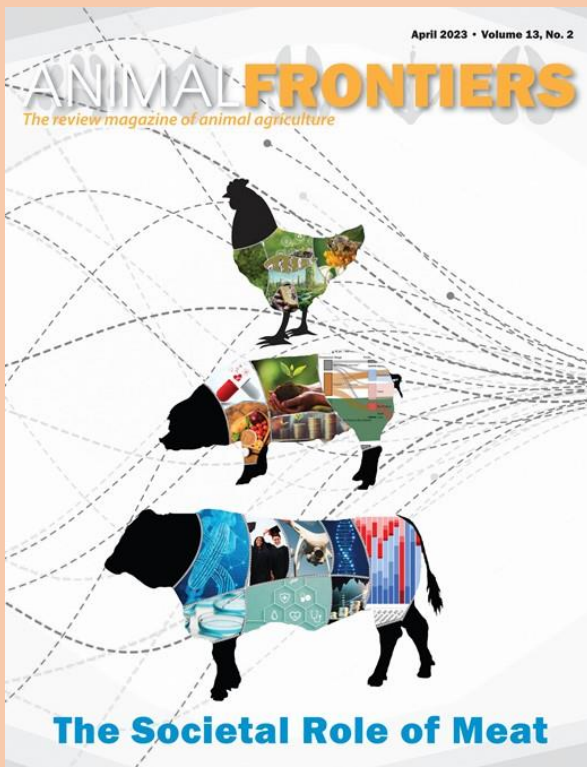


## THE SOCIETAL ROLE OF MEAT AND LIVESTOCK

### WHAT THE SCIENCE SAYS



Scientific papers based on the [Dublin Summit presentations](#) have just been published in a [peer-reviewed edition](#) of *Animal Frontiers*, the third most-cited journal in agriculture, dairy, and animal science. The journal edition's guest editors and authors are among the **nearly 1000 signatories** of the "[Dublin Declaration of Scientists on the Societal Role of Livestock](#)", a paper signaling that **livestock systems are too precious to society** to become the victim of simplification and reductionism.



The **Dublin Declaration** was born from discussions on the critical role of meat in society during the October 2022 International Summit, "The Societal Role of Meat – What the Science Says", hosted by **Teagasc** in Dublin, and it is becoming increasingly influential as it has been signed by **nearly 1000 scientists globally**. And on 12 April 2023, the Animal Task Force (ATF) and the Belgian Association for Meat Science and Technology (BAMST) organised a symposium in Brussels entitled "[The Role of Meat in Society: presenting the Dublin Declaration of Scientists](#)" to communicate the main findings of the Dublin Summit to **Brussels Bubble** stakeholders, policymakers and journalists.

Together, the Summit, the Declaration and the scientific papers from the summit set a milestone in integrating the **latest-available science on the societal role of meat and**

**livestock.** And this should be at the heart of the debate on the resilience and sustainability of our food systems.

The publication of the scientific journal was welcomed by Teagasc Assistant Director of Research **Declan Troy**, who highlights that **livestock farming** supports the **livelihoods of about one in six people** on the planet. Livestock farming supplies food, nutrition, income and more to hundreds of millions of people and is of enduring cultural significance for many. Deploying **scientifically-sound practices in animal agriculture** is key to succeeding in global health, climate, and development challenges.

Professor **Alice Stanton** of the Royal College of Surgeons of Ireland points out that the peer-reviewed evidence published in *Animal Frontiers* reaffirms that the **2019 Global Burden of Disease Risk Factors Report** (the most prominent global study) claim that consumption of even tiny amounts of **red meat** harms health, is fatally scientifically flawed and should be retracted. Nutrition scientists agree that removing fresh meat and dairy from diets would harm human health, and women, children, the elderly and those of low income would be particularly negatively impacted.

During the Brussels symposium, Professor Stanton presented on *“Meat in human health and nutrition – reflections on “too little”/“too much”*, showing **the importance of transparent, evidence-based health metrics**. She flagged to participants the worrying fact that the Global Burden of Disease (GBD) data analysis from 2019, now recognised as having errors, influences FAO, UN, WHO, and **EU Farm to Fork Strategy** policies.

