



THE EDUCATION AND WORK OF DIETITIANS (2004)

The following report on the Study of the Education and Work of Dietitians Around the World was presented at the XIVth International Congress of Dietetics by Mary-Ann Soerensen, ICDA Representative from the Danish Diet and Nutrition Association and Member of the ICDA Board of Directors.

During the 13th International Congress of Dietetics in Edinburgh, 2000, official delegates from the national dietetic association Members of ICDA agreed on the Mission statement for the International Confederation of Dietetic Associations (ICDA):

ICDA supports dietetic associations and their members, beyond national and regional boundaries, by achieving
. . . an integrated communications system
. . . an enhanced image for the profession
. . . increased awareness of standards of education, training and practice in dietetics

The ICDA Board of Directors decided that the first step in working towards increased awareness of standards of education, training

and practice in dietetics was to make information available. To be able to direct the course, one must know the present position.

In collaboration with the European Federation of the Associations of Dietitians (EFAD), a questionnaire, with thirteen (13) questions on basic education programmes, five (5) questions on further education programmes and nineteen (19) questions on the working environment, was sent out in 2002 to the thirty-seven (37) national dietetic associations who are members of ICDA or EFAD. Thirty-one (31) countries returned a completed questionnaire

The survey results reported here are limited to these thirty-one (31) countries and to the answers given by the national dietetic associations.

- Australia
- Austria
- Belgium
- Canada
- Chile
- Cyprus
- Denmark
- Finland
- France
- Germany
- Greece
- Hungary
- Iceland
- India
- Ireland
- Israel
- Italy
- Japan
- Luxembourg
- Netherlands
- New Zealand
- Norway
- South Africa
- Spain
- Sudan
- Sweden
- Switzerland
- Trinidad and Tobago
- Turkey
- United Kingdom
- USA



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Acknowledging the differences among countries, and as English is not the mother tongue of the vast majority of respondents, a glossary was provided so that the definitions of certain keywords and expressions would be understood in the same way. Still, interpretations varied and have influenced the responses, as will be pointed out as we look at the results.

As ICDA had previously adopted the 1980 EFAD (European Federation of the Associations of Dietitians), this definition was used in background information and the glossary.

Definition of Dietitian

- A dietitian is a person with a legally recognised qualification (in nutrition and dietetics) who applies the science of nutrition to the feeding and education of groups of people and individuals in health and disease



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All dietitians are translators of the science of nutrition, but the type of work undertaken by dietitians varies. In some countries the basic education for dietitians has special branches (e.g. administrative, clinical) and in other countries the education program is more general. Even among countries with similar education, different job opportunities exist.

The differences made it necessary to define three different areas of dietetic practice based on the focus of basic dietetic education:

Administrative Dietitian:

A dietitian with an education focused on food service management with responsibility for feeding of groups of people in health and disease in an institution or a community

Clinical Dietitian:

A dietitian with an education focused on clinical nutrition and dietetics with responsibility for disease prevention and treatment of individuals in an institution or a community

General Dietitian:

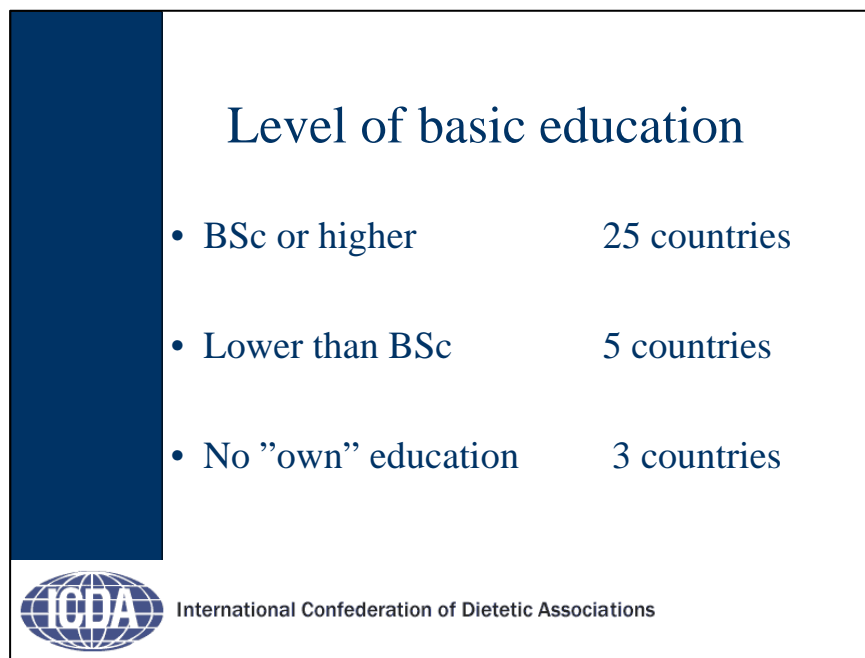
A dietitian with an education in clinical nutrition and dietetics and food service management with overall responsibilities for both aspects (clinical and food service) in an institution or a community

