

AUGUST 2019

GLOBAL DAIRY UPDATE



Dairy for life



- Australia production continues to decline. EU and US production flat. Small volumes of early season New Zealand production.



- Exports from Australia and the EU continue to grow. Large decline in monthly US exports.



- Monthly imports into Middle East & Africa show large decline. China, Latin America and Asia imports continue to grow.



- Fonterra's early season milk collection across New Zealand for the two months to 31 July reached 32.7 million kgMS, representing only around 2% of the full season forecast.



- Annual Results FY19 to be announced on 12 September 2019.



- Every farm to get a unique biological emissions profile.

KEY DATES

12 September 2019
FY19 Annual Results
Announcement.

7 November 2019
Fonterra Annual Meeting
Invercargill

11 November 2019
Fonterra Shareholders' Fund
Annual Meeting

20 April 2020
Share Standard Compliance
2019/20 Season





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

AUSTRALIA PRODUCTION CONTINUES TO DECLINE, EU AND US PRODUCTION FLAT. SMALL VOLUMES OF EARLY SEASON NEW ZEALAND PRODUCTION

NEW ZEALAND

4.8%↑

Change for July 2019 compared to July 2018

2.2%↑

Change for the 12 months to July 2019

New Zealand milk production in July was 23.5 million kgMS, up 4.8% compared to the same period last year. June and July account for only a small proportion of total milk production for the full season. The increase over last season partly represents good conditions at the start of the season and supply is also supported by winter milk.

New Zealand milk production for the 12 months to July was 2.2% higher than last year.

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

AUSTRALIA

9.9%↓

Change for June 2019 compared to June 2018

8.2%↓

Change for the 12 months to June 2019

Australia milk production¹ decreased 9.9% in June compared to the same period last year.

Production for the 12 months to June was down 8.2% on the previous 12 months.

Dairy Australia are forecasting a decline in the 2019/20 season of 3% to 5% in total milk production on the back of reduced herd sizes and strained farmer finances.

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

EUROPEAN UNION

0.3%↓

Change for June 2019 compared to June 2018

0.1%↑

Change for the 12 months to June 2019

EU milk production decreased 0.3% in June compared to the same period last year.

A slowdown in production due to the recent heatwave, impacted Germany (2.3%), The Netherlands (2.7%), Spain (2.1%) and Finland (5%).

Production in Ireland continues to grow, up 7.5% in June versus the same period last year.

EU milk production for the 12 months to June was up 0.1% compared to the same period last year.

USA

0.0%↑

Change for July 2019 compared to July 2018

0.3%↑

Change for the 12 months to July 2019

US milk production remained stable at 8 billion MT in July, compared to the same period last year.

The lack of production growth continues as poor on-farm profitability is leading to an increase in culling.

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

¹ Australian production for June 2019 is an estimate based on IFCN milk production figures.



EXPORTS FROM AUSTRALIA AND THE EU CONTINUE TO GROW. LARGE DECLINE IN MONTHLY US EXPORTS

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

NEW ZEALAND

0.2%↓

Change for June 2019 compared to June 2018

8.4%↑

Change for the 12 months to June 2019

Total New Zealand dairy exports decreased by 0.2%, or 410 MT, in June compared to the same period last year. This was primarily driven by butter and AMF, down 9,700 MT but mostly offset by a WMP increase of 7,326 MT.

Exports for the 12 months to June were up 8.4%, or 272,002 MT, on the previous comparable period. This was primarily driven by a significant increase in WMP and fluid milk products, up a combined 250,000 MT.

AUSTRALIA

10.3%↑

Change for June 2019 compared to June 2018

5.1%↑

Change for the 12 months to June 2019

Australia dairy exports increased by 10.3%, or 6,545 MT, in June compared to the same period last year. This was driven by fluid milk products, up 9,643 MT, and partially offset by cheese and whey powder, down a combined 2,847 MT.

Exports for the 12 months to June were up 5.1%, or 38,835 MT, on the previous comparable period.

Fluid milk product and infant formula are the main drivers of this increase, up a combined 56,059 MT. WMP and SMP declined 19,002 MT, partially offsetting the 12 months' growth.