When the latest GBD report was published, Stanton and five other scientists requested supporting evidence for the 2019 analysis. Although the authors admitted there were errors, they never answered the questions from the scientists. During the symposium, she pointed out that **the non-correction or the non-retraction of the GBD analysis is a serious problem with troubling consequences**, as it accounts for 2,147 scientific paper citations and influences EU and other international policies. She insisted that there is no evidence that unprocessed red meat is associated with increased health risks and that the protection against nutritional deficiencies has been completely ignored. Scientists, policymakers, and all involved in the **food system** should be extremely wary of global health estimates that are not **rigorously and transparently evidence-based**.

Professor **Adegbola Adesogan**, Director of the University of Florida’s Global Food Systems Institute, also welcomed the publication of the scientific papers, highlighting that animal-source foods are superior to plant-sourced foods at simultaneously supplying several **bioavailable micronutrients** and high-quality macronutrients that are **critical for growth and cognitive development**. Adesogan points out that dietary recommendations to eliminate animal-source foods from diets ignore their importance, particularly the great need for these foods in the diets of the **undernourished in the Global South**.

Moving on to the question of food vs feed during the Brussels symposium, Professor **Wilhelm Windisch** from the Technical University Munich in Germany highlighted that farmed animals maintain a **circular flow of materials** in agriculture. They use and upcycle large amounts of plant material humans cannot eat, turning this into high-quality, nutrient-dense food. He pointed out that the one-size-fits-all

agendas, such as drastic **reductions in livestock** numbers, could incur **environmental and nutritional consequences** on a massive scale.

In his presentation “Meat in sustainable food systems – circularity, ecological context, and metrics”, he pointed out that **most agricultural biomass is non-edible**. Grassland generates non-edible biomass only, and absolute grassland is non-arable. Effectively **70% of agricultural land globally cannot be used for growing crops**. So, he explained that the only way to manage this land sustainably is with livestock, as grazing **livestock help to create open spaces with high biodiversity**, with the replacement of lost habitats. He outlined that **1 kg of vegan food generates at least 3 to 5 kg of non-edible biomass**, and either plant nutrients bound in non-edible biomass must return to the soils, directly back to the soil by rotting, or to biogas with fermentation using residues, or we can obtain high-quality food from the circular use of non-edible biomass.

Professor Windisch also explained that **the “climate-killer-cow” is a misleading narrative**. **CO<sub>2</sub>** is a weak but extremely stable GHG accumulating once released from **fossil sources**, while **CH<sub>4</sub>** is a strong GHG, but it **quickly degrades**. **If ruminant numbers remain constant, CH<sub>4</sub> emissions will remain steady with degradation**. They do not add to global warming. He said feeding non-edible biomass to livestock is the smartest pathway to **circularity** and that **there is no sustainable agriculture without livestock**.

In his presentation “Societal dimensions of meat – economics and ethics”, Professor **Peer Ederer** from Goal Sciences said that epidemiological evidence shows we need 100 g per person per day of proteins, twice what is usually the case. He pointed out that we are **not providing enough proteins** to our global population, but it is **not always a question of availability but rather affordability**. In this respect, he said that **cell-based meat technology is not the answer**, as we don't yet know if we are biologically adapted to assimilate it safely. From a human species' point of view, **we need animal-source foods for our well-being**, and we even have an ethical duty to make good use of animals.

Professor **Frédéric Leroy**, from the Vrije Universiteit Brussel, also spoke at the Brussels symposium presenting, “The Dublin Declaration of Scientists – origins and key messages”. He explained that the Dublin Declaration gives a voice to the many scientists worldwide who research diligently, honestly and successfully on the role of livestock. As of 12 April, when the symposium occurred, **925 scientists have endorsed the declaration**. He said that together these scientists are keen on this unprecedented double challenge of ensuring adequate diets while fighting climate change. Nevertheless, **animals are irreplaceable** for maintaining a circular flow of materials in agriculture while generating many other benefits. **Livestock ownership is the basis of any rural community** and its financial capital.