During our work with the survey results it was clear that there was some confusion about the terminology used, even though a glossary was provided. I can assure you that it is not easy to put

dietitians into boxes! There were lots of “buts...”, and “we don’t do...”, and “this does not apply” comments! Nonetheless, the results provide a snapshot of our profession on a global basis at this point in time.

Basic education for dietitians


The survey concentrated on the basic education, meaning the lowest level of education after which the title dietitian can be used. There is a small part of the survey concerning further (advanced) education.



Education systems vary among countries, and also within an individual country, from university to university. ***Twenty-seven (27) countries reported having some national requirements for their education programmes. The vast majority of countries provide basic education leading to a Bachelor degree*** (designated BSc on slides). Four countries

have two basic education programmes, one for clinical and another for administrative dietitians. In two of these countries the education programme for administrative dietitians does not lead to a Bachelor degree. Three countries (Cyprus, Iceland and Luxembourg) reported dietetic education programmes are not provided. These countries will not feature in the survey results for basic education.


Total length of the dietetic course



Range in length of education

- BSc 3-5 years
 - 3 years (10) 83-132 weeks
 - 4 years (12) 80-172 weeks
 - 5 years (5) 144-200 weeks

- Non-BSc 2-3 years (70-146 weeks)

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The total length of the dietetic programme varies between three and five years for the Bachelor degree programmes and between two to three years for the non-degree programmes. It was also noted that a three-year programme in some countries can consist of as many weeks or more weeks than a four-year programme in other countries, for example, Turkey offers a four-year programme of 118 weeks and Austria offers a three-year programme of 132 weeks.

The survey asked how many hours students were expected to study per week (including lectures, seminars, practical work, and private study), and results ranged from 20 to 60 hours a week (mid-point 40h). Some responses did not include private study hours. One country reported students are expected to study 60 hours per week, which, if I may say so, is a very high expectation!

Some countries include subjects not directly related to dietetics in the programme, for example, language, religion, or first aid. In some countries subjects such as physics or mathematics are included in the programme, while these subjects are required for admission to the programme in other countries. At any rate, we know it is not necessarily the number of years of study that determines the level of education.

Range in focus of education theoretical/practical		
<u>BSc</u>	<u>Theory</u>	<u>Practice</u>
3 years	77-121 weeks	4-51 weeks
4 years	84-156 weeks	4-40 weeks
5 years	144-198 weeks	0-44 weeks
<u>Non BSc</u>		
2 years	41-80 weeks	0-29 weeks
3 years	88-119 weeks	27-50 weeks



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Practical programme (practicum/internship)

All countries have practical programmes included in the training.

The practical programme can include:

- clinical dietetics, health promotion, primary health care
- practical catering (cooking)
- catering management

Practical training as a percentage of the total education requirement varies between 1.5% and 51%, with an average of 15-20%.

It appears that in most countries most of the practical training time is spent in clinical dietetics; even those countries that provide a general programme provide the majority of practical training in clinical dietetics. In the few countries that have a special programme for administrative dietitians, most of the practical training is in catering management.

Successful completion of the practical programme is obligatory in order to qualify as a dietitian in all countries.

