Advances in cultured meat technology

Edited by: Professor Mark Post, Maastricht University, The Netherlands, Professor Che Connon, Newcastle University, UK and Dr Chris Bryant, University of Bath and Bryant Research, UK

Endorsement:
“Advances in cultured meat technology provides a timely overview of the critical components in the commercialisation pathway for cultivated meat...This book provides insights on the wider considerations around novel food regulation and consumer adoption and will be a valuable go-to resource for anyone interested in exploring the current technical status of the cultivated meat landscape.” (Professor Ivan Wall, University of Birmingham and co-founder and CEO of Quest Meat Limited)

Description:
With the global population estimated to reach 9 billion by 2050, agricultural production must align with this growth to alleviate any further burden on our current food systems. More sustainable and alternative modes of production are required to ensure that this overburden doesn’t occur and that the food security of millions isn’t compromised in the process. Advances in cultured meat technology reviews the growing interest and emergence in the field of cellular agriculture as one possible solution to achieving this. The book reviews the major technologies used in cultured meat product development, including cell line sourcing, cell growth media, bioreactors for cell multiplication and tissue engineering using scaffolds. The need to establish regulatory frameworks to permit the creation and trade of this new type of product is also highlighted, as is the key issue of consumer acceptance of this new technology.

Key features:
• Considers the potential benefits and challenges of cultured meat production, including the need to scale the current technology up at an affordable cost to produce nutritious and affordable products
• Addresses the key quality and sustainability issues of cultured meat production, highlighting consumer attitudes and how further education is required to increase consumer acceptance of cultured meat products
• Reviews the major technologies used in cultured meat product development, such as cell line sourcing, cell growth media and tissue engineering using scaffolds

Audience:
Researchers in agricultural, environmental and social science, government and other private sector agencies responsible for the establishment of regulatory frameworks that permit the production and trade of food items, pharmacologists involved in the study of cells and animal tissues

Editors' details:
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