Dietitians-nutritionists around the World

Their Education and their Work

(2016)

Dietitians-nutritionists around the World - Their Education and their Work (2016)

The following report of results from a survey of the education and work of dietitians-nutritionists conducted in 2016 was presented at the XVII International Congress of Dietetics by Carole Middleton on behalf of the International Confederation of Dietetic Associations Board of Directors.

The survey was conducted by Carole Middleton, Director, International Confederation of Dietetic Associations.

Background

In 2000, when the International Confederation of Dietetic Associations (ICDA) was constituted in the current form, the representatives of the national dietetic associations agreed a mission statement. This was refreshed in 2014 to reflect advances made in the interim.

Mission Statement 2014

The International Confederation of Dietetic Associations is the largest world-wide body of dietetics professionals.

It supports national dietetic associations and their members, beyond national and regional boundaries, by providing:

- **Guidance, development and increased awareness of the standards of education and training that underpin the profession.**
- **Leadership in dietetics in various contexts, with a focus on evidence based nutrition and dietetics practice.**
- **An integrated communications system for members**
- **Networking and professional development opportunities**
- **Promotion of the role of nutrition and the dietetics professional in enhancing health, supporting human development, and reducing disease.**

To achieve the aim and mission ICDA needs an understanding of the status of dietetics and the national dietetic association (NDA) in the member countries and every 4 years, before each International Congress of Dietetics, a survey is conducted. Reference to previous surveys is made in this report where trends can be seen and information is comparable.

The information provided in the 2012 survey was used as the basis for the current survey, with additional provision made for narrative to explain changes and provide some qualitative data. The 2012 NDA profile was sent electronically to each ICDA

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member in January 2016 with a request for the information to be updated if necessary. The final data was collated in July 2016.
The survey was sent to forty-three (43) ICDA members. Thirty-nine (39) NDAs completed the full questionnaire (91% response rate). Information from 2012 was available for the remaining four (4) NDAs.

In 2012 the ICDA By-Laws were revised to allow membership of more than one NDA in a country. Since initiating the 2016 survey a further five (5) NDAs became members of ICDA in time for inclusion in the report and an additional one (1) more recently, increasing the membership to forty-nine (49) NDAs. This report contains data from forty-eight (48) NDAs in forty-two (42) countries.

With some information from 100% of the membership the survey provided the most comprehensive set of data available to date.

Countries included in the 2016 report

Argentina	**Germany**	**Korea**	**Portugal**
Australia	**Greece**	**Luxembourg**	**Singapore**
Austria	**Hong Kong**	**Malaysia**	**South Africa**
Belgium	**Hungary**	**Mexico**	**Spain**
Brazil	**Iceland**	**Netherlands**	**Sweden**
Canada	**India**	**New Zealand**	**Switzerland**
Caribbean	**Indonesia**	**Nigeria**	**Taiwan**
Chile	**Ireland**	**Norway**	**Turkey**
Denmark	**Israel**	**Pakistan**	**UK**
Finland	**Italy**	**Philippines**	**USA**
France	**Japan**		

Professional Status

Membership of ICDA

ICDA is a confederation of national dietetic associations with membership open to two NDAs in a country. It is acknowledged that in some countries there are other dietetic associations and dietitians-nutritionists who do not belong to a dietetic association and therefore the figures presented in this report only represent the ICDA membership.

Between 2000 and 2016 the membership grew from thirty-one (31) to forty-eight (48) NDAs (55% growth).

