

MSc Nutrition and Health

Alumnus Jan Weststrate. Dr. Jan Weststrate was the first Wageningen nutritionist to go to work for Unilever. He still works there today because he has the knowledge that Unilever needed back then and still needs today and is focussed on solving problems. Many graduate nutritionists have followed him. *“People from Wageningen are a prominent group within our company thanks to their level of expertise. They have broad interests and a practical and international orientation.”*



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

Surveys show that our graduates greatly value the research skills they acquired in the programme. Many of them began working after graduation as researchers (38%) or PhD students (7%). Another group became advisors (13%), trainers or took up other jobs in the private sector. The majority of graduates found 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, Numico Research, Novartis Pharma, Organon). As graduates progress in their careers, they usually advance to a managerial level.



Other interesting programmes

MSc Food Safety, Health and Society (specialisation).

Admission Requirements

For general admission requirements, see page 40. More information about specific admission requirements can be found on the website.

Specialisations

EPIDEMIOLOGY AND PUBLIC HEALTH

Do you think it is interesting to research the role that food and lifestyle play in the development of diseases?

Epidemiologists try to determine casual 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 it is known that certain behaviour leads to a disease, then you can do research into impacting that behaviour, and measuring its effectiveness. The acquired knowledge can be used in health policy making and intervention programmes in both developing and developed countries. You will be helping to improve the overall health of people and may be able to prevent food-related diseases from developing.

NUTRITIONAL PHYSIOLOGY AND HEALTH STATUS

Do you ever wonder what the influence of food is on the functioning of the body?

In this specialisation, you will research various age groups and situations, such as growth, pregnancy, and food consumption behaviour. You will also review special situations including serious diseases (clinical food), or 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. The focus of this research will be on people in certain life stages and per geographical regions. You can also study the methods to precisely measure food consumption. 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

Do you want to know what happens exactly in the body? What do fat cells do and how do they influence our health? Why are certain substances healthy or unhealthy?

The answers to these types of questions can be found by delving at the lowest levels; cells and DNA. You will learn to use techniques, at molecular and cellular levels, to discover the mechanism driving the relationship between food and health. At toxicology, you will learn to research 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

For information about Sensory Science see page 37.