## Philosophy and Novel Foods. An Introduction

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Imagine a future scenario where, at dinnertime, you navigate the supermarket's meat aisle and encounter not only conventional meat but also an extensive assortment of alternatives: cultivated meat grown from animal cells, plantbased meats, insect-based products, and meats derived from microorganisms. These 'novel meats', which represent the potential future of our dinner plates, are gaining momentum in response to the urgent necessity to address the catastrophic state of the meat industry. Indeed, driven by a mission-oriented approach, food technology advancements are positioned as the key to establishing a sustainable, efficient, and ethically responsible model of meat production and consumption that meets both present needs and future demands.

The advent of novel meats has sparked pressing problems that populate a diverse range of research, spanning from investigations into how the sector's narrative landscape is shaping future visions of meat production (Sexton, Garnett, and Lorimer 2019; Broad 2020; Jönsson 2020), to legal issues surrounding product labelling (Failla *et al.* 2023; Malerich and Bryant 2022) and studies on consumer psychology and perceptions (Pakseresht *et al.* 2022; Lewisch and Riefler 2023).

Most importantly, the topic of novel meats has quickly entered the territory of philosophy due to the multifaceted ethical and metaphysical issues it poses. Ethical questions have been a focal point from the outset (Hopkins and Dacey 2008; Schaefer and Savulescu 2014), as novel meats – particularly cultured meat – are presented as a potential solution to the long-standing moral dilemma of eating animals. Indeed, these foods have been analyzed through traditional ethical frameworks, examining the consequences they might bring about, the virtues and values they challenge or promote, and the implicit assumptions that underlie their endorsement. In the realm of animal ethics, a key point of contention remains whether they represent a pathway toward animal liberation (e.g., Welin and van der Weele 2012; Sebo 2018; Milburn 2023) or, conversely, serve merely as a smokescreen that perpetuates or even reinforces speciesist and anthropocentric attitudes (e.g., Miller 2012; Cole and Morgan 2013; Alvaro 2019).

Beyond ethics, novel meats also disrupt the very concept of meat itself (Stephens 2013; Metcalf 2013), raising the question of whether an edible product made from animal stem cells cultured in a laboratory, or an assembly of plant-based proteins, can truly be considered meat. Additionally, on a broader scale, the topic of novel meats intersects with discussions in the philosophy of food, particularly regarding the limitations and challenges inherent in the approach they promote – namely, one that relies on the salvific potential of technology to fix the food system (Borghini, Piras, Serini 2020; Belasco 2006).

Embarking on the exploration of the various philosophical dilemmas surrounding novel meats, this focus aims to provide the latest insights into the ethical, metaphysical, political, and conceptual issues that drive the debate on the matter. In doing so, such a collection of essays seeks, on one hand, to illuminate how philosophy contributes to pressing food-related issues, and on the other, to position novel foods as a relevant subject for philosophical inquiry. For this reason, the focus intends to engage those working in philosophy, revealing how novel foods compel the refinement of theoretical tools and ethical frameworks, while simultaneously bringing traditional philosophical questions to the surface. Furthermore, this investigation also strives to serve as a resource for those working in food studies, food technologies, legislation and policy, and anyone with a general interest in novel meats, by offering an in-depth analysis of their ethical and theoretical dimensions.

The collection opens with the paper "New Challenges to Cultivated Meat" by Josh Milburn and Rachel Robison-Greene, which addresses three recent ethical objections to cultivated meat and argues that these objections fail to establish a definitive case against the adoption of this novel food. Firstly, the authors analyse the objection raised by Ben Bramble, which is based on the intuition that valuing another being's body is incompatible with its consumption - an act that, according to Bramble, should be repellent to any well-informed person. Since cultivated meat is composed of the same material as animal bodies, Bramble contends, it should likewise elicit disgust. Milburn and Robison-Greene counter this reasoning by questioning the anti-cannibalist intuition underlying the argument as well as the metaphysical understanding of cultivated meat. The authors then challenge Alvaro's claim that a virtuous individual would abstain from consuming cultivated meat and proceed to engage with the technological skepticism expressed by Abrell. Through a close examination and subsequent rejections of these arguments, the paper concludes with a cautious yet positive case for cultivated meat, one that frames this novel food as a potentially beneficial strategy for reducing animal agriculture.

