Pioneering Nutrition

50 YEARS
Human Nutrition and Health




WAGENINGEN
UNIVERSITY & RESEARCH

Introduction

by Prof. Jo Hautvast

Left page: English
Right page: Dutch

Was the establishment of the Nutrition study program in 1969 a matter of time or was it a fortuitous coincidence in the Dutch academic world?

A small Nutrition Department was established at our university in the 1950s as a secondary subject of nutrition education and research for students in the Food Science and Agricultural Home Economics. This nutrition department belonged to the Landbouwhuishoudkunde (Department of Agricultural Home Economics). An Associate Professor was appointed for the department in 1955 and the first chair holder was Professor Cees den Hartog with the teaching assignment “the doctrine of nutrition and food preparation”. Den Hartog was chairman of the Voedingsraad (Food and Nutrition Council), director of the Voorlichtingsbureau voor de Voeding, now Voedingscentrum (Information Office for Nutrition, now the Netherlands Nutrition Center) and therefore a logical choice. In the 1960s nutrition research started to emerge as a science. We can attribute this to the increasing information about the severe famine in the Netherlands during World War II and reports about the serious malnutrition problems and famines in developing countries. In those years, a report was published by the WHO and FAO emphasizing the importance of more nutritional education and research at the academic level.

On the basis of this, the Voedingsraad (Food and Nutrition Council), an advisory body of the Ministry of Agriculture, advised to start an academic program in the Netherlands. The Dutch Government adopted this advice with the request to check whether medical faculties could accommodate such a program at one of these institutions. The medical faculties did not show any interest in starting such a program at that time. Professor Cees den Hartog then suggested and investigated whether such training could be accommodated at the Landbouwhogeschool (former name of Wageningen University, National Agricultural College). A bold proposal, in particular because the college was a top institution focussing mainly on food production. In other words, the college focussed on food quantity and paid little or no attention to and had little to no knowledge on food quality in relation to health. The College accepted the request, enabling the Nutrition study program to start in September 1969 with Professor Cees den Hartog being appointed full professor. As of 1 September 1972, Professor den Hartog had to resign because he had reached the retirement age.

Right from the start of the Nutrition program, there was a great interest from students. In retrospect, the program can be seen as one of the first academic public health education programs in the Netherlands. And of all things, from and within a strong university institution specialized in agriculture.

From 1 September 1972 I was appointed as successor to Professor Cees den Hartog. I look back with pride to the overall development of the Division of Human Nutrition: we can speak of a prominent department in terms of education and research that meets a societal need. Over the years, a large number of students has been trained, who hold crucial positions both in the Netherlands and abroad. For me personally it was an honour and pleasure to contribute to that.

Was de oprichting van de studierichting Voeding in 1969 een vanzelfsprekendheid of was er sprake van een toevallige samenloop van omstandigheden in de Nederlandse universitaire wereld?

Er werd in de jaren 50 van de vorige eeuw een kleine afdeling Voeding op onze universiteit opgericht als een bijvak voor onderwijs en onderzoek op het gebied van voeding voor studenten in de studierichtingen Levensmiddelentechnologie en Landbouwhuishoudkunde. De afdeling werd ondergebracht bij de afdeling Landbouwhuishoudkunde. Voor deze afdeling Voeding werd in 1955 een buitengewoon hoogleraar benoemd en de eerste leerstoelhouder was Professor Cees den Hartog met de leeropdracht – de leer van de voeding en de voedselbereiding. Den Hartog was voorzitter van de Voedingsraad, directeur van het Voorlichtingsbureau voor de Voeding (nu het Voedingscentrum) en dus een logische keuze. In de jaren 60 van de vorige eeuw was er een geleidelijke opkomst van de voedingswetenschap. Dit kunnen we toeschrijven aan de toenemende informatie over de ernstige hongersnood in Nederland tijdens WO II en over de berichten over de ernstige ondervoedingsproblemen en hongersnoden in ontwikkelingslanden. In die jaren werd er door de WHO en FAO een rapport gepubliceerd over het belang van meer voedingsonderwijs en onderzoek op academisch niveau. Op basis hiervan adviseerde de Voedingsraad – een adviesorgaan van de Minister van Landbouw- ook in Nederland een academische opleiding te starten. De Nederlandse Regering nam dit advies over met daarbij het verzoek om medische faculteiten te polsen of bij een van deze instellingen de opleiding ondergebracht kon worden. De medische faculteiten toonden toen geen belangstelling om een dergelijke opleiding te starten. Professor Cees den Hartog heeft toen geopperd en onderzocht of een dergelijke opleiding ondergebracht zou kunnen worden aan de toenmalige Landbouwhogeschool. Een zeer gedurfd voorstel met name ook omdat deze Hogeschool een topinstelling was op o.m. voedselproductie, dus op voedsel kwantiteit en nauwelijks of geen aandacht of kennis had op het terrein van voedselkwaliteit in relatie tot gezondheid. De Hogeschool accepteerde het verzoek en zo kon in September 1969 de studierichting Voeding starten en Professor Cees den Hartog werd benoemd tot gewoon hoogleraar. Per 1 september 1972 moest Professor den Hartog zijn functie neerleggen wegens het bereiken van de pensioengerechtigde leeftijd.

Reeds vanaf de start van de studierichting Voeding was er een grote belangstelling van studenten. Deze studierichting kan in retrospect gezien worden als een van de eerste gezondheidskundige opleidingen in Nederland en dat nota bene vanuit en binnen een sterke universitaire instelling gespecialiseerd op landbouw.

Per 1 september 1972 werd ik benoemd als opvolger van Professor Cees den Hartog. Met trots kijk ik terug op de totale ontwikkeling van de afdeling Voeding: zowel op het gebied van het onderwijs als van het onderzoek kunnen we spreken van een prominente afdeling, die tegemoetkomt aan een maatschappelijke behoefte. In de loop der jaren zijn er een groot aantal studenten opgeleid, die cruciale functies uitoefenen zowel in Nederland als in het buitenland. Voor mij persoonlijk was het een eer en genot om daaraan bij te dragen.

Professor Jo Hautvast

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Colofon

October 2019

Editors:
Edith Feskens
Lisette de Groot
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Iris van Damme
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Layout:
rootcase

Special thanks to VoedingNu for the columns, which are spread around the magazine

Program Symposium – Pioneering Nutrition

Fifty years ago the Division of Human Nutrition was established at Wageningen University, as the first academic program in Human Nutrition in the Netherlands. To celebrate this event, we organized a scientific symposium with speakers from all over the world entitled: Pioneering Nutrition. Below you can find the program.

18 October 2019 Wageningen Campus – Orion building

08:30-09:30 Registration - Coffee and Tea

Morning session
Chair: Renger Witkamp, Professor in Nutritional Biology, Division of Human Nutrition and Health, Wageningen University

09:30-09:40 ***Welcome and introduction*** by Renger Witkamp, Professor in Nutritional Biology, Division of Human Nutrition and Health, Wageningen University

09:40-10:10 ***Highlights from 50 years Division of Human Nutrition and Health*** by Sander Kersten, Professor in Nutrition, Metabolism and Genomics, Division of Human Nutrition and Health, Wageningen University

10:10-10:15 ***Pitch*** by Harm van Baar, PhD fellow in Nutrition and Disease, Division of Human Nutrition and Health, Wageningen University
Subject: Myosteatosis and colorectal cancer prognosis

10:15-10:45 ***Keynote lecture by Kevin Hall,*** Section Chief: Integrative Physiology Section, Laboratory of Biological Modelling, National Institute of Health, Bethesda, USA

10.45-11.15 ***Coffee break***

11.15-11.25 ***Reflections of an alumna*** by Gerda Feunekes, Director Netherlands Nutrition Centre, The Hague

11.25-11.30 ***Pitch*** by Elbrich Postma, PhD fellow in Sensory Science and Eating Behaviour, Division of Human Nutrition and Health, Wageningen University
Subject: How to taste with your nose

11.30-12.00 ***Keynote lecture by Kathryn Dewey,*** Distinguished Professor Maternal and Child Nutrition, Department of Nutrition, University of Davis, USA

12.00-12.10 ***Reflections of an alumnus*** by Eric Ategbo, Chief of Nutrition and Food Security, UNICEF, Ethiopia

12.10-12.15 ***Pitch*** by Pol Grootswagers, PhD fellow in Nutritional Biology, Division of Human Nutrition and Health, Wageningen University
Subject: A mito-movement towards healhy ageing

12.15-13.15 ***Lunch***

Afternoon session
Chair: Edith Feskens, Professor in Global Nutrition, Division of Human Nutrition and Health, Wageningen University

13.15-13.45 ***Nutrition News*** by Ellen Kampman, Professor in Nutrition and Disease, and Guido Camps, Postdoctoral Fellow in Sensory Science and Eating Behaviour, Division of Human Nutrition and Health, Wageningen University

13:45-13:55 ***Reflections of an alumna*** by Floor van Leeuwen, Head of the Division of Psychosocial Research and Epidemiology at the Netherlands Cancer Institute and Chair in Cancer Epidemiology at The Faculty of Medicine, University of Amsterdam.

13:55-14:00 ***Pitch*** by Xanthe van Dierendonck, PhD fellow in Nutrition, Metabolism and Genomics, Division of Human Nutrition and Health, Wageningen University
Subject: Feeding your army: How metabolism shapes immune function

14:00-14:30 ***Keynote lecture by Boyd Swinburn,*** Professor of Population Nutrition and Global Health, University of Auckland, New Zealand

14:30-15:00 ***Tea break***

15.00-15.30 ***Keynote lecture by David Nabarro,*** Professor of Global Health, Imperial College London, United Kingdom

15:30-16:00 ***Keynote lecture by to be announced***

16.00-16.45 ***Keynote lecture by Arthur Mol,*** Rector Magnificus Wageningen University and ***Paul Blokhuis***, State Secretary for Health, Welfare and Sport

16.45-17.00 ***Closing*** by Kees de Graaf, Professor in Sensory Science and Eating Behaviour, Wageningen University

17:00-18:00 ***Drinks and Bites***












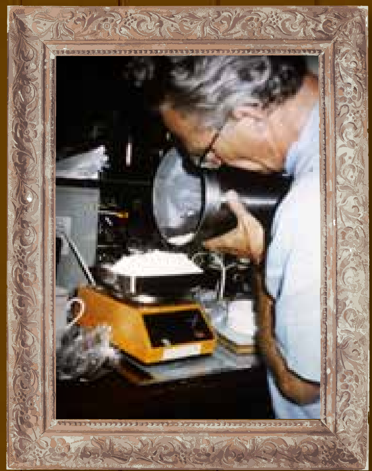








The food old days








Our **story**

The acquisition of pioneering knowledge on food and health in order to contribute to a better quality of life for people worldwide has been the driving force behind the work of the Division of Human Nutrition and Health, part of Wageningen University & Research, for the past 50 years.

Babies need proper nutrition to develop, and senior citizens stay fit longer with sufficient protein and energy on their plates. No matter how old we are, what we eat and drink has a major impact on our daily lives. And it is a fact that improvements in our nutritional patterns can still be made today.

Although people are living longer on average, this does not mean that they are healthier. Both obesity and malnutrition are still very common worldwide. Degenerative diseases such as cardiovascular issues, diabetes and cancer are increasingly prevalent in Asia and Africa in particular. At the same time, resources are becoming more scarce and there is an urgent need to replace animal protein with sustainable vegetable alternatives where possible.

These challenging issues are the focus of the Division of Human Nutrition and Health. We aim for a sustainable and healthy diet for all, studying the effect of nutrients on body processes, researching the impact of lifestyles on health and disease, and gaining insight into the sustainability of protein-rich products.

Broad field

Our research is organised into five chair groups, each with its own specialism. Together, we encompass a broad field and study a wide variety of target groups: from infants and adolescents to centenarians, from the healthy to the chronically ill, and from Dutch to Nepalese and African. We look at individuals as well as larger populations, in the lab and in natural habitats, and measure health effects at various levels.

Our educational programme in the field of food and health is the largest of its kind in Europe and exceptionally broad. With the majority of activities being organised from within the Division, the programme offers students depth, variation and plenty of options for e-learning. We were also the first university in Europe to provide a Massive Open Online Course (MOOC) in the field of nutrition and health. We have already trained over 3,000 nutrition experts who are working on promoting healthy nutrition all over the world – in research, for government authorities or in the industry. The Wageningen BSc and MSc programmes 'Nutrition and Health' each attract over 150 international and national students each year.

From nutritional patterns to DNA

Questions such as 'Can cardiovascular diseases and cancer be prevented by a healthy diet?' and 'Can good-quality nutrition improve the treatment and prognosis of disease?' are the focal point for the *Nutrition and Disease* chair group, while *Global Nutrition* zooms in on reducing overnutrition and malnutrition worldwide. The *Sensory Science* and *Eating Behaviour* chair group revolves around issues such as taste, smell, texture and appetite, and *Nutritional Biology* studies the effect of food on the intestinal tract, muscles and brain. The chair group *Nutrition, Metabolism* and *Genomics* zooms in on a smaller scale – the cell and molecular level – to see what is happening inside our bodies.

Human Nutrition and Health has access to modern research facilities, including the Health Research Unit for studies with test subjects, an MRI scanner, and a large laboratory for molecular biological research. We have first-class expertise and facilities in the field of transcriptomics, which attracts scientists from across Europe to Wageningen to carry out research. There is also a demand for our tools and questionnaires from many Dutch research centres who perform research into food consumption.

Mutual inspiration

Our five chair groups work very closely together. For instance, *Nutrition and Disease*, *Global Nutrition* and *Nutritional Biology* partner in the Regiodeal Foodvalley of the Dutch provinces of Gelderland and Utrecht. Moreover, research by *Nutritional Biology* is perfectly aligned to issues studied by *Global Nutrition*, *Nutrition and Disease*, *Metabolism and Genomics*, and *Sensory Science and Eating Behaviour*. This involves issues such as the added value of additional protein and exercise for muscle retention in the elderly and cancer patients, problems with taste perception among cancer patients, and the presence of inflammatory substances in the intestines of people who consume high amounts of omega-3 fatty acids.

The chair groups exchange a wealth of knowledge and expertise. This is an almost automatic process as we work in multidisciplinary teams, including nutrition scientists, epidemiologists, molecular and medical biologists, biochemists, sustainability experts and medical professionals. Moreover, all involved genuinely enjoy inspiring one another and keeping each other on their toes.

In addition to colleagues from within the Division, we often work with other research groups from in and outside of Wageningen University & Research. For example, we lead the multi-million-euro project *Food systems for healthier diets* and work with institutes such as Imperial College London, ETH Zurich, Cornell University and North-West University. We also maintain close relations with international bodies such as the World Health Organization and the Food and Agricultural Organization, and with leading social organisations such as the Health Council of the Netherlands and other health care institutions (including via Alliantie Voeding in de Zorg, an alliance focused on food and health care).

Strong reputation

Over the past half century, the Division of Human Nutrition and Health has built up a strong reputation in research and education. In this framework, we are set apart by the way new developments are integrated within our work, our down-to-earth attitude and our future-oriented perspective.

We are also uniquely aware of how to set up and realise observational and intervention studies and distil as much valuable knowledge from them as possible. Human Nutrition and Health is the only party in the world that looks at both preventing cardiovascular diseases among cancer patients and at preventing cancer among people with cardiovascular diseases. Even when one is ill, a healthy lifestyle can make a major difference and we aim to discover which lifestyle is best for people with a chronic illness. In addition, we are one of the few bodies that perform research into nutrition and adolescents, both in the Netherlands and in Africa and Southeast Asia. And while sensory research at other universities often has a technological nature, ours is explicitly focused on nutrition and health.

Our research is published in leading scientific magazines and our papers are regularly picked up by the mainstream media. For example, we emphasize that the elderly benefit from eating extra protein, that healthy and sustainable food can go hand in hand, and that there are many reasons to drink fewer sugary soft drinks. Our research into medication and nutrient deficiencies in hospitals also caused quite a stir.

Facilitating change

In addition to putting issues on the agenda, Human Nutrition and Health also triggers actual social change. Our research into protein and exercise among the elderly has led to countless follow-up studies and national intervention projects, for instance. And thanks to the Ambiance project, which showed that residents in nursing homes for the elderly ate more when their meals were presented in an attractive way, resulted in more stringent criteria for such facilities. We also developed the SLIMMER programme, a lifestyle prevention focused on healthier food and more exercise to prevent diabetes type 2, which was included in the basic Dutch health insurance package in 2019. Our research also made a significant contribution to the development of the field of nutrigenomics and the application of molecular technologies in nutritional research. No other food department worldwide has performed so many transcriptomics studies and published the results.

And there's more. Together with Alliantie Voeding in de Zorg and academic medical centres, we are working on the integration of nutrition and lifestyle in health care education. This will create awareness among future doctors, nursing staff and other health care professionals of the major impact food has on health. We also stimulate scientists worldwide to exchange knowledge and data on nutrition, sustainability and health. This will enable the establishment of concrete guidelines for consumers, manufacturers and government authorities, and accelerate the transition to a global sustainable diet.

More health rewards

Although it is always good to have an excellent reputation, this is in itself not our raison d'être. Human Nutrition and Health aims to make an even greater difference in the health and wellbeing of people around the world. Nutritional advice for various target groups and an integrated approach to health care can still reap plenty of rewards. We will therefore continue our research in this field, taking a holistic approach while maintaining a focus on the individual.

We will also remain active in the social debate. As pioneers in nutrition research, we will take the lead in the global transition to sustainable, healthy dietary patterns by gaining insight into preventing shortages among vulnerable groups in and, more importantly, outside of the Netherlands. At the same time, we will continue inspiring the industry to develop healthier products which taste great and ensure we only eat as much as we need and no more. Step by step, this will bring our ultimate goal of people worldwide eating healthily within reach.

Studies from then...

ONNO

ONNO included several studies focussing on the associations between overweight and health status (Dutch name: ONderzoek Naar Overgewicht). Although the Department of Human Nutrition was the home base for the studies, much of the work was carried out in collaboration with the Central Bureau of Statistics, the Nijmegen University General Practitioners Institute and the Institute for Radiodiagnostics of the Catholic University in Nijmegen. All studies were performed between 1979 and 1986.

Interesting finding:

- After adjustments for age and educational level, certain chronical disorders were reported more often in overweight subjects than in subjects without overweight

Related publications:

- PhD thesis from J.C. Seidell: Overweight and fat distribution: associations with aspects of morbidity
- PhD thesis from M.A. Rookus: Body mass index in young Dutch adults: its development and the etiology of its development

ZWALAC

ZWALAC was a study project in which the various components of energy requirements of pregnant and lactating (ZWAnger and LACterend in Dutch) women were measured before, during and after pregnancy. Between 1980 and 1995, a number of longitudinal studies in healthy women from Wageningen and surroundings were performed, resulting in several scientific publications. Different measurements were done, including measurements of BMR with open-circuit indirect calorimetry with Douglas bags, measurements of daily activity with diaries and cycling exercises.

Main results:

- The observed changes in energy intake over pregnancy appeared to be insufficient to meet the energy costs of pregnancy. This indicates that substantial energy savings on energy expenditure must occur during pregnancy
- No evidence was found for (physiological) significant changes in digestibility, diet-induced thermogenesis or energy expenditure during standardized exercise tests
- Pregnant women reduce the amount and pace of physical activity, although not sufficiently to meet all energy needs of pregnancy

Related publication:

van Raaij, J. M. (1995). Energy requirements of pregnancy for healthy Dutch women. European Journal of Obstetrics & Gynecology and Reproductive Biology, 61(1), 7-13.

SENECA

The aim of SENECA was to study the consequences of differences in dietary and lifestyle factors among elderly Europeans, and to identify the factors that contribute to healthy aging. In total, 2586 male and female participants were included, living in twelve different European countries. At the start of the study, participants were aged between 70 and 75. Standardized measurements were conducted at baseline in 1988-1989 and were repeated in 1993 and 1999. These measurements included dietary intake, biochemistry, anthropometrics, disease, disabilities, performance and quality of life. Additionally, whole blood and serum/plasma samples were analysed for a number of markers.

Interesting findings:

- The prevalence of a body mass indices exceeding 30kg/m^2 was high. At nine research sites, it was over 30% in men or women. In the towns studied in Poland, Spain, central Italy and Greece, proportions were as high as 40-50%.
- Dietary intake differed highly between areas and ranged from 12.7 MJ to 8.2 MJ for men and from 10.9MJ to 6.3MJ for women. Geographical patterns could be detected for the intake of fatty acids and alcohol.

