



Building Sustainable Food Systems through Adversarial Collaboration

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KEY TAKEAWAYS:

- Collaboration across divides builds stronger solutions – adversarial collaboration supports progress by clarifying disagreement, identifying shared goals, and building solutions grounded in robust science and mutual respect.
- The case of milkfat demonstrates the value of open scientific exchange – evolving scientific perspectives on whole milk dairy, shaped by constructive dialogue between experts with opposing views, illustrate how adversarial collaboration can recalibrate long-held assumptions to drive progress.
- Transforming food systems requires an integrated approach – nutrition, environmental sustainability, and socioeconomic realities must be addressed together and guided by transparent, evidence-based engagement.

In a world where debates over nutrition, sustainability, and food policy are increasingly polarized, progress is too often slowed – not by a lack of evidence, but by a lack of dialogue between those with differing or even opposing views. Meeting the challenge of sustainably nourishing a growing, aging population demands more than agreement among like-minded stakeholders. It requires structured, science-informed engagement across divides.

Adversarial collaboration, a disciplined process for working constructively with those who hold opposing perspectives¹, offers a pathway to build common ground and generate solutions that are scientifically sound, socially viable, and environmentally responsible.

This paper draws on the evolution of scientific thinking on milkfat and cardiometabolic health to illustrate how robust dialogue can reshape long-held assumptions, inform policy, and strengthen trust. The lessons extend far beyond dairy, offering a model for food system transformation that integrates nutrition, environmental sustainability, and socioeconomic viability.

Milkfat and Cardiometabolic Health: A Case Study in Adversarial Collaboration

For decades, nutrition guidance was shaped by the assumption, derived from early population-based studies, that saturated fat, including milkfat, increased LDL cholesterol and by extension cardiovascular disease risk. This narrative, “saturated fat = bad” was simple but incomplete.

Over time, systematic reviews, meta-analyses, well-designed cohort studies, and clinical trials revealed that not all saturated fats have the same effect on human health. Whole-milk dairy

emerged as neutral, or even beneficial, for cardiometabolic health.

In a hallmark example of adversarial collaboration at its finest, an expert panel brought together scientists with divergent views on saturated fat and heart disease and despite their initial disagreements, the group concluded that **the effect of a food on coronary heart disease risk could not be predicted solely by its saturated fat content.**² A decade later, leading nutrition experts are calling for food authorities to stop differentiating between whole-milk and low-fat dairy foods in dietary guidelines for children and adults, **stating the consumption of milk, yogurt, and cheese, irrespective of fat content, does not contribute to heart disease risk.**³

Nutrition science is shifting from a nutrient-by-nutrient focus to a broader evaluation of food quality and overall dietary patterns because of the willingness of scientists with opposing perspectives to engage in adversarial collaboration.

Adversarial Collaboration as a Model for Building Sustainable Food Systems

As the food system evolves to meet the needs of a growing, aging population and a resource-constrained planet, dialogue across disciplines, sectors, and viewpoints – not just within echo chambers – is required. By working with stakeholders across the food system to explore shared goals, GDP recognizes that thoughtful, structured engagement with industry, academia, government, and civil society organizations can clarify differences, surface shared values, and foster inclusive solutions that are rooted in sound science and lived experience. Engagement in adversarial collaboration is a model for driving science-informed diplomacy and will be essential to advancing shared goals without compromising scientific integrity.

Why Adversarial Collaboration is Critical for Dairy Leadership Today

Dairy sits at the crossroads of major trade-offs. It is nutritionally dense, promotes health, is widely consumed, and economically viable, yet it is often scrutinized for its environmental footprint. As debates over sustainable diets intensify, adversarial collaboration enables the dairy sector to engage constructively with critics, dispelling myths while addressing legitimate concerns, and advocating for balanced, science-based targets. This is particularly valuable in a global context, where cultural and socioeconomic differences shape how sustainable diets are understood and implemented.

Scientific disagreement is not a weakness; it is an essential driver of progress. When managed constructively, it can improve scientific rigor, build resilient and trusted policy, and support adaptive dietary guidance that reflects new evidence without undermining public trust. By leading in this space, the dairy sector can help shape the future of the food system, rather than

simply respond to it.

Applying the Model to Food System Transformation

A sustainable food system must deliver on three interdependent pillars:

- Nutrition: supporting human health and development across all life stages.
- Environmental sustainability: conserving resources and protecting planetary boundaries.
- Socioeconomic viability: ensuring affordability, cultural acceptability, and equitable livelihoods for those who produce and consume food.

Too often, debates on sustainable diets focus narrowly on environmental metrics, overlooking nutritional adequacy and social realities. Trade-offs among these pillars are inevitable.

Adversarial collaboration ensures these are navigated transparently, not through unilateral prescriptions, but through inclusive, evidence-based dialogue.

Several prominent food systems experts have **nuanced their views** in light of such engagement.⁴ These shifts did not occur in isolation. They emerged through scientific debate, contested panel discussions, collaborative publications, and ongoing data sharing, the hallmarks of adversarial collaboration done well.

DAIRY LEADERSHIP: A CALL TO ACTION

- Champion science-based dialogue that welcomes dissenting voices and reflects evolving evidence, not static paradigms.
- Invest in cross-sector collaboration to ensure that food system transformation is both credible and inclusive.
- Advocate for holistic sustainability frameworks that integrate nutrition, environmental impact, and socioeconomic viability.

For more information on the Global Dairy Platform's Perspective Papers or our Quarterly Webinar Series, please reach out to Dr. Beth Bradley at Beth.Bradley@GlobalDairyPlatform.com

References

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