EUROPEAN UNION

5.9%↑

Change for May 2019 compared to May 2018

3.7%↑

Change for the 12 months to May 2019

EU dairy exports increased by 5.9%, or 28,049 MT, in May compared to the same period last year. This was primarily driven by SMP, fluid milk products and butter, up a combined 32,477 MT. This was partially offset by WMP, down 5,993 MT.

Exports for the 12 months to May were up 3.7%, or 199,704 MT, on the previous comparable period.

SMP, lactose and fluid milk products were up a combined 255,738 MT. This was offset by a 75,231 MT decrease in WMP.

USA

12.0%↓

Change for June 2019 compared to June 2018

6.3%↓

Change for the 12 months to June 2019

US dairy exports decreased 12%, or 24,978 MT, in June compared to the same period last year. Whey exports to China continue to decline (7,778 MT) as a result of the African Swine Fever. Declines were also reported in SMP and cheese, down a combined 18,669 MT.

Exports for the 12 months to June 2019 were down 6.3%, or 151,577 MT on the previous comparable period.

The decrease was largely driven by whey powder, WPC, lactose and SMP, down a combined 177,916 MT.



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

MONTHLY IMPORTS INTO MIDDLE EAST & AFRICA SHOW LARGE DECLINE.

CHINA, LATIN AMERICA AND ASIA IMPORTS CONTINUE TO GROW

LATIN AMERICA

1.5%↑

Change for May 2019 compared to May 2018

3.1%↑

Change for the 12 months to May 2019

Latin America dairy import volumes¹ increased 1.5%, or 2,611 MT, in May compared to the same period last year. This was driven by SMP, cheese and WPC up a combined 7,674 MT and partially offset by decreases in infant formula and cultured products, down a combined 3,957 MT.

Imports for the 12 months to May 2019 were up 3.1%, or 59,775 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 a combined 56,389 MT.

ASIA

0.2%↑

Change for May 2019 compared to May 2018

6.1%↑

Change for the 12 months to May 2019

Asia (excluding China) dairy import volumes¹ increased 0.2% or 742 MT, in May compared to the same period last year. Increases were recorded across WMP, WPC, infant formula and butter, up a combined 10,647 MT and largely offset by decreases in cultured products, SMP, Whey powder and AMF, down a combined 10,218 MT.

Imports for the 12 months to May were up 6.1%, or 283,317 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 241,818 MT.

MIDDLE EAST & AFRICA

24.5%↓

Change for May 2019 compared to May 2018

11.4%↓

Change for the 12 months to May 2019

Middle East and Africa dairy import volumes¹ decreased 24.5% or 94,891 MT in May 2019 compared to May last year. Decreases were recorded in fluid milk products, cheese, WMP, cultured products and SMP, down a combined 82,431 MT. The main driver is lower imports by Algeria as political instability creates economic uncertainty and drives weaker demand in powders. Imports for the 12 months to May 2019 were down 11.4%, or 482,050 MT, compared to the same period last year. The reduction has been driven by cheese, fluid milk products, WMP, SMP and other powders down a combined 424,344 MT.

CHINA

2.8%↑

Change for June 2019 compared to June 2018

8.4%↑

Change for the 12 months to June 2019

China dairy import volumes¹ increased 2.8%, or 6,163 MT, in June compared to the same period last year. This was driven by increases in fluid, WMP, SMP and cheese, up a combined 33,283 MT but largely offset by whey, which was down 21,900 MT. African swine fever continues to have a significant impact on whey imports as hog numbers decline along with demand for feed. Imports for the 12 months to June were up 8.4%, or 232,321 MT, compared to the same period last year. Strong demand out of China continued with imports across all key categories; WMP, fluid products and SMP were up a combined 279,352 MT.

