

PhD in AGRIFOOD AND ENVIRONMENTAL SCIENCES

CALL 2025 – CYCLE 41

Reserved scholarship:

N - Sensory Perception, Health, and Sustainability: A Multidisciplinary Approach to Future Diets

Funding Body: **University of Trento and University of Southern Denmark (SDU)**

Supervisor 1: **Flavia Gasperi - UniTN**

Supervisor 2: Davide Giacalone - SDU

Supervisor 3: Benyamin Khoshnevisan - SDU

This PhD project investigates how we can make sustainable diets more appealing and healthy without compromising on taste. By analyzing both existing data and conducting new experiments, the project explores how sensory qualities—like flavor and texture—relate to nutrition and environmental impact. The ultimate aim is to understand what drives people's food choices and how to guide them toward better options that are good for both people and the planet. The focus is particularly on innovative plant-based foods as alternatives to meat and dairy.

The goal is to develop an interdisciplinary framework for evaluating and promoting sustainable diets by integrating sensory perception, environmental assessment, and nutritional science. This project will contribute to excellence by generating new knowledge on how sensory attributes influence consumer acceptance of sustainable foods and by identifying strategies to promote healthier, more sustainable eating patterns.

The core idea is to bridge sensory science, life cycle assessment (LCA), and nutrition in a unified research approach. By combining existing datasets, literature meta-analyses, and newly designed experiments, the project will map the relationships between sensory appeal, healthiness, and environmental footprint of food products. It will specifically target plant-based innovations, which often face challenges in consumer acceptance.

The PhD candidate will build on previous and ongoing collaborative projects between the University of Trento and the University of Southern Denmark, and is expected to spend approximately 50% of the project duration at each institution.