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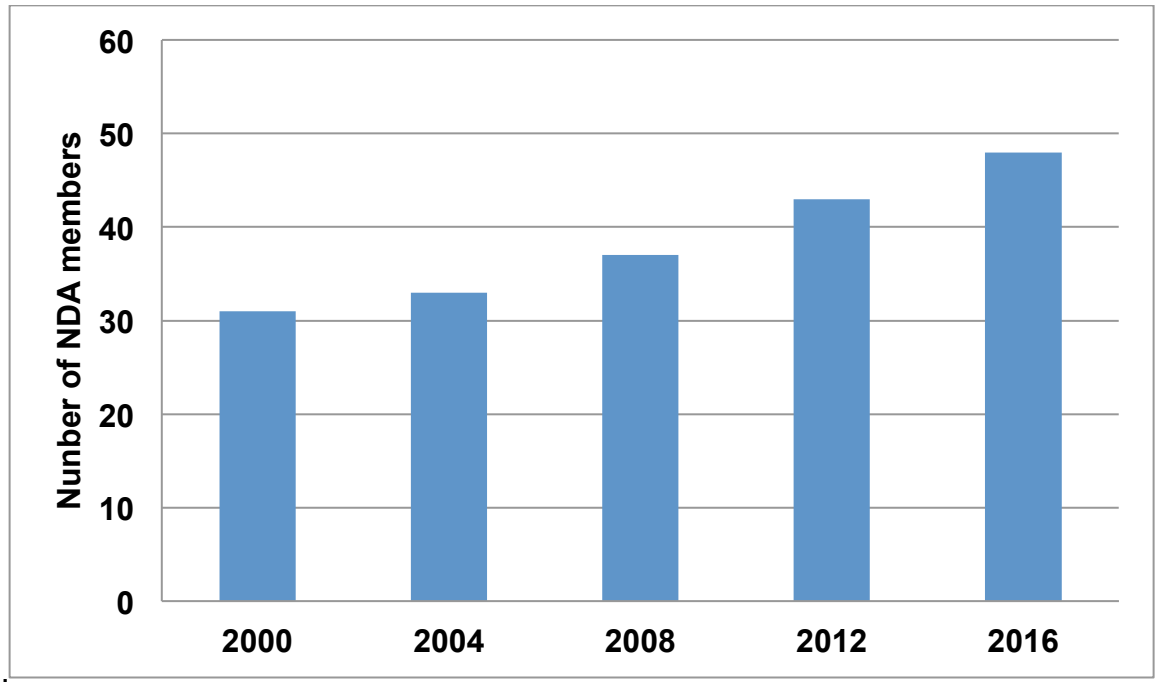
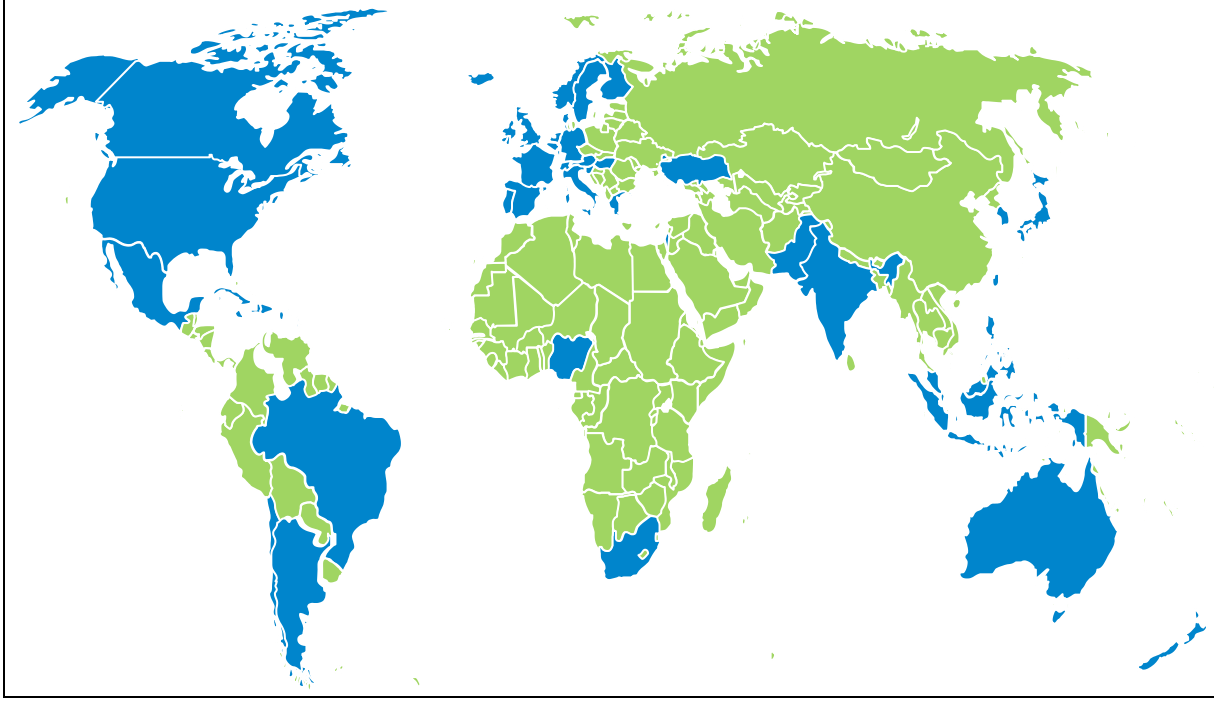


Membership in 2016 – Blue indicates Member country



On the above map, areas shown in green had either no dietitians-nutritionists or there were no national dietetic association eligible or wishing to belong to ICDA.

