports from New Zealand and the EU show strong growth and an increase in monthly US exports. Australia monthly exports continue to decline

NEW ZEALAND

22.4%1

Change for September 2019 compared to September 2018

8.9%

Change for the 12 months to September 2019

Total New Zealand dairy exports increased by 22.4%, or 35,648 MT, in September compared to the same period last year. This was primarily driven by WMP, up 23,796 MT, followed by cheese, infant formula and fluid milk products up a

Exports for the 12 months to September were up 8.9%, or 287,858 MT, on the previous comparable period. This was primarily driven by WMP, fluid milk products and infant formula, up a combined 275,549 MT.

combined 11,083 MT.

AUSTRALIA

5.6%

Change for September 2019 compared to September 2018

1.9%1

Change for the 12 months to September 2019

Australia dairy exports

decreased by 5.6%, or 3,478 MT, in September compared to the same period last year. This was primarily driven SMP and WMP down a combined 6,216 MT but largely offset by an increase in fluid milk products of 4,608 MT.

Exports for the 12 months to September were up 1.9%, or 14,764 MT, on the previous comparable period.

Fluid milk products and infant formula continue to be the main drivers of this 12 month growth, up a combined 59,628 MT while WMP, cheese and SMP declined by 43,943 MT.

EUROPEAN UNION

13.2%

Change for August 2019 compared to August 2018

7.7%t

Change for the 12 months to August 2019

EU dairy exports

increased by 13.2%, or 56,498 MT, in August compared to the same period last year. This was driven by increases across most products but primarily by SMP, fluid milk products and cheese, up a combined 45,115 MT.

High cheese volumes were recorded with demand from the US, South Korea, Canada and Ukraine.

Exports for the 12 months to August were up 7.7%, or 405,296 MT, on the previous comparable period. SMP fluid milk products, lactose and cheese were the main drivers of this growth, up a combined 415.764 MT.

USA

3.3 %t

Change for September 2019 compared to September 2018

9.5%

Change for the 12 months to September 2019

US dairy exports

increased 3.3%, or 6,060 MT, in September compared to the same period last year, curbing a declining trend in recent months. The increase was driven by SMP and cheese, up a combined 16,277 MT.

Whey exports continue to decline, however, as a result of the downturn in whey for feed due to the African Swine Fever in China.

Exports for the 12 months to September 2019 were down 9.5%, or 233,686 MT on the previous comparable period.

The decrease was driven by whey, SMP, WPC and lactose, down a combined 243,929 MT.

Global Imports





To view a chart that illustrates year-on-year changes in imports –

Imports into China continue to grow. Asia and Latin America monthly imports down. Middle East & Africa grew in August

LATIN AMERICA

6.6%

Change for August 2019 compared to August 2018

2.2%t

Change for the 12 months to August 2019

Latin America dairy import volumes¹

decreased 6.6%, or 11,438 MT, in August compared to the same period last year. This was driven by decreases in WMP, infant formula and whey, down a combined 9.622 MT.

Brazil is the main driver behind the WMP decline year-on-year.

Imports for the 12 months to August 2019 were up 2.2%, or 42,116 MT, compared to the same period the previous year. Increases were recorded across a broad range of products with SMP, WMP, and fluid milk products up by a combined 56,020 MT.

ASIA

7.6%

Change for August 2019 compared to August 2018

4.2%

Change for the 12 months to August 2019

Asia (excluding China) dairy import volumes

decreased 7.6% or 31,537 MT, in August compared to the same period last year. Decreases were recorded across a broad range of products with WMP, fluid products, whey and infant formula down 24,489 MT.

Imports for the 12 months to August were up 4.2%, or 196,144 MT, compared to the same period the previous year. Growth continues across a broad range of products with SMP, fluid milk products, WMP and lactose up a combined 184,276 MT.

MIDDLE EAST & AFRICA

4.9%1

Change for August 2019 compared to August 2018

4.2%

Change for the 12 months to August 2019

Middle East and Africa dairy import volumes

increased 4.9% or 13,946 MT in August 2019 compared to the same period last year. Increases were recorded principally in WMP and infant formula, up a combined 24,028 MT, mainly driven by Nigeria. This was partially offset by a decrease in fluid milk products, butter and cheese, down 14,157 MT, mainly due to Libya and Qatar. Imports for the 12 months to August 2019 were down 4.2%, or 176,384 MT, compared to the same period last year. This was driven largely by cheese, WMP and butter, down a combined 199,377 MT.

