

Battle of the Proteins: **Alt vs. Animal**

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Increasing awareness of the environmental impacts of food systems has motivated a drive to replace resource-intensive foods with alternatives that have lower impact. The conversation has focused on animal-derived foods, which are typically high in protein and often (but not always) resource-intensive to produce. The phrase 'alternative proteins' has been coined to refer to non-traditional molecules, ingredients and food products, or traditional proteinaceous food materials produced with new technologies.

Animal-derived foods deliver substantially more bioavailable protein and minerals than non-animal foods, and require less processing than plant proteins. When nutritional and processing differences are accounted for in sustainability calculations, the 'alt vs. animal' comparison shifts substantially.

There is a clear need to boost the nutritional and sustainability attributes of alternative proteins, and to bring nutrition into the conversation about the environmental impacts of our food systems. In Singapore, food resilience is an added imperative through which to filter the options for domestic food production. The 'big three' under discussion are plant-based foods, microbial foods and cultured meats.

In this seminar, Dr Loveday will discuss some promising new approaches towards nutritious, sustainable protein-rich foods. He will critique some of the mythology surrounding alternative proteins, and highlight research needs in the drive towards a sustainable and resilient food supply.

Date: 16 September 2022 (Friday)

Time: 2 pm - 3 pm

Venue: Zoom