Café Scientifique Headingley

Monday 13th October 2025 Taste of Tomorrow:

Unravelling Mouthfeel for the Future of Sustainable, Healthy Foods

By Ben Kew



Outline: As we move toward more sustainable and healthier diets, texture and mouthfeel, often overshadowed by taste, could play a crucial role in shaping the future of food. This talk explores how we eat, dives into the science of mouthfeel, with a focus on oral tribology, to tackle the sensory challenges that limit the appeal of plant-based and alternative protein foods. Using cutting-edge tools—from 3D-printed biomimetic tongues to neural imaging—we'll examine how understanding mouthfeel can help predict food perception, improve the sensory qualities of plant proteins, and unlock exciting innovations, such as a fat replacer that's 99% water and only 4 kcal per 100g. Finally, we'll look ahead to the future of food: what a sustainable—and unsustainable—2050 might look like, lets debunk and reduce our anxiety over "ultra-processed foods", and how food science research is shaping diets that are not only healthier and more sustainable, but also more enjoyable.

Ben Kew is a food scientist at the University of Leeds, specialising in the mouthfeel and texture of food through oral tribology (friction), rheology (flow), and sensory science, with a focus on plant-based proteins. His research employs cutting-edge methods—including 3D-printed tongue surfaces, AFM, QCM-D, and neural imaging—to investigate and address sensory challenges in alternative proteins. Ben is a co-inventor on a patent that led to the formation of the spin-out company Microlub Ltd. Ben has won numerous prizes for his research including a student of the year award and currently Chair of a science society, STLE UK Student Chapter. Ben is now joining NAPIC (national alternative protein innovation centre) to advance oral processing research for more nutritious, healthier but tastier plant-based foods.

Venue: The New Headingley Club, 56 St Michaels Road, LS6 3BG Time: Room opens 7:30pm, Talk begins promptly at 7:45pm Entry: Donation please for room hire and expenses: £4 at the door