CHINA

15.2%t

Change for September 2019 compared to September 2018

11.1%

Change for the 12 months to September 2019

China dairy import

volumes continue to increase, up 15.2%, or 30,187 MT, in September compared to the same period last year. This was driven by increases in fluid milk products, up 34,615 MT consistent with the trend for the past year. Imports for the 12 months to September were up 11.1%,

Imports for the 12 months to September were up 11.1%, or 306,357 MT compared to the same period last year. Strong demand out of China continued across all key categories, fluid milk products, WMP, SMP and infant formula were up a combined 444,192 MT, partially offset by a continued decline for whey, down 98,894 MT, as a result of the ongoing African Swine flu.

¹ Estimates are included for those countries that have not reported data.

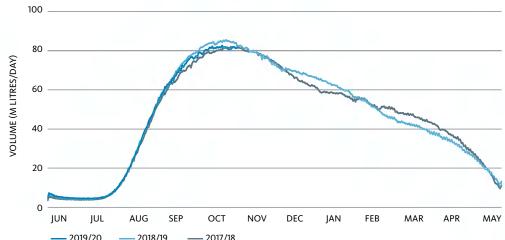
Fonterra Milk Collection 2019/20 Season





To view a table that shows our detailed milk collection in New Zealand and Australia compared to the previous season –

New Zealand Milk Collection



NEW ZEALAND

2.2%

Change for October 2019 compared to October 2018

0.5%

Season to date
1 June to 31 October

Fonterra's New Zealand collection for October, was 215.3 million kgMS, down 2.2% on the same month last season

However, season to date collection is 524.7 million kgMS, which is similar to the early part of last season. October began with colder and wetter conditions than usual across most regions which has seen milk collections reduce. However, recent warm weather could see a recovery in the first half of November.

NORTH ISLAND

2.0%

Change for October 2019 compared to October 2018

0.3%

Season to date
1 June to 31 October

North Island milk

collection in October was 128.7 million kgMS, down 2.0% on last October.

Season to date collection is 339.6 million kgMS, up 0.3% on last season.

Weather conditions across most regions were wetter than usual and was the main contributor to the decrease in October collections.

SOUTH ISLAND

2.6%

Change for October 2019 compared to October 2018

1.8%

Season to date
1 June to 31 October

South Island milk

collection in October was 86.6 million kgMS, down 2.6% on last October.

Season to date collection is 185.1 million kgMS, down 1.8% on last season.

Wet and cold weather has South Island collections down relative to last year. The Southland region has had pasture damage due to sustained wet conditions. In contrast, Canterbury collections are in line with last season.

AUSTRALIA

13.0%

Change for October 2019 compared to October 2018

18.9%

Season to date
1 July to 31 October

Fonterra's Australia collections in October were 13.5 million kgMS, down 13% on October last season.

Fonterra milk collections continue to decline but to a lesser extent compared to the beginning of the season as peak milk comes through.

High on-farm input costs, decreased cow numbers, combined with intense competition for milk will continue to impact Fonterra's milk supply this season.

Outlook

NZD 7.00kg/MS 7.60 Forecast Farmgate Milk Price for

the 2019/20 season

1,530_M kgMS

Forecast milk collection for the 2019/20 season

The inclusion of off-GDT sales contributed 5 cents per kgMS to the Milk Price for the season to 31 October 2019.

Fonterra Global Dairy Trade Results



Fonterra GDT results at last trading event

3 December 2019:



Change in Fonterra's weighted average product price from previous event

3,498

Fonterra's weighted average product price (USD/MT)

35.2°000'MT

Fonterra product quantity sold on GDT

RENNET CASEIN

4.9%1 USD 8,047/MT **CHEDDAR**

2.6%1 USD 3,797/MT

SMP

1.6% USD 3,086/MT

BUTTER

2.2%

AMF

5.2% USD 4.8405/MT

WMP

0.3%

SOUTH EAST ASIA

LATIN AMERICA

OTHER

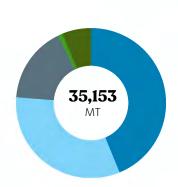
NORTH ASIA (INCLUDING CHINA)

