

Food Technology: Understanding Neophobia in the Context of Clean Meat

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DESCRIPTION

The food industry has witnessed remarkable advancements in technology, with clean meat, also known as cultured or lab-grown meat, emerging as one of the most revolutionary innovations. Despite its potential to address pressing global issues such as food security, environmental sustainability, and animal welfare, clean meat faces significant psychological barriers to widespread acceptance. Among these barriers, the fear or reluctance to try new food technologies known as food technology neophobia stands out as a critical challenge. This article delves into the concept of food technology neophobia and its implications for the acceptance of clean meat [1-3].

Understanding food technology neophobia

Food technology neophobia is a specific type of food neophobia, which refers to the reluctance to eat or the avoidance of new foods. While food neophobia generally pertains to unfamiliar food items, food technology neophobia is more focused on the methods and processes used to produce food. This phenomenon can be attributed to various psychological factors, including distrust in technological advancements, concerns about unnaturalness, and perceived risks associated with new food technologies.

Distrust in technological advancements

One of the primary drivers of food technology neophobia is the inherent distrust some individuals have towards technological advancements. This distrust is often rooted in a broader skepticism towards modern science and technology, fueled by historical instances where technological innovations have led to unintended negative consequences. For instance, controversies surrounding Genetically Modified Organisms (GMOs) have left a lasting impression on public perception, causing some consumers to be wary of any food produced through novel technological means [4-6].

Implications of food technology neophobia for clean meat acceptance

The psychological barriers posed by food technology neophobia have profound implications for the acceptance and adoption of clean meat. To fully realize the potential benefits of clean meat, it is essential to address these barriers through targeted strategies and interventions. One of the most effective ways to combat food technology neophobia is through public education and transparency. Providing consumers with accurate and accessible information about the science and safety of clean meat can help dispel myths and misconceptions. Educational campaigns that explain the benefits of clean meat, such as reduced environmental impact and improved animal welfare, can also shift public perception towards a more positive view [7-9].

Additionally, transparency in the production process, including clear labeling and third-party certifications, can build trust and credibility among consumers. Addressing the psychological concerns associated with food technology neophobia requires a nuanced approach. Engaging with consumers on an emotional level, highlighting the ethical and environmental benefits of clean meat, can help counteract negative perceptions. Storytelling and personal testimonials from individuals who have adopted clean meat can also humanize the technology and make it more relatable. Furthermore, involving trusted influencers, scientists, and healthcare professionals in promoting clean meat can lend credibility and reassurance to hesitant consumers. Introducing clean meat incrementally and gradually familiarizing consumers with the concept can also mitigate food technology neophobia. Initial offerings of clean meat could focus on hybrid products that combine cultured meat with traditional meat, easing the transition for consumers. As familiarity and acceptance grow, more products composed entirely of clean meat can be introduced. This phased approach allows consumers to gradually adjust to the idea of clean meat, reducing the shock and resistance that may arise from sudden, widespread availability [10].

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Policy and regulatory support play a critical role in shaping public perception and acceptance of new food technologies. Clear and consistent regulations that ensure the safety and quality of clean meat can enhance consumer confidence. Government endorsements and initiatives promoting clean meat as a sustainable and ethical alternative to conventional meat can also influence public opinion. Collaborative efforts between policymakers, industry stakeholders, and scientific communities are essential to create a supportive environment for the adoption of clean meat. Understanding the underlying factors driving this neophobia, such as distrust in technological advancements, concerns about unnaturalness, and perceived risks, is critical for developing effective strategies to address it. Through public education, transparency, addressing psychological concerns, incremental introduction, and policy support, it is possible to overcome food technology neophobia and pave the way for the widespread acceptance of clean meat. Embracing this innovative food technology holds the promise of a more sustainable, ethical, and secures future for global food systems.

REFERENCES

- David F. Msc in renewable energy and the environment. University of Reading, UK for an Advanced Biomass Module. 1996.
- Neela S, Fanta SW. Injera (An ethnic, traditional staple food of Ethiopia): A review on traditional practice to scientific developments. J Ethn Foods. 2020;7(1):32.

- Singh R, Malik RK, Tauro P. Anaerobic digestion of cattle waste at various retention times: A pilot plant study. Agricultural wastes. 1985;12(4):313-316.
- Usack JG, Wiratni W, Angenent LT. Improved design of anaerobic digesters for household biogas production in Indonesia: One cow, one digester, and one hour of cooking per day. The Sci World J. 2014.
- 5. Nyirenda K, Maurice T. Design of a co-digestion biogas plant to curb deforestation: Case study of Phalombe boarding secondary school in Malawi. ResearchGate. 2020.
- 6. Onwukeme VI, Etienajirhevwe OF, MokobiSa EK. Production of biogas from cow dung, weeds and domestic wastes. Ethiop J environ stud manag. 2017;10(4):482-491.
- Mountjoy M, Sundgot-Borgen J, Burke L, Carter SL. The IOC consensus statement: Beyond the female athlete triad-relative energy deficiency in sport (RED-S). Br J Sports Med. 2014:491-497.
- Yeager KK, Agostini R, Nattiv A, Drinkwater B. The female athlete triad: disordered eating, amenorrhea, osteoporosis. Med Sci Sports Exerc. 1993;25(7):775-777.
- 9. International Olympic Committee. IOC consensus statement on sports nutrition. J Sports Sci. 2010: S3-S4.
- Kazami K, Ashida K, Sato Y, Arai T, Kazami M, Ohsaki S, et al. Nutrition interventions improve anemic status in male college long-distance runners. Jpn J Phys Fitness Sports Med. 2014; 63(3): 313-321.

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