

COURSE

Stable Isotope Methods in Nutrition Research

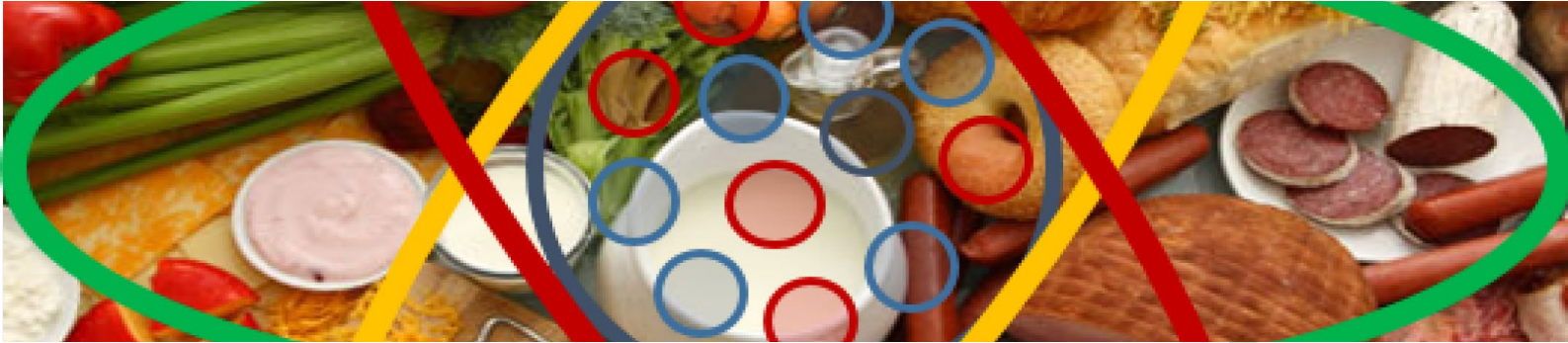


IAEA

27 - 31 October 2025

Wageningen Campus, the Netherlands

With support from the International Atomic Energy Agency (IAEA)



BACKGROUND

In vivo assessment of nutrient absorption, status and metabolism can benefit a lot from the use of stable isotope methods. These methods can help to better understand biological processes, provide quantitative data on fluxes of nutrients through different compartments in the body, and help to determine nutrient status which links to health and diseases. This course will provide a solid scientific background on the application of stable isotopes in nutrition research. Topics will include Deuterium-based methods like body composition, energy expenditure and breast milk intake (dose to mother technique), as well as cover vitamin/mineral bioavailability and protein digestibility.

PARTICIPANTS

The course welcomes PhD candidates, post-docs and academic staff as well as scientists from research centres and industry working in the area of human and animal nutrition, food sciences and/or biomedical sciences. Basic scientific knowledge on concepts, methods and study designs in quantitative research is assumed, as well as general understanding of nutrition and nutritional physiology.

PROGRAMME TOPICS

- Basic concepts and definitions of the use of stable isotopes in nutrition research
- Mass spectrometry methods to measure stable isotope tracers
- Intrinsic and extrinsic labelling of experimental foods and nutrients
- Isotope tracer methods for measuring a.o. nutrient status, body composition, energy expenditure and bioavailability of vitamins and minerals
- Use of tracers in protein metabolism: digestibility and bioavailability
- Considerations for isotope-based study designs and proposals
- Some practical demonstration of dose preparation and administration, as well as sample collection and data analyses

COURSE LECTURERS/FACULTY

- Dr **Alida Melse-Boonstra**, Division of Human Nutrition and Health, Wageningen University and Research, the Netherlands
- Dr **Marco Mensink**, Division of Human Nutrition and Health, Wageningen University and Research, the Netherlands
- Prof. **Diego Moretti**, Swiss Distance University of Applied Sciences (FHHS) / University of Applied Sciences of South Switzerland (SUPSI), Switzerland
- Dr **Cornelia Loechl**, International Atomic Energy Agency (IAEA), Austria
- Dr **Nikkie van der Wielen**, Division of Human Nutrition and Health / Animal Nutrition Group, Wageningen University and Research, the Netherlands
- Dr **Michiel Balvers**, Division of Human Nutrition and Health, Wageningen University and Research, the Netherlands

COURSE FEES

	Early Bird Fee**	Regular fee**
WUR PhD candidates*	€ 275	€ 325
All other PhD candidates / VLAG postdocs and staff	€ 500	€ 550
Postdocs and other academic staff / Non-profit	€ 725	€ 775
Participants from the private sector	€ 1600	€ 1650

*Affiliated with one of the Wageningen Graduate Schools, with an approved TSP

**Early bird registration deadline: 5 September 2025.

For more information and registration



<https://www.vlaggraduateschool.nl/en/courses/course/sim25.htm>