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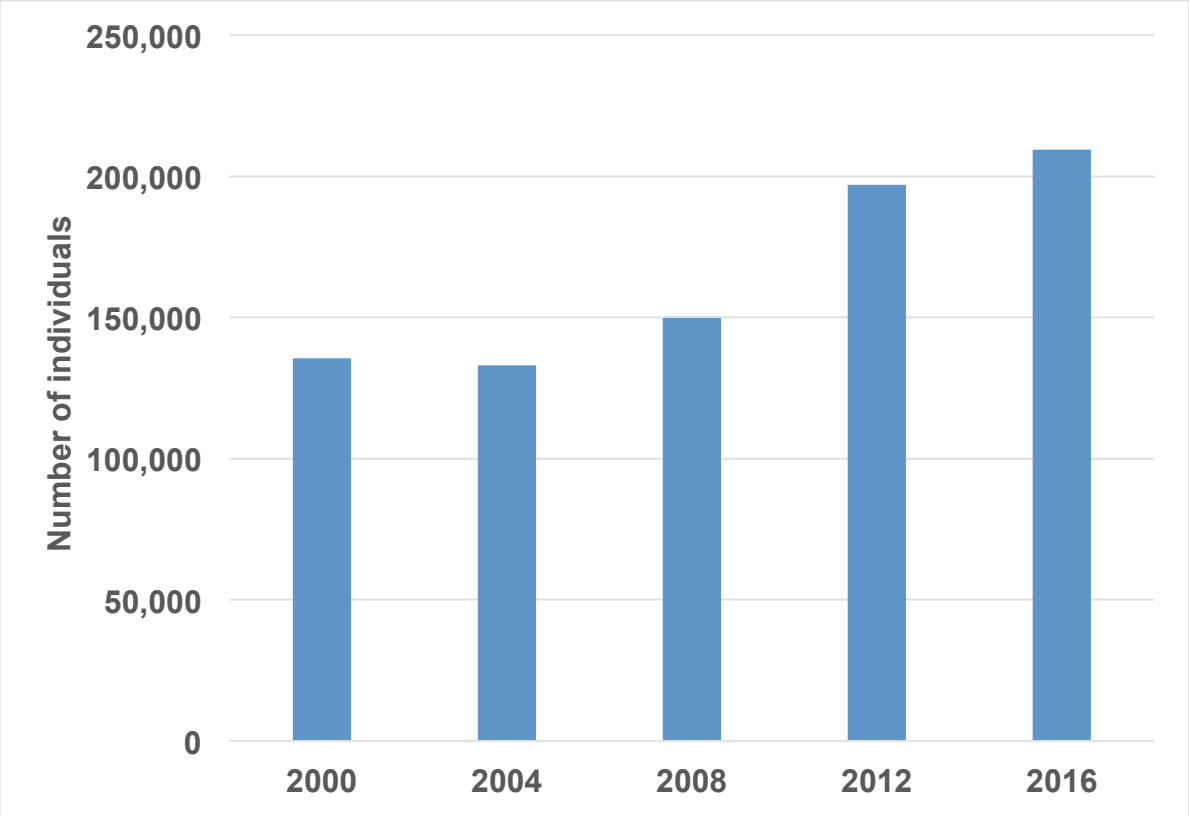
Number of individual dietitians-nutritionists represented



Over the same time period the number of individual dietitians-nutritionists represented by ICDA had grown from 135,000 to 209,362 (55% growth).

Some NDAs represent the majority of dietitians-nutritionists in their country while others represent only a small proportion. Survey respondents estimated the total numbers of dietitians-nutritionists in countries with ICDA Members to be approximately 520,000.

The National Dietetic Associations

The constituent members of ICDA, the NDAs vary enormously both in terms of how well established and organised they are and their size. The oldest and largest member, the American Academy of Nutrition and Dietetics (AND) will celebrate it's centenary in 2017 while some of the newest members are less than 5 years old.

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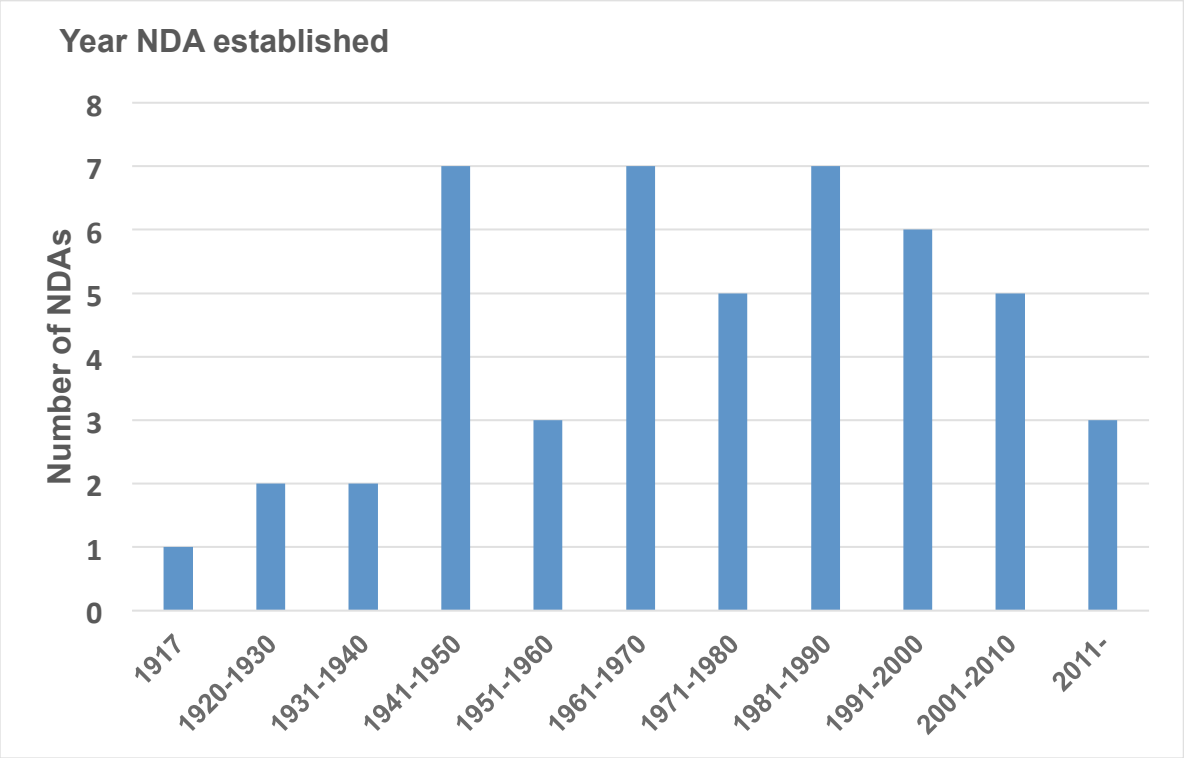