MIDDLE EAST AND AFRICA

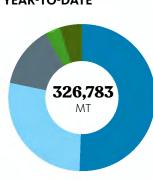
Fonterra GDT sales **by destination**:

To view more information, including a snapshot of the rolling year-to-date results –





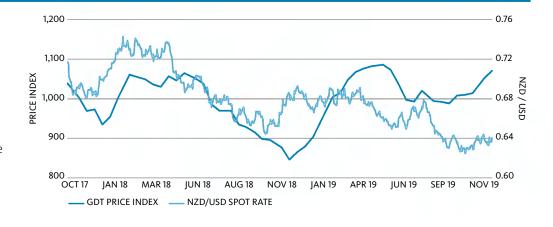
FINANCIAL YEAR-TO-DATE



▶ The next trading event will be held on 17 December 2019. Visit www.globaldairytrade.info for more information.

Dairy commodity prices and New Zealand dollar trend

A more positive assessment of the ongoing trade negotiations between the US and China, and of the United Kingdom's departure from the European Union, contributed to lifting the NZD from a four-year low to settle at 64 US cents by month-end.



Our Performance



Fonterra and BY-HEALTH partner in health and wellness research Fonterra has created a new research and development partnership with BY-HEALTH to accelerate sales growth for its Sports and Active Lifestyle business unit.

BY-HEALTH is a leading global vitamin and dietary supplement company and is the largest in China.

Komal Mistry-Mehta, Director of NZMP Sports & Active Lifestyle says the partnership will focus on developing innovative nutritional solutions for the health and wellness market.

"We'll work together to explore health research and new product development that will deliver health benefits to consumers around the world – and, in particular, consumers in China.

BY-HEALTH have been a Fonterra customer for 12 years and now we are taking the relationship to another level.

Our two organisations have complementary skills and knowledge in the health and wellness market. We have a long-history of pioneering innovation in functional dairy proteins, Milk Fat Globule Membrane (MFGM) and probiotics".

"BY-HEALTH has expertise in vitamin and dietary supplements which presents a new opportunity for us. They also have access to extensive consumer insights and trends through their online sales platform which now accounts for 20% of their business," she says.

With stress now being ranked as one of the biggest issues facing consumers, people are becoming more aware and proactive about health and wellness, and dairy nutrition plays an important role in supporting these nutritional needs.

"Our partnership with BY-HEALTH will help us develop effective solutions that help support people's health and enable them to live the lifestyles they desire.

"In the same way we have been unlocking the benefits of dairy protein, we want to do more with other milk components, such as probiotics and lipids, to deliver customers highly specialised ingredients that address emerging needs.

"The global probiotics market is seeing significant growth and Euromonitor forecasts the probiotics supplement segment will grow by 7% over the next five years.



Komal Mistry-Mehta, Director of NZMP Sports & Active Lifestyle

"People are becoming increasingly aware and interested in metabolic health, mental well-being and anti-ageing needs and this presents a big opportunity for our specialty nutrition ingredients, including dairy proteins and probiotic super strains BifidoB HN019TM and LactoB HN001TM," Komal says.

Our Co-op



Sweet success with reducing sugar

Picture 2,000 bath tubs of sugar – that's the amount of added sugar Fonterra Brands New Zealand is set to remove from its products over the next 12 months.

A reformulated Fresh 'n Fruity yoghurt with 40% less added sugar¹ has hit supermarket shelves, signalling the latest step in Fonterra's commitment to limit added sugars across its products.

Fonterra Brands
New Zealand, Managing
Director, Brett Henshaw
says, "Healthy People and
providing valuable nutrition
are a key part of our new
strategy, and our business is
doing everything we can to
make it happen."

"The World Health Organization recommends less than 10% of our daily energy intake should come from added sugars. This means around 12 teaspoons of added sugars each day for adults. However New Zealand's total added sugar intake is currently averaging 14 teaspoons per person, each day."

"UNICEF's "The state of the world's children 2019" report ranked New Zealand second-worst in the OECD for child obesity, with 39% of Kiwi kids classified as overweight or obese. We



want to be part of helping to fix this problem," Brett says.