Related publications:

de Groot, L. C., Hautvast, J. G., & van Staveren, W. A. (1992). Nutrition and health of elderly people in Europe: the EURONUT-SENECA Study. Nutrition reviews, 50(7), 185-194.

and studies from now

Alpha Omega COHORT

The Alpha Omega Cohort is a cohort of 4,837 Dutch patients with a history of myocardial infarction. Within the Alpha Omega Cohort, the Alpha Omega Trial was established. Recruitment took place from 2002-2006 and involved 32 cardiology centres in the Netherlands. The Alpha Omega Trial is a randomized double-blind placebo-controlled trial with the main aim of examining whether major cardiovascular events, in particular fatal coronary heart disease, could be prevented by low doses of the fish fatty acids EPA and DHA in patients with a history of myocardial infarction. In addition, the effect of the plant-based omega-3 fatty acid alpha-linolenic acid (ALA) was studied. If ALA would prevent cardiovascular events, eating plant foods rich in ALA could be a substitute for eating fish.

Related publication:

Kromhout, D., Giltay, E. J., & Geleijnse, J. M. (2010). n–3 Fatty acids and cardiovascular events after myocardial infarction. New England Journal of Medicine, 363(21), 2015-2026.

More info: www.alphaomegacohort.org

Belly Fat Study

The objective of the Belly Fat study was to compare the effects of a 12-week intervention with two energy restricted diets that differed in nutrient quality on metabolic health and phenotypic flexibility. This study was executed between October 2014 and April 2015 and analyses are still ongoing. The study was a parallel-designed randomized 12-week intervention study in which 111 participants with abdominal obesity (BMI >27 kg/m2 or waist circumference >88cm for females, >102cm for males) were randomized over three groups: a Western-type or Targeted 25%ER dietary advice group or control group. The Targeted diet aimed to improve metabolic health by including MUFA, n-3 PUFAs, soy protein and fiber.

Related publications:

- Mensink, M., Schutte, S., Chatindiara, I., Esser, D., Siebelink, E., & Afman, L. (2016). Effect of Caloric Restriction and Dietary Composition on Liver Triglyceride Content in Subjects with Abdominal Obesity: the Wageningen Belly Fat Study. The FASEB Journal, 30(1_supplement), 291-4.
- Dijk, W., Schutte, S., Aarts, E. O., Janssen, I. M., Afman, L., & Kersten, S. (2018). Regulation of angiopoietin-like 4 and lipoprotein lipase in human adipose tissue. Journal of clinical lipidology, 12(3), 773-783.

More info: www.wur.nl/nl/project/bellyfat.htm

COLON

The COLON study is an ongoing longitudinal cohort study of approximately 2000 colorectal cancer patients. Recruitment started in 2010 and is still ongoing. The purpose of the COLON study is to provide a scientifically substantiated answer to the question whether nutrition and lifestyle affect the disease course of colorectal cancer. To achieve this, we study diet and lifestyle of colorectal cancer patients shortly after diagnosis and during the years after treatment and collect information on disease progression and survival. In the COLON study, we gather data on dietary intake and physical activity level using questionnaires; we collect blood samples to facilitate measurement of e.g. biomarkers, nutritional status, metabolomics data. Moreover, we gather information on body composition using (diagnostic) CT-scans.

Related publication:
The COLON study: Colorectal cancer: Longitudinal, Observational study on Nutritional and lifestyle factors that may influence colorectal tumour recurrence, survival and quality of life
Renate M Winkels, Renate C Heine-Bröring, Moniek van Zutphen, Suzanne van Harten-Gerritsen, Dieuwertje EG Kok, Fränzel JB van Duijnhoven & Ellen Kampman. BMC cancer, 2014, 14.1: 374.

More info: www.colon-studie.nl

NQplus

The NQplus study is a longitudinal study on diet and health. Recruitment started in 2011, and the cohort ended in 2015. The purpose of the NQplus study was to pin-point the specific dietary factors that may be responsible for the rise in obesity and adverse cardiometabolic health outcomes and at the same time providing a platform for validating dietary intake measurements. In total, 2048 men and women aged 20-70 years participated in the study.

Related publications:

- Brouwer-Brolsma, E. M., Van Lee, L., Streppel, M. T., Sluik, D., Van De Wiel, A. M., De Vries, J. H., ... & Feskens, E. J. (2018). Nutrition Questionnaires plus (NQplus) study, a prospective study on dietary determinants and cardiometabolic health in Dutch adults. BMJ open, 8(7), e020228.
- Sluik, D., Brouwer-Brolsma, E. M., de Vries, J. H., Geelen, A., & Feskens, E. J. (2016). Associations of alcoholic beverage preference with cardiometabolic and lifestyle factors: the NQplus study. BMJ open, 6(6), e010437.
- Van Lee L, Feskens EJ, Meijboom S, et al. Evaluation of a screener to assess diet quality in the Netherlands. Br J Nutr 2016;115:517–26.
- Botros, N., Sluik, D., van Waateringe, R. P., de Vries, J. H., Geelen, A., & Feskens, E. J. (2017). Advanced glycation end-products (AGEs) and associations with cardio-metabolic, lifestyle, and dietary factors in a general population: the NQplus study. Diabetes/metabolism research and reviews, 33(5), e2892.

More info: www.wur.nl/nl/project/nqplus.htm

Wageningen
Vakgroep Humane Voeding

Division of Human Nutrition

50 YEARS Human Nutrition and Health

We're Moving! To Wageningen Campus July 2016

Landbouwuniversiteit Wageningen

Human Nutrition

Division of Human Nutrition NEWSFLASH

Wageningen
Vakgroep Humane Voeding

Vakgroep Humane Voeding Department of Human Nutrition

A **journey** through our **logos**

Division of Human Nutrition

Agrotechnology & Food Sciences Group

Wageningen Human Nutrition
Celebrating 40 years of research and education!

Human Nutrition

WAGENINGEN UR
For quality of life

Vakgroep Humane Voeding

WAGENINGEN UNIVERSITY
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Afdeling Humane Voeding & Epidemiologie
Division of Human Nutrition & Epidemiology

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UNIVERSITY & RESEARCH

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Wageningen Agricultural University
Division of Human Nutrition & Epidemiology

Landbouwuniversiteit Wageningen

Landbouwuniversiteit Wageningen

A few of our studies

Yes, it's published!

Over the years, more than 4000 scientific articles have been published by the Division. In addition to articles, students and employees also publish books, individual chapters, conference papers and PhD theses. Most of them can be found online via the WUR library. Below you can see an example of some key publications per chair group.

Global Nutrition

- de Pee S, West CE, Muhilal, Karyadi D, Hautvast JG. Lack of improvement in vitamin A status with increased consumption of dark-green leafy vegetables. Lancet. 1995 Jul 8;346(8967):75-81.
- Mwangi MN, Roth JM, Smit MR, Trijsburg L, Mwangi AM, Demir AY, Wielders JP, Mens PF, Verweij JJ, Cox SE, Prentice AM, Brouwer ID, Savelkoul HF, Andang'o PE, Verhoef H. Effect of Daily Antenatal Iron Supplementation on Plasmodium Infection in Kenyan Women: A Randomized Clinical Trial. JAMA. 2015 Sep 8;314(10):1009-20.

Sensory Science and Eating Behaviour

- Biomarkers of satiation and satiety - de Graaf C, Blom WAM, Smeets PAM, Stafleu A, Hendriks HFJ. American Journal of Clinical Nutrition 2004;79:946-61.
- Effect of family style mealtimes on quality of life, physical performance, and body weight of nursing home residents: cluster randomized controlled trial - Nijs KA, de Graaf C, Kok FJ, van Staveren WA. British Medical Journal 2006;332:1180-1184.

Nutritional Biology

- Dwarkasing JT, Boekschoten MV, Argilès JM, van Dijk M, Busquets S, Penna F, Toledo M, Laviano A, Witkamp RF, van Norren K. Differences in food intake of tumour-bearing cachectic mice are associated with hypothalamic serotonin signalling. J Cachexia Sarcopenia Muscle. 2015 Mar;6(1):84-94. doi: 10.1002/jcsm.12008. Epub 2015 Mar 31. PubMed PMID: 26136415; PubMed Central PMCID: PMC4435100.
- Tieland M, van de Rest O, Dirks ML, van der Zwaluw N, Mensink M, van Loon LJ, de Groot LC. Protein supplementation improves physical performance in frail elderly people: a randomized, double-blind, placebo-controlled trial. J Am Med Dir Assoc. 2012 Oct;13(8):720-6. doi: 10.1016/j.jamda.2012.07.005. Epub 2012 Aug 11. PubMed PMID: 22889730.

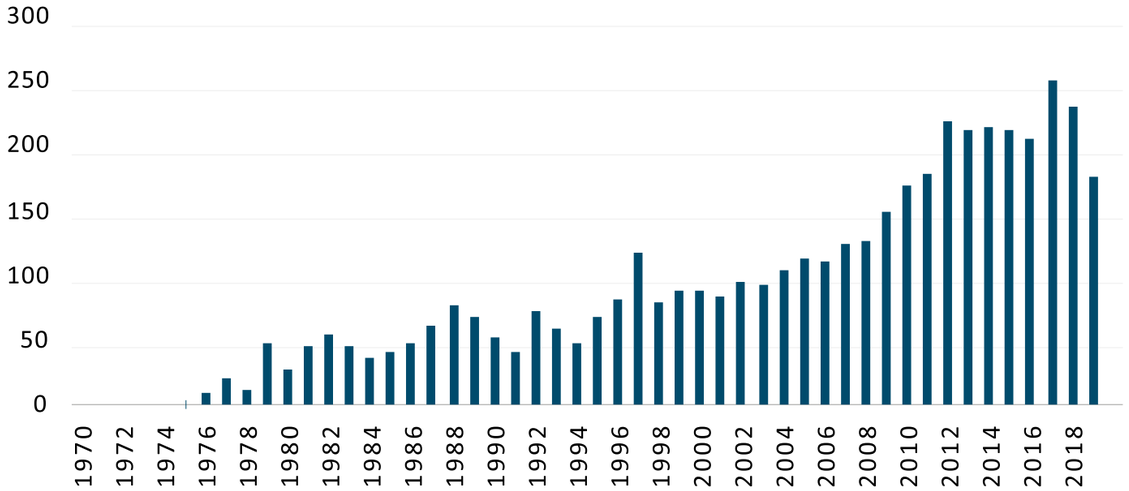
Nutrition and Disease

- Botma A, Nagengast FM, Braem MG, Hendriks JC, Kleibeuker JH, Vasen HF, Kampman E. Body mass index increases risk of colorectal adenomas in men with Lynch syndrome: the GEOLynch cohort study. J Clin Oncol. 2010 Oct 1;28(28):4346-53.
- Kromhout, D; Giltay, EJ; Geleijnse, JM; Alpha Omega Trial Group. N-3 fatty acids and cardiovascular events after myocardial infarction. N. Engl. J. Med., 2010 vol. 363(21) pp. 2015-26.

Nutrition, Metabolism and Genomics

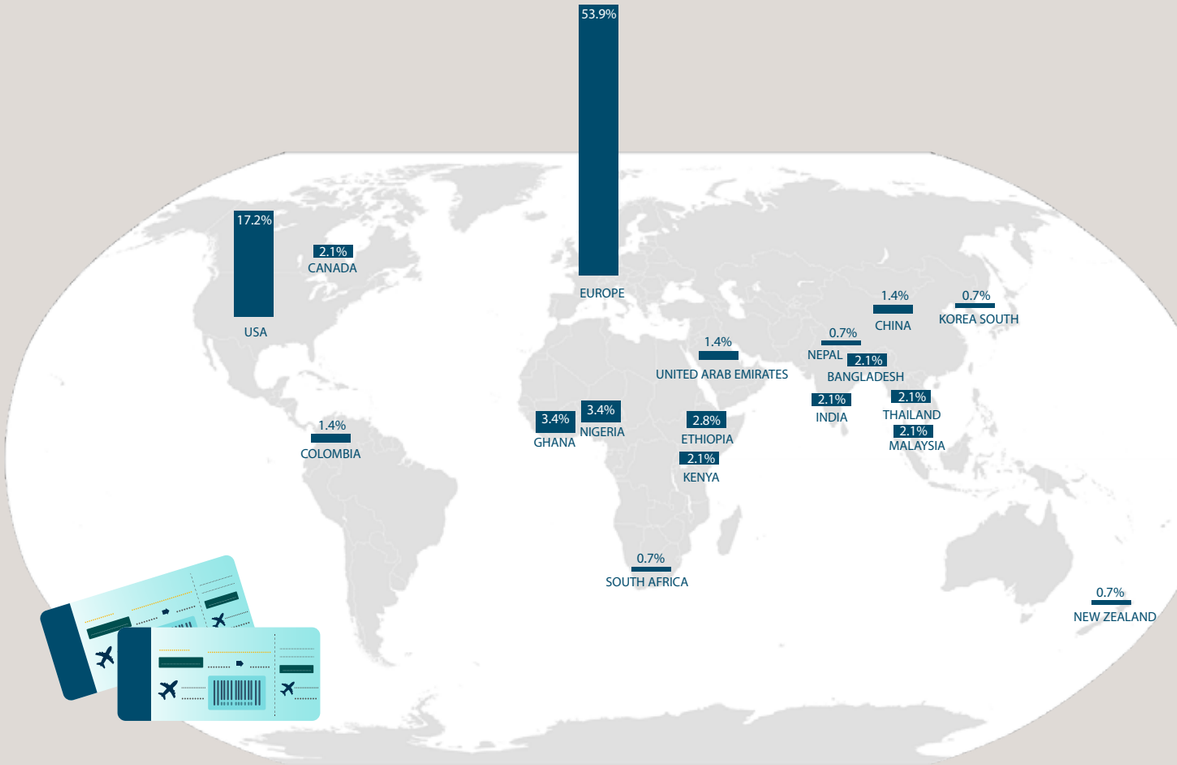
- Angptl4 protects against severe proinflammatory effects of saturated fat by inhibiting fatty acid uptake into mesenteric lymph node macrophages - Lichtenstein L, Mattijssen F, de Wit NJ, Georgiadi A, Hooiveld GJ, van der Meer R, He Y, Qi L, Köster A, Tamsma JT, Tan NS, Müller M, Kersten S. Cell Metab. 2010 Dec 1;12(6):580-92.
- A saturated fatty acid-rich diet induces an obesity-linked proinflammatory gene expression profile in adipose tissue of subjects at risk of metabolic syndrome - van Dijk SJ, Feskens EJ, Bos MB, Hoelen DW, Heijligenberg R, Bromhaar MG, de Groot LC, de Vries JH, Müller M, Afman LA. Am J Clin Nutr. 2009 Dec;90(6):1656-64. doi: 10.3945/ajcn.2009.27792.

The number of refereed articles written by our staff members over the years



Sleep work travel (rep)eat

Employees of our division travel a lot for fieldwork, conferences, courses and so on. Below you can find an overview of all the destinations where our staff members flew to in 2018-2019. Check it out!



A word from our partner

Science for impact: Better health by nutrition!

The Nutrition & Healthcare Alliance integrates nutrition science into healthcare before, during and after hospitalization. The Alliance is recognized as a center of excellence for nutrition in healthcare. As a participant in the Dutch 'National Prevention Agreement', we execute national programs for the Ministry of Health, Welfare and Sport.

Important themes in the Alliance are: oncology, heart and vascular diseases, geriatrics, intestinal diseases and obesity. In all of these themes, attention is paid to nutrition, exercise, sleep and other important lifestyle factors. Several concepts have been developed such as NutriProfiel , Taste and Smell Center, Nutrition Hospital, Cater with Care and Eat2Move.

Expert Center:

Origin of the Nutrition & Healthcare Alliance

On the 3rd of July in 2007, the Division of Human Nutrition & Health of Wageningen University & Research and the Gelderse Vallei Hospital initiated the establishment of the 'Alliantie Voeding Gelderse Vallei'. Within the Alliance, Wageningen University & Research has built strong partnerships with local hospitals and care organizations. The Gelderse Vallei Hospital is now recognized as a Nutrition Hospital. Together with the Municipality of Ede and healthcare organization Opella, excellent nutritional care in the Food Valley region has been realized. As a result of our national recognition, the name of our group changed to Alliantie Voeding in de Zorg and Nutrition & Healthcare Alliance in English in 2017. Rijnstate hospital joined the Alliance in 2017 to strengthen its research and innovation programs.

Connect education & research to healthcare

The partnership with hospitals also enriches education and research. Students can conduct their thesis research or internship at the hospitals. Furthermore, medical doctors give lectures to the students at the university or during student excursions to the hospitals. Shared facilities have provided unique research opportunities to the university as well as the hospitals. In 2013, gastroenterologist and hepatologist Ben Witteman of Gelderse Vallei Hospital was appointed as a professor in Nutrition and Intestinal Health in Transitional Care. In 2019, surgeon Eric Hazebroek of Rijnstate Hospital was appointed as a professor in Nutrition and Obesity Treatment.

Ziekenhuis Gelderse Vallei

Rijnstate

Examples

Nutrition Hospital® & program 'Nutrition in hospitals'

From the unique meal service for patients to tailor-made nutritional advice for people with chronic diseases via 'Eetscore', Gelderse Vallei Hospital, the Nutrition Hospital® of the Netherlands, constantly searches for new innovations to improve healthcare. A healthy diet and sufficient physical exercise are the essential building blocks in their care. The Alliance is executing the program 'Nutrition in hospitals', subsidized by the Ministry of Health, Welfare and Sport. The overall goal is to have healthy food choices in Dutch hospitals for patients, visitors and staff. Experiences of the Nutrition Hospital are shared among other hospitals and care organizations.

Smell and Taste Center®

Many patients with cancer or other chronic illnesses suffer from changes in smell and taste, due to medication use. The Smell and Taste Center® uses the latest technologies for scientific research and diagnostics. Patients with anosmia undergo extensive testing regarding their sense of smell or taste. With the help of a unique database, the center investigates how changes in sense of smell and taste affect eating behavior and brain functioning. The aim is to achieve optimal care and treatment for people with smell and taste disorders. The expertise of the Smell and Taste Center is unique in Europe.

Want to know more?

Webpages Nutrition & Healthcare Alliance

Flyer 'For better Health!!!

NutriProfiel®

NutriProfiel gives tailor-made dietary advice to patients and clients. The advice is based on laboratory measurements of vitamins in blood and dietary patterns as assessed with the use of the digital tool 'Eetscore'. 'Eetscore' evaluates the vitamin content of a patient's diet. NutriProfiel® is an online tool that is fully integrated into the care given at the Gelderse Vallei Hospital and into the care given by general practitioners in the areas surrounding the hospital.

Program 'Attention for (pre-)obese clients in the education of health professionals'

The Nutrition & Healthcare Alliance is coordinating the program 'Attention for (pre-)obese clients in the education of health professionals'. In this program, also subsidized by the Ministry of Health, Welfare and Sport, several national organizations are working together on the prevention of (pre-) obesity and related chronic illness via the training of medical doctors and nurses. The aim is to achieve an optimal integration of themes such as nutrition, exercise and collaboration between health care professionals into their education.'

