



National Consultative Committee
for Nutrition and Dietetics

National Transcript

2010 -2017



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Introduction

This National Transcript is the property of the four Universities of Applied Sciences for Nutrition and Dietetics in the Netherlands. This National Transcript is made to support the process of diploma recognition by dietitians abroad. Every student, who graduates from a Dutch bachelor programme in Nutrition and Dietetics, will receive this National Transcript.

National Consultative Committee for Nutrition and Dietetics

This National Transcript is written under the authority of the National Consultative Committee for Nutrition and Dietetics (het Landelijk Overleg Opleidingen Voeding en Diëtetiek: LOOVD). This Committee is a cooperative body of the four Universities of Applied Sciences for Nutrition and Dietetics in the Netherlands. This committee meets 6 times a year and has at least 2 meetings a year with the Dutch Association of Dietitians.

Duration

This edition of the National Transcript is in force for graduates of the academic year 2009-2010 to academic year 2016-2017.

Paragraph A describes the education undertaken in the Bachelor of Nutrition and Dietetics. Paragraph B describes the competences, by describing the roles and professional products, which are the starting point of the education in Nutrition and Dietetics. The body of knowledge and skills can be found in paragraph C. The relationship between the competences and the body of knowledge (subjects) is illustrated.



A. The Bachelor of Nutrition and Dietetics

Nutrition and Dietetics is a bachelor programme in higher professional education (hpe) - that is offered by four 'Hogescholen' (Universities of Applied Sciences) in the Netherlands: De Haagse Hogeschool, Hanzehogeschool Groningen, Hogeschool van Amsterdam, Hogeschool van Arnhem en Nijmegen.

The study programme belongs to the domain of the 'Bachelor of Health'.

The Nutrition and Dietetics programme is based on regulations provided by the Ministry of Education, Culture and Science and by the Ministry of Health, Welfare and Sports. The quality assurance for the Ministry of Health, Welfare and Sports is regulated under the terms of the General Directive (2005/36-EC). The quality assurance for the Ministry of Education, Culture and Science is regulated by accreditation.

The Nutrition and Dietetics programme adheres to the description of the professional profile of the Dutch Association of Dietitians. The professional profile describes a general nutritionist /dietitian, who is trained and active in all health care settings, as well as in the commercial sector, who is able to translate science to personal action, is enterprising and contributes to the development of his/her actions and the profession.

The bachelor programme in Nutrition and Dietetics is designed on the basis of international and national agreements and positioned with regard to:

- **European Bachelor Master structure**

The Higher Education Qualification Framework in the Netherlands (2008) describes the qualifications and demonstrable learning outcomes for three levels of qualification in such a way that they can be understood in the international context and furthermore defines the inter-relationships between the qualifications. A description of Nutrition and Dietetic education is given in the table below.

Table: Description of the Nutrition and Dietetic education

Three exit levels	Years of study	Title	Type of institution
First cycle	4 years (240 EC)	Bachelor / general nutritionist / dietitian	University of Applied Sciences
Second Cycle	1 to 2 years (60-120 EC)	Professional Master	University of Applied Sciences
		Research oriented Master	Research Universities
Third Cycle	Normally 4 years, credits not indicated	Doctorate (PhD)	Research Universities

- **Professional profile, competence profile and European statements**

A professional profile for dietetics was stipulated in 2003 by the Netherlands Association of Dietitians (NVD). In 2004 a National Competency Profile was adopted by the four Universities of Applied Sciences. This national competency profile describes the different roles of the nutritionist / dietitian in relation to the competences and activities described in the professional profile. This document also describes the relation between the national competences and the Dublin descriptors. The "Competency Profile for Nutrition and Dietetics Courses" can be found on the Netherlands Association of Universities of Applied Sciences website, www.hbo-raad.nl, under competences of health care; competences B of Health. Most recent version: September 2004.

In 2005, members of the European Federation of the Associations of Dietitians (EFAD) adopted the **European Academic and Practitioner Standards for Dietetics** for the education and training of dietitians in Europe. The statement describes the minimum standard required for qualification as a dietitian in the member countries of EFAD.

The European Dietetic Competences and their Performance Indicators (www.efad.org/everyone/1117/5/0/32) were adopted by EFAD in 2009, and describe the minimum level, or baseline, of knowledge, skills, understanding and competences of a dietitian at the point of qualification in Europe. The Dutch National competence profile is in accordance with the European Dietetic Competences.