The theoretical programme

The theoretical programme has been divided into 5 subgroups by subject:

- **Basic Sciences:** physics, chemistry, biochemistry and genetics, biology, physiology and histology, anatomy, mathematics, statistics, research methods, computer skills
- **Food and Nutrition Sciences:** nutrition, dietetics, medicine, food science, technology and analysis

microbiology, techniques of food preparation, sensory evaluation, nutritional assessment, food safety and food hygiene

- **Food Service Administration:** management, health care organisation, food planning and production, legislation, economics, equipment, purchasing, marketing
- **Nutrition Education and Community Nutrition:** health promotion, philosophy and ethics, sociology, psychology, teaching methods, communication, food culture, epidemiology, community services.
- **Miscellaneous**

Although it would be easier to understand the survey results if responses were provided as a percentage of the total study time, however countries replied in various ways to these questions. For example, in some responses the practical part of the education programme is included in the calculation and in others it is not. Within a country, the specific courses that make up a programme can be different from one university to the next, making it difficult to provide one general answer.

In both the Bachelor degree and non-degree programmes, the most important subject seems to be food and nutrition science followed by basic sciences, nutrition education, and community nutrition. Food service administration is a major part of education programmes for administrative dietitians.

Theoretical programme

Food and Nutrition Sciences	20-50%
Basic Sciences	10-38%
Nutrition Education and Community Nutrition	3-20%
Miscellaneous	0-22%



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In most countries a project/study report (2.3–40 weeks) using research methods is obligatory for successful completion of the basic education programme.

Proportion of dietitians in the population

The range of practising dietitians reported by 24 countries is 1,15 to 39,37 per 100.000 population; For countries that reported separate education for clinical and administrative dietitians, that is Norway, Denmark and Sweden, the number of practising clinical and administrative dietitians per 100,000 are reported separately in the following table.

Number of Practising Dietitians per 100.000 population

>1-<2	Finland, Sudan
2-5	Greece, Iceland, Ireland, Italy, Norway (clin.), South Africa, Sudan, Trinidad and Tobago
6-10	Cyprus, Denmark (clin), France, New Zealand, Sweden (clin), United Kingdom
11-15	Austria, Hungary, Israel, Luxembourg, Norway (adm.), Switzerland, USA
16-20	the Netherlands
21-25	Canada, Sweden (adm.)
>25	Denmark (adm.), Japan



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Further (advanced) education opportunities

Of the five countries that reported that basic dietetic education does not lead to a Bachelor degree, two offer further education leading to a Bachelor degree. In one of these two countries it is also possible to continue coursework leading to a major diploma, a Masters degree or a PhD. ***In all countries where basic education leads to a Bachelor degree, academic courses leading to a major diploma, a Masters degree or a PhD are available.***


Other types of further education courses (courses more than one month full-time or equivalent part-time studies) are available in

fifteen (15) countries. The length of courses varies between five weeks and four years. It is not possible to report which courses are part-time and which ones are full-time. Subjects studied are different aspects of clinical dietetics, health promotion, public health, health service management, food science & technology, economy, natural sciences, teaching methods, therapy & health care, health chief studies, food service management and environment. In six countries, updating courses are offered for those who have taken a career break; in one country an updating course is obligatory.

Further education

Non BSc (5 countries)

Upgrade to BSc	2 countries
Major diploma, MSc or PhD	1 country
<u>BSc</u>	
Major Diploma MSc or PhD	23 countries



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Where do dietitians work?

Results from this part of the survey are not very clear. We have considerable work yet to do in describing the variety of work settings for dietitians. The replies do suggest the ***most common work is in hospitals, nursing homes, health education, food industry, pharmaceutical companies, staff/school/military***

restaurants, catering industry, community advisors, and quality control.

Hospitals are a primary place of work for dietitians; we estimate more than 50% of dietitians work in hospitals. In some countries, Nursing Homes are a common place of employment; 10 countries did not report dietitians working in Nursing Homes. Health Education is a significant area of work in some countries; results from several countries do not indicate dietitians work in Health Education.

Employment as a community adviser or in the food industry appears to be more common for those educated as clinical dietitians. A small but significant number of administrative dietitians are employed in staff and military restaurants, the catering industry, as community advisors and in quality control. A small but significant number of dietitians work in research, education, with family doctors or the media.

Consultant Dietitians are very common in some countries; up to 40% of Dietitians were described as Consultants by one country.

Other places of employment reported include beauty centres, sports clubs, hospitality industry, airlines, non-governmental organizations (NGOs) and international non-governmental organizations (INGOs).

What does the dietitian actually do? And, does the work change as the dietitian becomes more experienced?