"Our Co-op has nutrition targets that are designed to help consumers limit their intake of added sugars. The Fonterra Food and Nutrition Guidelines – endorsed by the New Zealand Nutrition Foundation – shows that the Co-op aims to limit the addition of sugars to less than 2% (2.5 tsp) of daily energy requirements per serve.²

"The new Fresh'n Fruity yoghurt comes hot on the heels of Primo and Calci-Yum UHT, where our team has also reduced added sugar levels by up to 40%.

"When we combine what we've already achieved through similar reductions undertaken over the last 18 months, we are now putting 600 tonnes less added sugar into our products each year.

"And the good news is we won't be stopping here, our innovation team will be getting stuck into more work like this.

"It's not an easy task taking this much sugar out of our products while also delivering to consumers expectations around taste.

"Our Fonterra Brands Innovation Team have worked hard on this over the past year and a half, and this has included a lot of consumer testing.

"The overall liking of the reformulated Fresh 'n Fruity recipe by the sensory panel was really positive. We're confident our consumers will love the new Fresh 'n Fruity recipe as much as we do," Brett says.

¹ On average compared to previous added sugar (g per 100g) across Fresh 'n Fruity range.

² Based on an average adult diet of 8,700 kJ and the World Health Organisation guidance to reduce daily free sugar intake to less than 10% of total daily energy intake. This only applies to products positioned for everyday consumption and/or positioned for nutrition/health benefits.

Our Co-op



Helping our farmers 'Plant for Good'

A healthy environment is essential if we are to continue meeting our customers' expectations and getting the most value from our milk.

Farmers are increasingly being asked to do more when it comes to improving water quality, combating climate change, and reducing emissions.

"They are ready to take on the challenge and our Co-op will continue to support them," says Richard Allen, Director of Farm Source.

"This season, our Co-op launched the Co-operative Difference. It brings together existing on-farm requirements and makes them easier to understand. It also gives our farmers clear guidance on likely future requirements and supports them with regional advice and industry partnerships," explains Richard.

"Planting is an important part of the solution to the environmental challenges we face, but it's estimated that nearly half of what's planted doesn't survive because they aren't right for the region, climate or soil.

"That's why our Co-op has launched 'Plant for Good' – a new partnership between Farm Source and Wildlands that will reduce the cost of on-farm native planting.

"Plant for Good will deliver plants and services to all Farm Source customers nationwide at a discounted rate. And quite literally, it will mean our farmers only have to plant once.

"Plant for Good guarantees a survival rate of at least 90% for the first 24 months, achieved through expert



plant selection, regionally sourced plants and ongoing maintenance."

Wildlands Chief Executive Sarah Beadel says, "we're really excited to offer this exclusive pricing and service through Farm Source. We know farmers are keen to plant for a variety of reasons and we're here to support them, making sure that when they plant, they plant for good."

Fonterra farmer Sam Spencer-Bower from Rangiora welcomed the news saying, "planting is about doing the right thing. We have to front-foot some of the issues that are coming at us. We've got to do the right thing for the environment and for the farm."

While some farms who are ahead of the game like Sam's may not need this service, Sam says it will help others bring their farm up to standard, especially if they don't have the planting know-how or time to do it themselves.

"All farms are different in terms of how they are run, how much time they have. Some farms will struggle to make it happen and this is a good way to get it done." Sam says the advice provided through this service will help farmers save money long-term.

"Unfortunately, not enough thought goes into what's being planted. A lot of people throw things in, but if you don't do it properly or have the right spacing – it's money down the drain. I'd recommend chipping away at it every year and when you do it, do it right," he says. This new initiative is in addition to the on-farm tools, services and solutions that the Co-op already provides to help farmers run healthy and sustainable businesses.

'Plant for Good' will align with a farm's Farm Environment Plan (FEP). An FEP is a tailored plan that identifies opportunities for improvement or risks that need to be addressed.

Fonterra's Farm Source team is able to use its scale, regional knowledge and expertise to develop FEPs with farmers at no additional cost. Already 23% of our farms have an FEP and we're on track to ensure all farms have one by 2025.