The ethical discussion of cultivated meat continues with the second paper in this collection, "Cultivated Meat: A New Lifeworld for Human Beings" by

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Luca Lo Sapio, which explores ethical positions both for and against cultivated meat. Lo Sapio examines perspectives such as Singer's consequentialism, Francione's abolitionism, and the positions of Bramble and Alvaro. In contrast to the latter three, who reject cultivated meat, Lo Sapio presents it as an opportunity to reshape the human lifeworld. This opportunity is articulated through five key aspects related to the production and consumption of cultivated meat. First, the capability of cellular agriculture to favour transparent production processes that – unlike conventional meat production – could reduce consumer alienation. Second, the ability of novel foods to encourage a balanced and pragmatic perspective on technology, steering clear of polarized views that depict technology as either entirely salvific or wholly destructive. Third, the relationship between consuming cultivated meat and cultivating virtuous character traits, as well as fostering pathways for personal self-improvement. Fourth, the potential of cultivated meat to deepen connections with the external environment and, lastly, to transcend the rigid dichotomy between the natural and the artificial.

A different approach to the promises and pitfalls of cultivated meat is presented in the third paper, "Cultured Meat in Between Anthropocene Crises: A Perspective from Ecological Feminism", where Alice Dal Gobbo examines the issue through the lens of political ecology. This perspective, combined with feminist thinking on science, technology, and ecology, allows the author to reveal the role of power in shaping both the material and symbolic dynamics surrounding novel food technologies. By uncovering the inherently political, rather than technically neutral, pathways of food innovation, Dal Gobbo emphasizes the importance of addressing how the future enabled by these technologies risks replicating existing power dynamics and leaving marginalized voices unheard. As such, the paper advocates for a methodological approach that involves mapping controversies and attending to overlooked perspectives, with the goal of rethinking food innovations – not as simplistic salvific solutions, but as complex hybrid socio-technical objects that must be understood within the context of planetary boundaries and social equity.

The fourth paper, "An ontological guide to make novel foods familiar" by Nicola Piras, endorses ontological modelling as a methodology capable of facilitating the familiarization of novel foods. Starting with a thorough examination of the European Union's definition of "novel foods", Piras critiques the EU's simplistic, one-size-fits-all categorization, arguing that a more nuanced approach is needed to capture the varying degrees of novelty that foods can present. The paper then proposes an ontological model that focuses on the relationships a food has with its cultural context, consumption practices, and the identity of the eaters, offering a more detailed understanding of the different kinds and degrees of food novelty. This allows for a more precise demarcation between what is considered local and what is novel and, more importantly, it underscores that a robust categorization of novel foods requires specific normative decisions – decisions that should be developed collaboratively with the involvement of local stakeholders. Using edible insects as a case study, the paper concludes that – while acknowledging the vital role of food experts in these decisions – the input of local communities is crucial for categorizing novel foods.

The final paper, "Is This Meat After All? Novel Food Technologies and Conceptual Change" by Fabio Bacchini and Elena Bossini, examines whether novel meats, such as cultivated and plant-based varieties, can be recognised as instances of the category of meat. After analyzing the divergent definitions of meat found in the literature, the authors argue that novel food technologies reveal the longstanding, yet often overlooked, artefactual nature of meat, making this food category apt to be represented by a functional concept, which defines objects based on the roles or functions they serve within a given system. Under this framework, slaughter-based, cultivated, and plant-based meats are recognized as distinct subtypes within the broader category of meat. Indeed, a functional understanding of meat breaks the traditional association between meat and animal flesh at the overarching category level, while preserving this connection within the specific subtype of "slaughter-based meat." The paper concludes that this functional perspective represents a conceptual amelioration of "meat", as it allows each subtype of meat to maintain its unique identity while accommodating innovations in food production.

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