At the time of the survey the smallest association in Iceland had 45 members compared with the 75,000 plus members in the Academy of Nutrition and Dietetics (USA).

The number of members affects what resources the NDA has to influence and support development of the profession in that country but also the number of professionals available to influence the nutritional health in that country.
Those associations with greater resources in manpower and finance, which are stronger and more established, are in a position to support the newer associations and those just starting out by providing leadership, guidance, mentorship and the opportunity to share resources and expertise.

Though absolute numbers are interesting a more meaningful way of presenting the dietetic workforce is the number of dietitians-nutritionists in a country relative to the population of that country, as this also affects what they can achieve. The reported figures were for ICDA members and were therefore not all of the dietitians-nutritionists working in that country. The numbers again showed considerable variation and ranged from 0.19/100,000 in Indonesia to 39.3/100,000 in Japan. Eight (8) countries had less than 1 dietitian-nutritionist/100,000. This was a slight improvement since 2012 when ten (10) countries reported less than 1/100,000.

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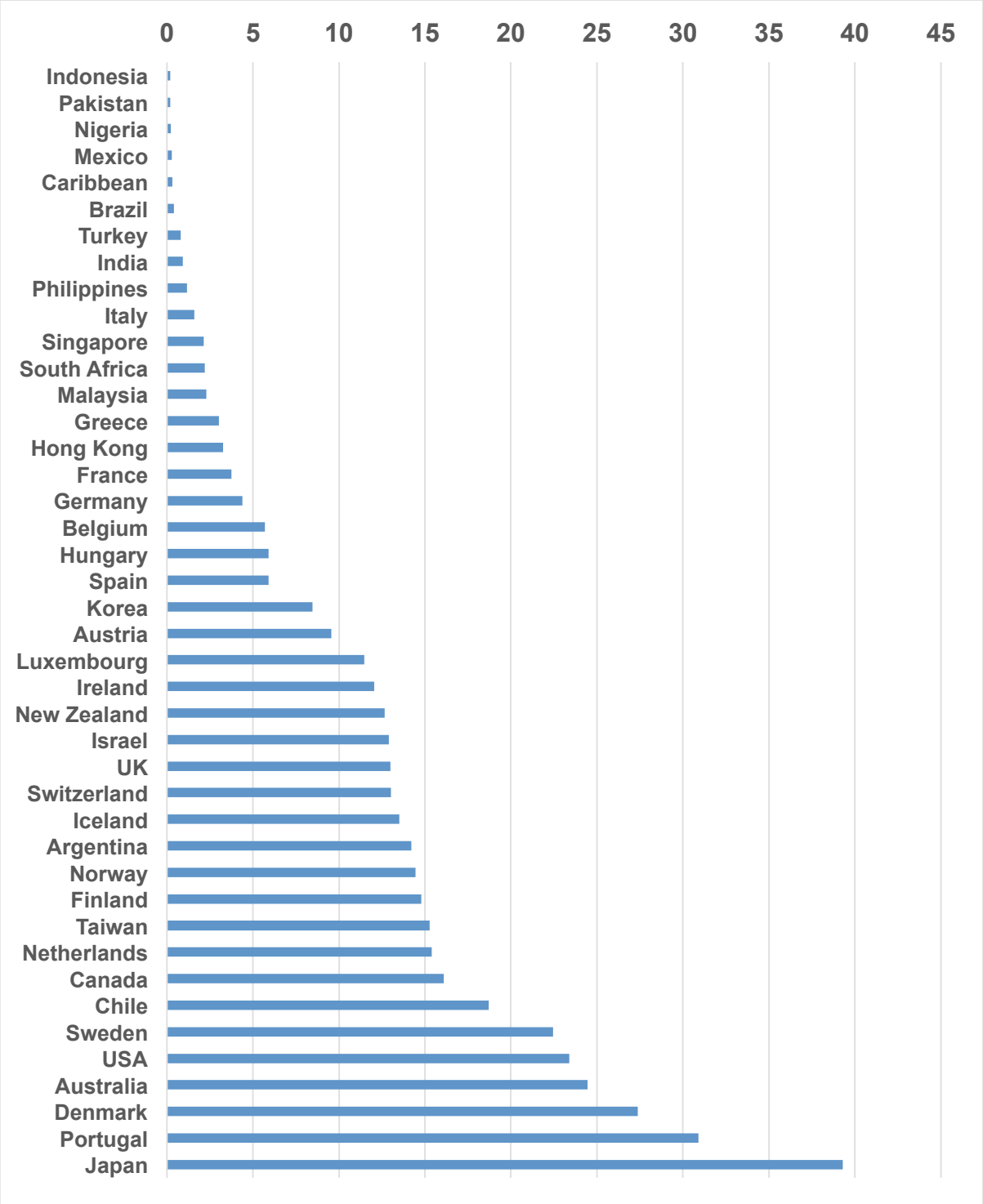
Number of ICDA dietitians-nutritionists/100,000 population