Nationaal Preventie Akkoord

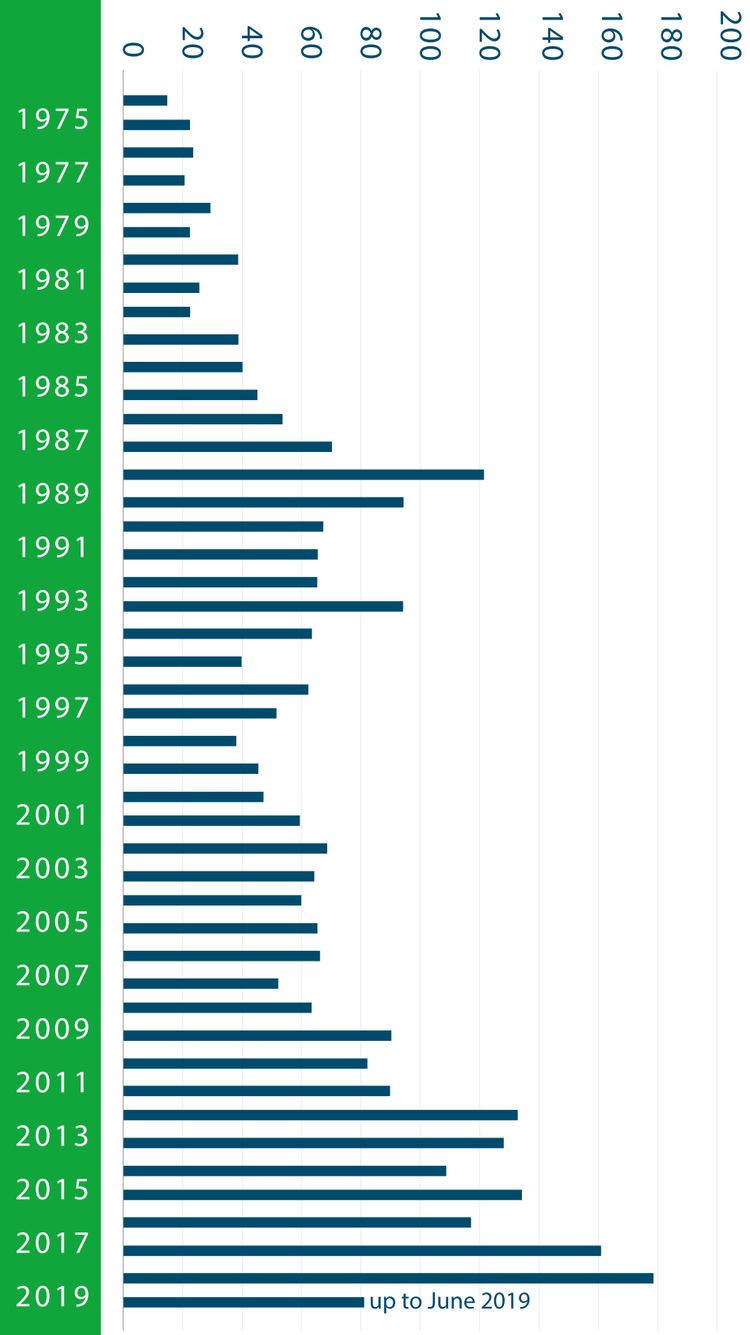
Cater with Care®

Older patients often have a reduced appetite, which can lead to malnutrition. The consequences of malnutrition can be very serious: slower recovery from illness and surgeries, less disease resistance and an increased risk of complications. Consuming enough protein can prevent many of these problems. Cater with Care® has developed a range of appetizing protein-enriched foods to combat malnutrition. The group also investigates the effects of these foods on patient health.

Numbers of

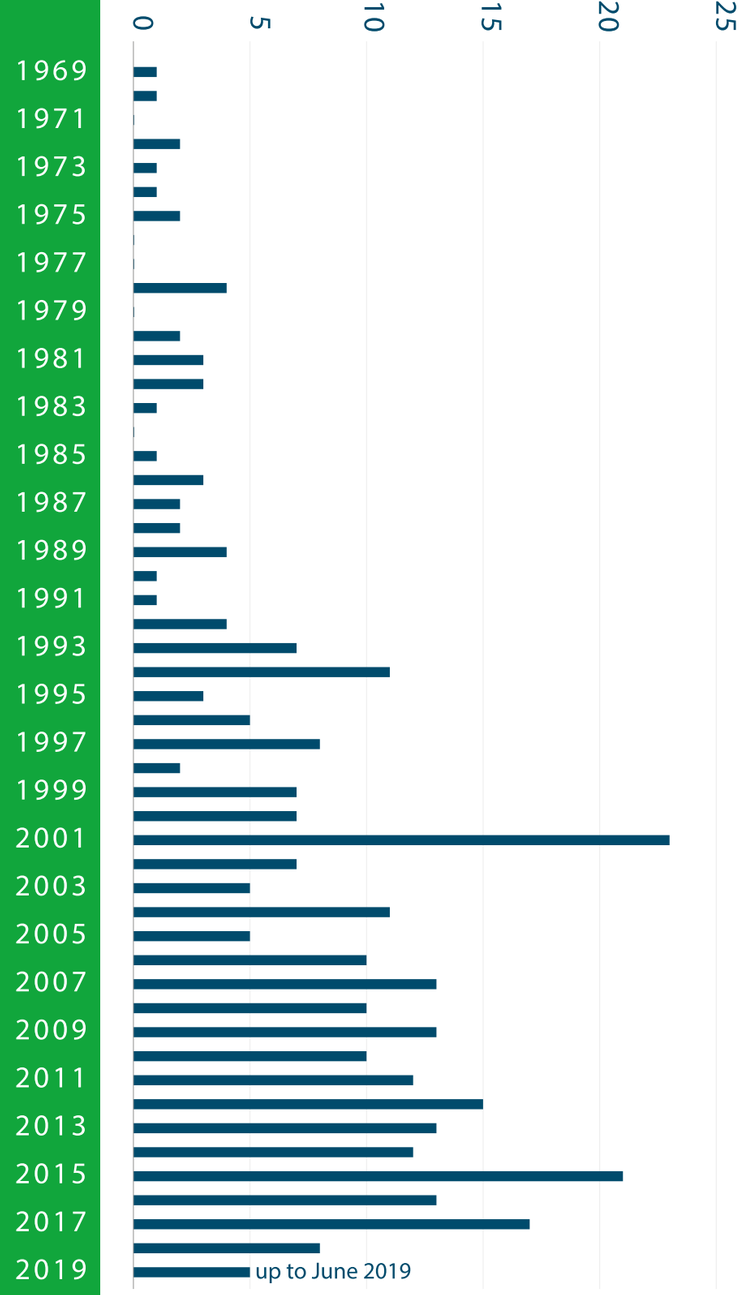
Graduated **MSc students** over the years

(per calender year)



Graduated **PhD students** over the years

(per calender year)



Division trips

Subjects of **MSc theses**

Subjects of **PhD theses**

The change in **PhD theses subjects**

1969-1979

1980-1989

1990-1999

2000-2009

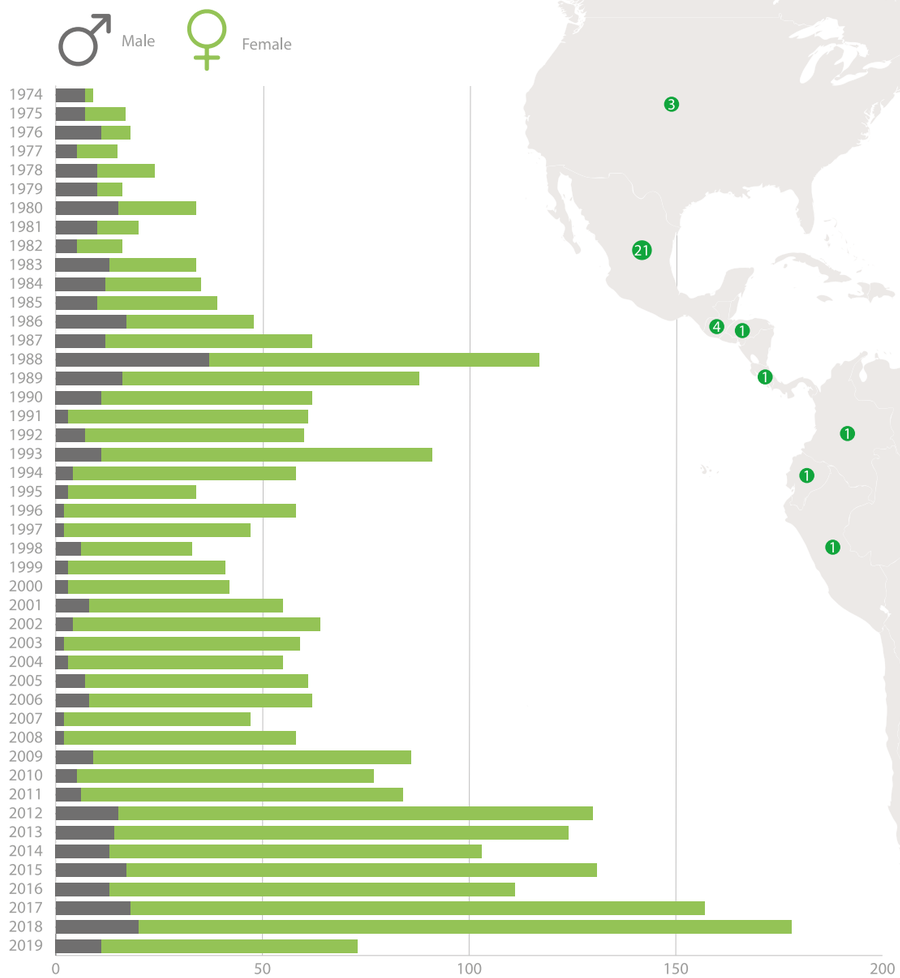
2010-2019

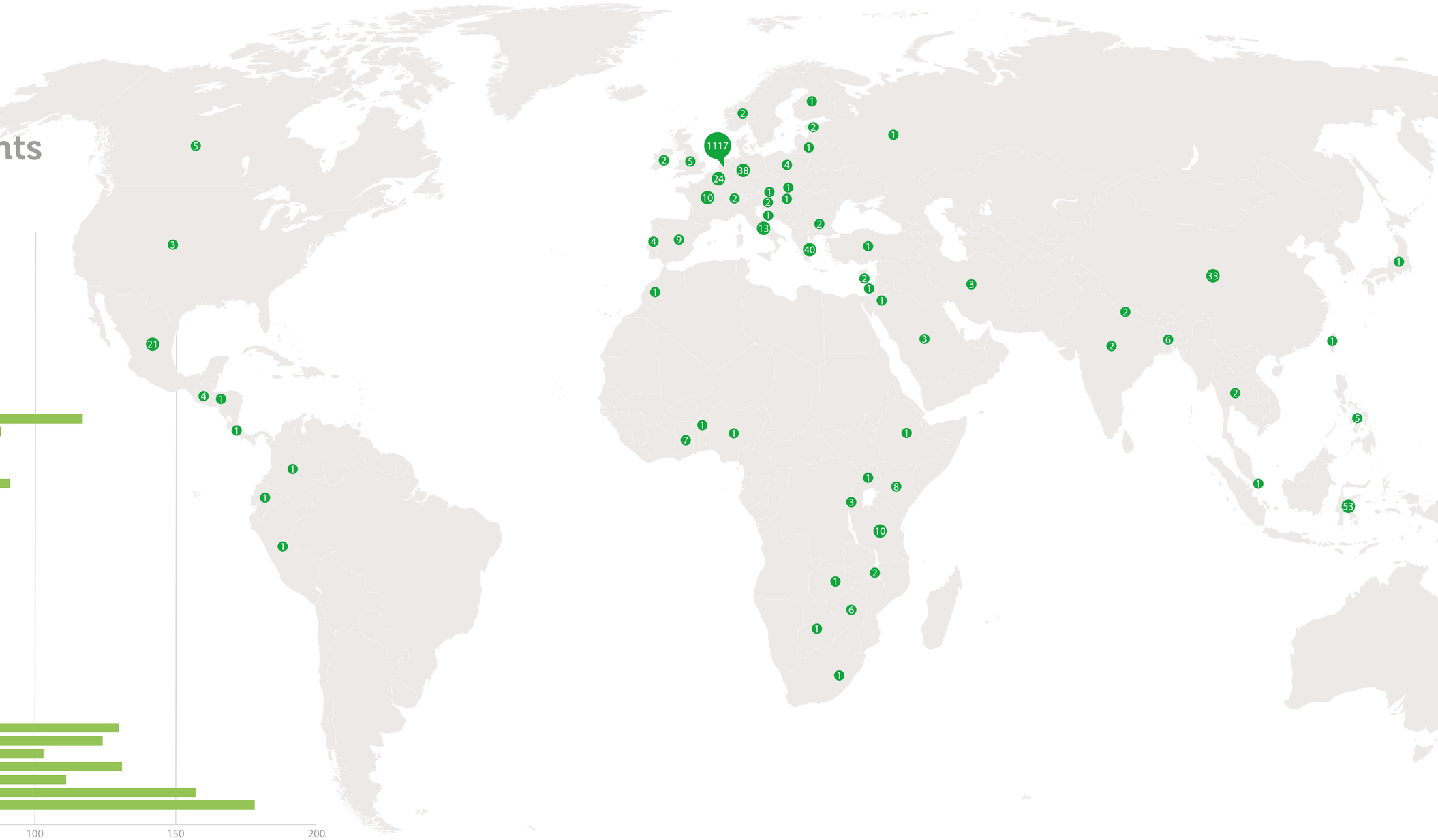
The nationalities of **MSc students** of Nutrition and Health

(since 2002)

Austria	1	Estonia	2	Ireland	2	Nigeria	1	Switzerland	2
Bangladesh	6	Ethiopia	1	Israel	1	Norway	2	Taiwan	1
Belgium	24	Finland	1	Italy	13	Peru	1	Tanzania	10
Benin	1	France	10	Japan	1	The Philippines	5	Thailand	2
Botswana	1	Germany	38	Jordan	1	Poland	4	Turkey	1
Bulgaria	2	Ghana	7	Kenia	8	Portugal	4	Uganda	1
Canada	5	Greece	40	Lesotho	1	Russia	1	United Kingdom	5
China	33	Guatemala	4	Lithuania	1	Rwanda	3	United States	3
Colombia	1	Honduras	1	Malawi	2	Saudi Arabia	3	Zambia	1
Costa Rica	1	Hungary	1	Mexico	21	Singapore	1	Zimbabwe	6
Croatia	1	India	2	Morocco	1	Slovakia	1		
Cyprus	2	Indonesia	53	Nepal	2	Slovenia	2		
Ecuador	1	Iran	3	Netherlands	1117	Spain	9		

Sex ratio of our MSc students





Study association **Di-Et-Tri**

First of all, on behalf of all members of our study association Di-Et-Tri, happy birthday to the division! Already 50 years of excellent research in the beautiful and important field of human nutrition and health. The history of our association goes as far back as that of the division. Back in 1969 the agricultural university started the programme XXIII 'human nutrition' and a small group of friends started organising a lot of activities. This group grew and 3 years later Di-Et-Tri was officially established and named after the number of the programme XXIII, 23 in Latin. Back then the association had only 74 members. In 1978 there was a separation and after that the association continued as we know it now. Since then the association has grown a lot and has now almost 800 members! And no, not as many boys as back in the beginning: the vast majority are women. This is not the only thing that has changed. The association has gained a lot of committees, now over 20 in total.

Some of these committees were established a long time ago, like the editorial committee of the magazine of the association. At first, the magazine was called 'de Kalorie' (the calorie) and was feared by a lot of teachers because they were critically discussed. Creating the magazine took a lot of time, because it was put together with a lot of handiwork. Now 'de Kalorie' is replaced by the less feared Health Issue and is printed at a printing company. Yes, the magazine has an English name! Over the years the programme attracted more and more international students, so the number of international members increased as well. That is why we are trying to involve the international students in our association as much as we can, and we recently established a master committee.

Other committees that were recently established are the food committee and the orientation day committee. These two are good examples of the teamwork between the Division of Human Nutrition and Health and Di-Et-Tri and thus between the teachers and the students. For example, Els Siebelink helps a lot with the activities organized by the food committee in the kitchen of the Helix building and the teachers in general help a lot with making every orientation day for the high school students a huge success.

These are only a few examples of good collaboration between both of us, because there are a lot more. Something, I think, we both can be really proud of! Let's continue this teamwork in the future!

Lisanne Vintcent *President Di-Et-Tri Board 2019*

Just a normal day at the office..

Study online

at Wageningen University:

the master program

‘Nutritional Epidemiology and Public Health’

The online master programme

Since September 2015, around 10-25 students a year, from all over the world, follow the online full-degree master program ‘Nutritional Epidemiology and Public Health’. Students study part-time for four years. The online learning platform is highly interactive and small-scale, with a high teacher-to-student ratio and active tutors. The field of nutritional epidemiology and public health aims at investigating the relationships between dietary intake, nutritional status and health outcomes. In this online master, future epidemiologists are trained. The online master is based on studying the aetiology of diet related diseases (from a biomedical perspective), strategies for prevention in the community setting (from a behavioural and environmental perspective) and treatment in the curative setting (from a clinical perspective).

WAGENINGEN
UNIVERSITY & RESEARCH

What is the difference between studying online and studying on campus?

Our online students differ from our on-campus students: on average, they are a bit older and often combine the part-time master program with work and family life. Does it seem lonely to you, studying online, behind your own computer? Quite the contrary, studying online involves a lot of interaction. Students not only interact by posting written text to the learning environment, but for example also by uploading their own video clips to pitch a project for a group assignment. Watching 45-minute online lectures seems boring? Yes, probably it is, therefore we have short knowledge clips in which important concepts are explained. After a clip students immediately apply their knowledge in interactive e-learning modules, discussions, individual assignments etc. A new world of teaching methods is opening up for our teaching staff. Producing knowledge clips, online moderating and guiding students is a new challenge. Cora Busstra, founder and one of the core teachers of the programme said: ‘For me it was a great pleasure to develop these new innovative teaching methods. It is really exciting to see how students are enjoying their online master.’

Student experience

Andreja Misir is a student of the Nutritional Epidemiology and Public Health Master of Wageningen University. She lives in Croatia and has a very diverse background ranging from horticulture and nutrition to business studies. Here you can read about why she chose Wageningen and the online programme.

“I enjoy learning and I enjoy thinking about food and health. This is the reason I became a student of the Nutritional Epidemiology and Public Health master, which I follow on-line at WUR. While working on the final paper of my nutrition study in Croatia, I got interested in nutritional epidemiology. At that time, I encountered an epidemiological challenge that I did not fully understand. Then, I knew that I needed to study this further. However, as somebody who is working full-time, I had to choose an on-line mode of studying and I have chosen WUR because of the outstanding international reputation. In addition, WUR aims at training professionals that will create linkages between agricultural production, food technology, nutrition and health. My current education and career path as well as my plans for the future incorporate the same goals. I hold a bachelor’s degree in horticulture and a master specialist degree in food safety management from the University of Zagreb. Additionally, I got a master specialist degree in nutrition from the University of Osijek and an MBA degree from the Henley Business School, University of Reading. My work experience ranges from agricultural/food production and trade to food safety. At the age of 45, I am ready to change my career towards a profession that deals with the impact of nutrition on health. I have chosen WUR to help me make that transition. When it comes to my experience with the online program, I can say that I was pleasantly surprised with the quality. I was constantly positively challenged and pushed to learn. We did a lot of group work, which was difficult and frustrating in the beginning, because students came from different parts of the world, with different educational background, from different age groups and had to communicate via on-line tools. Honestly, the first group work was difficult. I actually had real fear of group work. However, as we learned about each other this became easier and even fun. We also had to communicate a lot via Feedback Fruits (online learning platform) where we discussed course material, which really made us get to know one another. Sometimes, I think I know my on-line group better than some of my colleagues that I saw every day during my bachelor study.”