Responsibility of the individual University of Applied Sciences

The content of the courses as described here indicates what is present in a generic sense. In the design, the contents of courses can differ slightly and students can make individual choices.

B. Professional competences: roles and professional products

The Nutrition and Dietetic Professional Competences have been categorised into 6 professional roles. The nutritionist/dietitian as a:

- Practitioner
- Advisor
- Public Information officer
- Nutrition manager
- Entrepreneur
- Researcher

In the “Competency Profile for the study programme Nutrition and Dietetics”, competences are the capacities which enable the professional practitioner to fulfil a professional task in the context of practising a profession. Competences are not observable as such, but they ultimately lead to a professional product. Competences are apparent from the work done. In that sense, professional products form the core of the competences. Several professional products can apply to each professional role, where the corresponding competences can be observed and utilized.

Role: Practitioner

The treatment plan is the central professional product for the nutritionist/dietitian as a practitioner. It forms the basis on which other (sub)products are developed. However, to do justice to the importance and complexity of the role of the nutritionist/dietitian as a practitioner, not one but seven professional products are described. The sequential order of methodical practice is maintained. However ‘sequential order’ does not mean that the phases in the work process are separated from each other. Treatment is a process in which the steps are repeated.

- **Dietetic diagnoses**

The nutritionist/dietitian makes a dietetic diagnosis on the basis of analysis and interpretation of data collected from the client.

- **Treatment plan**

On the basis of the dietetic diagnosis, the nutritionist/dietitian discusses with the client (if necessary after a collegial consultation) possible evidence-based methods of treatment and their consequences, and sets goals with the client.



- **Nutritional or dietary advice**

The nutritionist/dietitian translates nutritional or dietary advice into a food consumption regime according to currently accepted standards, scientific views and guidelines and gives information demonstrating sensitivity to the client's level of knowledge and cultural background.

- **Supervision / counselling**

The nutritionist/dietitian counsels the client to follow dietary advice in his/her living environment making use of communication and motivation techniques adapted to the client to bring about change in his/her behaviour or lifestyle.

- **Report / evaluation**

The nutritionist/dietitian evaluates treatment with the client, assesses its effectiveness and writes a report to the referring party.

- **Dietary care dossier**

In accordance with relevant legislation and professional codes, the nutritionist/dietitian records the client's data in a care file and secures this for accountability, quality improvement and possible research purposes.

- **Protocol / guideline**

In a collegial context, the nutritionist/dietitian makes an evidence-based design for the development or adaption of a protocol / guideline for the benefit of the treatment of a health problem in order to improve nutritional and dietary care.

Role: Advisor

Nutritional advice has to do with the importance of a healthy and responsible diet/lifestyle by stimulating health awareness. Consequently, nutritional advice is always about choices, roles and effects, in which nutritional arguments are the underlying theme. Today, there is an increasing desire for information about food products with a 'health claim'. The result of this development is that nutritionists/dietitians are increasingly being employed by the food industry and by caterers. Companies have an increasing demand for, and attach much more importance to, nutritional and dietary expertise. Thus, nutritionists/dietitians must have a broad knowledge of nutrition, for example legislation and regulations for labelling, health claims, nutritional declarations, marketing, menus, recipes, hygiene (HACCP) and diets. In addition, the nutritionist/dietitian is expected to be a strong and effective communicator; to have a proactive attitude and clear opinions and to be able to deal with resistance.

- **Nutritional advice**

With the help of well-defined research methodology and contemporary scientific findings, the nutritionist/dietitian draws up a nutritional analysis and translates this into nutritional advice to the commissioning organisation.

- **Quality plan / Nutritional policy plan**

The nutritionist/dietitian draws up a quality plan within the scope of the nutritional policy of the commissioning organisation.

Role: Information officer

The value of the role of the nutritionist/dietitian in prevention and for specific customer groups such as professional sportsmen/sportswomen, babies, toddlers and primary school pupils is increasingly appreciated and made use of. In the field of public health nutrition, the nutritionist/dietitian works together with schools, GPs and municipal institutions. Either on his/her own initiative or at the request of third parties, the nutritionist/dietitian designs and explains the underlying reasoning/benefits of a public information plan in improving the health, nutrition, lifestyle and well-being of a specific target group.