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86% of the thirty-six (36) respondents to this question reported an increase in the number of dietitians-nutritionists working in their country, though of concern is the number in education, which had not increased at the same rate. Two countries, Korea and USA, reported a reduction in the number of students and eleven (11) countries the same number, representing 36% of respondents.

Regulation of the profession

Over the last four (4) years changes in legislation had come into force in some countries which have or will impact on dietetic practice. The regulation of the profession is important primarily for protection of the public as it involves the setting and monitoring of standards both in education and working practices and registration is something all NDAs have aspired to for many years. Registration serves as a kite-mark indicating to clients that the dietitian-nutritionist they are dealing with is appropriately qualified and competent to practice.

Since 2012 seven (7) countries reported changes in legislation.
In five (5) countries registration bodies had been established and in one (1) a bill for the creation of a registration body was before parliament.

Other legislation unrelated to registration was reported. In Italy the NDA had been legally recognised by the Ministry of Health as the representative body for dietitians and in the UK legislation had been enforced to allow suitably qualified dietitians to become supplementary prescribers under the Human Medicines Regulations 2012 (Statutory Instruments 2012 number 1916).

Professional title

The number of countries with a recognised professional title protected by law had steadily grown to 79% in 2016, from 69% in 2008, though in both Denmark and Sweden the title was only protected for clinical dietitians and not for those in food service or public health.

Professional Title registered / protected by law

2016 33 out of 42 countries (79%)

2012 27 out of 39 countries (70%)

2008 18 out of 26 countries (69%)

Denmark, Sweden have protected title for Clinical Dietitians but not for Food Service or Public Health Dietitians

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The title was awarded by the NDA in three (3) countries, by a governmental body in thirty - one (31) countries and by the education institution in four (4) countries.

Code of Ethics / Practice / Conduct

Registration also includes working within a recognised code of ethics, practice and/or conduct. There is an expectation that the professional can be trusted to behave to a high set of standards. Codes vary but tend to include the same basic principles of respect, consent, confidentiality, appropriate and effective communication, maintenance of skills, among others. In 2008 ICDA adopted an International Code of Ethics and Code of Good Practice which was expanded in 2010.

In the 2016 survey the number of countries with a recognised code had again grown steadily with 95% having either their own code or had adopted the ICDA codes. This compared very favourably with the 2004 survey when only 35% had a code and is a sign of the growing maturity of the profession and individual associations.
The 2016 numbers were greater than those countries with registration as NDAs have developed codes in the absence of national registration bodies.

2016 Information from 41 countries

39 (95%) – Code of Ethics/Practice/Conduct including 14 who have adopted ICDA Codes as well as/instead of their own and 6 whose own code conforms with ICDA.

1 – Being developed

1 – No professional codes

2012 Information from 38 countries

36 (95%) – Code of Ethics/Practice/Conduct

2 – No professional codes

2004 Information from 31 countries

11 (35%) – Code of Ethics/Practice

8 – Being developed

12 – No professional codes

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Basic Education

In 2004 ICDA adopted an aspirational standard for the education of a dietitian-nutritionist. This quickly became the norm and was refreshed in 2016.

ICDA standard for dietetic education 2016

The minimum level of education of a dietitian-nutritionist is: *a bachelor degree in nutrition and dietetics and a period of supervised professional practice of at least 500 hours, which together meet international competency standards for dietitians-nutritionists*.

In the 2016 survey the minimum level of education for entry into the profession was less than a bachelor degree in two (2) countries - France and Germany, and Japan had both bachelor and non-bachelor routes, which amounted to 7% of ICDA members. In both Germany and Japan new education programmes at bachelor level were reported but the non-bachelor programmes still existed. This was not significantly different from 2012 but had reduced from 23% in 2008.