> *“I was constantly positively challenged and pushed to learn”*

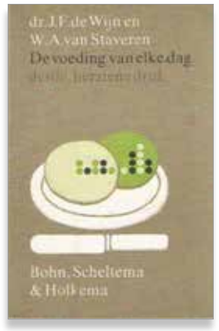
complete online master
Wageningen University & Research

Books written by our division

Nieuwe Voedingsleer
New Nutrition

By C. den Hartog, J.G.A.J Hautvast, A.P. den Hartog

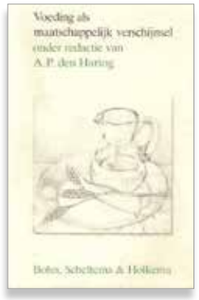
1980



De voeding van elke dag
The everyday diet

By J.F. de Wijn & W.A. van Staveren

1980



Voeding als maatschappelijk verschijnsel
Social Aspects of Nutrition

By A.P. den Hartog

1982

The diet factor in epidemiological research

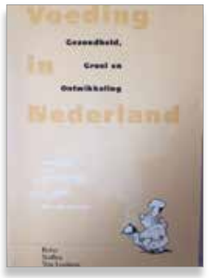
J. G. A. J. Hautvast & W. Klaver

1983

Eetgedrag in de toekomst

P. van der Veeken

1989



Voeding in Nederland
Gezondheid, groei en ontwikkeling
Nutrition in the Netherlands
Health, growth and development

By C. de Graaf & L. de Groot

1994

De voeding van Nederland in de twintigste eeuw
The diet of the Netherlands in the twentieth century

By A.P. den Hartog

2001

Food, Nutrition, Physical Activity, and the Prevention of Cancer: a global perspective

By P. van 't Veer & E. Kampman

2007

Gezond eten, gewoon doen
'Eat healthy – just do it'

By F. Kok & B. Scholtens

2011

Ingredienten van geloofwaardigheid
goed eten onder de loep
Ingredients of credibility
Scrutinizing good food

A. Berben & M. Geleijnse

2012

Eten en drinken bij demetie
Eating and drinking with dementia

J. Wapenaar & L. de Groot

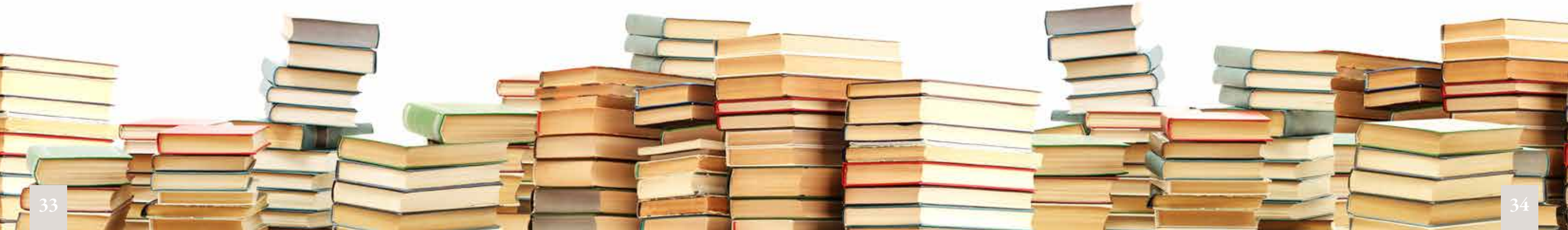
2013

Epidemiology in Public health practice

A. Haveman-Niels, J.A.M. van Oers, P. van 't Veer

2017

Looking for more books written by staff members? Check it out here!



The Division of
Human Nutrition and Health
2019

Human Nutrition

meets

Universiteit van Nederland

Inspiring scientists share the most exciting insights from their field through short lectures. In different formats, they bring science to life for a young and wide audience by answering an exciting question every week. From dark matter to falling in love with animals: everything hits the scene! A selection of our nutritionists (only available in Dutch).

Check it out!
www.universiteitvannederland.nl

How can we continue eating while we are already satiated?

Renger Witkamp

Why can we get cancer from red meat and red wine?

Ellen Kampman

Are you really as full as you feel after eating?

Guido Camps

How can we be fat and undernourished?

Saskia Osendarp

How to prevent being overtrained as an athlete?

Rieneke Terink

Why does a stuffy nose lead to different eating habits?

Sanne Boesveldt

Broodje Gezond

Is coffee bad for your heart? Is butter better than margarine? Do we need vitamin pills?

Broodje Gezond is a tv program about food hypes and health myths that has been broadcasted by KRO-NCRV on Dutch television since 2016. Food fact checkers Marlijn Weerdenburg and Ersin Kiris are looking for the sense and nonsense about nutrition and health.

In 14 of the 23 episodes, a nutritionist from Human Nutrition (employee or graduate) is interviewed to reveal the scientific truth. Missed it? You can watch the program online via www.npostart.nl

Kees de Graaf
Zoetstoffen

Renger Witkamp
Vitaminepillen

Marianne Geleijnse
Is koffie slecht voor je hart?

Sander Kersten
Is boter beter dan margarine?

Ellen Kampman
Krijg je kanker van het eten van vlees?

Astrid Postma
Soja

Martijn Katan
Ei

Renger Witkamp & Ben Witteman
Detox

Edith Feskens
Chocolade

Annet Roodenburg
E-nummers

Sabita Soedamah-Muthu
Melk

Ben Witteman & Nicole de Roos
Darmflora

BROODJE GEZOND

Ingeborg Brouwer
Vis

Gerda Pot
Eetpatroon

kro ncrv

Just a normal day at the office..

Human Nutrition in the papers

Nutrition is a topic that concerns everyone. Although most nutritionists dive into scientific publications, the majority of the population have to get the information from other sources. For example, through the newspaper. Dutch newspapers publish a lot of articles about nutrition, often with a Wageningen nutritionist speaking. Some newspapers even have their own food section, in which new scientific knowledge is explained in understandable language. But is it (still) true? Judge for yourself!

deVolkskrant

Broccoli in opkomst: is dit de nieuwe antikankergroente?

Alliëtte Jonkers – 6 mei 2017

Over de invloed van voeding op onze gezondheid. Deze week: beschermt het eten van broccoli tegen kanker? Dat is een brug te ver, zegt ook Ellen Kampman, hoogleraar Voeding en Kanker aan de Wageningen Universiteit. 'Zo'n sterk effect is in de literatuur niet terug te vinden. Bovendien kunnen we voorstadia van kanker niet goed definiëren, zoals bij hartvaatziekten, waarbij we naar bijvoorbeeld hoge bloeddruk en cholesterol kunnen kijken. En: kanker is een proces van twintig, dertig jaar. Dat maakt het lastig om te bewijzen dat groenten als broccoli kanker afremmen.'

Wonderstof in olijfolie werkt niet

Willem Koert - 20 oktober 2001

Olijfolie is goed voor de gezondheid. Dat komt, dacht men, door onverzadigde vetzuren en anti-oxidanten. Maar die laatste stoffen blijken veel te weinig in de olie te zitten.... Voor haar onderzoek reisde ir. Maud Vissers af naar Kreta. Een anti-oxidant in olijfolie, hydroxytyrosol, bleek inderdaad het LDL te beschermen. 'Maar alleen bij concentraties die zo hoog waren, dat je de hoeveelheden olijfolie met geen mogelijkheid via je voeding naar binnen kunt krijgen', zegt Vissers.

Voeding is religie geworden - inclusief profeten, duivels en heilige boeken

Ianthe Sahadat en Ellen de Visser- 8 juli 2017

Gezond dik bestaat niet, obese mensen gaan eerder dood

Ellen de Visser – 4 december 2013

Te dik is altijd ongezond. Wie overgewicht heeft, gaat eerder dood. Het idee dat sommige zwaarlijvige mensen vanbinnen net zo gezond zijn als slanke mensen, is een mythe. Dat concluderen Canadese artsen in Annals of Internal Medicine. "Als mensen met fors overgewicht erg verantwoord eten en veel bewegen, kunnen we ze misschien gezond dik noemen. Het punt is: daar zijn er heel weinig van" Edith Feskens, hoogleraar voeding aan de Wageningen Universiteit.

Kunstvet is misschien veilig

Willem Koert – 1 juni 2002

Olestra, kunstvet, kan een mens niet dik maken, maar misschien wél ziek. Dat valt mee, aldus een proefschrift... Onderzoekster Broekmans promoveerde gisteren aan Wageningen Universiteit op een studie die op het eerste gezicht het sein veilig geeft voor de komst van het light-vet. Hoewel ze haar proefpersonen een jaar lang voedingsmiddelen voortzette waarin een op Olestra lijkend product was verwerkt, was er van nadelige gezondheidseffecten geen sprak

Met je genenpaspoort naar de supermarkt

Nell Westerlaken – 3 maart 2001

De voedselwereld is volop in beweging. Alles moet nog gezonder, nog beter. Biotechnologie en genetische modificatie bieden ongekende mogelijkheden. Over tien jaar zal de supermarkt er totaal anders uitzien, meent professor Hautvast....

Leren hoe het eten werkt

Eric Hendriks – 6 maart 1999

Er lopen mensen met dozen eieren door de gangen van het Biotechnion, een van de gebouwen van de landbouwuniversiteit Wageningen. Althans: er is een goede kans dat je ze daar tegenkomt, dezer dagen. Want er zijn proefpersonen in het gebouw die eieren eten voor de wetenschap, veel eieren. Dat moet van Martijn Katan en zijn medewerkers.

Groente dient vitaminepil flinke klap toe

Gebrand Feenstra – 23 april 1994

Anders dan veelal wordt gedacht, helpt het slikken van extra vitamines tegen kanker nauwelijks, of werkt het zelfs averechts. Aldus Fins onderzoek.... 'Een hele gekke bevinding, die ook mij zeer heeft verrast', zegt prof. dr ir F. Kok, hoogleraar epidemiologie aan de Landbouwuniversiteit Wageningen

'Health food' van de jaren negentig

Mac van Dinther – 1 april 1998

Mag je uit het feit dat Japanners de hoogste levensverwachting ter wereld hebben en het meeste zeewier eten van alle volkeren op aarde, de conclusie trekken dat zeewier ontzettend gezond is, en dat onmiddellijk een actie moet beginnen met de strekking: 'Eet meer wier'?... Natuurlijk niet, zegt M. Katan, hoogleraar voeding en gezondheid aan de Landbouwuniversiteit Wageningen.

deVerdieping Trouw

Voedsel is meer dan een zak koolhydraten

Kees de Vré – 2 november 1999

In de strijd om de maag brengen fabrikanten steeds meer voeding op de markt met een gezondheid-sclaim: het functionele voedsel. Is dit functionele voedsel een truc waarmee de voedselgiganten hun afvlakkende omzetten willen opkrikken? Is de consument gebaat bij al die toevoegingen, of worden hem knollen voor citroenen verkocht? Een serie over de zegeningen en gebreken van het iets minder alledaags brood. Vandaag, tot slot: Jo Hautvast, hoogleraar humane voeding in Wageningen en vice-voorzitter van de Gezondheidsraad.

Vasten kan een intense ervring opleveren. Maar een droomfiguur krijg je er niet van.

Kees de Vré – 31 mei 2006

Vasten behoort tot de vroegste menselijke tradities en heeft zijn wortels in religieuze stromingen. Boeddha, Jezus en Mohammed vastten met grote regelmaat. Fysieke onthechting, reiniging, concentratie op de geest waren zoal de achterliggende motieven. Nou is die religieuze notie in het huidige tijdsgewricht naar de achtergrond gedrongen. In West-Europa is het echte vasten – onder christenen met name, moslims kennen nog steeds een vorm van vasten – nauwelijks nog aan de orde. "Als je wilt afvallen kun je beter je voedingspatroon wijzigen en meer gaan bewegen. Het is een simpel verhaal, maar die gedragsverandering blijkt extreem moeilijk aan de man te brengen. Als je via vasten jezelf bewust wordt van die nodige verandering is dat prima." zegt Sander Kirsten, vastenexpert bij de vakgroep humane voeding van de universiteit Wageningen

Het laatste nieuws voor de mond voedingsleer

Rutger Schilpzand – 8 juni 1994

Eerst was het giftig, toen kankerremmend en nu doen Finse boeren het bij de mest om hun landgenoten wat minder snel aan een hartinfarct te laten overlijden. En seleen is maar een voorbeeld van de nieuwe wegen die de voedingsleer inslaat. Prof. dr. J. G. A. J Hautvast, hoogleraar humane voeding in Wageningen, sprak onlangs in de diesrede van de Landbouw Universiteit zelfs van een renaissance in de voedingswetenschap.

Doctor op de planken

Kees de Vré – 18 mei 2001

„BSE-saté, dat is alle gekheid op een stokje..." Het duurt even voordat het kwartje valt. En dan nog zie je sommige toeschouwers in de zaal besmuikt om zich heen kijken om te zien of de buurman het wel heeft begrepen. Rob Urgert is na enkele jaren weer terug tussen de hem zo vertrouwde mensensoort: de voedseldeskundigen. Chic publiek in een chique omgeving.

Zuivelindustrie: Stigma op kaas

Kees de Vré – 1 december 2004

Een broodje kaas is voor de Nederlander haast net zo vanzelfsprekend als ademhalen. Kaas is ongezond, is een boodschap die bij hem nauwelijks kan postvatten. Dat de oer-Hollandse kaas voortaan niet meer op het menu mag staan heeft daarom in de afgelopen week geleid tot discussie. De Wageningse hoogleraar humane voeding Frans Kok staat achter het Voedingscentrum.

Niet ontbijten en alcohol maken pubers dik

Onno Havermans - 10 december 2007

Middelbare scholieren die niet ontbijten zijn dikker dan hun klasgenoten. Dat blijkt uit onderzoek onder 35.000 kinderen. Een op de vijf Nederlandse kinderen is te dik, zo bleek twee jaar geleden uit onderzoek van de Wageningen Universiteit. Promovenda Simone Croezen toont nu aan dat er een duidelijke relatie is tussen overgewicht en het niet ontbijten.

Snel afvallen is bijna onmogelijk. Veel mensen hopen op een wonder van de afslankpil

Kees de Vré – 22 april 2005

Als de zon hoger aan de kim gaat staan en de heg weer uitbot, krijgt een deel van de bevolking, vooral vrouwen, de kriebels. De uit de kast getrokken zomerkleding, maar vooral de weinig verhullende bikini moet bij voorkeur weer om een slank lijf. Er wordt nog eens extra in de spiegel gekeken en gekeurd. Meestal is dan het oordeel: te dik. Snel afvallen is dus het parool. De afslankpillen kwamen onlangs extra in het nieuws met de aankondiging van een nieuw 'wondermiddel' -Rimanobant- en de inbeslagname door de Voedsel- en Warenautoriteit (VWA) bij verscheidene distributeurs en handelaren van vele duizenden Hoodia-pillen. Docent humane voeding en kenner van afslankpillen dr.ir. Sander Kersten van de Wageningen Universiteit vindt de actie van de VWA een tikkeltje ironisch.

Kleine Mars-reepjes maken minder dik

ANP – 15 november 2007

Wie kleine Mars-reepjes met het formaat van een groot uitgevallen smartie eet, wordt minder snel dik dan iemand die de normale grote variant consumeert. De kleine chocoladesnoepjes blijken namelijk eerder te verzadigen. Dat blijkt uit een onderzoek van de vakgroep Humane Voeding van de Wageningen Universiteit. Gemiddeld kregen proefpersonen die de kleine Marsjes aten 26 kilocalorieën minder binnen dan de reepeters. Volgens onderzoeker Pascalle Weijzen lijkt dat weinig, maar op de lange termijn helpt zo'n verschil toch om een gezond gewicht te behouden.

Het kan soms wat eenzijdig worden

Kees de Vré – 14 juni 2008

Waarom eten we peultjes uit Afrika en vlees uit Zuid-Amerika? Steeds meer mensen verzetten zich tegen dit gesleep en eten alleen voedsel uit de buurt. Hoe verhoudt lokaal eten zich tot gezondheid? Eeuwenlang hebben grote delen van de bevolking hun menu lokaal moeten verzamelen. Als er al iets van ver kwam was dat alleen bereikbaar voor de rijken. Jeanne de Vries: „Wat groenten en fruit betreft mis je veel. De nadruk ligt steeds meer op variatie. Anderzijds weten we ook niet echt wat het effect is als je al die levensmiddelen van ver weg niet op je bord hebt liggen. Uit onderzoek weten we wel dat het traditionele menu van aardappelen, groente en vlees zo gek nog niet was. Overgewicht kwam veel minder voor dan nu het geval is. Maar dat is natuurlijk niet te wijten aan de grote variatie, maar aan de enorme beschikbaarheid van voedsel."

Fabels over bier onder de loep

Joop Bouma – 3 oktober 2009

Bierbrouwers hebben een Kennisinstituut Bier opgericht, dat aandacht vraagt voor 'de wetenschappelijke achtergronden van verantwoorde bierconsumptie'. Drie hoogleraren doen mee. Wij willen feiten en fabels over het drinken van bier op een rij zetten. Er is nog genoeg te onderzoeken", zegt Frans Kok, hoogleraar Voeding en Gezondheid aan de Wageningen Universiteit.

Drie kopjes thee helpen tegen beroerte

ANP – 27 maart 2010

Wie elke dag tenminste drie kopjes thee drinkt, vermindert de kans om een beroerte te krijgen met 20 procent. Dat komt omdat thee flavonolen bevat, die een beschermende werking hebben tegen een hersen-infarct of hersenbloeding, zegt Peter Hollman van de afdeling Humane Voeding en onderzoeksinstituut RIKILT, onderdeel van de Wageningen Universiteit.

Waar is de levertraan gebleven?

Annelies van der Woude – 16 maart 2013

Journaliste Annelies van der Woude kreeg wegens extreem lage waarden extra vitamine D voorgeschreven. Maar waarom slikken al die gezonde volwassenen in haar omgeving het ook? Pieter van 't Veer, hoogleraar Voeding en Epidemiologie van de afdeling Humane Voeding aan de Universiteit van Wageningen reageert.

Niks schadelijks aan, en anders is er nog altijd de citroen

Caroline van Keeken – 17 mei 2013

Vis met spinazie. Volgens sommigen is dat kankerverwekkend. Een lezeres (27) wil weten of dat klopt. Haar vrienden weten het zeker; vis kun je prima eten in combinatie met spinazie. Of met sla. Hartstikke goed voor je. De lezeres betwijfelt dat. Sommige combinaties van vis met groenten zijn juist ongezond, volgens haar. Of erger nog: giftig! Niet alleen in de vriendengroep van deze lezeres heerst onenigheid over dit onderwerp. "Wetenschappers discussiëren hier al jaren over", zegt Daan Kromhout, verbonden aan de afdeling humane voeding van Wageningen Universiteit.

Get to know some of our alumni!

Canan Ziylan


Canan Ziylan

2006 Start Bsc Nutrition and Health
2011 Year of obtaining Msc degree in Wageningen
2016 Year of obtaining PhD degree in Wageningen
Other degrees Teaching certification for higher education (2018)
Currently Researcher and Lecturer at the Rotterdam University of Applied Sciences

Why did you start with the study Nutrition & Health?

I was interested in health and health care from a young age, wanting to be a physician when I was younger. After a while, I realized that I liked the prevention of illness more than curing it, and what better way than to focus on nutrition?

What did you learn from N&H in Wageningen that really helped you to get where you are now?

Nutrition is linked to every aspect in life: for better, for worse, for richer, for poorer, in sickness and in health, until death do us part… so basically, we're all married to nutrition in some way!

ROTTERDAM UNIVERSITY OF APPLIED SCIENCES

On the other hand, what should studying nutrition have taught you, but did not; in other words what was lacking?

The awareness that the world does NOT revolve around nutrition… I have lived in a nutrition bubble for too long (2006-2016), which led to the belief that everyone acknowledges the impact of nutrition in real life. Turned out that most people do not! Since I started teaching in Nursing studies and realized how many other aspects play a large role in life generally and in health care specifically. It would have been nice to realize that sooner, so I would have been equipped with the full –more realistic– picture. And by that, be better equipped to convince others of how important nutrition still is, even more in illness than in health!

Do you have any recommendations or suggestions for our current educational program of BSc, MSc or PhD students; what should we focus on now?

Incorporate health care more prominently in the program: ask nurses and physicians as lecturers to provide their experiences and point of view to better understand the role that nutrition could play, in sickness and on the way to health!

Snapshot of our journey, when we started selling our company, Tinyfoods, which I founded together with two friends and BVG students


Joar Nilssen


Left to right: Rens Stokman, Yannick van Gelder, Joar Nilssen

Joar Nilssen

2013 Start Bsc Nutrition and Health
2019 Year of obtaining Msc degree in Wageningen
Currently Startup Analyst at StartLife

Why did you start with the study Nutrition & Health?

From a young age I have always had an interest in nutrition, especially in relation to sports. I became enthusiastic about the study in Wageningen due to the broad range of topics and the amount of lab experience that was offered in the Bachelor Nutrition and Health. The master Nutrition & Health was a logical step for me, as I was interested in diving deeper into the topics that were included in the specialization Molecular Nutrition & Toxicology. Furthermore, the teaching methods, the facilities and the campus atmosphere all contributed to this decision as I have always felt very inspired and at home in Wageningen.

What did you learn from N&H in Wageningen that really helped you to get where you are now?

Something which really stuck with me during my bachelor studies was the question of how to feed the growing world population in a sustainable and healthy manner. This was one of the questions which led me and two of my fellow BVG students to start our own company, Tinyfoods. We started at the market in Wageningen, selling edible insect and insect-based products which we expanded to the Benelux. Our background in nutrition provided us with valuable knowledge which we could use to inform and educate our customers about alternative protein sources through our web shop or during events.

On the other hand, what should studying nutrition have taught you, but did not; in other words what was lacking?

I think some of the strong points of the study is the extensive lab experience and research background. However, in reality a lot of students do not proceed in academics but turn towards the industry either through interests or due to a lack of relevant PhD positions. I believe the study could include more options for students to prepare themselves for a career outside of academia.

