Leehen Mashiah - PhD Candidate in Biotechnology and Food Engineering

Leehen Mashiah, a PhD candidate at the Technion's Faculty of Biotechnology and Food Engineering, works under Prof. Uri Lesmes to explore food digestion processes in the human body. Her research focuses on protein digestibility in the upper gastrointestinal tract, examining how factors like gender and age affect this process.

By investigating protein digestibility and its variations across different populations, Mashiah's work paves the way for more targeted dietary solutions. This research could potentially lead to the development of foods and dietary plans that are better suited to individuals based on their age, gender, and other physiological factors, ensuring that each person's "next bite" is optimized for their specific nutritional requirements and digestive capabilities.

Her key publications include:

- "Tailored Co-Extruded Cereals for Seniors: Fabrication, Palatability, and in vitro Digestibility" (Food Science and Human Wellness, 2024, DOI: 10.26599/FSHW.2024.9250421), which introduced a co-extruded cereal prototype enriched with bioactive compounds, demonstrating high protein digestibility and nutritional quality.
- "Static in vitro digestion model adapted to the general older adult population: an INFOGEST international consensus" (Food & Function, DOI: 10.1039/D3FO00535F), which proposed an adapted digestion model tailored for seniors, addressing physiological changes in their digestive systems.
- "Strategic Considerations in Designing Food Solutions for Seniors" (Foods, 2025, DOI: 10.3390/foods14030396), which explored approaches to developing age-oriented food products as part of the EAT4AGE project, focusing on palatability, digestibility, and nutritional adequacy.