In four (4) countries; Finland, Iceland, New Zealand and Norway for Clinical Dietitians a masters degree was reported as the entry level standard.

Two (2) countries, Luxembourg and Singapore did not have a basic dietetic education programme in their country. Dietitians-nutritionists working in those countries received their education elsewhere in the world but a minimum level of education was expected.

Minimum level of basic education	
Masters **(Norway – for Clinical Dietitians only)**	**4 countries**
Bachelor degree	**34 countries**
Non Bachelor qualification	**2 countries**
Both Bachelor and non-Bachelor	**1 country**
No basic education	**2 countries**

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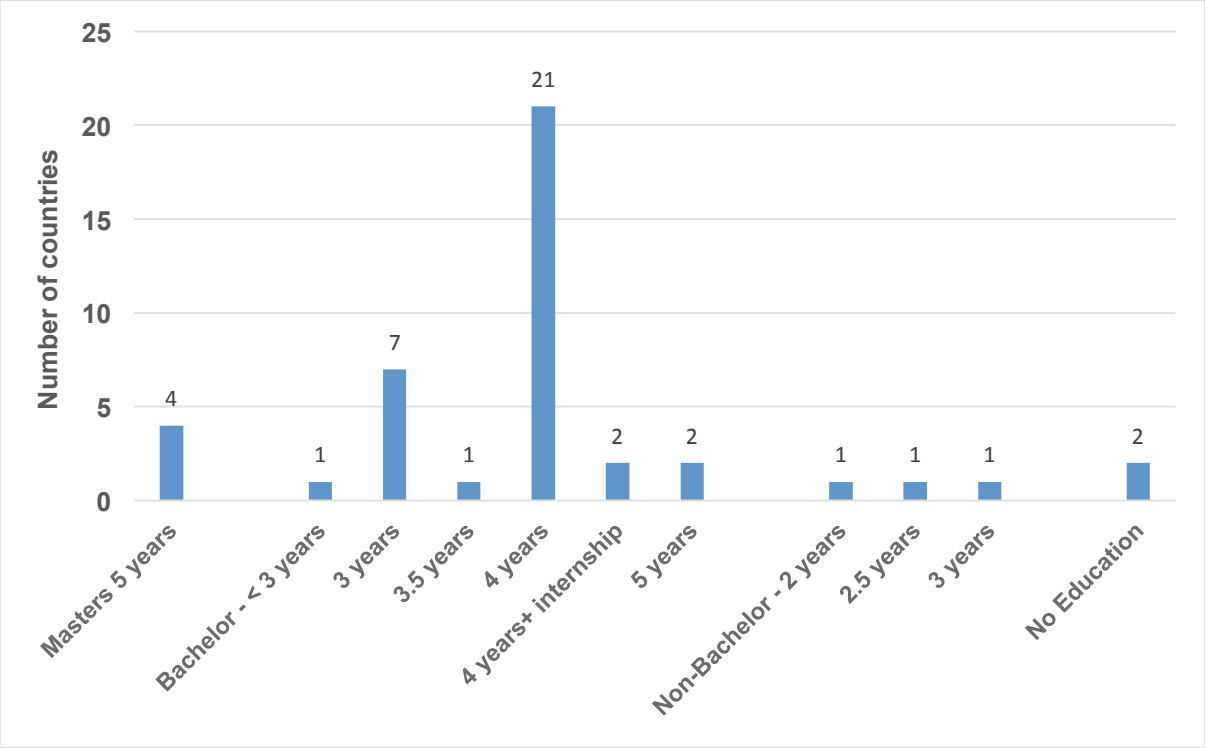
Range in length of education

Though a bachelor degree level education programme was offered in thirty-four (34) countries, the actual time taken to receive the degree varied from less than three (3) years to five (5) years. The 2016 survey did not ask the number of weeks/hours but in previous surveys it was found that some courses ran over more years but students studied for less weeks or hours than those running over a shorter period of time.

The non-bachelor level education programmes ranged from two (2) to three (3) years.



Compulsory practicum programme

The standard for dietetic education includes a supervised period of professional practice, outside of the education institution, of at least 500 hours. 92% of countries reported that supervised practice was a compulsory part of the dietetic programme, which was also not significantly different from 2012, but the length of the practicum had increased and only 8% had less than 500 hours compared with 14% in 2012. Based on forty (40) hours a week, this has been interpreted as equivalent to approximately twelve and a half (12.5) weeks.