TINYFOODS

Kirsten Imbert-van Harmelen

2000 Start Nutrition and Health
2005 Year of obtaining Msc degree in Wageningen
Currently Owner of company Kirsten Clinical Research based in France near Geneva.

Why did you start with the study Nutrition & Health?

After having been eliminated 3 times by lottery for medical school, I moved to France to study French in Nice. The brilliant idea came from my mother who found out about the study "Voeding en Gezondheid" in 2000. I spoke to Ypie Blauw (study coordinator) and I can confirm it has been a great choice to move back to Wageningen! This Masters of Science allowed my conviction of becoming a pediatrician to translate into becoming a researcher and much more.

What did you learn from N&H in Wageningen that really helped you to get where you are now?

Discovering how a simple meal could have such a complex and important influence on our metabolism as well as on the development of diseases, intrigued me. The first lectures of Prof. Ivonne Rietjens, Prof. Michel Müller and Prof Sander Kersten gave a remarkable direction to my new passion, Molecular Nutrition, Nutrigenomics and the world of nuclear receptors. At that time, a brand new specialization in the study of Nutrition and Health and a new future for nutritional and medical research. The study gave a wide variety of fundamental insights in Nutrition, and also many international opportunities came by. Today I'm an expert in the field of clinical research mainly focusing on chronic fatty liver diseases and rare inborn pediatric diseases throughout Europe and the USA, while managing my small business working with pharmaceutical and nutrition companies. Having worked for over 15 years abroad, makes me realize the importance of Wageningen University in the Nutrition Research on our globe, a great basis for starting a rich career.

On the other hand, what should studying nutrition have taught you, but did not; in other words what was lacking?

My experience has been very positive at Wageningen University. The international opportunities and especially the encounters with international students that come to Wageningen from all over the world give the University a great culture.

Kirsten Imbert-van Harmelen

Liesbeth Smit

2000 Start Bsc Nutrition and Health
2007 Year of obtaining Msc degree in Wageningen
Currently Creative Director at The Online Scientist (my own company in science communication)

Liesbeth Smit

Why did you start with the study Nutrition & Health?

From a very early age I was intrigued by all the media attention about nutrition. One day carbs were unhealthy for you and made you fat, the other day it seemed that it was fat that you should avoid. As a teenager I read all the books in the library about nutrition, but I never learned enough to figure out how the world of nutrition science really worked. Studying Nutrition and Health was the obvious choice.
I wanted to learn for myself how nutrition can impact your health and become a professor, so I could teach others as well.

What did you learn from N&H in Wageningen that really helped you to get where you are now?

The most important thing I learned was how to think critically. How does nutrition science work, what questions should you ask to find answers, and what is a good scientific process?

Peter Res

Peter Res

1996 Start Bsc Nutrition and Health
2001 Year of obtaining Msc degree in Wageningen
Other degrees IOC Diploma in Sports Nutrition
Currently High Performance Nutritionist TeamNL

Why did you start with the study Nutrition & Health?

I was a runner and fascinated by the interaction of nutrition and exercise performance. I liked the atmosphere of Wageningen University and the surroundings of Wageningen are perfect for running.

What did you learn from N&H in Wageningen that really helped you to get where you are now?

I learned a lot about the basics of science, which laid a good foundation for the rest of my career and maybe most important: critical thinking.

On the other hand, what should studying nutrition have taught you, but did not; in other words what was lacking?

I thought I was going to learn about what makes you healthy. I was wrong. I learned all the ways to answer that question but was never taught the scientific consensus about what you should actually eat to stay healthy. In hindsight, I would have wanted to learn more about which studies defined the nutritional advice that is given today and how the nutritional guidelines were developed in practice. This could have shown me an insight in the difficulties of science communication, and to be better prepared in public discussions about nutrition and health.

Do you have any recommendations or suggestions for our current educational program of BSc, MSc or PhD students; what should we focus on now?

I believe that it has become more and more important for scientists to communicate with the public. Maybe even more so for nutrition scientists, who are battling a world of misinformation about nutrition online. To include courses in science communication, public speaking and writing in the curriculum would mean that more nutrition scientists can explain what they do and why it is important. This will be very helpful in future positions where you need to acquire grants, battle for tenure positions, and communication about sensitive topics with the public.

On the other hand, what should studying nutrition have taught you, but did not; in other words what was lacking?

At the time, there was no focus or research at the Wageningen University in the area of sport nutrition. That issue has been solved after I left. Luckily, for my thesis, I managed to do research in Austin, Texas, with John Ivy, in one of the "hot" sport nutrition research centres at the time.

Do you have any recommendations or suggestions for our current educational program of BSc, MSc or PhD students; what should we focus on now?

For students with the ambition to work in top sport practice, it is important to not only understand the science (specifically exercise physiology) , but also to understand the top athletes and their world and be able to connect with them.

Saskia Osendarp

1987 Start BSc Nutrition and Health
1993 Year of obtaining Msc degree in Wageningen
2001 Year of obtaining PhD degree in Wageningen
Currently Executive Director of Micronutrient Forum

Saskia Osendarp

Why did you start with the study Nutrition & Health?

To be honest, Nutrition & Health was my second choice as I had preferred to study Medicines but did not get selected. However, I soon became hooked to Nutrition, and when I got selected for Medicine after my first year, I decided that I'd prefer to stay in Wageningen and continue with Nutrition and Health.

What did you learn from N&H in Wageningen that really helped you to get where you are now?

Wageningen brought me the academic skills required to pursue a career in science: a strong methodological and content background that helps me up to today. In addition, my MSC internship in Ivory Coast and teachers such as the late Clive West, Abel den Hartog, Wija van Staveren and Judith Schwartz sparked my interest in nutrition and health in low- and middle-income countries and this passion continues until today.

Micronutrient FORUM

On the other hand, what should studying nutrition have taught you, but did not; in other words what was lacking?

At least at that time, there was very little training on competencies: presenting yourself and your ideas strategically, leadership skills, working in teams. After my graduation from Wageningen, I soon learned that these competencies are perhaps even more important than academic skills when you want to succeed in what you do.

Do you have any recommendations or suggestions for our current educational program of BSc, MSc or PhD students; what should we focus on now?

Nutrition and its interactions with the SDG goals. For instance, the complex interactions between climate change, nutritional quality of our diets and nutritional status will become high on the (research) agenda. This will require multi-sectoral collaboration, so students should get trained in working across different disciplines.

Yneke Kootstra

1984 Start Bsc Nutrition and Health
1991 Year of obtaining degree in Wageningen
Currently Directeur Academie voor Leefstijl en Gezondheid

ACADEMIE *voor* LEEFSTIJL *en* GEZONDHEID

Why did you start with the study Nutrition & Health?

After a failed year in computer science at the UvA, I wanted to study medicine. Unfortunately, I had not followed the chemistry courses in high school. During the summer holiday, I was able to get a chemistry certificate in Wageningen. After a year of Human Nutrition, I was not selected for medicine and I stayed in Wageningen to complete my studies in Nutrition.

What did you learn from N&H in Wageningen that really helped you to get where you are now?

Nutritional knowledge says nothing about your behavior: after the lectures I even saw the professors eating croquettes and that initially made me rebellious. "If you know what healthy eating is, how can you not do it yourself?". The study has given me a very comprehensive basis to form a vision about nutrition, lifestyle and health.

On the other hand, what should studying nutrition have taught you, but did not; in other words what was lacking?

Health goes further than your own body. What we eat also has an impact on our environment. Just as our environment influences your lifestyle. That aspect was not discussed during the programm.

Do you have any recommendations or suggestions for our current educational program or BSc, MSc or PhD students; what should we focus on now?

The most important question is how we can influence dietary behavior.

Yneke Kootstra

What's Cooking

What is going on at the Division? Check it out on our Twitter Account 'What's Cooking'

@WhatscookingHN

whatscooking.hn @WhatscookingHN • 22 aug.
De opnames over de #hongerwinter voor het programma @AndereTijden zijn gemaakt in onze unieke onderzoekskeuken in Helix @WUR

whatscooking.hn @WhatscookingHN • 19 jul.
Vanavond op NPO tv: de Smaak van Joel, over aromatiseren als kooktechniek. Met oa Sanne Boesveldt die het verschil tussen ortho- en retronasaal ruiken uitlegt. https://kro-ncrv.nl/programmas/de-smaak

whatscooking.hn @WhatscookingHN • 5 jul.
This afternoon the official "hammer" has been handed over! We wish the new chairs good luck.

whatscooking.hn @WhatscookingHN • 3 jun.
Onze studenten maken weer de lekkerste producten en je kunt nu meedoen aan de tasting!

whatscooking.hn @WhatscookingHN • 31 mei
Exhibition of fruits and vegetables of Human nutrition in the library @WUR

whatscooking.hn @WhatscookingHN • 27 mei
The Women In Olfactory Science symposium, by Sanne Boesveldt as local organizer, was a great success last weekend! Great science, amazing line-up of (mostly) female speakers, and lots of fun and social interactions! #wios #wios2019

whatscooking.hn @WhatscookingHN • 23 mei
Our researchdietitian @ElsSiebelink with her SelfCookingCenter @ResourceWUR

whatscooking.hn @WhatscookingHN • 17 mei
Kick off meeting new chair #Global #Nutrition @WUR

whatscooking.hn @WhatscookingHN • 14 mei
Congratulations to our PhD candidate Xanthe van Dierendonck, she won the prize for best presentation during the annual North European Young Diabetologists meeting #NEYD in Lyngby, Danmark.

whatscooking.hn @WhatscookingHN • 11 apr.
Genomineerden jaarprijs goede #voeding:
Sofina rodebietenburger, zilvervliesrijstnoedels van Fairtrade en fusilli rode linzen van AH.
En de winnaar is.....

Throughout the booklet you can find VoedingNu columns written by alumni of our division. All columns have different subjects that cover contemporary questions related to nutrition and health. For more information about VoedingNu, make sure to check out their website: www.voedingnu.nl.

VOEDING NU

Column by Coosje Dijkstra 2017

Meten is weten

'Een van de highlights binnen mijn vak als voedingswetenschapper is het bezoeken van internationale congressen. Zo bezocht ik drie weken geleden ISBNPA (International Society of Behavioral Nutrition and Physical Activity) in Canada. Een congres waarbij voedingsgedrag en lichamelijke activiteit op de voorgrond staan.'

Een dag voor het congres bezocht ik twee pre-conferences over het meten van voedingsinname. Want een van de belangrijkste vragen binnen ons werk blijft toch wel hoe we zo betrouwbaar mogelijk kunnen meten wat mensen eten.

De nieuwste technologieën werden uit de kast gehaald. Er was een groep uit Nieuw Zeeland die onderzoek deed met behulp van een fotocamera die je om je nek moest bevestigen en die elke 10 seconden een foto nam. Dit leverde op een gewone dag bijna 3000 foto's op (er zat ook een "privéstand" voor op de wc op). Innovatief onderzoek, maar arme onderzoeker die al die foto's moet analyseren. Ook werd er veel werk over biomarkers gepresenteerd, zoals het meten van vitamine C in het bloed om zo iets te kunnen zeggen over de inname van groente en fruit. De boodschap luidde dat we op zoek moeten gaan naar meer en betere biomarkers. Dit is echter voor de meeste onderzoeken niet haalbaar en niet te betalen. En dan hebben we het nog niet eens over de extra belasting van respondenten gehad. Een groep onderzoekers uit Engeland hadden een mobiele-telefoonapp ontwikkeld. Alles wat je at moest je fotograferen. Aan de hand van deze foto's berekende de app dan precies wat en hoeveel er gegeten was. Voor de ontwikkeling van deze app hebben de onderzoekers bijna alle voedingsmiddelen die er zijn in een MRI-scanner geplaatst, zodat ze de dichtheid konden meten. Mooi onderzoek. Uiteindelijk mochten we de app zelf proberen. Met mijn telefoon maakte ik een foto van mijn witte bord met een wortel erop. Na 10 minuten kon ik via de app precies bekijken wat ik had gegeten: een beker melk en een appel. Bijna goed...

Ik heb veel respect voor al deze innovatieve onderzoekers, maar aan de uitwerking moet nog wat tijd besteed worden. Tot die tijd gebruik ik toch nog maar mijn voedingsdagboekje, voedselfrequentie vragenlijst of 24-uurs navraag.

Coosje Dijkstra, Vrije Universiteit Amsterdam, lid Nederlandse Academie Voedingswetenschappen

VOEDING NU

Column by Jaap Seidell 2015

Richtlijnig

'Van moleculair naar epidemiologisch oedingsonderzoek'

Veel mensen willen graag veel vrijheid in keuze, maar aan de andere kant ook graag heldere en eenduidige adviezen. Dat blijkt ook telkens weer bij het uitbrengen van adviezen over voeding. Het International Agency of Research on Cancer haalde wereldwijd de pers met een rapport over bewerkt vlees en kanker en recenter was er veel discussie over de nieuwe Richtlijnen goede voeding van de Gezondheidsraad.

De voedingswetenschapper is behept met zwakke methoden om zwakke verbanden te onderzoeken. Epidemiologisch onderzoek kent intrinsieke problemen zoals de voedingsvragenlijsten die maar een globale indruk kunnen geven van de voedingsinname over een lange tijd. Bovendien willen of kunnen mensen maar in beperkte mate antwoord geven op vragen over voeding en zitten de analyses vol valkuilen door verstorende invloed van allerlei andere variabelen. Bovendien gaan ze uit van wat in een bevolking in de praktijk geconsumeerd wordt en niet wat optimaal zou kunnen zijn (er zitten bijvoorbeeld geen jagers-verzamelaars in Amerikaanse cohorten). De vele kortdurende trials hebben evengoed problemen door hun beperkte validiteit en generaliseerbaarheid voor de relaties tussen spontane en langdurige voedselconsumptiepatronen en het ontstaan van chronische ziekten. De experimentalist sluit vaak mogelijk verstorende variabelen uit zoals leeftijd, lichaamsgewicht of etniciteit, die in werkelijkheid juist vaak van grote invloed zijn voor relaties tussen voeding en gezondheid. Er bestaan ruim driehonderdduizend verschillende voedingsmiddelen waarvan er enkele tienduizenden in een grote supermarkt te koop zijn. In veel onderzoek is een breed scala aan voedingsmiddelen daarom noodzakelijkerwijs gegroepeerd zoals "zuivel", "groenten", "fruit", "noten", "vleeswaren" enzovoorts. Behalve dat deze groepen bestaan uit producten van soms totaal verschillende samenstelling is er ook veel onzekerheid: is boter zuivel? Zijn aardappelen en tomaten groenten? Is een smoothie fruit? Zijn pinda's noten?

Observationele en experimentele onderzoeken laten, niet verrassend gezien bovenstaande, nogal eens verschillende en soms tegenstrijdige uitkomsten zien. In experimenten is de individuele respons op een interventie vaak groot. Commissies die richtlijnen formuleren maken daarom voortdurend afwegingen in onderzoeksgegevens die een grote mate van onzekerheid in zich hebben. Is het dus mogelijk om eenduidige en voor iedereen geldende voorschriften te maken voor een optimale gezondheid? Totaal onmogelijk lijkt mij. Maar blijkens de reacties op de richtlijnen willen veel mensen dat wel: 'we mogen niet meer x' of 'we moeten dagelijks y'. Voedingsrichtlijnen zijn geen voorschriften of instructies waarin geen variatie mogelijk is. Ze moeten zeker serieus genomen worden maar ook weer niet té serieus.

Jaap Seidell

Workin' out

Alpe D'HuZes (June 2012)

A team from the Division of Human Nutrition & Health participated in the Alpe d'Huzes in June 2012. This sponsorship event aimed to raise as much money as possible for cancer research and the improvement of the quality of life of people who have (had) cancer. There was already a lot of contact with Alpe d'HuZes because at that time, the foundation co-supported the chair group of Nutrition and Cancer of Ellen Kampman. The year before, cancer had gotten awfully close to the division and some colleagues, including of course the death of Lidwien van der Heijden in 2011.

A team was formed under the name "Wageningse Wieltjes" (referring to the flag of Wageningen). We traveled to Southern France with a group of enthusiastic supporters to climb the famous Alpe d'Huez. The cycling team itself consisted of Gea Brussen, Kees de Graaf, Frans Kok, Anne Wanders, Renate Shops, Renger Witkamp and Valentijn van den Berg (Sportcentrum de Plataan). Despite the pleasant training sessions in advance (just fewer than there should have been) we were a bit shocked when we checked the day before how steep and long that road really was ...

Beforehand, we did not only train together, but we also organized all kind of promotions and recruited sponsors, because to be able to start as a team you had to bring €20,000 with you. We organized a lottery during the WE-days, a lecture evening, a survival afternoon for children, and much more and we managed to get the money. The day itself on June 6 was beautiful and impressive. Many participants and supporters themselves had been dealing with cancer from close-by and during cycling we also caught conversations from participants who had experienced cancer themselves. The event was also much bigger at the time than it is today. For example, we had to participate in a draw to start, we were scheduled to cycle on the "second day" and we could only start late. Partly because of this, we did not go up 6 times, but that did not detract from the unforgettable experience and team building. Among the various sponsor logos on our shirts there was also a heart in memory of Lidwien and sponsored by her family ... **– by Renger Witkamp**

“A PhD is really a time where you can focus on a dedicated subject matter”

Kees de Graaf

What is your current position at the Division of Nutrition and Health?
I have a full chair in Sensory Science and Eating Behavior. This chair was established in 2009. The chairgroup currently has about six scientific staff members and about 20 PhD fellows.

When did you start working at the division?
A long, long time ago in the summer of 1983; I started on a voluntary basis. In 1984 I got a PhD position.

What is your background (BSc, MSc, PhD)?
My BSc (at that time Kandidaats) was in Human Nutrition, my MSc also on Human Nutrition also with a focus on Consumer Sciences. My PhD was on “psychophysical studies of mixtures of tastants”, mostly on the perceived sweetness intensity of mixtures of sweeteners.

After working many years in the division, what noticeable changes did you experience? How did the division evolve?
So many; At the time of my PhD, the Division was much smaller. Prof. Jo Hautvast was the head of the Division and there were a few PhD fellows. In 1988 when I graduated, there were 2 other PhD graduations. The 80’s was the time of the introduction of personal computers instead of typing machines, no ethics committee, still no e-mail, old postal letters to scientific journals. Going to your post-box every day to see whether there was a letter from a Journal. The Division expanded, became more diverse and more professional, and adjusted to the changing circumstances. The drive of curiosity and the passion of wanting to know how things work are still in place.

What do you like best about working at WUR?
The variety and freedom of the job. You can pursue your intellectual curiosity, you work with talented young people who want to contribute to a better society. I am still proud of working in Wageningen, which has a clear and distinct mission on food and health. It is also satisfying to see the field growing, to understand how things work, e.g. in my case the role of taste and smell in eating behavior.

What is the best/hardest part of your job as a professor/researcher?
The best parts are to work with colleagues and enjoy the quest for understanding why people eat what they eat, and sometimes to make a difference in the life of consumers. Also to see young people like PhD fellows grow in their performance and personality.
The hardest part is sometimes to cope with the multitude of tasks. It can be very, very busy not having time enough to do all the task in a careful manner. You sometimes have the disappointment of rejected grants, papers, but we go on.

What advice would you offer any new PhD candidate/employee of the division ?
GO for it, enjoy it. A PhD is really a time where you can focus on a dedicated subject matter, where you can become one of the experts in a certain field, and where you have the time and opportunity for personal growth and development.

“As a PhD student you have the opportunity to largely focus on your own specific research topic”

Lisette de Groot

What is your current position at the Division of Nutrition and Health?
Personal Chair Nutrition and Ageing, with due attention for older adults.

When did you start working at the division?
After my graduation I worked for about one year on the ONNO project: data-analysis for the PhD of Jaap Seidell and Wija van Staveren (1984); after my PhD @Animal Physiology (name at that time) I returned and started to coordinate the SENECA project in 1988.

What is your background (BSc, MSc, PhD)?
BSc and MSc: nutrition with specializations physiology, epidemiology (B), didactics (additional).

After working many years in the division, what noticeable changes did you experience? How did the division evolve?
Growth covers a lot here: in number of students, PhD students and staff, in research methodologies, knowledge, expertise, research fields and integration. What remains is the ambition to excel in education and in research.

What do you like best about working at WUR?
The topic of my own research, the variability in my job, the colleagues I work with and especially the fresh brightness and energy of (new) students and PhD students.

