



Investigating the economic feasibility of microalgae as an alternative protein source.  
(Photo: Rainer Spitzenberger)

# SUSTAINABLE FOOD PROCESSING



Developing system oriented food processing via the consideration of the total value chain including emerging needs in society and their environmental, economic and social impact.

## Research Areas

- Emerging multi-hurdle technologies for gentle preservation of healthy and high quality food;
- Novel protein based biorefineries, with focus on algae and insects, for more sustainable food production;
- Modular micro process engineering approaches to improve upscaling;
- Nutritional combined environmental life cycle assessment.

## Regions

Australia, China, Europe, Kenya, Nigeria, South Africa, and USA.

## Partners

Bühler AG; Migros; Nestlé SA; German Institute of Food Technologies (DIL); University Stuttgart; Agroscope; HS Sion; luFoST; and Institute of Food Technology (IFT).

## Contribution to the WFSC

The Sustainable Food Processing Group focuses on a system oriented approach in production via the consideration of the total value chain including emerging needs in society. A multi-indicator sustainability assessment as guidance tool is the foundation of the emerging food process development. Selected mechanical, biotechnological, thermal and non-thermal techniques to realize biomass use efficiency, waste reduction and

high quality food production are evaluated based on a food systems approach. Innovative raw materials from algae and insects are utilized within urban farming and processing concepts to enable new ways of sustainable food supply.

## Contact

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