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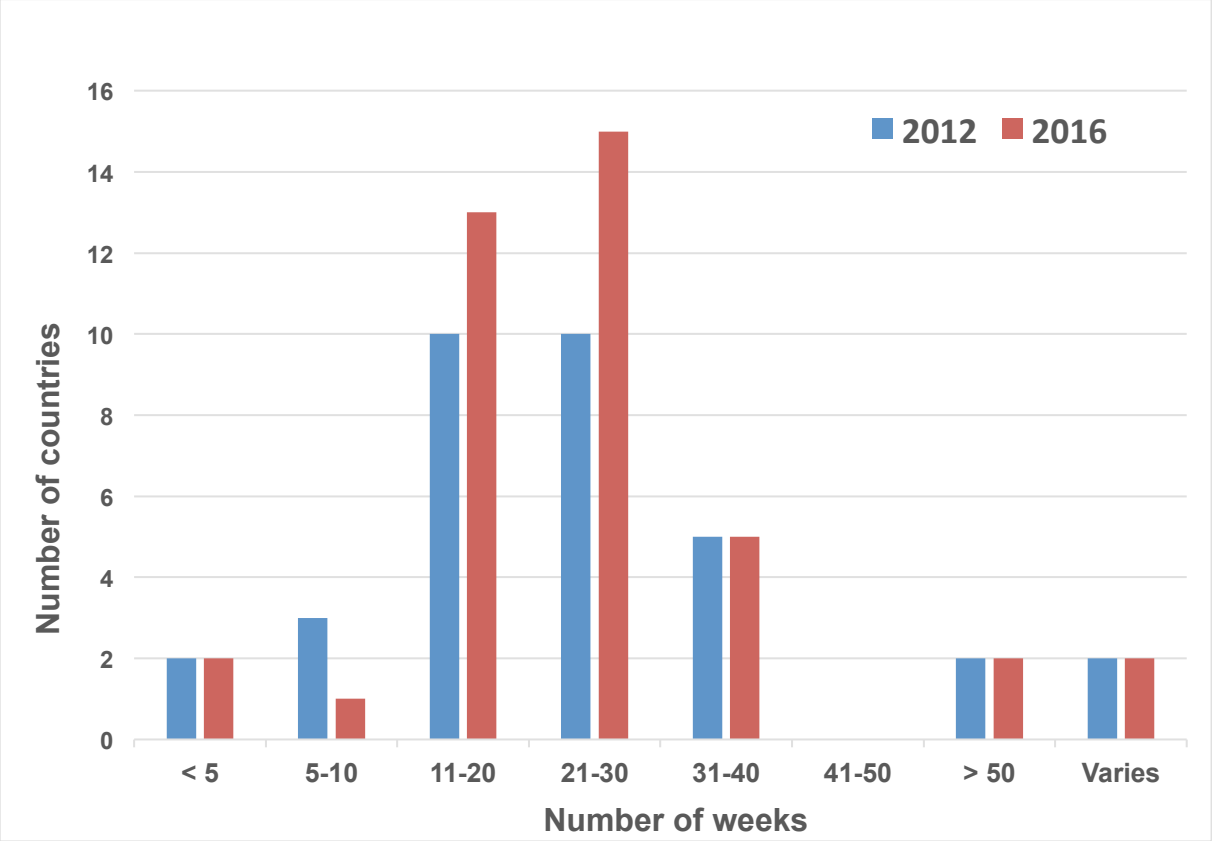

Only two (2) countries reported that the practical programme varied between universities – South Africa and Turkey. This was supported by the response to the following question on national standards for basic education.

National standards for basic education

Thirty-seven (37) countries (92%) had national standards for the basic education program in place.

The standards were set by a range of government bodies, such as the Ministry of Health, Ministry of Education and Registration Bodies, in three (3) cases jointly with the NDA, three (3) cases with the NDA and the education institutions and in two (2) cases with the place of study. The involvement of government bodies seemed to have increased and there were only five (5) countries where the setting of standards did not include a governmental body.

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National Standards set by:	
Government Body	24 countries
Government Body + NDA	3 countries
Government Body + NDA + Place of study	3 countries
Government Body + Place of study	2 countries
NDA	2 countries
Place of study + NDA	2 countries
Place of study	1 country

Competency standards

Competency standards are statements that describe the knowledge, skills and attitudes needed for a profession. These knowledge, skills and attitudes must be performed to the level stated in the competency standard for a person to be considered competent. Competency standards may be used as part of the assessment to complete a basic dietetic education program.

Thirty-one (31) countries (84% of respondents to this question) reported that they had a set of competencies that students must meet to complete their dietetic education programme. This compared with twenty-eight (28) countries in 2012 (75% of respondents). Competencies were set by a similar range of bodies to the bodies who set the education standards, but more education institutions were involved in the setting of competencies.

Continuing Competence

Having demonstrated competence at the point of qualification many countries now expect dietitians-nutritionists to demonstrate their continued competence to practice throughout their working lives. Most Codes of Practice or Codes of Conduct including the ICDA International Code of Good Practice include a statement about maintaining competence to practice by being responsible for lifelong learning and engaging in self-development.