What is the best/hardest part of your job as a professor/researcher?
Juggling with time, responsibilities and ambition.

What advice would you offer any new PhD candidate/employee of the division ?
Enjoy !! As a PhD student you have the opportunity to largely focus on your own specific research topic.

“ *Take the time to walk into the office of your colleagues* ”

Paul Hulshof

What is your current position at the Division of Nutrition and Health? When did you start working at the division?

I am assistant professor at the Division since 2005. I started working at the end of 1989 on a project studying fatty acids in edible fats and oils under the supervision of Martijn Katan. In the nineties I became responsible for the chemical laboratory for nearly 20 years; a responsibility which I handed over to my colleague a few years ago.

What is your background (BSc, MSc, PhD)?

I have an MSc degree in Human Nutrition obtained in 1986. After my graduation I worked for the ministry of Health (at that time Ministry of Welfare, Public Health and Culture) and the European consumer organization BEUC.

After working many years in the division, what noticeable changes did you experience? How did the division evolve?

Many, many things have changed. The group became much bigger to start with and as a result, it is less easy to get to know each other and to follow the research lines within the Division. DOS operating computers were already there in the beginning of the nineties but not to everyone’s disposal. What a change! I remember the group being under the umbrella of one chair holder. Now it has expanded to five, doing justice to the fact that the different fields of research have evolved, intensified, and refined. Along with these changes also the toolboxes have changed. The field of Human Nutrition research looked easier in the past, but that had probably to do with our toolboxes: the saying “if a hammer is your only tool, every problem looks like a nail” seems applicable but is of course also an exaggerated and distorted view of the past. Now, on each of the levels that are studied (cell, individual and population), the toolboxes are well filled (but that is also what we thought in the past). I think that education of students has become much better and more professionalized during the last decades. Which is to the benefit of all of us, not only to the benefit of the students :-)

What do you like best about working at WUR? What is the best/hardest part of your job as a professor/researcher?

There is a lot of freedom (flipside is responsibility) at WUR. And the informal atmosphere in an international environment makes me thrive. Finding budget for research has never been easy but seems to be more difficult nowadays. Coping with information (overload), (changing) rules and administration can be hard now and then.

What advice would you offer any new PhD candidate/employee of the division ?

Go to many meetings accessible to you to “taste the waters” and understand the organization. And take the time to walk into the office of your colleagues: many things, but not everything can be adequately discussed or solved by E-mail alone :-)

“ *Most people like to give you advice* ”

Words of **wisdom**

Jeanne de Vries

What is your current position at the Division of Nutrition and Health? When did you start working at the division?

I am Jeanne de Vries and assistant professor. I started working at the Division in November 1978 as a research dietician.

What is your background (BSc, MSc, PhD)?

I have a BSc in dietetics, and after 15 years at the Division I did my PhD next to my work as a research dietician.
In the mean time I did some courses on statistics and methodology at the Open University. So I have a PhD but not an MSc.

After working many years in the division, what noticeable changes did you experience? How did the division evolve?

I started in the Transitorium building and after a few years moved to Biotechnion. When I started there was only one chair group. I was involved in controlled feeding trials for many years. There was only one computer available for the whole division. So we did the nutrient calculations using pencil and paper, coding of food records using a punching machine, and had a type writer and a stencil machine at our disposal to make letters for the participants. Although the methodology of the feeding trials was in principal similar as nowadays, our facilities were not as modern. The research kitchen was an old lab, we put the food packages on book shelves, and not everything was prepared according to current standards.

What do you like best about working at WUR? What is the best/hardest part of your job as a professor/researcher?

It is nice that you work with very motivated colleagues and students, and that all generations are present. Also the work offers a lot of variety; there is the opportunity to work on different type of projects, nationally and internationally, and teach students with very different backgrounds. I also like the topic of dietary assessment methodology very much especially also to work in the dietary assessment and eating behavior group together with the dieticians. On the other hand you work sometimes long hours, there is little time to discuss things with others or to help people who need it. People are so busy with their own activities that they do not have time to do things for the division.

What advice would you offer any new PhD candidate/employee of the division?

Try to broaden your view and learn from other disciplines. Don’t re-invent the wheel. Most people like to give you advice. Also, be open to give others your advice. Also, enjoy doing the PhD work not only the result of it.

BSc tour

Aim

The European Excursion is meant for the students to get a broader knowledge of the possibilities of a career in Nutrition and Health with a focus on research, teaching programs, policy programs and food industry as well as meeting foreign students. The intention is to cover all the topics of our five MSc specialisations: Epidemiology and Public Health, Nutritional Physiology and Health Status, Molecular Nutrition and Toxicology, Sensory Science, and Food Digestion.












A selection of the institutes visited by city

Brussel
- EC DG Health and Consumer Protection

Coleraine
- University of Ulster

Copenhagen
- Uppsala University – Department of Public Health and Caring sciences
- National Food Administration
- Karolinska Institutet – Splendid Project
- SWETOX
- Stockholm University – Department of Psychology
- Karolinska Institutet – Department of Clinical Neurosciences
- Uppsala University – Department of Food, Nutrition and Dietetics
- Swedish University of Agricultural Sciences – Department of Food Science

Dijon
- Centre Européen des Sciences du Goût (CESG)

Dublin
- University College Dublin
- Safefood
- Food Safety Authority Ireland
- Health Service Executive

Geneva
- World Health Organisation (WHO)

Lausanne
- Université of Lausanne Institute de Physiologie
- Nestlé Research Centre

Lyon
- International Agency for Research on Cancer (IARC)

Milaan
- The Mario Negri Institute
- DiStam institute of the University of Milan
- Istituto Nazionale dei Tumori
- Macedonio Melloni, department of paediatrics, Milano

Munchen
- Technical University of Munich
- Helmholtz Zentrum Munchen
- Weihenstefan Brewery
- Leibniz-Institute for Food Systems Biology

Oslo
- University of Gothenburg
- Norwegian University of Life Sciences
- Norwegian Scientific Committee for Food Safety - VKM
- The Norwegian Food Safety Authority

Palaiseau
- Danone Vitapole (R&D)

Rome
- INRAN - National Research Institute for Food and Nutrition
- ISS - Istituto Superiore di Sanita 'CUORE project'
- FAO – Food & Agricultural Organization
- World Food Programme

Vevey
- Musée d'Alimentation

Vienna
- University of Vienna
- IAEA & United Nations
- University of Natural Resources and Life Sciences

Els' recipes!

Els Siebelink is one of our research dieticians of the division. Over the years she has gathered many different recipes. On this page you see two recipes which turn out to be the favorites of the participants, yet also from the division! Try them out for yourselves!

Bitterkoekjesvla

(macaroon-vanilla custard)

Ingredient list

780	gram	Vanilla custard
200	gram	Bitterkoekjes (macaroons)
20	gram	Rum

How to create this?

Step 1. Add the macaroons and rum at once to the vanilla custard, stir, and its ready to go!

Koeloejoek sauce

Ingredient list

250	gram	Margarine
55	gram	Onions
50	gram	Tomato paste
50	gram	Tomato ketchup
60	gram	Flower
18	gram	Broth powder
30	gram	Ginger syrup
50	gram	Canned pineapple
30	gram	Sweet soy sauce
407	gram	Water

How to create this?

Step 1. Fry the onions by using the margarine, for three minutes.
Step 2. Add the tomato paste and ketchup
Step 3. Add the flower, make sure to stir!
Step 4. Add the water
Step 5. Add all the other ingredients at once

VOEDING NU Column by

Anne Wanders 2017

'Nepnieuws en alternatieve feiten in de voedingswetenschap'

Het is even wennen dat we bij alles wat we lezen moeten bepalen of het nepnieuws, een alternatief feit of de waarheid is. Voor ons als voedingskundigen en gezondheidsprofessionals is dit niet helemaal nieuw, we hebben ten slotte al jaren discussie of nieuwsberichten over voedingsonderzoek mogelijk veel te kort door de bocht of zelfs misleidend zijn.
Het is geruststellend om te zien dat er steeds meer voedingskundigen en gezondheidsprofessionals opstaan, zich verenigen in organisaties zoals de NAV, en zich mengen in het maatschappelijke debat over gezonde voeding. Regelmatig wordt 'de industrie' genoemd als bron van onjuiste informatie. Wat veel consumenten zich niet realiseren is dat, in tegenstelling tot journalisten en bloggers, de Europese levensmiddelenindustrie voor communicatie over voeding gebonden is aan strikte regelgeving. Een voorbeeld. Door Europese wet- en regelgeving is het voor de levensmiddelenindustrie verboden om consumenten te informeren over de relatie tussen een product en gezondheid zolang deze niet goedgekeurd is (Artikel 13 en 14 claims, EU). Wanneer de industrie zich niet aan de regels houdt zijn er boetes, moeten producten worden teruggetrokken en is er schade aan het imago en wellicht de bedrijfsresultaten.
De Europese regelgeving is belangrijk om consumenten te beschermen tegen voorbarige en onvoldoende onderbouwde beloften over producten. Echter, sommige regelgeving beperkt juist het geven van duidelijke informatie. Neem transvet. De regelgeving verbiedt het om de hoeveelheid transvet op het etiket te vermelden. Uit de afzonderlijke ingrediënten zoals 'gedeeltelijk gehard vet' – vaak verward met 'volledig gehard vet' - kan worden afgeleid dat er mogelijk transvet in het product zit. Maar welke consument snapt dat? Door verboden als deze krijgen consumenten niet altijd de beste informatie om gezonde keuzes te kunnen maken.
De relatie tussen voeding en gezondheid is ontzettend ingewikkeld. De vertaling naar duidelijke adviezen voor consumenten in het huidige klimaat van verwarring en wantrouwen is wellicht nog veel moeilijker. Daarom is het heel belangrijk dat wij als voedingskundigen vanuit al onze verschillende professionele invalshoeken, inclusief de levensmiddelenindustrie, vooral doorgaan met het deelnemen aan het maatschappelijke debat over gezonde voeding.

Anne Wanders, Onderzoeker voeding en gezondheid bij Unilever R&D, en lid Nederlandse vereniging van voedingswetenschappen

VOEDING NU Column by

Michiel Joosten 2011

Financiering van wetenschappelijk onderzoek door industrie: vloek of zegen?

Er is een tendens om de industriële relevantie van wetenschappelijk (voedings)onderzoek te beschrijven, bijvoorbeeld in subsidieaanvragen. Wetenschappers volgen hiermee de tijdgeest die hen steeds meer dwingt tot samenwerking met de industrie. Hierdoor wordt onderzoek vaker gefinancierd door de industrie. Zo ook mijn PhD-project dat gedeeltelijk is gesponsord door de drankenindustrie. Dergelijke financiering stuit echter op een groeiende weerstand. Maar is die weerstand terecht en waar is men bang voor?
Tegenstanders claimen dat financiering door de industrie gepaard gaat met een verlies aan wetenschappelijke onafhankelijkheid. De wetenschapper heeft de schijn tegen wanneer het onderzoek ondersteund wordt door een belanghebbende industrie. Het vertrouwen van de consument in de wetenschap kan daardoor in gevaar komen.
Ik zie in dat de integriteit, objectiviteit en geloofwaardigheid van zo'n wetenschapper op het spel kan staan. Mogelijk wordt hij aangezien als een soort marketingtool. Om deze belangenverstrengeling tegen te gaan, bestaat er de NAV Gedragscode. Dit zorgt voor houvast om onderzoek op een eerlijke en transparante manier uit te voeren. Het draagt bij aan de kwaliteit van de (toegepaste) voedingswetenschap.
Heb ik, terugkijkend, het gevoel 'gebruikt' te zijn als verlengstuk van de industrie? Niet echt. Wel heb ik het gevoel dat ik de mogelijkheid heb gekregen mij uitgebreid(er) wetenschappelijk te ontplooien. Ondanks de financiering heb ik, als onderzoeker, mij altijd naar eer en geweten toegelegd op het brengen van de feiten. Ik heb getracht dit zo objectief en genuanceerd mogelijk te doen door in bijvoorbeeld de publiciteit de bevindingen altijd in een bredere context te plaatsen.
Uiteindelijk is het aan een individu zelf om een (geïnformeerde) keuze te maken. Hopelijk heeft mijn onderzoek hier op sommige punten een bescheiden bijdrage aan kunnen leveren. Daar gaat het uiteindelijk om. Want iedereen (wetenschap en industrie, maar ook overheid en maatschappij) is erbij gebaat om de toegevoegde waarde van voedingsonderzoek in te zien. Dergelijke voorlichting en kennis kunnen hopelijk een rol spelen in het verbeteren van de algehele volksgezondheid.

Michel Joosten, lid Nederlandse Academie van Voedingswetenschappen
Voormalig onderzoeker TNO & Wageningen Universiteit

VOEDING NU Column by

Geert van Poppel 2018

Het ei is gelegd: het Nationaal Preventieakkoord is klaar. We pakken roken, problematisch alcoholgebruik en overgewicht aan. Doel is een gezonder Nederland met kinderen die een goede start maken en daar lang profijt van hebben. We hebben ambitieuze plannen: ernstig overgewicht (obesitas) bij volwassen halveren. Van 1 op 7 nu, naar 1 op 14 in 2040.
Voor overgewicht is geen simpele oplossing. Overheden, bedrijfsleven en maatschappelijke organisaties werken daarom samen aan een brede aanpak. Een gezonder productaanbod en een gezondere omgeving; stimuleren van gezondere keuzes en bewegen; bijbrengen van voedselkennis en voedselvaardigheden.
Voor minder overgewicht over twintig jaar, moeten we nu bij de jeugd en hun ouders beginnen. Ik denk dat het de ultieme vorm van nudging is als de gezonde keuze niet alleen de gemakkelijke is, maar ook de beter betaalbare. Schoolkantines zullen frisdranken met suiker weren en zullen het aanbod van koek en snoep aanpassen, maar hoeveel helpt dat als in de winkel op de hoek de reguliere frisdrank goedkoper is dan light
en een gevulde koek goedkoper is dan een banaan?
In de huidige plannen wordt prijsbeleid om gezondere voedingskeuzes te bevorderen nauwelijks genoemd. Begrijpelijk, want dit ligt politiek gevoelig, net zoals rekeningrijden. Gelukkig wil het akkoord ook een lerende aanpak en een actieve samenwerking met de wetenschap. Partijen gaan nu de plannen verder uitwerken. Gemeenten nemen de regie en willen met andere partners een Preventiefonds opzetten.
Ik wil pleiten voor een pilotstudie naar de effecten van prijsbeleid in combinatie met andere maatregelen. Naar prijsbeleid alleen zijn al studies gedaan waar we verder op kunnen bouwen. Het zou mooi zijn als er in een aantal wijken afgesproken kan worden dat winkels aan scholieren en hun ouders korting geven op dranken en snacks met minder calorieen.
Daar moet een mooie app voor te maken zijn. We kunnen dan meten of de jeugd het in de wijken met korting beter doet. Als het inderdaad werkt, kan zo'n interventie toegevoegd worden aan onze instrumenten voor het terugdringen van overgewicht.

What's going on at the **PhD committee?**

The PhD committee is a platform that represents all PhD students from the Division of Human Nutrition. The members are themselves PhD students of the division. They keep a close eye on what is going on at the division and they stand up for the interest of the PhD students within the division. The PhD committee also takes care of the exchange of information between the division and the PhD students and vice versa.


Christmas dinner


Bounz


Beer tasting

The PhD committee organizes:

Serious events...

- Workshops: how to use your voice workshop, how to handle stress workshop, etc.
- The Food for synergy lunch: about 4 times a year, PhD students have a nice lunch together while a couple PhD colleagues present their current work.


Game night


Vineyard visit and wine tasting

...and less serious events

Fun big events are organised approximately twice a year (a summer and a winter event), for example an escape room, a cake-decorations work shop or beer/wine tastings. Smaller events are also regularly organised through the year (PhD games night, movie night, etc.).

Do you want to know more?

Send an e-mail to phdcie.hne@wur.nl

VOEDING NU Column by Andries Olie 2014

De passie van Andries Olie

Hoe bent u in de voedingswereld terecht gekomen?

Na het behalen van mijn vwo-diploma wist ik niet zo goed wat ik wilde gaan doen. Nadat ik zag hoe twee agenten een agressieve dief arresteerden, kwam ik op het idee om bij de politie te gaan. Er was toen de mogelijkheid vier keer per jaar in te stromen, dus ik dacht ik probeer het gewoon. Dit bleek erg leuk en ik ben uiteindelijk 3,5 jaar bij de politie gebleven. Toch wilde ik graag doorstuderen; ik ben toen Voeding en Gezondheid gaan studeren aan Wageningen University. Ik heb mijn studie hier afgerond met een Master in Nutritional Physiology and Health Status. Tijdens mijn studie heb ik nog een semester in Amerika gevolgd over genetica, en in mijn laatste jaar heb ik drie maanden in India stage gelopen. Hier deed ik onderzoek naar de effecten van ijzerrijke mungboon en vitamine C-rijke guave op de groei, ziekte en het gewicht van Indiase schoolkinderen.

Na het afronden van mijn studie in 2011 kon ik aan de slag bij de VU voor de 'Voedselbankstudie', een onderzoek met als doel om cliënten van de voedselbank, met lage sociaaleconomische status, te stimuleren gezondere voedselkeuzes te maken en daarmee het voedingspatroon te optimaliseren. Ondertussen had ik nog een applicatie lopen voor een traineeship bij de Europese Commissie. Deze werd goedgekeurd waarna ik een half jaar naar Ierland ben vertrokken om bij de Food and Vetinary Office (FVO) als stagiair te werken. Dit was een mooie periode. Helaas moet je daarna plaatsmaken voor nieuwe trainees en was er dat jaar geen concours in Brussel. Na terugkomst kon ik gelukkig weer aan de slag met het voedselbankproject terwijl ik verder zocht naar een baan. Toen kwam de vacature voor manager voeding en gezondheid bij Kenniscentrum suiker & voeding voorbij en daar ben ik nu sinds september 2013 werkzaam.

Wat houdt uw huidige werk in?

Het lezen en beoordelen van nieuwe studies over suiker en gezondheidsgerelateerde onderwerpen. Ook spelen wij als kenniscentrum een rol in het communiceren van nieuwe informatie over suiker aan gezondheidsprofessionals via position papers, fact sheets, gastcolleges en multimedia. Hierbij vind ik het van groot belang dat de informatie die wordt overgebracht correct en op wetenschappelijk niveau is. Verder is er binnen het kenniscentrum budget beschikbaar om onderzoeken te financieren. Kenniscentrum suiker & voeding heeft met behulp van dit budget onderzoekers van Wageningen University gevraagd een voedingsmiddelentabel gericht op suikers te ontwikkelen. Met die nieuwe tabel is onder andere duidelijk geworden hoeveel sacharose (suiker) en fructose Nederlanders eten. Uitkomsten van dit onderzoek zijn eind 2013 naar buiten gebracht en op dit moment wordt geanalyseerd wat het aandeel toegevoegde suikers is.

Wat zou u nog onderzocht willen zien?

Naast de onderwerpen die binnen het centrum onderzocht kunnen worden, zou ik graag meer onderzoek willen zien naar gentherapie. Hoe kunnen mensen door middel van gentherapie geholpen worden bij erfelijke ziekten. Verder vind ik onderzoeken naar gezonde veroudering interessant. Wat ik voor de toekomst belangrijk vind is meer en betere samenwerking tussen landen als het op onderzoek aankomt. Via een multidisciplinaire samenwerking kunnen onderzoeken veel uitgebreider en grootschaliger aangepakt worden. Een goed voorbeeld hiervan is het EU-project 'MooDFOOD'. Hier bundelen verschillende partijen op de VUmc/VU campus met 13 andere Europese partners hun expertise op het gebied van voeding, consumentengedrag, psychiatrie en preventieve psychologie om te onderzoeken wat de rol is van voeding bij depressie.

Andries Olie, Manager voeding en gezondheid bij Kenniscentrum suiker & voeding en lid van de Nederlandse Academie van Voedingswetenschappen.

VOEDING NU Column by Trudy Voortman 2013

De passie van Trudy Voortman:

'Van moleculair naar epidemiologisch voedingsonderzoek'

Lid van de Nederlandse Academie van Voedingswetenschappen sinds september 2011.

Hoe bent u in de voedingssector terecht gekomen?