The same questions were asked concerning newly qualified dietitians and dietitians with 5 or more years of experience. Thirty one tasks were listed and respondents were asked to indicate if these tasks were done by each of the three categories of dietitians, and, if yes, whether the work was done with or with supervision.

In most countries most of the tasks identified were carried out by one or all three categories of dietitians.

General Dietitian

All thirty-one tasks are undertaken by general dietitians in three or more countries. This means general dietitians cover the tasks described for both administrative and clinical dietitians.

Administrative dietitian:

Thirty of the thirty-one tasks are undertaken by administrative dietitians in one or more countries. The one task not undertaken was performance of relevant non-dietetic activities such as monitoring blood pressure, blood glucose, cholesterol, passing naso-gastric tubes, changing drug prescriptions, etc.

Work details

Administrative dietitian (16 countries)

- Translate nutrition into food/menus for groups
- Plan production and distribution of food to meet recommendations
- Purchase of food
- Develop and measure outcomes for food and nutrition services and practice
- Quality improvement and customer satisfaction
- Management tasks
- Health promotion activities
- Education of target groups



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Clinical Dietitian

Thirty of the thirty-one tasks are undertaken by clinical dietitians in four or more countries. The one task not undertaken was purchase of food. Clinical dietitians do undertake management tasks, but less so than administrative and general dietitians.

Work details

Clinical dietitian (11 countries)

- Nutritional assessment/screening of both healthy and high risk individuals
- Decision and implementation of nutritional careplans
- Council/education of individuals and carers
- Monitoring/evaluation of clinical outcomes
- Participation in interdisciplinary conferences about patient/client treatment
- Education of target groups
- Quality improvement
- Management of change within the organisation



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The tasks undertaken by the three categories of dietitians correspond well with the definitions provided.

We also tried to ascertain whether dietitians were supervised in any of the activities they undertake, and if there is a difference between newly qualified and dietitians with 5 or more years of experience. Iceland is the only country that reported newly qualified dietitians are fully supervised. In many countries clinical activities are carried out alone but newly qualified dietitians are supervised in management tasks such as business planning, managing change, financial and management data processing, equipment purchasing. After 5 years most tasks are carried out without supervision.

The level of responsibility of chief dietitians varies. In most countries the Chief Dietitian (clinical) has full responsibility for some or all staff, development, training and quality. Economic responsibility is more likely to be only partial, whereas most administrative dietitians have full responsibility for economic matters.

Education and research activities

In most countries dietitians are involved in the education and training of health professionals. It is less common for dietitians to provide education and training for qualified dietitians or medical doctors, but most dietitians are involved in education and training for student dietitians. Clinical dietitians more frequently train qualified and student nurses and healthcare

assistants whereas administrative dietitians more frequently train food service managers and staff.

In slightly more than half of the countries it is common for dietitians to get involved in research; more often it is clinical dietitians who undertake research, although Greece and Turkey report general dietitians participate in research and Sweden reports administrative dietitians are involved in research. Switzerland is the only country reporting non-degree dietitians participate in research.

Where research is undertaken by dietitians, all report participation at the local level, most report participation at a national level and a few report participation at an international level. The research is initiated primarily by dietitians and medical staff. Less commonly, research by dietitians is initiated by government departments, university departments or industry. All countries reported research by dietitians is published in nutrition and dietetic and medical journals. In some countries it may also be published in food science journals or conference proceedings.

Employment conditions

The unemployment reported for dietitians ranged from 0 to 60 %; data is missing from many countries. Although there is great variation and our data is not complete, ***compared with unemployment in the general population, reportedly fewer dietitians are unemployed.***

Salary data reported is far from complete, however ***where data is given, dietitians earn a salary that is higher than the national average salary.***

A work week varies between 35 and 48 hours. Retirement age varies from 55 years to no age of retirement. Most countries have some kind of maternity rights varying from 2 weeks of paid leave to 52 weeks paid leave with unpaid leave also possible. Paternity leave is NOT common.

Conclusion

The education and work of dietitians around the world is a complex and multifaceted subject. Our basic education has differences and similarities. Our work settings are varied, and yet we perform similar tasks. It appears that work opportunities are generally good for dietitians in many countries.

Although comparison is difficult, we can see considerable common ground to build upon. Study of the education and work of dietitians around the world is an ongoing interest of ICDA. As we increase our common understanding of the education and work of dietitians, we will be more able to fulfill the ICDA mission.