

House of Commons Science and Technology Committee: 'My Science Inquiry'

Proposal from the Society for Applied Microbiology

Microbiome research and application

Microbiomes exist everywhere on Earth. They are the specific communities of microbes that live in environments as varied as the human gut, soils and coral reefs. Microbiome research is undergoing a boom in activity, including within healthcare where the human microbiome has been linked to inflammatory bowel disease, obesity, and certain neurological conditions. Microbiome R&D is also directed towards new biotechnology and agri-tech products, such as microbe-coated seeds. Yet, our understanding is nascent and public discourse must avoid over-hyping discoveries in this rapidly moving area. The use of prebiotics, probiotics and faecal microbiota transplants also highlights regulatory considerations.

Microbiome research spans many scientific disciplines and demands a co-ordinated approach. In 2016, the US government recognised this by committing \$121 million to launch a National Microbiome Initiative. By contrast, the UK lacks a roadmap or similar unified strategy to capitalise on our leading research. The Committee may wish to explore the potential of this rapidly developing field for the UK economy, in light of the UK Government's long-awaited bioeconomy strategy and the industrial strategy. The Committee is in a good position to build on evidence from the previous genomics inquiry and the recent POSTnote on the microbiome and human health.

About the Society for Applied Microbiology

The Society for Applied Microbiology (SfAM) is the oldest microbiology society in the UK, representing a global scientific community that is passionate about the application of microbiology for the benefit of the public. Our members work to address issues involving the environment, human and animal health, agriculture and industry.

www.sfam.org.uk

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