Ik las als kind veel, maar tijdens het eten mocht ik niet lezen. Daarom ging ik de etiketten van alle producten die op tafel stonden bestuderen en vergelijken. Toen ik van de middelbare school af kwam was voor mij de keuze snel gemaakt. De studie Voeding en Gezondheid aan Wageningen Universiteit sloot als beste aan op mijn interesses. Na het behalen van mijn bachelor wilde ik een onderzoeksmaster volgen. Ik heb gekozen voor moleculair onderzoek omdat ik de diepte in wilde. Deze master verdiept zich in het mechanisme op moleculair niveau. Ik vond deze master enorm leuk maar miste wel de directe link met de mens en gezondheid.

Na mijn afstuderen ben ik gaan werken bij Unilever. Daar heb ik mij verdiept in plantensterolen, bekend van de Becel pro-activ producten. Ook hier was ik bezig met onderzoek, maar op een totaal ander gebied. Het raakvlak met mensen en gezondheid had ik daar wel. Na enige tijd gewerkt te hebben begon ik te verlangen naar een eigen onderzoek. Ik ben toen gaan zoeken naar promotieplekken en heb een hele leuke functie aangeboden gekregen. Vanaf 2012 werk ik aan mijn eigen promotieonderzoek aan het Erasmus Medisch Centrum in Rotterdam.

Wat houdt uw huidige werk in?

Ik verdiep mij nu in een totaal ander gebied van onderzoek. Van moleculair onderzoek ben ik overgestapt naar epidemiologisch voedingsonderzoek. De groep waarin ik werk, ErasmusAGE, doet onderzoek naar het effect van levensstijl en voeding op gezondheid in verschillende fasen van het leven. Ik richt mij op kinderen en kijk onder andere naar het effect van voeding op groei, lichaamsvet, cholesterol en botdichtheid. Omdat ik weinig ervaring had in epidemiologisch voedingsonderzoek, doe ik nu een master epidemiologie in deeltijd naast mijn werk. Ik vind het leuk om me ook in deze kant van onderzoek te verdiepen.

Wat zou u nog onderzocht willen zien?

Aan elke type onderzoek zitten voor- en nadelen. Zo heb je over moleculair onderzoek meer controle en zijn er meer gedetailleerde gegevens meetbaar dan bij epidemiologisch onderzoek. Je bent bij dit soort experimenten echter vaak beperkt tot onderzoek in dieren of cellen. Epidemiologisch onderzoek is in mensen, maar bij observationeel onderzoek is de kans op bias groter en er zijn externe invloeden waar rekening mee gehouden moet worden. Het liefst willen we natuurlijk trials in mensen, maar dit is ook niet altijd mogelijk. Wat ik graag zou zien is dat uitkomsten van verschillende onderzoeken vaker gekoppeld worden zodat er meer mee gedaan kan worden. Eén onderzoek is niet voldoende om conclusies te trekken over gezondheidseffecten van voeding, het zijn allemaal puzzelstukjes die samen een deel van het totale plaatje kunnen leveren. Ik zou het leuk vinden om resultaten van verschillende soorten studies meer te integreren met elkaar.

Daarnaast ligt er nog veel open op het gebied van implementatie. Weten wát gezond is is belangrijk, maar hoe zorg je dat mensen daadwerkelijk gezonder gaan eten? Welke gedrags- en omgevingsfactoren zijn hierbij van belang? Hier wordt al veel onderzoek naar gedaan maar op dit vlak valt nog veel te winnen.

Trudy Voortman, wetenschapper aan het Erasmus medisch centrum Rotterdam op de afdeling epidemiologie.

PhD Tour
Broadening the scope

Every two years PhD Candidates of the ww of Wageningen University organise an international study trip. The aim of the PhD tour is to exchange knowledge, gain experience, broaden scientific networks and stimulate collaborations with researchers from all over the world.

The PhD tour provides excellent opportunities to establish contacts with people from different universities and institutes through interactions on the scientific, social and cultural level.

Want to know more? Visit the website of the PhD tour of this year! 2019.phdtour.nl

1991
- Germany
- Switzerland

1993
- United Kingdom

1995
- USA

1997
- Denmark
- Sweden
- Finland

1999
- South Africa

2001
- Germany
- Switzerland
- Italy

2003
- Australia

2005
- United Kingdom
- Ireland

2007
- USA

2009
- Denmark
- Sweden
- Norway

2011
- South West USA
- Mexico

2013
- Australia

2015
- USA

2017
- United Kingdom

2019
- Yet to come: Canada

1997 1999 2001

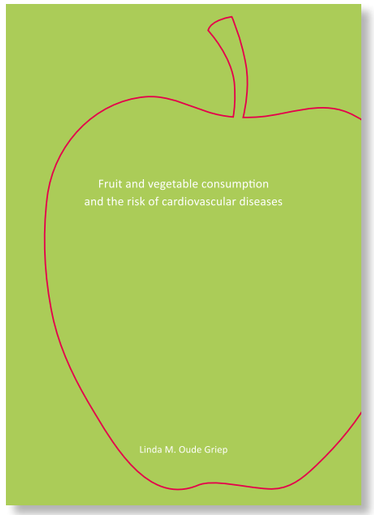
2005 2007 2009 2017

Winners of the **PhD cover awards**

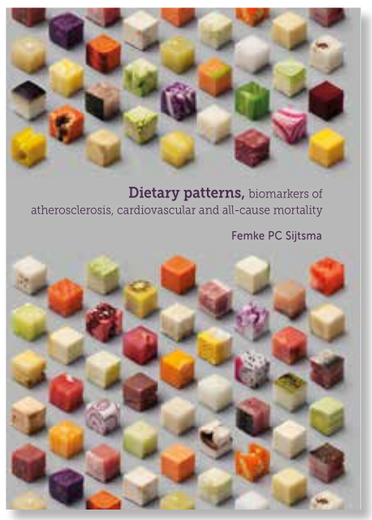
The Resource Cover Prize is awarded annually by the university magazine to the most attractively designed PhD thesis cover. In 2009, the science editors of Resource thought it would be fun to look at the annual pile of theses from a different angle than the usual: focusing on the outside. This gave the impetus for the first election of the best cover.
In the beginning, a jury panel assessed the thesis covers in terms of creativity, attractiveness and relevance to content. After three years, the election went online to let the public vote. From all the covers, Resource picks a shortlist of ten candidates for the Cover Prize.
The nominated covers are accompanied by a short description of the research and its relation to the cover.

During the past ten elections, the prize was awarded to a thesis from the Division of Human Nutrition & Health four times!

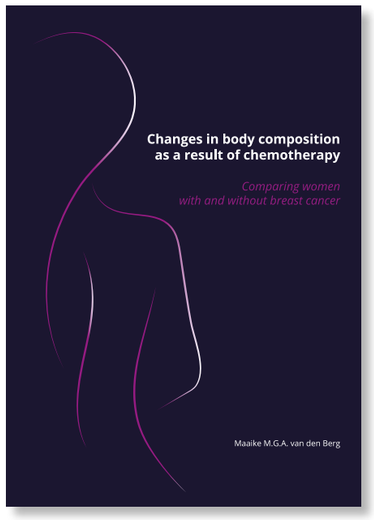
2010 Saskia T.J. van Cruchten



2011 Linda M. Oude Griep



2015 Femke P.C. Sijtsma



2018 Maaike M. G. A. van den Berg

Don't only judge a book by its cover...

VOEDING NU Column by Annet Rodenburg 2014

Etiketten zetten industrie aan tot gezondere producten

Vanaf 14 december 2014 moeten levensmiddelen voldoen aan de nieuwe Europese Verordening voor etikettering (EU Nr. 1169/2011). Voortaan moet voedingswaardedeclaratie verplicht worden vermeld op het etiket, enkele uitzonderingen daargelaten. Dat betekent dat het etiket voortaan aangeeft hoeveel energie, koolhydraten (inclusief suikers), eiwitten, vetten (inclusief verzadigde vetten) en zout in het product zit.
De Wetenschappelijke Raad voor het Regeringsbeleid (WRR) schreef in het net uitgekomen rapport "Naar een voedselbeleid" dat productinformatie en logo's een potentieel belangrijke motor kunnen zijn voor verandering. Doordat zij consumenten kunnen aanzetten tot andere keuzes, maar ook – en misschien wel vooral – via anticipatie hierop door de levensmiddelenindustrie.
Slechts een beperkt aantal consumenten kijkt op de etiketten, daarom is die laatste route veel interessanter. Succesvolle voorbeelden uit het verleden waarbij etikettering een rol heeft gespeeld in productverbetering zijn: de verlaging van zoutinname in Finland en van transvetinname in de Verenigde Staten (VS).
Terug naar de nieuwe wetgeving. We zijn er in Europa best laat mee: al sinds 1990 is voedingswaardedeclaratie verplicht in de Verenigde Staten. Daar is recent een nieuw voorstel voor de "Nutrition Facts" gekomen. Met meer aandacht voor energie, portiegrootte en toegevoegd suiker. Interessant is ook het plan om de drie belangrijkste ingrediënten en het totaal aantal ingrediënten prominent (Front of Pack) te declareren; en verplicht te maken dat alle verschillende typen toegevoegd suiker (zoals fructose, dextrose, suikerstroop) samengenomen moeten worden. Dit alles vanwege het eerder genoemde potentiële anticiperen hierop van het bedrijfsleven (Kessler NEJM 2014, 193-195).
Dat het bedrijfsleven anticipeert op de wensen van consumenten is goed te zien aan de E-nummer- discussie. Anticiperend op de angst van consumenten voor E-nummers worden bedrijven aangezet tot herformuleren van hun producten en het gebruik van claims zoals "E-nummer-vrij". De HAS Hogeschool doet regelmatig herformuleringsopdrachten voor de levensmiddelenindustrie. Deze opdrachten gaan vaker over het reduceren van E-nummers dan over het reduceren van zout, suiker en ongezonde vetten. Helaas! Sterker nog, voor een goede kwaliteit of houdbaarheid kan door E-nummerreductie de noodzaak ontstaan juist meer zout of suiker toe te voegen. Als de aandacht van de consument zich meer richt op zout, suiker en ongezonde vetten, en minder op E-nummers, dan leidt etikettering pas echt tot gezondere boodschappen!

Annet Rodenburg

VOEDING NU Column by Wim Saris 2014

De passie van NAV-lid Wim Saris

'Een groot vraagteken betreft nog hoe individuen omgaan met hun energie'

Hoe bent u in de voedingssector terecht gekomen?

'Dat is een merkwaardig verhaal. Mijn vader was vroeger voedselcommissaris in de provincie Overijssel. Destijds was het nodig dat in tijden van oorlog of rampspoed voldoende voeding was opgeslagen in Nederland, bijvoorbeeld in de vorm van koekjes of in blikken. Ik vond het wel fascinerend dat er ergens een plek was met een grote voorraad eten en er werd thuis ook wel eens over gesproken. Nu bestaat er geen voedselcommissaris meer en is er door de toegenomen productie geen schaarste, maar zo is wel mijn interesse op het gebied van voedsel en voedselproductie ontstaan. Ik ging in Wageningen studeren aan de nieuwe richting Humane Voeding. Ik was ook geïnteresseerd in landbouw en veeteelt, maar mijn voorkeur ging al snel uit naar de klinische en medische kant van voeding. Hierdoor ben ik tijdens mijn studie ook een basisopleiding medicijnen gaan volgen aan de Radboud Universiteit in Nijmegen, waardoor ik makkelijker klinisch onderzoek kon doen en niet steeds de toestemming van een dokter nodig had. Ik ben in Nijmegen gepromoveerd op een onderzoek naar lichamelijke activiteit en prestatie bij schoolkinderen. Dat sloot aan bij mijn parttime werk aan de Radboud Universiteit, waarin ik me richtte op Gezondheidsvoorlichting en Opvoeding bij basisschoolleerlingen. In 1982 ben ik als onderzoeker overgestapt naar de Universiteit Maastricht waar ik in 1986 hoogleraar Humane Voeding ben geworden. Behalve het doen van onderzoek, gaf ik les en was ik betrokken bij het universitair management. Ik heb vrij snel na mijn aanstelling het universitaire onderzoeksinstituut NUTRIM mee opgericht, waarin de brug werd geslagen tussen de faculteiten geneeskunde en gezondheidswetenschappen. Tussen 2005 en 2009 ben ik nog programmadirecteur geweest van het TIFN, het topinstituut voor food en nutrition.

Wat houdt uw huidige werk in?

'In 2005 ben ik parttime gaan werken voor DSM, als corporate scientist Human Nutrition. Ik was toen 55 en benieuwd naar hoe het eraan toe ging in de industrie. Bij de universiteit ben ik in juni afgezwaaid, bij DSM zal ik nog tot 1 oktober als corporate scientist in dienst zijn. Ik zie dat twee zaken tussen industrie en universiteit verschillend zijn. In het bedrijfsleven worden eenmaal genomen besluiten vrijwel binnen een half jaar uitgevoerd en na een jaar heb je het er niet meer over, terwijl er op de universiteit nog jaren daarna over wordt gesproken zonder tot besluitvorming te komen. Ook biedt het human resource beleid in het bedrijfsleven meer mogelijkheden voor de medewerkers.
Ik heb in de loop der jaren 60 promovendi begeleid en was betrokken bij grote Europese multicenter onderzoeksprojecten op het gebied van voeding. Daar zijn verschillende databases uit voortgekomen, bijvoorbeeld uit het Diogenesproject. De data van 800 mensen die zijn afgevallen worden nu gekoppeld aan genetische databanken waardoor vervolgonderzoek kan plaatsvinden. Ik zal die onderzoeken niet doen, maar ben nog wel betrokken.'

Wat zou u nog onderzocht willen zien?

'Een van de grootste vraagtekens voor mij betreft de energie-efficiëntie van mensen en dieren. Hoe komt het dat de ene mens zeer efficiënt zijn energie gebruikt en de andere niet? Hoe komt het dat de voederconversie bij het ene varken vele malen hoger is dan bij het andere? Van de mens weten we dat door de genetische bepaling er verschillen zijn die tussen individuen drie keer zo groot kunnen zijn. We weten er wel iets van, maar veel te weinig.'

Wim Saris, emeritus hoogleraar Humane Voeding Universiteit Maastricht, corporate scientist Human Nutrition DSM (tot 1 oktober)
Lid en medeoprichter Nederlandse Academie van Voedingswetenschappen

A visit from

Sinterklaas...

and from

Santa!

Marianne Geleijnse

The Health Council of The Netherlands

"Getting an overview of what's going on in the broad health field appeals to me a lot. It is a responsible position and combining two jobs is not always easy. But I like the intellectual challenge and enjoy working with a team of qualified people, including a network of top experts in health science. I think it is important that policy is based on science: that leads to measures that are effective and not just based on opinions. My motivation is that I would like to contribute to improving the health and well-being of large groups of people."

Marianne about her function at the Health Council

Prof. dr. J.M. Geleijnse is the vice-president of the Health Council. The Council of Ministers has nominated her for appointment as of January 1, 2018. Marianne studied Biomedical Sciences in Leiden and did a Masters in Epidemiology in Rotterdam. She obtained her PhD at Erasmus University Rotterdam on research into sodium, potassium and blood pressure. Since 1999 she has been working at the Division of Human Nutrition and Health at Wageningen University & Research and since 2015 as a professor of Nutrition and Cardiovascular Diseases. Her research focuses on the role of nutrition and lifestyle in the prevention and treatment of cardiometabolic disorders and their risk factors. Part of her research is the so-called Alpha Omega Cohort, a long-term study of nearly five thousand heart patients, of which Geleijnse is the project leader. In addition, she participates in various projects in the field of sustainable, healthy food. Marianne Geleijnse has 280 scientific articles to her name.

From Biomedical Sciences to Epidemiology

The Biomedical study at Leiden University focused on molecular aspects of health, such as cellular processes and DNA. A small part of the study was related to public health and epidemiology. During her studies, she developed a special interest in this epidemiological approach, because it felt like she could have more impact by tackling problems on a large scale, which feels closer to society. "I like to identify risk factors by looking at epidemiological data and to puzzle with good reasoning. However, I am very interested in fundamental science, too. It is important to understand both the underlying molecular mechanisms and the ultimate disease outcomes. By combining epidemiological with physiological and molecular data, you will get the bigger picture and a better understanding of causal pathways."

Dutch Health Council

Half of the week, Marianne works at the Dutch Health Council in The Hague. The Health Council is an independent scientific advisory body. Its task is to provide solicited and unsolicited advice to the government and parliament in the field of public health and healthcare. Nutrition is one of the focus areas. Advice by the Health Council is mainly addressed to the Ministry of Health, Welfare and Sport, but also to other ministries such as Agriculture, Nature and Food Quality, and Social Affairs and Employment. Other organizations, such as the Voedingscentrum, implement the recommendations. Marianne has been familiar with the Health Council for a longer period of time: she was involved in the development of the Richtlijnen Goede Voeding 2015 as a member of the Standing Committee on Nutrition. The appointment as vice-president of the Health Council is for a period of four years. Besides this, she still works as professor of Nutrition and Cardiovascular Diseases at the Division of Human Nutrition and Health.

Educational career:

1985-1991	Bsc and Msc in Biomedical Sciences at Leiden University
1992-1996	PhD fellow in Epidemiology at Erasmus University Rotterdam
1994-1995	Msc in Epidemiology at Netherlands Institute for Health Science
1996-1999	Junior Postdocteral fellow at Erasmus University Rotterdam

Career at Human Nutrition Division at WUR

1999-2006	Senior Postdoctoral Fellow
2006-2010	Assistant Professor and Coordinator of the Alpha Omega Trial
2010-2015	Associate Professor
2015-now	Principal investigator of the Alpha Omega Cohort
2015-now	Professor in Nutrition and Cardiovascular Disease at Division of Human nutrition

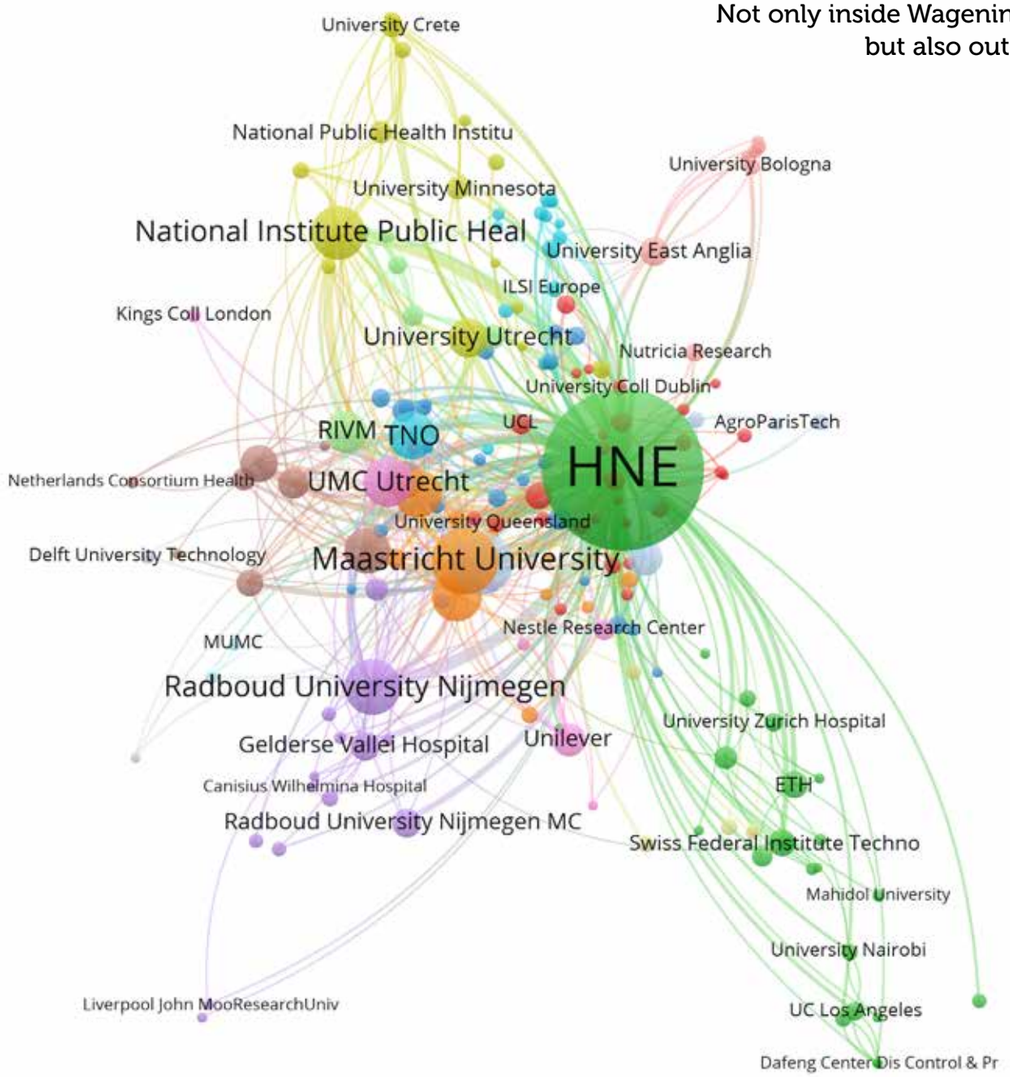
Career outside of WUR:

2008-now	Senior Scientist at TI Food and Nutrition
2010-2013	Chairperson of the Dutch Academy of Nutritional Sciences
2013-2016	Chairperson of the Assessment Committee of the Dutch Epidemiological Society
2015-2017	Co-director of the European Nutrition Leadership Platform Essentials Program
2018-now	Vice President of the Health Council of The Netherlands

This is a text assembled from multiple former published interviews.
Original full texts can be found at:
• bit.ly/2lY4606 • bit.ly/2mdds8q •bit.ly/2kO0rSw (2017-2018, 3)

Network and partners

The division has a broad network.
Not only inside Wageningen,
but also outside!








