



Introduction to New Zealand Grass-Fed Milk Protein

At Orgain, we chose 100% New Zealand sourced grass-fed dairy because we believe it makes for a superior product. Higher levels of beta-carotene, CLA, and a perfect balance of omega-3 to omega-6 fatty acids make grass-fed sourcing from New Zealand a clear choice for Orgain.



IN GOOD HEALTH,

Andrew

Andrew Abraham, M.D.
Founder, Cancer Survivor
& Food Entrepreneur

Background - Facts & Figures

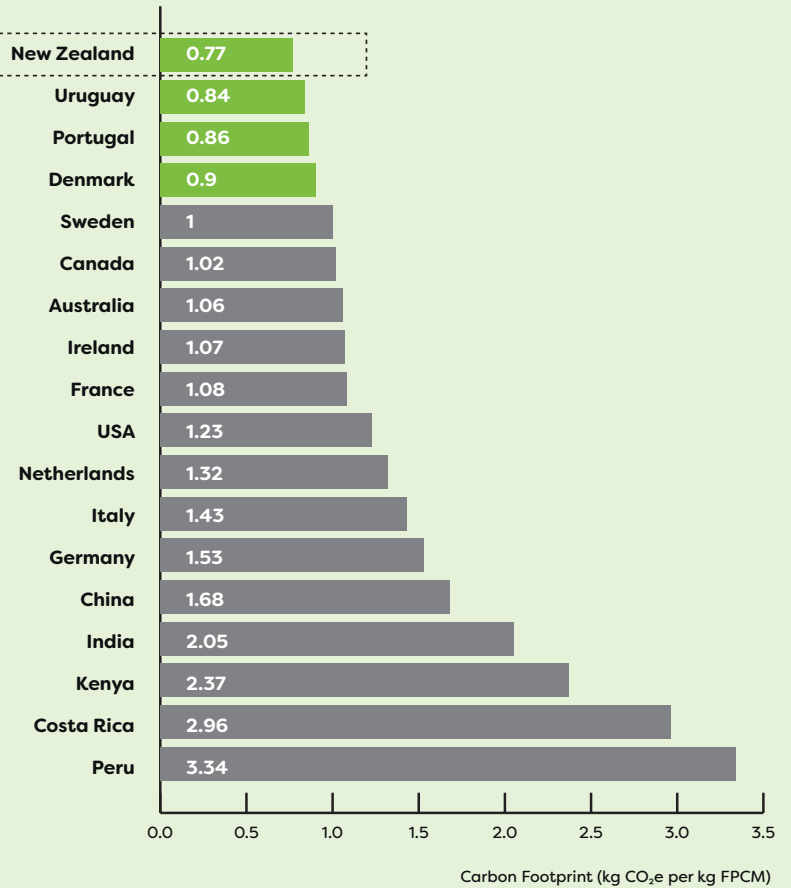
- The total dairy cow population is over 6 million, that's more than the number of people who live in New Zealand (NZ).^{1,2}
- NZ's milk is produced by healthy cattle who spend most of their days outside all year round.³
- In NZ, antibiotics are strictly only used in the treatment of illness and disease, instead of prevention.⁷
- It takes roughly 1-2 days for the pasture the cattle consumes to become milk. Cattle produce on average 25-40 liters of milk per day.³

- To maximize milk output and make milking a comfortable experience for the cattle, milking machines mimic the motion of a young calf feeding.³
- Once the milk has been collected, it is processed locally to maintain milk quality and freshness.³
- 10% of the world's cattle live solely on grazed pasture. This is one of the key advantages the NZ dairy industry offers.⁴



New Zealand leads the world with the lowest carbon footprint for dairy milk production.

On-farm carbon footprint of milk production



- New Zealand is known for its luscious green grass, clean air and fresh waters. Farmers in NZ are committed to environmentally friendly practices. This is likely one of the reasons why NZ has the lowest carbon footprint for milk production at 0.77 kg CO₂e per kg FPCM (fat and protein corrected milk). This is 46% less than the United States (1.23 kg CO₂e per kg FPCM).⁵
- NZ is committed to maintaining its place as one of the most efficient producers of low-emission milk in the world.^{5,6}

Research shows NZ dairy the world's most emissions efficient. Dairy NZ. 2021 [cited 29 July 2022].