- Information plan

Using the latest professional and scientific research, the nutritionist-dietitian designs and substantiates an information plan (public health plan) to improve the welfare of a specific target group in the field of nutrition, implements this plan (or coordinates its implementation), and handles its evaluation.

Role: Nutrition manager

The role of nutrition manager refers to a position in which the nutritionist/dietitian in an organisation manages staff and coordinates work processes or a position in which the initiation and maintenance of customer relations is his/her responsibility. This broad role is performed from a nutritional and commercial perspective in both profit and non-profit organisations. In a profit organisation, this could be the function of product manager – managing the work performed in the marketing and manufacture of food products – or the regional manager for specific food products. In a non-profit organisation, the nutrition manager role could be Head of Dietetics, where at a policy level, ideas are proposed and advice is given on the practical execution of ideas and strategies. The role of nutrition manager, in relation to a professional product quality plan, can include a position within Quality Control in the food industry. It could also be a position in companies who advise on food hygiene.

- Marketing plan

The nutritionist/dietitian draws up a marketing plan for a certain product-market combination, on the basis of an internal and external analysis carried out with the help of SWOT- methodology (strengths, weaknesses, opportunities and threats analysis). This can also be applied to services.



- **Quality plan**

The nutritionist/dietitian produces a quality plan within the scope of food safety, for his/her own or another organisation, in accordance with internationally drawn up requirements and procedures (e.g. HACCP/ISO, GMP).

Role: Entrepreneur

The nutritionist/dietitian can work independently, as a freelancer or entrepreneur by starting their own company. The services provided reflect the particular expertise in nutrition and dietetics and targeted customer orientation. The company can focus, with various products and services, on a number of customer and market niches. The independent entrepreneurship approach requires self-initiative, ambition and a commercial attitude. The initiation and implementation of new ideas/strategies and the effective maintenance of contacts are important skills requiring a proactive entrepreneurial spirit. On the other hand, the employed salaried nutritionist/dietitian who is managing a department and its budget can also be seen as an entrepreneur.

- **Business plan**

As an independent entrepreneur, the nutritionist/dietitian produces a business plan on the basis of research into nutritional, consumer and health trends in the external environment.

- **Department plan / activity plan**

The nutritionist/dietitian implements and coordinates strategic plans, by steering the internal processes of a department in such a way that the objectives are realised.



Role: Researcher

The nutritionist/dietitian advises on the planning and implementation of nutrition-related research; participates in nutrition-related consumer research; contributes to the collection and processing of data, recording of findings, conclusions and recommendations in a research report. The nutritionist/dietitian participates primarily from the practical professional perspective of a nutritionist or dietitian. Activities include the critical assessment of nutrition-related research protocols and research design, independent development of a research protocol, the design of measuring instruments, literature research and the collection/monitoring of data. This professional role of researcher comes into play with the other professional roles of the nutritionist/dietitian.

- **Research set-up**

The nutritionist/dietitian advises on the set-up and realisation of nutrition-related research and the protocols to be used.

- **Research report**

The nutritionist/dietitian initiates research, based upon the data in client files, in the field of nutrition in relation to lifestyle and health, to contribute to professional practice and knowledge. The nutritionist/dietitian participates in nutrition-related research, collects and processes data and records findings, conclusions and recommendations in a report or paper for publication.

C. Body of knowledge and skills

This paragraph gives an overview of the body of knowledge and skills in the programme of Nutrition and Dietetics. Before describing the subjects belonging to the body of knowledge, a description of the relation between the professional roles and the subjects of knowledge and skills will be given.