The food old days





















Female professors trained in Nutrition & Health in Wageningen **inspiring examples**

Female professors are still quite rare in the Netherlands: the current proportion is only 19.3%, while more than 50% of the academic students are female.
Also in the Division of Human Nutrition and Health it took a while before we had female professors. Wija van Staveren was appointed as special (endowed) professor in 1988. It took until 2005 until the next female professor was appointed, Lisette de Groot, and the first female chair holders were only appointed 10 years later (Ellen Kampman and Edith Feskens).

That is why we are very proud of our own female alumni who obtained professorships elsewhere. We interviewed sixteen women who graduated from Nutrition & Health in Wageningen and were recognized for their talent and expertise by other universities. We asked them what they learned in Wageningen. We also wondered whether a lack of female professors was an issue in their own university and what actions were taken to increase the numbers. Finally, we asked them 'What would be your advice to our female students?".

Name	Appointment as professsor	Alumna
Ilja Arts	*Molecular Epidemiology of Chronic Diseases*, Maastricht University (2013)	1988 Start BSc 1994 MSc, 2001 PhD
Matty Weijenberg	*Molecular Epidemiology of Cancer*, Maastricht University (2013)	1986 start BSc 1992 MSc, 1996 PhD
Monique Verschuren	*Healthy Vascular Ageing in Public Health Perspective*, at the Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht (2014)	1979 Start BSc 1995 PhD
Yvonne T. van der Schouw	*Chronic Disease Epidemiology*, at the Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht (2008)	1982 Start BSc 1988 MSc
Riekie de Vet	*Clinimetrics*, VU Amsterdam (2000)	1974 Start BSc
Marjanka Schmidt	*Genetic epidemiology of cancer, especially breast cancer*, Leiden University Medical Center (2019)	1992 Start BSc 1997 MSc, 2001 PhD
Joline WJ Beulens	*Lifestyle and cardiometabolic disease epidemiology*, VU Amsterdam (2015)	1999 Start MSc 2001 MSc, 2007 PhD
Maria Jansen	*Population Health*, Maastricht University (2014)	1974 Start BSc 1981 MSc
Marjolein Visser	*Healthy Aging*, VU Amsterdam (2007)	1984 Start BSc 1990 MSc, 1995 PhD
Mai Chin A Paw	*Social Medicine, in particular Child Health & Care*, VU Amsterdam (2014)	1999 PhD
Jantine Schuit	*Health, Behaviour and Society*, Tilburg university (2017) Previously: Health promotion and policy, VU Amsterdam (2007)	1997 PhD
Ellen Blaak	*Human Biology/Physiology of fat metabolism*, Maastricht University (2007)	1983 Start BSc 1989 MSc
Cornelia (Cock) M van Duijn	*Epidemiology*, University of Oxford (2018) Previously: Genetic Epidemiology, Erasmus MC (2001)	1980 start BSc 1987 MSc
Anne M. Stiggelbout	*Medical Decision Making*, Leiden University Medical Center (2007)	1980 Start BSc 1987 MSc
Floor van Leeuwen	*Cancer Epidemiology*, VUMC (1998)	1974 Start BSc 1981 MSc
Ingeborg Brouwer	*Nutrition for Healthy Living*, VU Amsterdam and EMGO+ (2014)	1987 Start BSc 1993 MSc, 1999 PhD Nijmegen (Katan)

Our question: What specific things did you learn in Wageningen?

Apart from the content on human nutrition, a strong methodological background is provided by our Wageningen education: 'good methods', 'epidemiology and research methodology', 'a solid background in epidemiology, physiology, nutrition, life style and health', and 'learning the importance of high quality "exposure" assessment' are examples of the remarks made in the interviews.
In general, Wageningen provided 'a broad view' and, more specifically, 'interdisciplinary thinking', 'multidisciplinary collaboration', 'to consider a question or problem from several angles and disciplines' and 'how much fun and how interesting multi- and interdisciplinary research is - and how often that is where the real innovations occur'. (Actually, this reflects the current educational goals in Wageningen and shows that this is already in our DNA for a long time). 'To think globally and act locally, interdependency of problems, conceptual ability and learning to think analytically' was the overall summary of Maria Jansen.

Extracurricular activities have been important aspect of the training in Wageningen: chairing meetings, management, strategic thinking as mentioned by Floor van Leeuwen, and board activities such as WSKOV and CAID by Anne Stiggelbout. However, a typical Wageningen aspect already from the early days, were the internships: 'these placement periods sparked my interest for conducting science, something I could not have imagined during most of my time following classes at University. These opportunities were therefore important for my career choice' indicated Matty Weijenberg. Matty also benefited from writing a thesis and performing group work: 'I also remember several different teaching modes with opportunities for discussion and presentations - discussing scientific papers in groups, an individual written assignment to discuss a controversy in the literature to be defended in a one-on-one discussion with the professor, presentations during training sessions, etc. I think these were very important aspects of the program that shaped me as a scientist.' Riekie de Vet explicitly mentioned 'doing research projects in teams in the doctoral (now MSc, ed) phase'.
Mai Chin A Paw did her PhD at the division and also experienced how the face-to-face interaction with fellow students was valuable: 'Actively exchange knowledge with your colleagues: I remember I participated in many informal and voluntary group meetings where we critically discussed research protocols, planned analyses, to-be-submitted and already published papers with colleagues who were not involved in your project. I believe this is very educational, stimulating and inspiring'.

Finally, individual teachers were recognized for their inspiration. Marjolein Visser: 'Wija's enthusiasm for aging research and the great experience working with older persons in that project, made me decide to pursue a research career in aging. Up till today, I am still fascinated by the aging process, the biological heterogeneity between older persons of the exact same age, and never regretted my choice for scientific research'.

What can you say about the number of female professors at your university? And what could be solutions to increase this number?

MAASTRICHT:
Maastricht University ranks position 5 (24,4%) of 14 universities in the Netherlands. However, the university will not sit back and relax. More than half of the academic and administrative employees within Maastricht university are women. In the higher salary scales (scale 12 and higher) this is only a third and in the case of professors this is even slightly less than a quarter. Maastricht University has set up classes to prepare young talented scientists for a chair and train the skills needed for that chair. Besides, Maastricht University started in 2018 with the Female Empowerment Maastricht-University Network (FEM). The network aims to promote female leadership within the university in order to stimulate diversity. A UM-broad diversity officer has been appointed. During the coming years several workshops, lunches and a mentoring program will be organized. Flexible employment practices can help women to reconcile private (and children) and professional life. (from Maria Jansen)
The view from Matty Weijenberg and Ilja Arts: Early and mid-career (managerial) programs with inter-vision/peer-coaching is very useful, for both men and women. This facilitates the discussion and exchange about career paths and the choices people can make throughout their career. Such programs also provide role models among peers. The opportunities for men and women should be the same, and if the participation ratios for such programs deviate to a higher male participation, an extra impulse for female participation in such programs is crucial. If teams are not diverse, and that is not limited to gender, we are underutilizing the full potential of society. There is no quick fix, but I am convinced that the many efforts that are currently ongoing to correct this will be successful in the end.
Ellen Blaak mentioned 'In general, I think rules and duration for child leave can be improved for both females and males. The focus in science should be directed more towards quality of science and team work and not only on measures of individual performance'.

AMSTERDAM:
At the Vrije Universiteit Amsterdam, in 2017, 22% of the professors were female. This percentage is indeed higher than at Wageningen University, but lower than Nijmegen or Leiden. There is a strong wish to increase this percentage, but this seems to be a slow and difficult process. Creative solutions are being used to increase this number, for example though the Fenna Diemer-Lindeboom foundation, which is based on the legacy of a former female student and PhD student of the Vrije Universiteit. The foundation supports the promotion of female associate professors to become full professor for 5 years at no extra costs for their department (from Marjolein Visser).

Riekie de Vet: In our research institute (former EMGO) there are many female professors, but we are an exception within VUmc. I think it is important for female students to have role models. Within LNVH there have been continuous discussion, but I am afraid there is no evidence for what works best…

According to Floor van Leeuwen it is 'Very important to increase the number of female professors as role model for young researchers. Female Professors have different management styles. Solutions: better mentoring, sufficient number of females in selection committees'. Mai Chin A Paw comments 'female professors will lead to more role models and more female professors in committees could tackle the default for nominating a male professor. Therefore, I support a preferential policy for female professors'.
Marjanka Schmidt: The Netherlands Cancer Institute has given special attention to the recruitment of female group leaders and the appointment of female professors over the last years. The still low rate of female professors is a problem indeed and a multifaceted issue, for which there is not one solution.

TILBURG:
Jantine Schuit is currently Dean of the faculty Social and Behavioral Sciences and explains their policy: Also at Tilburg university the number of female professors is low. In my faculty, however, we have a significant number of female associate professors, so we expect a shift in the coming years. At Tilburg University we have a few initiatives to stimulate the number of female professors.

- Dedicated positions for female professors
- More women in advisory boards for professor positions
- Coaching/mentorship for talented female scientist
- Stimulating positioning of women in key positions
- Networking and discussion groups

UTRECHT
Yvonne van der Schouw and Monique Verschuren about the current situation at Utrecht University and the specific actions taken recently: In Utrecht, the percentage female professors has increased from 20.8% in 2014 to 24.6% in 2017, so we almost reached the goal of 25% in 2020. Compared to other universities, Utrecht is doing pretty well, and expressed in persons the UMC Utrecht does even better, with 27.2% female professors. This shows that for the UU and the UMCU diversity is a serious issue. In my view (YvdS), it is important to have a good share of female professors, for several reasons. To name a few: diverse teams take better decisions, it is good for the atmosphere to have mixed teams, and students need role models. In 2017, Utrecht University celebrated the Johanna Westerdijk Anniversary, to commemorate the fact that it was 100 years ago that the first female professor was appointed. In that year, the appointment of female professors was stimulated and for the first time more female than male professors were appointed.

LEIDEN:
According to Anne Stiggelbout the low number of female professors is more a problem at the LUMC than at the University (even though they have one of the highest rankings, the percentage is still under 30% in Leiden). She recommends: 'Quota! I used to be opposed but not anymore. The problem is so tenacious, and the culture is so male dominated, that it is hard for females to truly belong'.

General NL and UK:
Cornelia van Duijn from Oxford: 'the Nuffield Department of Population Health just received its Athena Swan Silver Award, which is a Charter established and managed by the UK Equality Challenge Unit. I personally never experienced problems up until the full professor level. The next level up, I did hit the old boys' network in the Netherlands. I became part of the Topvrouwen.nl network.
It is not only a Wageningen problem – not so long ago, only 2 of the 30 appointed Chief Executive Officers were women – this cannot be right! Not much better in the government: Mark Rutte bluntly expressed that he opted for the best persons instead of 50% female. As Neelie Smit pointed out at a meeting Topvrouwen.nl network, for goodness sake: any idiot can see that these men are not the best and there are certainly better women around.
Just penalize institutions that are failing: cut down support of a failing university: how difficult can it be? Also, force a prime minister to justify himself in parliament'.

What can you advise the current MSc students?

Matty Weijenberg:
Keep pursuing what interests you most. It will be easy to work hard on what you find very interesting. The energy you put into it will also fuel you with new energy and this will make the difference. And don't worry too much if this also means that you will make a major switch somewhere during your career. If you really want something: go for it. Many home/work balance issues are solvable if you really want to solve them.

Mai Chin a Pauw:
Do what you really like and are interested in because life is not about the destination but about the journey. Express and follow your ambitions.

Anne Stiggelbout:
F* that uncertainty, be brave, go against your modesty and fears…

Riekie de Vet:
For those who want to become a researcher: Try to get much experience with the process of scientific research.. Enjoy your study!

Cornelia van Duijn:
Follow your talent, you never reach the top by doing something that others can do better; Do what you like to do, otherwise you never can invest the time in your work to reach the top; Follow your dream: the sky is the limit.

Ellen Blaak:
If you have a drive for scientific research, just go for it and believe in it.

Jantine Schuit:
Choose a career that fits your personality and capabilities.

Joline Beulens:
Go outside your comfort zone; that's where the magic happens.

Monique Verschuren:
Don't be too modest about your skills and qualities. When speaking to applicants for new positions, I always experience that women are more modest about their achievements than men. So don't be shy!

Maria Jansen:
Be ambitious! Discuss diversity topics. Prepare yourself in combining private and professional life. Set up mentoring groups within the department in which a female professor inspires students to pursue ambitious scientific careers.

Marjanka Schmidt:
Strive to do what you enjoy and believe in. Be ambitious and at the same time realistic in what you can achieve. Remember this does not always mean it is easy, sometimes you need to push or stand up for your ideas, this is all part of the game (and fun).

Floor van Leeuwen:
It IS possible to combine a research career with being a GREAT parent! You can do it if you have a stimulating partner and healthy kids. Don't reduce working hours to easily and certainly not just because your social environment expects you to spend a day at home.

Yvonne van der Schouw:
Do not think anything is impossible.

Marjolein Visser:
For any choice you make, such a selecting an optional course or where to go for your internship, always pick the option that you feel most enthusiastic about. Any other considerations, such as whether it is good for your career or the teacher is very good, are of lesser importance. If you are enthusiastic, it will be easier for you to become fascinated and you will likely work harder and achieve more, and because of this, ultimately, you will get higher grades or your internship supervisor will hire you after graduation. I have always made, and still make, important choices based on this criterion, and it never failed me.

Ilja Arts:
Try to find out what you really enjoy doing and pursue that, even if it may seem unusual at the start. My research interests never really fitted within one discipline and sometimes that was challenging. With the increasing recognition of the importance of interdisciplinary research my unusual combination of expertise is all of a sudden becoming a great asset.

Ingeborg Brouwer:
You have gained a lot of valuable knowledge during your study. Be not afraid to share this knowledge and use it to make the world a better place. Even if you feel that you cannot contribute much, together we can make the difference!

Final words

By Edith Feskens

The final words of this special magazine are simple: ***Thank you!***

Thank you, first to the giants on whose shoulders we are currently standing. We would not have celebrated our 50th Anniversary – our GOLD status – if the foundations were not so well and solidly laid by the staff and students during the first decades. Professor Jo Hautvast led this building-brigade consisting of dedicated scientific and support staff, and many BSc, MSc and PhD students. You have met several of them in this magazine.

And we for sure remember Jo's motto of 'Peaceful infiltration'. Many of us have taken up this challenge, so now our alumni can be found all around the globe in various positions fitting their interest, talent and specialization.

The 25th anniversary was celebrated in 1994. On this occasion a very nice Anniversary Book was presented (in Dutch) entitled 'Van de grond naar de mond'.

This booklet gave a very broad overview of the growth and development of the department Human Nutrition, its education track, and the student association Di-Et-Tri. The current Anniversary Magazine is meant as a follow-up, with adaptations similar to what we see e.g. in our classrooms: less words, more images. And of course it contains information on more recent highlights.

An important milestone was the merging of the Department of Human Nutrition with the Department of Epidemiology into the Division of Human Nutrition, in 1997. This laid the foundation of the Division of Human Nutrition and Health as we are now. At the start Frans Kok chaired the Division. Later, the Division expanded and new chair groups were introduced: Nutrition Metabolism and Genomics with Michael Muller in 2000, Nutritional Epidemiology and Public Health with Pieter van 't Veer in 2002, Nutrition and Pharmacology with Renger Witkamp in 2006, and Sensory Science and Eating behavior with Kees de Graaf in 2009. Currently we work under the name Division of Human Nutrition and Health (HNH) and have five chair holders, two personal professors, four special professors, one additional professor, twelve staff members in tenure track, and ten regular scientific staff members. Supporting staff with permanent contracts amount to ~20 fte. This shows the enormous growth of the Division since its establishment 50 years ago, and I want to express our **sincere thanks** to all who have made this development possible.

However, growth cannot occur without some growing pains every now and then. Recently a reorganization took place, which was necessary to get into a better financial position. After some reshuffling we now consist of five equally-sized chair groups. But this reformation took a lot of effort, and therefore a big **'thank you'** to the current and recent staff and students is appropriate. We had to let people go, and had to make changes in (the focus of) some chair groups. This is definitely a period which showed how close, collegial and loyal we are to each other (and we should be proud of that!), but it is also a period we for sure do not want to occur again. A special word of **thanks** to Kees de Graaf, who chaired the Division from 2015 to 2019 and was confronted with the challenge to lead this process.

I have no doubt in my mind that we will arrive at HNH75 and HNH100 safely. Although for example scholars in the Netherlands doubt whether the universities will make it through 2040 ('Haalt the university 2040?' / 'Will the universities still exist in 2040?' by Bert van der Zwaan) and the academic education will undoubtedly change and adapt: HNH will and should stay. The importance of nutrition, and the link we provide between the quality of the food and sustainability of the food system on one hand with the impact on health and disease on the other hand, is unique. Nutrition is key to at least 6 of the 17 UN Sustainable Development Goals, not only for Zero Hunger, and as such we know there is still much to do, to investigate, and to teach. The Division of Human Nutrition and Health is currently a unique set of chair groups (cluster) in the WU-setting, as we not only have a joint strategy and common support staff, but also, uniquely indeed, one shared budget. As such we are an example of what one at WUR would call a robust group, and we feel we are fit for the next 50 years. Our current students and young staff will be the ones organizing and celebrating HNH75: we are already looking forward to it!

This magazine is part of our set of activities commemorating HNH50: the scientific symposium on October 18, the alumni day on October 19, and the Dinner Game organized summer-fall 2019 to get everybody of the Division in the right festive spirit and ending with a final challenge during our employee party on night of the 18th.

The program of the scientific symposium was compiled by Kees de Graaf, Sander Kersten, Ellen Kampman, Lisette de Groot, and Sanne Boesvelt. We not only have a great scientific line-up, but it includes pitches of alumni and students showing their promise for the future. A milestone is the presence of the State Secretary of Health, Welfare and Sport, Mr. Paul Blokhuis. We will provide him with our view on the National Prevention Agreement ('Nationale Preventie Akkoord') and what we can contribute to achieve sustainable diet for health.

Anne van de Wiel, Nicole de Roos and Eva Ketel worked on the program of the Alumni day. Gea Brussen and Jasmijn Mater provided organizational and secretarial support, and Els Siebelink was responsible for the catering, of course an important item for a department of nutrition. Adrienne Cavelaars lend a hand in all activities and let us not forget the secret jury of the departmental 'Dinner Game': I do not know who they are, but on behalf of all staff I can say: we are impressed by the fun annex difficulty of the game, and no doubt this game will be a highlight in the HNH100 magazine in 2069.

So, to all who contributed to HNH50 in some way or another, **thank you** all for organizing the events and spending your time and energy so generously to make HNH50 an unforgettable experience.

And **final thank** you to my fellow editors and www.rootcase.nl: although we were mostly connected through email and internet because of the holiday season, we have designed a memorable Anniversary Magazine, and I hope our readers will think so as well.

Thank you for your interest in our 50th anniversary and this magazine, and hope to see you all at our next anniversary!

Edith Feskens


HELIX