Supplementary Information

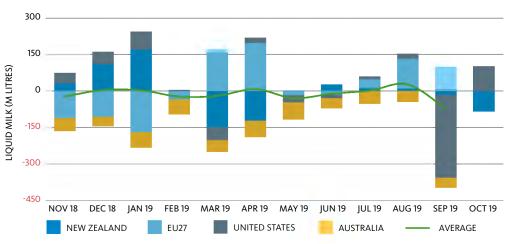
Global Dairy Market

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.

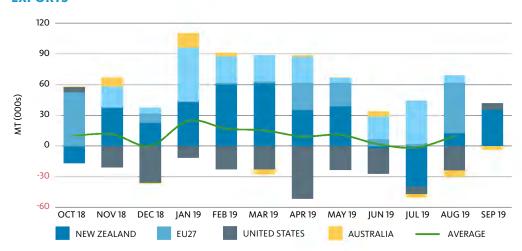
Averages are shown where data is complete for the regions presented.

PRODUCTION



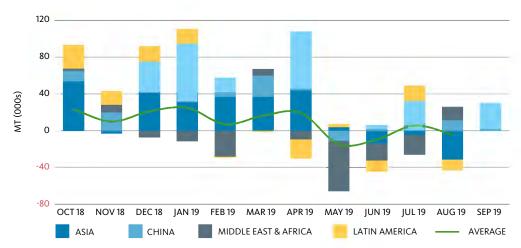
NOTE: Data for Australia and EU to September; New Zealand and US to October.

EXPORTS



NOTE: Data for EU to August; New Zealand, Australia and US to September.

IMPORTS



NOTE: Data for Latin America, Asia, Middle East & Africa to August; China to September. SOURCE: Government milk production statistics/GTIS trade data/Fonterra analysis.

Supplementary Information

Fonterra milk production

The table on the right shows Fonterra milk solids collected in New Zealand and Australia compared to the previous season.

MILK COLLECTION (MILLION KGMS)	OCTOBER 2019	OCTOBER 2018	MONTHLY CHANGE	SEASON- TO-DATE 2019/20	SEASON- TO-DATE 2018/19	SEASON- TO-DATE CHANGE
Total Fonterra New Zealand	215.3	220.2	(2.2%)	524.7	527.2	(0.5%)
North Island	128.7	131.3	(2.0%)	339.6	338.7	0.3%
South Island	86.6	88.9	(2.6%)	185.1	188.6	(1.8%)
Fonterra Australia	13.5	15.5	(13.0%)	36.7	45.3	(18.9%)

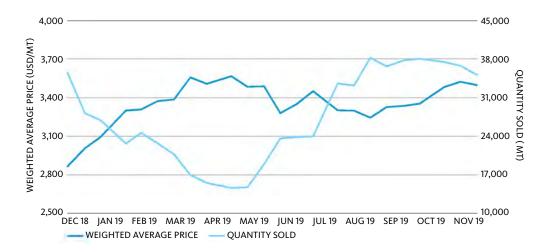
Fonterra GDT results

This table provides more information on the latest results, including a snapshot of the year-to-date results.

	LAST TRADING EVENT (3 DECEMBER 2019)	YEAR-TO-DATE (FROM 1 AUGUST 2019)
Quantity Sold on GDT (Winning MT)	35,153	326,783
Change in Quantity Sold on GDT over same period last year	(0.7%)	(4.6%)
Weighted Average Product Price (USD/MT)	3,498	3,374
Change in Weighted Average Product Price over same period last year	22.7%	14.9%
Change in Weighted Average Product Price from previous event	(0.7%)	-

Fonterra GDT results

This chart shows Fonterra GDT prices and volumes over the past 12 months.



Glossary

AMF

Anhydrous Milk Fat.

BMP

Butter Milk Powder.

DIRA

Dairy Industry Restructuring Act 2001 (New Zealand).

Farmgate Milk Price

The price for milk supplied in New Zealand to Fonterra by farmer shareholders.

Fluid Products

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.

GDT

Global Dairy Trade, the online provider of the twice monthly global auctions of dairy ingredients.

kgMS

Kilogram of milk solids, the measure of the amount of fat and protein in the milk supplied to Fonterra.

MPC

Milk Protein Concentrate.

Non-Reference Products

All dairy products, except for Reference Products, produced by the NZ Ingredients business.

Reference Products

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

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.

WMP

Whole Milk Powder.

WPC

Whey Protein Concentrate