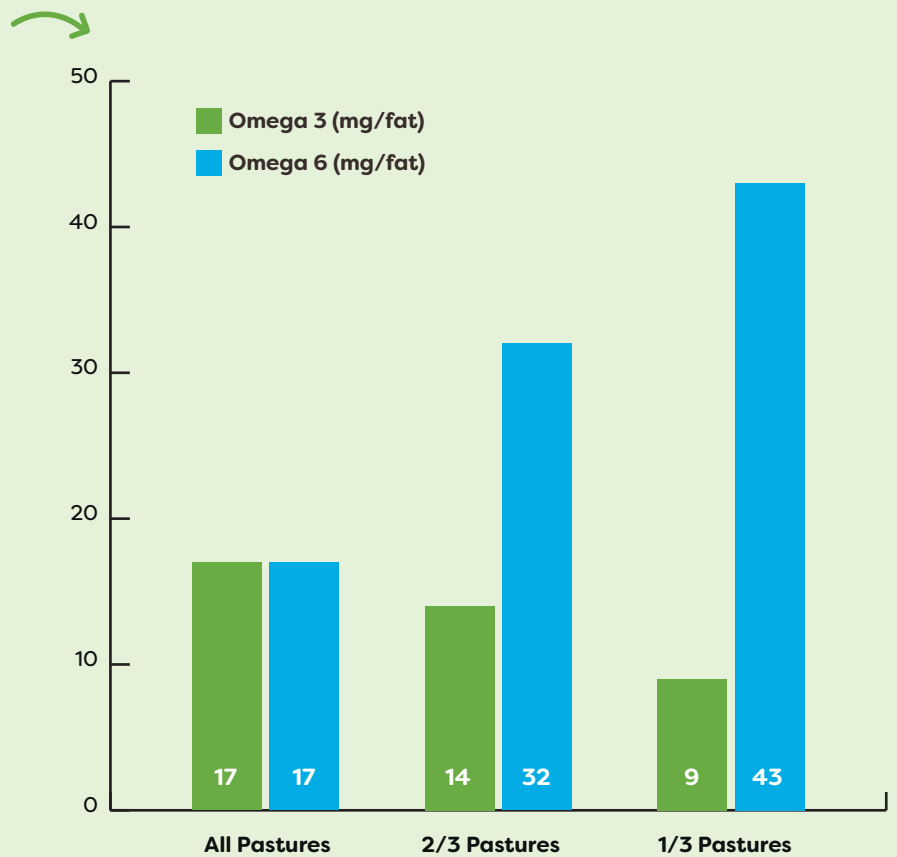
Nutritional Advantages of Milk Protein from Pasture Raised Dairy Cattle

- Beta-carotene is a precursor for vitamin A, meaning it is easily converted to the active form of vitamin A.⁵ Vitamin A is required for healthy skin and mucous membranes, immune health and vision. Beta-carotene is found in pastures i.e. grass, thus, milk derived from grass-fed cattle has higher concentrations of beta-carotene as well as other essential nutrients such as omega-3 fatty acids and CLA.^{7,8}
- Considerably higher levels of CLA (conjugated linoleic acid) and unsaturated fatty acids (alpha-linoleic acid, a form of omega-3 fatty acid) have been reported in milk from grass-fed cattle compared to grain-fed cattle.^{7,8}
- Cattle fed only pasture have a 1:1 balance of omega-3 and omega-6 fatty acids. However, this balance is interrupted with the introduction of grain-based feed.⁸

Pasture raised cattle produce milk with a more favorable omega-3 to omega-6 ratio. However, this balance is interrupted with the introduction of grain-based feed.⁸



Role of pasture on omega-3 versus omega-6 fatty acids in dairy milk



New Zealand: dairy cattle numbers 2021 [Internet]. Statista. 2021 [cited 29 July 2022].



References

1. Live & Work New Zealand. 2022. *Working on a New Zealand dairy farm*. [online] Available at: <https://www.newzealandnow.govt.nz/resources/working-on-a-new-zealand-dairy-farm> [Accessed 29 July 2022].
2. New Zealand: dairy cattle numbers 2021 [Internet]. Statista. 2021 [cited 29 July 2022]. Available from: <https://www.statista.com/statistics/974482/new-zealand-dairy-cattle-numbers/>
3. From Grass to Glass [Internet]. Fonterra. [cited 29 July 2022]. Available from: <https://www.fonterra.com/nz/en/goodness-of-nz-milk/what-makes-nz-milk-good/from-grass-to-glass.html>
4. Clancy K. Greener Pastures - How grass-fed beef and milk contribute to healthy eating [Internet]. Ucsusa.org. 2006 [cited 29 July 2022]. Available from: <https://www.ucsus.org/sites/default/files/2019-10/greener-pastures.pdf>
5. Research shows NZ dairy the world's most emissions efficient [Internet]. Dairy NZ. 2021 [cited 29 July 2022]. Available from: <https://www.dairynz.co.nz/news/research-shows-nz-dairy-the-world-s-most-emissions-efficient/>
6. Research shows NZ dairy the world's most emissions efficient [Internet]. AgResearch NZ. 2021 [cited 29 July 2022]. Available from: <https://www.agresearch.co.nz/news/research-shows-nz-dairy-the-worlds-most-emissions-efficient/#:~:text=%E2%80%9CNew%20Zealand's%20dairy%20sector%20is,food%2C%E2%80%9D%20said%20Dr%20Mackle>
7. Stringleman H, Scrimgeour F. Dairying and dairy products - On the farm' [Internet]. Te Ara - the Encyclopedia of New Zealand. [cited 29 July 2022]. Available from: <http://www.TeAra.govt.nz/en/dairying-and-dairy-products/page-8>
8. What makes New Zealand milk so good? [Internet]. NZMP. 2021 [cited 29 July 2022]. Available from: <https://www.nzmp.com/global/en/news/what-makes-nz-milk-so-good.html#:~:text=And%20being%20predominately%20grass%20fed,meet%20the%20highest%20customer%20expectations>