

Protein Challenge 2040

Protein is essential for a healthy diet, yet the way in which we produce and consume it at the beginning of the 21st century is having significant impacts on both the environment and human health, which will only worsen if no concerted action is taken. There are serious questions over whether we will be able to provide sufficient protein sustainably for a further 2 billion people by 2040.

The Protein Challenge 2040 is the culmination of a year of enquiry by an unusual coalition of food companies, retailers, feed companies and NGOs into the big protein question: How are we going to feed nine billion people enough protein by 2040, in a way that is healthy, affordable and good for the environment?

Facilitated by sustainability non-profit Forum for the Future, The Protein Challenge 2040 consortium is founded by leading NGOs including WWF and GAIN, retailers Target and Waitrose, leading dairy nutrition firm Volac, taste and flavour experts Firmenich, as well as food manufacturers The Hershey Company and Quorn. It is the first partnership that brings together representatives from animal, plant and alternative protein industries to understand the protein system's challenges, identify a common way forward and find new solutions collectively.

Through in-depth research and work with food, nutrition, health and technology experts across the world, the coalition has mapped the interrelationships within the entire protein system for the first time. It has pinpointed six areas for innovation, which the group will take immediate action on to meet future demand sustainably. These include increasing the proportion of plant-based protein consumption with consumers, scaling up sustainable feed innovation to meet demand for animal protein, and tackling the loss and waste of protein across the system.

In the next phase of the initiative, the Protein Challenge is looking to help scale up sustainable animal feed innovations. Over the last 60 years, farmed cattle, chickens, pigs and fish have increasingly been fed on grains, soy and fishmeal. Many of these feedstocks are high-quality sources of protein that could be used to feed humans, particularly in places where protein deficiency is common. Additionally, the use of fish as animal feed puts pressure on our ocean ecosystems. Developing new sources of animal feed to meet the growing demand for animal protein is critical for taking the pressure off land use, and to reduce the overall land footprint of agriculture and impact on ocean ecosystems. There is already a huge amount of innovation in alternative feeds, from insects to micro-organisms. The Protein Challenge is seeking new partners working on sustainable feed to help scale the most promising and sustainable innovations, through addressing the barriers to scale.