# MSc Nutrition and Health

Rolf Marteijn MSc | Programme Director | mnh.msc@wur.nl | www.wageningenuniversity.eu/mnh



Alumna Pascalle Weijzen. Pascalle did a thesis in Epidemiology and Sensory Science. After her graduation, she did a PhD project on the dynamics of food choice and sensory specific satiety. She joined FrieslandCampina afterwards, as a Researcher Sensory & Consumer Science, where she has been responsible for innovation projects aiming at strategies to stimulate healthy food choices. "I really feel I can contribute to profit for the company and to public health at the same time. In this job I still benefit from the broad nutrition and sensory expertise, the strong academic level of thinking, and the worldwide expert network which I built up during my MSc and PhD degrees."

# **Specialisations**

#### **Epidemiology and Public Health**

 $\label{pidemiologists} \mbox{ try to determine causal relationships in } \\$ 

large groups of people, such as the elderly or people with cardiovascular problems; between food, lifestyle and the development of diseases. Research results act as starting points for health advice and lead to a greater understanding of cause and effect. If you know that certain behaviour leads to a disease, that behaviour can be addressed, and the effectiveness of the efforts to do so can be measured. You will be helping to improve the overall health of people and may be able to prevent food-related diseases from developing.

### Complete Online Master

From September 2015, Wageningen University will also offer the specialisation 'Nutritional Epidemiology and Public Health' as a complete online master. For more information, read the programme description in this brochure, or go to www.wageningenuniversity.eu/onlinemaster

### **Nutritional Physiology and Health Status**

In this specialisation, you will study various age groups and situations, such as growth, pregnancy, and food consumption behaviour. You will also review special situations including serious diseases (clinical food), during sports and activity. You may also research the food consumption behaviour and habits of individuals and how you may be able to influence that, for example, through portion sizes. In short, you will review different aspects and will learn what the effects are of food consumption patterns and the physiological processes on the body and what that means for the status of its health and illness.

#### **Molecular Nutrition and Toxicology**

In this specialisation, you will learn to use techniques, at molecular and cellular levels, to discover the mechanism driving the relationship between food and health. In toxicology, you will learn to study the possible poisonous effects of substances present in food. For instance, new ingredients in food products and additives, but also natural substances present in our food. The relationship between food consumption, food and medicines can also be researched and through this research, you will find many new leads to improving our health.

#### **Sensory Science**

This specialisation is positioned at the interface of the programmes Food Technology and Nutrition and Health. Sensory scientists deal with the way humans perceive the world and act upon sensory input. They address how sensory systems function, from stimulation and perception to cognition and behaviour. You will work with humans and products in different contexts and study the way in which product properties affect, for example, sensory perception. The study always keeps a link to the application of this knowledge in the fields of human health and the design, production and consumption of attractive healthy foods.

## Programme summary

Nutrition and Health focuses on the role of dietary and lifestyle factors in human health and disease. This role is studied from a biomedical perspective at the individual and population levels. In addition, the mechanisms underlying beneficial and adverse effects are studied at the sub-cellular (DNA), cellular and organ/ organism levels. Human nutrition is a multidisciplinary field of expertise. To solve problems in nutrition and health, you must consider chemical and biochemical characteristics, physiological and biomedical aspects, the social and behavioural context of nutrition, and the relationships between these factors. Solving problems in this domain requires multidisciplinary biomedical knowledge and skills as well as an interdisciplinary approach to communication with experts in human nutrition and other fields.

#### Your future career

Many of our graduates begin working as researchers or PhD students. Another group becomes advisors, trainers or take up other jobs in the private sector. The majority of graduates finds employment at universities (including university medical centres), research institutes (TNO Nutrition or RIVM), in the public sector (national, regional and local governments, Netherlands Nutrition Centre, District Health Authorities) or companies involved with nutrition, pharmacology and toxicology (Unilever, Nutricia, Friesland Campina, Danone Research, Novartis). As graduates progress in their careers, they usually advance to a (more) managerial level.

ADMISSION REQUIREMENTS see page 40.

#### **Related programmes**

MSc Food Safety - Health and Society (specialisation).

# Admission & Application

## **Application Deadlines**

	February 2015	September 2015	February 2016
Dutch students	January 1, 2015	August 1, 2015	January 1, 2015
EU/EFTA students	December 1, 2014	July 1, 2015	December 1, 2015
Non-EU/EFTA students	October 1, 2014	May 1, 2015	October 1, 2015
Study programme	Bioinformatics	All programmes	Bioinformatics
	Biotechnology		Biotechnology
	Biology		Biology
	Environmental Sciences		Environmental Sciences
	Molecular Life Sciences		Molecular Life Sciences
	Organic Agriculture		Organic Agriculture
	Plant Biotechnology		Plant Biotechnology
	Plant Sciences		Plant Sciences

## Application procedure

You can find a complete description of the application procedure as well as the MSc application form online at www.wageningenuniversity.eu/applicationform

### Study Expenses

Study expenses consist of tuition fees, research fees, living expenses (housing, foods, drinks) and other expenses (insurance, residence permit, handling fee, books, study materials).

	EU/EFTA students 2015/2016	Non-EU/EFTA students 2015/2016
Tuition Fee	€ 1,900* / year	€ 16,000* / year
Research Fee		€ 1,400** / year
Living Expenses	€ 10,000* / year	€ 10,000* / year
Other Expenses	€ 500* / year	€ 1500* / year

- \* Indication only, see the website www.wageningenuniversity.eu/tuitionfee for up-to-date information.
- $\ast\ast$  A one-time fee to cover research expenses during internship and/or thesis in the second year.



# General admission requirements

All MSc study programmes at Wageningen University have the following general admission requirements:

- > A bachelor degree (or equivalent) in a field of science relevant to the selected programme;
- > A cumulative grade point average (GPA) - or cumulative average mark - for the Bachelor's study, which is at least 70% of the highest grade, or mark achievable; (visit www.wageningenuniversity.eu/ admission for specific requirements)
- > Good working knowledge of mathematics and/or statistics;
- > Fluency in English, both written and spoken (see schedule).

In addition to these general requirements, specific requirements may apply to individual programmes. See the website of the specific MSc programmes for more information

# **English Language Proficiency**

	Standard	Exceptions*
havo**	7.0	8.0
VWO**	6.0	7.0
Oxford Online Placement Test**	60	70
IELTS	6.0 (with a minimum sub score of 6.0 for speaking)	6.5 (with a minimum sub score of 6.0 for speaking)
TOEFL	80 internet (with a minimum sub score of 20 for speaking)	92 internet (with a minimum sub score of 23 for speaking)
Cambridge CAE	Pass at grade C or above	Pass at grade B or above
Cambridge FCE	Pass at grade B or above	Pass at grade A or above
Cambridge CPE	Pass at grade C or above	Pass at grade B or above

<sup>\*</sup> MSc Applied Communication Science / MSc International Development Studies / MSc Management, Economics and Consumer Studies / MSc Development and Rural Innovation / Water Technology.

<sup>\*\*</sup> Dutch applicants who do not meet the havo or vwo level requirements can use the Oxford Online Placement Test (OOPT) as evidence of proficiency in English for admission to the MSc programme. The Oxford Online Placement Test can be taken at Wageningen in to Languages.