Alternative meats and alternative metrics

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Abstract

Sustainability discussions bring in multiple competing goals, and the outcomes are often-conflicting depending upon which goal is being given credence. The role of livestock in supporting human well-being is especially contentious in discourses around sustainable diets. Diets with low greenhouse gas emissions are often described as sustainable, even though the nutritional, social and economic pillars of sustainability are not considered. Alternative meat companies promise to reduce carbon emissions, along with the land and water used for animal protein production. And perhaps, in the opinion of Silicon Valley JUST CEO, "end world hunger". This narrative seemingly ignores the dietary importance of animal-source foods, and livelihoods that are supported by grazing ruminant production systems. Rarely do such hubristic claims emanate from scientists, but rather from companies in their efforts to raise venture capital investment and market share. Such bold pronouncements are reminiscent of the early days of the biotechnology industry. There too, finance followed aspirations for a "tomorrow without hunger". Such promises opened the biotechnology industry to attack by activist groups, who effectively created fear around genetically modified food by framing GMOs are "unnatural" and therefore unsafe to eat and grow. And while the target of these campaigns was ostensibly multinational companies, the impact was to preclude global access of academic researchers, and developing countries to the use of agricultural biotechnology. Many of these same groups have since moved their "Frankenfood" sights towards the unnaturalness of cell-cultured and alternative meats. Perhaps now is an opportune time to collectively communicate how innovations are enabling both alternative- and conventional-meat producers to more sustainably meet future demand. This could counteract the possibility that special interest groups, whose business model is to promulgate misinformation, fear and uncertainty, will be able to hinder the adoption of technological innovations to the ultimate detriment of global food security.

Key words: cultured meat, plant-based meat, alternative meat, sustainability, metrics