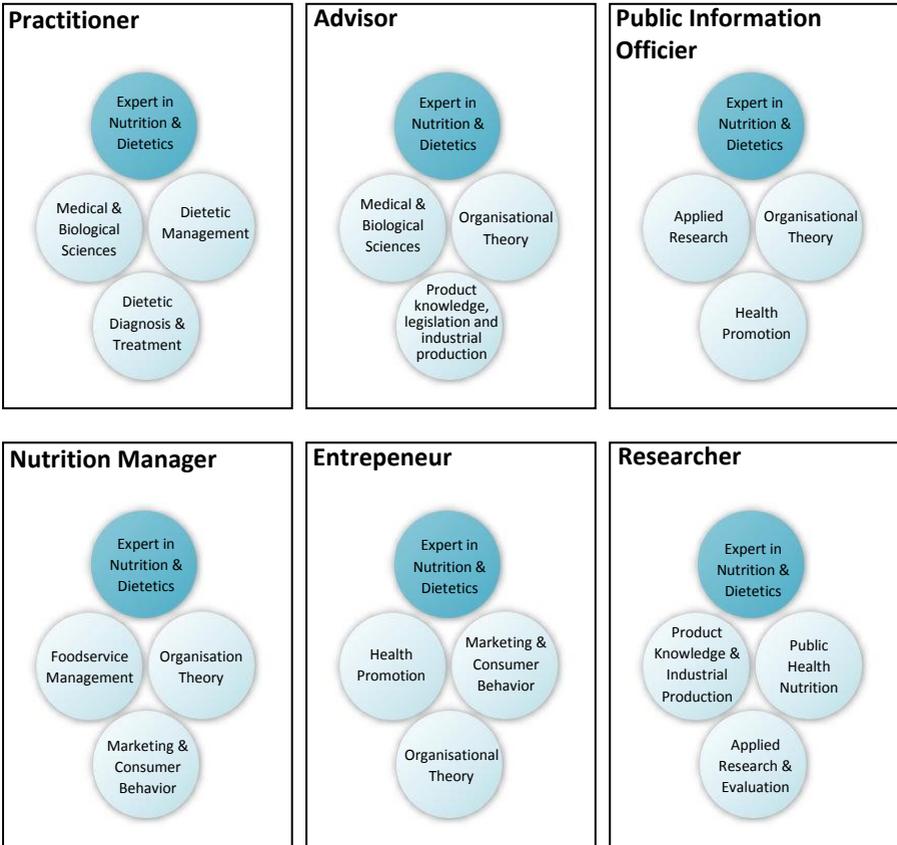
The six professional roles of the nutritionist / dietitian and their relationship to knowledge and skills.

The knowledge and skills of a nutritionist/ dietitian form the complete package of competences that a professional must attain to be successful in practise. In the previous paragraph B, the roles of practitioner, advisor, public information officer, nutrition manager, entrepreneur and researcher are explained. The subjects are explained in this paragraph C. To give a clear understanding of the knowledge and skills of each professional role, the subjects have been divided into different, more specific, groups. These different groups are:

- Expert knowledge in Nutrition & Dietetics
 - *Nutrition and metabolism*
 - *Food intake analysis and public health nutrition*
 - *Product knowledge, legislation and industrial production*
 - *Anatomy, Physiology, Pathology, Biochemistry, Microbiology, Sociology, Psychology*
 - *Applied research*
 - *ICT*
 - *English*
- Dietetic diagnosis and treatment
- Dietetic management
- Organisational theory
- Health promotion
- Marketing and consumer behaviour
- Dietetic consultation

Each graduate Bachelor in Nutrition and Dietetics has the complete package of knowledge and skills, although there are different emphases in the professional roles. This is illustrated by the following figures.

Figure: The roles in relation to the subjects



Each graduate Bachelor in Nutrition and Dietetics has the complete package of knowledge and skills, although there are different accents in the different professional roles

Subjects

The bachelor programme in Nutrition and Dietetics is awarded 240 European Credits (240 ECTS, 6720 hours). The content of the body of knowledge and skills is categorized in subjects. The subjects are divided into three areas:

Nutrition and dietetics	96 ECTS (2688 hours)
Medical and biological sciences	72 ECTS (2016hours)
Social sciences	72 ECTS (2016 hours)
Total:	240 ECTS (6720 hours)

The content and size of the subjects are outlined below. Every subject is allocated a number of hours, 1 ECTS is 28 hours. In general, the subjects are composed of theory and practical skills. It is possible that the content is slightly different in each University of Applied Sciences.

Nutrition and Dietetics

Subject: Nutrition and metabolism	ECTS:22	Hours: 616
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Understanding of macro- and micronutrients, vitamins and minerals related to ingestion, absorption, transport, metabolism, interaction, storage and excretion. Nutrition throughout the lifespan, nutrition of special groups, like sportsmen, different cultures and nutrition patterns, like the Turkish, Moroccan, Surinamese, European and third world countries. Knowledge of alternative nutrition systems and philosophies.

Preparing standard recipes and modified recipes for therapeutic diets, nutritional value of foodstuffs. Reading and understanding English research literature in nutrition and dietetics.