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

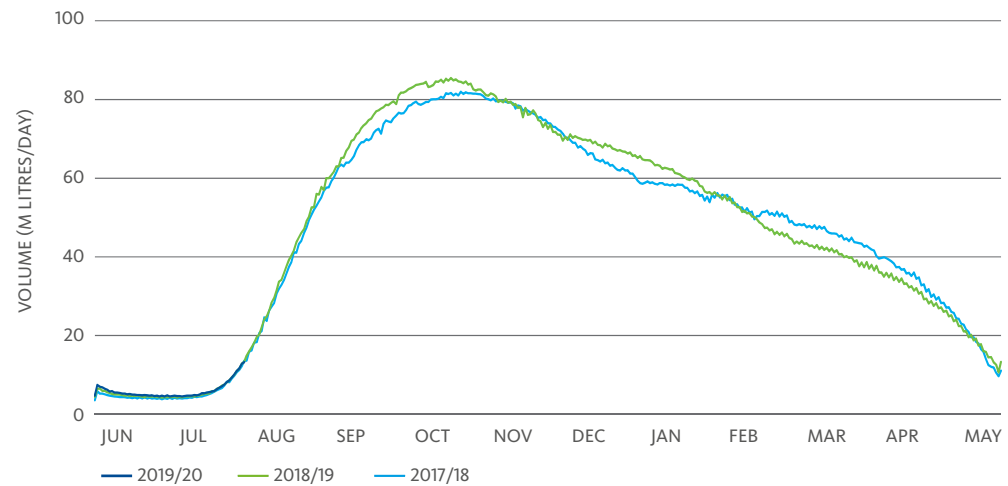
OUR MARKETS

FONTERRA MILK COLLECTION



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 July 2019 compared to July 2018

4.7%↑

Season to date 1 June to 30 July

Fonterra's July collections were 18.3 million kgMS, up 2.2% on the same month last season.

Season to date collections were 32.7 million kgMS, up 4.7% on last season. This represents only around 2% of full season collections.

These volumes are small in the context of the full season which is usual at this time of the year. The increase over July last year is also small and is due to a relatively mild July across much of the country supporting good pasture cover.

NORTH ISLAND

2.1%↑

Change for July 2019 compared to July 2018

4.0%↑

Season to date 1 June to 30 July

North Island milk collections in July were 16.4 million kgMS, up 2.1% on July last season.

Season to date collections were 27.5 million kgMS, up 4% on last season.

The increase was primarily driven by generally favourable conditions across much of the North Island, particularly in Northland and the lower North Island.

SOUTH ISLAND

2.7%↑

Change for July 2019 compared to July 2018

8.6%↑

Season to date 1 June to 30 July

South Island milk collections in July were 1.9 million kgMS, up 2.7% on July last season.

Season to date collections were 5.2 million kgMS, up 8.6% on last season.

Otago and Southland were the main contributors to this increase, although volumes were still typically small in relation to the full season.

AUSTRALIA

28.9%↓

Change for July 2019 compared to July 2018

28.9%↓

Season to date 1 July to 30 July

Fonterra's milk collections across Australia for the first month of the 2019/20 season were 5.4 million kgMS, a decline of 28.9% on July last season. This represents a small percentage of the full year's collection.

Fonterra's milk collection share continues to decline, impacted by intense competition for milk supply and the continued impact of the poor conditions on-farm. The drought in 2019 has led to an increase in cow cull rates, a significant number of farm retirements and a continuation of historically high input costs resulting in a material reduction to the Australian milk pool in FY19 versus FY18.

OUR MARKETS

FONTERRA GLOBAL DAIRY TRADE RESULTS



Fonterra GDT results at
last trading event
20 August 2019:

0.1% ↓

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

USD **3,299**

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

33.2 ⁰⁰⁰ MT

Fonterra product quantity
sold on GDT

WMP

2.0% ↑

USD 3,100/MT

CHEDDAR

0.5% ↑

USD 3,857/MT

SMP

0.4% ↓

USD 2,499/MT

BUTTER

3.4% ↓

USD 4,025/MT

AMF

3.5% ↓

USD 5,061/MT

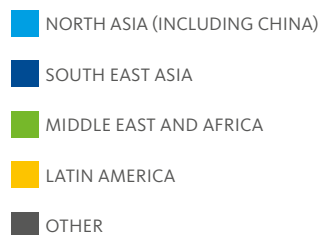
RENNET CASEIN

7.8% ↓

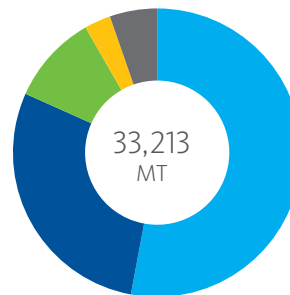
USD 6,348/MT

Fonterra GDT sales
by destination:

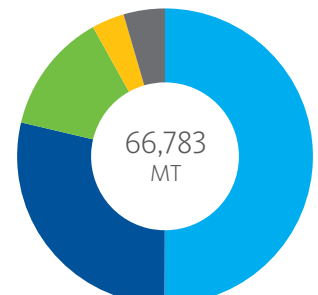
To view more information,
including a snapshot of the
rolling year-to-date results –



LATEST AUCTION



**FINANCIAL
YEAR-TO-DATE**



► The next trading event will be held on 3 September 2019. Visit www.globaldairytrade.info for more information.

Dairy commodity prices and New Zealand dollar trend

Expectations for a softening
in world growth, driven
largely by heightened risks
to global trade, resulted in a
mildly weaker New Zealand
dollar by the end of July.





Every farm to get a unique biological emissions profile

When it comes to making change on farm, it takes time, effort and money. Our farmer owners are committed to reducing their on-farm emissions but to do so in a meaningful, significant and sustainable way, their decisions must be supported by clear data and science-based evidence.

The fact is, our farmer owners have a low understanding of the sources of greenhouse gas emissions on their farms, and what type of things they can do to reduce their emissions. The data speaks for itself.

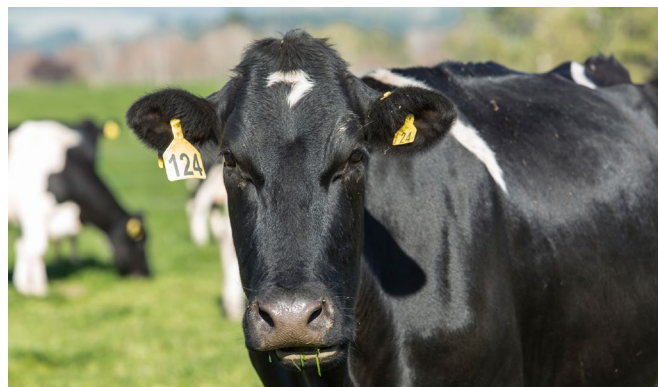
In December 2018, the Biological Emissions Reference Group (BERG) found that 98% of farmers do not know their emissions and more than 40% did not know how to reduce emissions on their farm.

Fonterra recently introduced **The Co-operative Difference** to make it easier for farmers to know what is expected, and recognise those who are taking steps to produce high quality milk in a more sustainable way.

The Co-operative Difference outlines what great looks like as a marker of where we need to be and one of our aspirational goals is to have greenhouse gases emissions quantified and reduced.

To learn how we could quantify on-farm biological emissions, Fonterra undertook a recording pilot involving 113 farms – of all sizes and geographies. This project has given confidence that the accurate estimation of biological greenhouse gas emissions can be done at scale.

We used the information



provided by farmers annually in their Farm Dairy Records to complete a robust estimation of on-farm biological greenhouse gas emissions and produced reports for the pilot farms in the 2016/2017 and 2017/2018 seasons.

Feedback from the farmers within the pilot was exceedingly positive, with over 90% of participants saying that the reports improved their understanding of biological greenhouse gases on farm.

Our Sustainable Dairying and on-farm R&D team, with technical support from AgResearch, will use the modelling methods developed during this pilot to estimate greenhouse gas emissions for all farms. A New Zealand first!

Charlotte Rutherford, Director for On-Farm Excellence, says a key part of achieving emissions reductions is having a clear understanding of where we stand today.

“New Zealand farmers are already some of the most carbon-efficient in the world. This has come about through significant research and investment, and a willingness and ability to adapt over time.

“We still have work to do so getting a clear baseline for each farm will be central to moving forward.”

Tracy Brown, Matamata farmer and Chair of the DairyNZ Dairy Environment Leaders Forum, says that when it comes to reducing on-farm emissions, no one farm is going to have the same solutions as the other.

“A significant New Zealand reduction will only come once all farms have done what they can, according to their individual production system, to reduce their emissions.

