THE FUTURE OF DAIRY – EXECUTIVE SUMMARY

New research conducted in collaboration with Lund University develops four scenarios for the dairy industry in 2030.

"The Food & Beverage sector will undergo an enormous transformation over the next decade, with the dairy industry feeling this most acutely. Clearly, many challenges lie ahead – but there are plenty of opportunities for manufacturers too. The key to success in the new landscape will be in embracing flexibility and proactively responding to the wave of disruptive changes." **Frederik Wellendorph, Vice President BU Liquid Food, Tetra Pak**

An 18-month study completed by Lund University School of Economics and Management during 2018 and 2019 set out to uncover fresh insights into the shifting landscape of the dairy industry. The geographical scope of the study involved six key global markets in the preliminary stages: UK, US, China, India, Nigeria and Brazil. At a later stage, the full project effort focused on the first four of these countries.

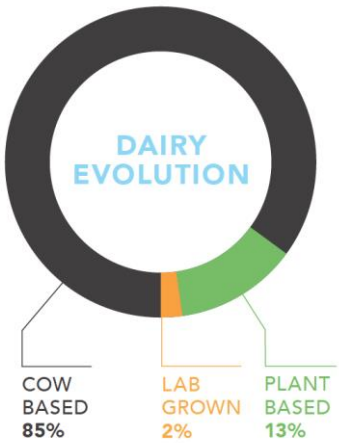
The aim was to explore what the dairy value chain might look in 2030. The result was the following four scenarios, each demonstrating varying interplay of socio-environmental forces and technological transition, with very different outcomes.

1. Dairy Evolution

No major surprises; current trends continue with only incremental changes.

- Only incremental environmental improvements.
- Low technological transition.
- Continued consolidation towards mega factory farming.
- Continued, moderate plant-based growth.
- Fermentation/lab-based protein remains niche.
- Increased global milk movements to meet demand in dairy deficit countries.

2030 market mix

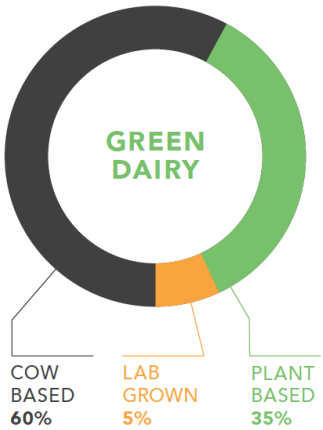


2. Green Dairy

Marked by strong socio-environmental restrictions, driving the dairy industry to invest heavily to reduce carbon footprint – the main driver for this scenario.

- Technological transition is low.
- Only a few mega factory farms remain after major changes to subsidy regulations plus new animal-based food taxation and stricter welfare policies.
- Cost increases lead to higher cow-based dairy prices, especially butter and cheese.
- Strong plant-based growth.
- Fermentation-based dairy protein remains a premium niche but faces consumer resistance due to unsolved GMO issues.

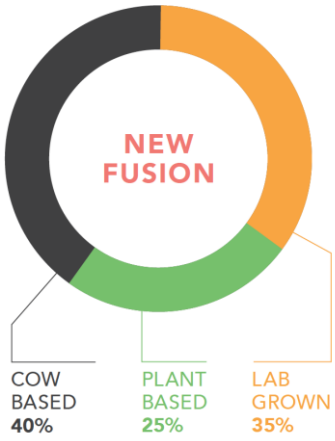
2030 market mix



3. New Fusion
Dominated by innovative technologies and processes. Novel combinations of proteins from different sources.

- Only weak incremental environmental improvements.
- Fermentation-based dairy companies reach mass-market scalability.
- Drinking milk is the “last bastion” for conventional dairy.
- Artisanal/premium dairy and cheese continue to thrive.
- Moderate plant-based growth despite advances in nutritional profile and texture.
- Fusion products combine “three worlds” of animal, plant and lab-based proteins to create thriving new personalised nutrition segment.

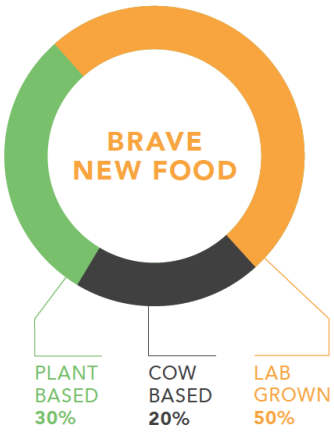
2030 market mix



4. Brave New Food
Combines both strong socio-environmental restrictions and high technological transition. Environmentally engineered and intelligence-driven achievements.

- Very few mega factory farms remain, due to technological and regulatory pressure.
- Artisanal/premium dairy and cheese continue to thrive.
- Cultured dairy protein production is cost-effective and reaches mass market scalability.
- Highly functional cultured liquid milk emerges due to cost advantages over heavily taxed animal-based products.
- Strong plant-based growth based on nutritional sustainability, improved taste and texture, as well as policy “nudges”.

2030 market mix



Conclusions

These four scenarios are all plausible. Each one is very different, but they all have points in common:

- Large, efficient dairy manufacturers without close farming ties (cooperative model) may be more flexible than other manufacturers.
- Farsighted food conglomerates may have smart investment strategies that cover more than one technological approach.
- Food entrepreneurs (niche manufacturers) will have opportunities to provide relevant innovations and value propositions.

The reality may vary, in one or more markets, or globally. Nevertheless, two critical dimensions impacting the Dairy Industry's development are technological transition and socio-environmental forces. Dialogue and collaboration – and applying flexibility to plan accordingly in order to handle the next ten years as the dairy industry evolves – will be key to success.

To find out more, join one of the webinars on 8 October by registering at:
http://tetrapak.com/about/events/dawn-of-new-dairy-industry