Subject: Food intake analyses and public health Nutrition	ECTS:13	Hours: 364
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Food and eating within society including food consumption trends, factors influencing attitudes to food and health, food supply and food policy, cultural and economic issues and food habits and traditions.

Exploring methodologies available for collecting and analysing dietary data and interpretation of this data. Using international dietary guidelines, food composition tables and nutrition education models of different countries. Principles of dietary and menu planning for individuals, groups and in institutional settings. Working with recommended daily amounts of nutrients. Planning, devising and reviewing nutritional programmes for individuals and groups. Applying nutritional information in development, design and use of written and visual materials in nutritional science.

**Subject: Product knowledge, legislation
industrial production**

ECTS: 19

Hours: 532

Knowledge of commonly consumed foods, convenience foods, functional foods, diet products and products for groups with special food demands. Methods of food production and food preservation. Food labelling regulations and national and international legislation. Types and uses of food additives. Basic knowledge of legislation and procedures concerning food hygiene and handling. (Like HACCP) Recipe development, product development, sensory analyses.

Subject: Dietetic management

ECTS:11

Hours: 308

Roles and responsibilities of the dietitian within the Dutch healthcare system and as part of the health care team. Ethics and competence standards. Working according to guidelines. Designing and justifying guidelines. Dietetic expenses in relation to insurances. Dietetic management of disease. Medical files: working with electronic files, informing and referring. Use of basic software packages for patient registration programs and nutritional analysis programs to analyse food intake.

Subject: Dietetic diagnosis and treatment

ECTS:31

Hours: 868

Theory and practice of nutritional assessment. The use and interpretation of anthropometric, biochemical and dietary data. Clinical care and roles and responsibilities of the dietitian in nutritional assessment, dietary diagnosis and nutrition care planning, along with concepts of clinical decision making and evidence-based practice. Interventions for individuals with medical conditions, such as hypertension, diabetes, obesity, cardiovascular disease, oncology, renal disease, intensive care, coeliac disease, liver disease, dysphagia, total parenteral and enteral nutrition, burns, pressure scores, pulmonary diseases, eating disorders and paediatrics. Food allergy and intolerance. Practice of communication and counselling skills to perform dietetic diagnosis, coaching clients and motivational interviewing. The role and skills in interviewing and history taking, counselling, conflict resolution, group education and use of media. Preparing standard recipes and modified recipes for therapeutic diets, nutritional value. Anthropometric assessments of individuals based on body composition.

Medical and biological sciences

Subject: Anatomy	ECTS:17	Hours: 476
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Anatomical terminology and cell biology. Structure and function of the human body: cutaneous, skeletal, muscular, nervous and endocrine systems.

Subject: Physiology	ECTS:15	Hours: 420
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Function of the human body. The physiology of the cardiovascular, respiratory, digestive, renal and reproductive systems. Regulation of hunger, appetite and satiety. Growth and development during the life cycle.

Subject: Pathology	ECTS:17	Hours: 476
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Understanding of the pathogenesis of various common diseases, like diabetes mellitus, types 1 and 2, cardiovascular diseases, hypercholesterolemia, heart failure, hypertension, stroke. Pulmonary disease like COPD, asthma, cystic fibrosis. Decubitus ulcers, burns. Overweight, obesity, metabolic syndrome, eating disorders. Illnesses of the gastro intestinal system. Oncology: catabolic state, clinical depletion. Food allergy and intolerance, food poisoning and infections.

Subject: Biochemistry	ECTS:14	Hours: 392
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Outline of structure and function of biological macromolecules, like proteins, carbohydrates, lipids and nucleic acids. The major metabolic and bio-energetic pathways within the cell. Regulation of water and inorganic ions: sodium-potassium pump, osmosis, urea. Diabetes: Hba1c, glycemic control.

Subject: Microbiology	ECTS:9	Hours: 252
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Knowledge of micro-organisms most commonly associated with infections of all groups of the population. The cultivation, enumeration and identification of micro-organisms. Knowledge of how to minimise the spread of infections.

Social Sciences

Subject: Sociology

ECTS:7

Hours: 196

Organisation of the health care system in national and international context. Role of food and eating in a social context. Primary, secondary and tertiary prevention. Sociology of health and illness. The concept of socialisation. Insurance companies and reimbursement of diet costs. E-health.