“These emission profiles are a necessary first step to doing just that – giving each farm a clear picture of where they stand and how much they might need to do.”

Our Co-op will start providing these unique farm reports in Spring 2020.

Similar to the nitrogen reports that we have been providing our farmer owners for six seasons, the emission profile will be provided at no additional cost, and won't require our farmer owners to provide any more information than they already do or have a farm audit.

SUPPLEMENTARY INFORMATION

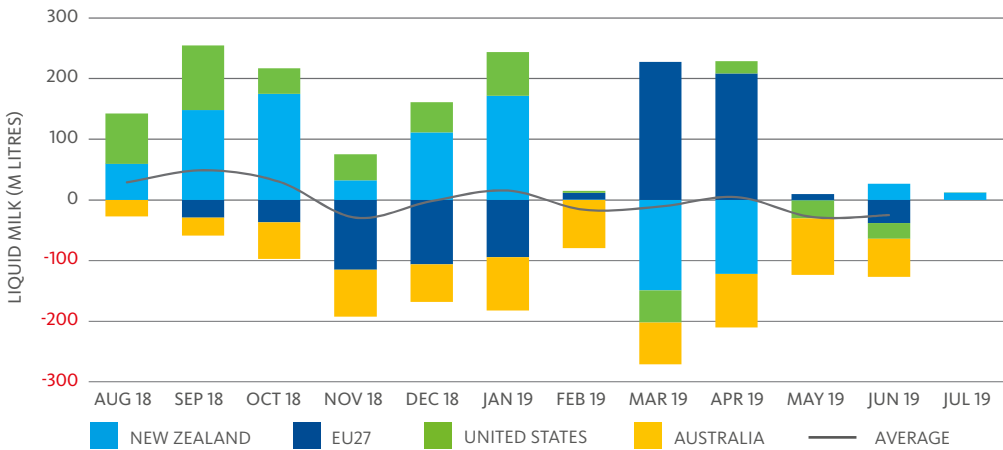
Global Dairy Market

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.

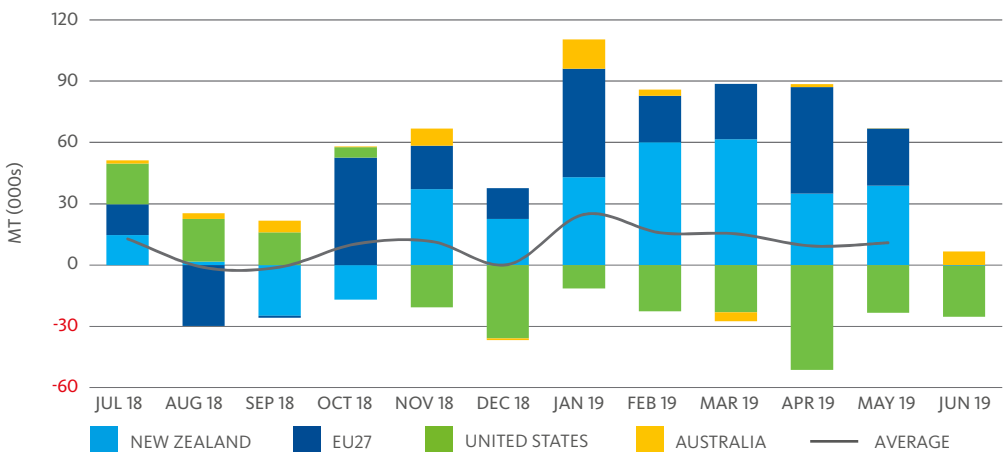
Averages are shown where data is complete for the regions presented.

PRODUCTION



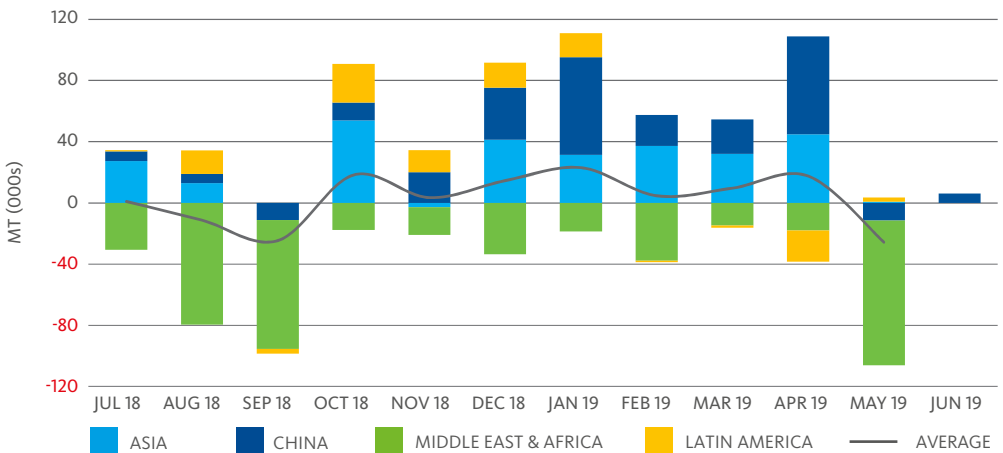
NOTE: Data for Australia and EU to June; New Zealand and US to July.

EXPORTS



NOTE: Data for EU to May; New Zealand, Australia and US to June.

IMPORTS



NOTE: Data for Latin America, Asia, Middle East & Africa to May; China to June.

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)	JULY 2019	JULY 2018	MONTHLY CHANGE	SEASON- TO-DATE 2019/20	SEASON- TO-DATE 2018/19	SEASON- TO-DATE CHANGE
Total Fonterra New Zealand	18.3	17.9	2.2%	32.7	31.2	4.7%
North Island	16.4	16.0	2.1%	27.5	26.5	4.0%
South Island	1.9	1.9	2.7%	5.2	4.8	8.6%
Fonterra Australia	5.4	7.6	(28.9%)	5.4	7.6	(28.9%)

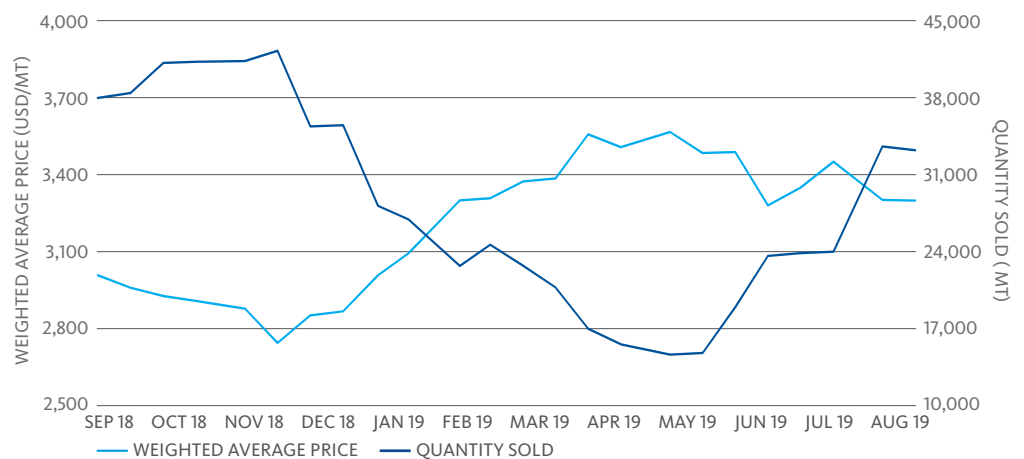
Fonterra GDT results

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

	LAST TRADING EVENT (20 AUGUST 2019)	YEAR-TO-DATE (FROM 1 AUGUST 2019)
Quantity Sold on GDT (Winning MT)	33,213	66,783
Change in Quantity Sold on GDT over same period last year	5.8%	3.4%
Weighted Average Product Price (USD/MT)	3,299	3,301
Change in Weighted Average Product Price over same period last year	7.3%	5.8%
Change in Weighted Average Product Price from previous event	(0.1%)	–

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.

LME (Liquid Milk Equivalent)

A standard measure of the amount of milk (in litres) allocated to each product based on the amount of fat and protein (“milk solids”) in the product relative to the amount of fat and protein in a standardised raw milk.

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