Subject: Psychology

ECTS:12

Hours: 336

Insight into theories of human behaviour and effects of personality. Psychosocial and social determinants of health, models of health belief, health counselling, intervention mapping. Theories of dealing with illness and death in different cultural systems. Psychology related to the life cycle, developmental psychology, theories of learning. Group dynamics, theories of motivation, coping, fear, stress, depression and addiction.

Subject: Health promotion

ECTS:17

Hours: 476

Insight into health promotion and public health strategies to promote behavioural change
Theory of prevention and health promotion, behavioural change theories, working with health models. Analysing, designing, performing and evaluating nutrition and physical activity health programmes. Health education and promotion in different settings, such as schools and communities. Planning and organizing, setting goals and objectives. Developing lesson plans. Practice of presentation skills. Evaluation of educational programs.

Subject: Organisational theory

ECTS:10

Hours: 280

A range of topics relevant to the role of manager; organisational policy, strategic planning, marketing, finance, service evaluation, quality and safety issues, report, business plan, quality care plan (Plan Do Check Act cycles)

Subject: Marketing and consumer behaviour

ECTS:12

Hours: 336

Identification of marketing opportunities, market segmentation, targeting and positioning, product life cycle, new product development, marketing mix decisions. Psychological, social and cultural aspects of consumer behaviour, personality and emotion, trends and consumption patterns.



Subject: Applied research

ECTS:14

Hours: 392

Principles of research methodology as relevant for the profession. Basic research skills, such as statistical techniques, qualitative and quantitative research methodology. Use of basic packages for statistical analysis e.g. SPSS. Levels of evidence, literature search, PICO (patient, intervention, comparison, outcome) criteria.



Practice in the field

Students practice and apply theory and skills in the field of nutrition and dietetics in a work placement, a graduation project, and sometimes (partly) in a minor.

Workplacement

Through workplacements in the field, students are actually given the opportunity to practise and apply theory and professional skills. The workplacement is part of the last year of study.

Here the student practises and masters all the competences that are important in real life, while he/she is supervised by an experienced practitioner of Nutrition and Dietetics. The general guideline for the duration of the work placement is 30 ECTS (840 hours).

Graduation project

The graduation project forms part of the last year of study. It concerns a methodical approach at the desired final level of the Bachelor of Health. The graduation project is based on a problem in the field of Nutrition and Dietetics. Part of the graduation project includes research, methodology and literature study. The project is documented in a written paper or article and a verbal presentation. The duration of the graduation project is 30 ECTS (840 hours).

Minor

The minor is a part of the study where the student has a free choice of subject. Most students choose a minor or subject close to the profession, or to pursue personal interests, or to specialize in a certain field of the dietetic profession. The duration of the minor is 30 ECTS (840 hours).



Appendix 1. List of Universities of Applied Sciences

Hogeschool van Amsterdam

Opleiding Voeding en Diëtetiek
Dr. Meurerlaan 8
1067 SM Amsterdam
Tel: 020- 595 34 00

Hogeschool van Arnhem en Nijmegen

Opleiding Voeding en Diëtetiek
Kapittelweg 33
6525 EN Nijmegen
Tel- 024 353 11 11

De Haagse Hogeschool

Opleiding Voeding en Diëtetiek
Johanna Westerdijkplein 75
2521 EN Den Haag
Tel: 070-445 8380

Hanzehogeschool Groningen

Opleiding Voeding en Diëtetiek
Eyssoniusplein 18
9714 CE Groningen
Tel: 050 – 595 77 77



Appendix 2. List of working group and advisors

Working group

Annemarie Nijhof, Project Leader, Hogeschool van Arnhem en Nijmegen
Inge Audenaerde, De Haagse Hogeschool
Vivianne Ceelen, Hogeschool van Arnhem en Nijmegen
Anne Doornbos, Hogeschool van Amsterdam
Menso Havinga, Hanzehogeschool Groningen

Group advisors

Judith Liddell, Secretary General, European Federation of the Associations of Dietitians, DIETS Network Manager
Wineke Remijnse, Advisor of Quality, Dutch Association of Dietitians
Sue Perry, Deputy Head of Dietetics, Hull and East Yorkshire Hospitals NHS Trust, United Kingdom
Fiona Engeler, Registrar Accreditation, Recognition and Education Services, Australia