In the 2016 survey on-going study was required in twenty-nine (29) countries (70% of respondents) but the NDA in two of these reported that it was not enforced. In Switzerland on-going study was only compulsory for self-employed dietitians-

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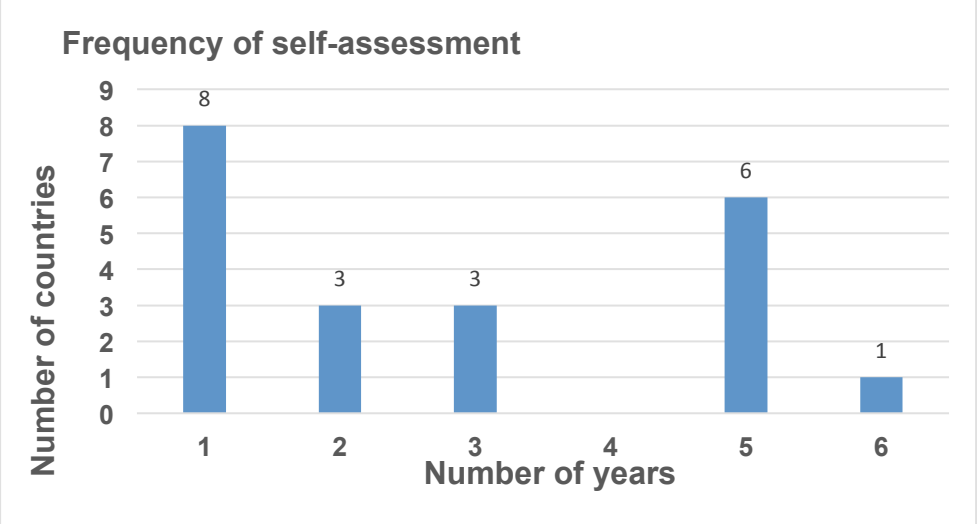
nutritionists and in Hungary it was only compulsory for clinical dietitians-nutritionists. This was a significant increase on the twenty-two (22) countries in 2012 (59% of respondents) and fourteen (14) countries in 2008 (50% of respondents).

In a further three (3) countries Continuing Professional Development (CPD) was recommended by the NDA. In one of those countries, Germany, CPD was not compulsory but clients could not be reimbursed from the statutory health insurance if the private dietitian-nutritionist could not provide evidence of CPD.

The type of on-going study reported varied but more than 95% required CPD, though some also quoted examinations and practice assessments.

Some countries required re-examination if the dietitian-nutritionist had been out of practice for a period of time or had not completed the required amount of CPD.

The majority of countries stipulated the amount of CPD required as either hours over a period of time or credit points. Where hours were given they ranged from six (6) hours over two (2) years to one hundred and fifty (150) hours over three (3) years. In a number of countries credit points were not based on learning hours but were awarded based on the type and level of the learning activity. Five (5) countries did not define the number of hours or credits. Twenty-two (22) countries expected the dietitian-nutritionist to undertake a self-assessment of their continued competence by providing evidence, which could be assessed against different standards depending on the area of work, and random monitoring in some cases by the regulatory body. The frequency of self-assessment ranged from annually to six (6) yearly, with no formal structure in one (1) country.



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Work of Dietitians-nutritionists

Around the world the role and work settings of the dietitian-nutritionist varies considerably. The scope of practice has evolved, and continues to evolve, as new opportunities arise for dietitians-nutritionists to use their expertise in other fields.

Attempts have been made in previous surveys to establish what type of work dietitians-nutritionists were doing, in order to define the scope of practice. From the information provided it was not possible to analyse the data in any meaningful way and it was decided in 2012 to concentrate on documenting the locations in which dietitians-nutritionists worked, either as employees or consultants. The NDAs were asked to indicate the most common locations from a list of possible work settings, adding any other significant areas. The same approach was taken in 2016 and it was possible to identify some changes.

Information was gathered from forty-two (42) countries and is presented as the number of countries reporting dietitians-nutritionists working in that arena and as a percentage of the respondents. The 2012 information from forty-one (41) countries is presented alongside to allow comparison.

Historically dietitians-nutritionists have worked in hospitals either in food service or clinically on the wards and in some cases in outpatient clinics. In 2016 this continued to be the case with 100% of countries reporting hospitals as a location for employment.

More than 90% of countries also reported that dietitians-nutritionists worked in food service/hospitality, food production, and a food manufacturing company or association and in academia and research. Employment in military food service or the media was less common with only 64% of countries reporting each of these as possible work settings.

In the 2016 survey community food projects was listed as a possible additional area of work. Only sixteen (16) countries (38%) reported dietitians-nutritionists working in this area. It was not clear if this was genuinely an uncommon area of employment or it was underreported because it was new and what was meant was not fully explained. For this reason it has not been included when analysing the information.

Many countries reported growth in private practice, consultancy and self-employment as areas of employment for dietitians-nutritionists.

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Where dietitians-nutritionists are most commonly employed	2016 42 respondents		2012 41 respondents	
	Number of countries	% of responses	Number of countries	% of responses
Health				
Hospitals (all types including military)	42	100	41	100
Community health centres	37	88	29	70
Public health agencies	36	86	27	66
Doctor's office or medical clinic	34	81	30	73
Nursing homes or long term care	33	79	27	66
Government departments (health/social services)	33	79	26	63
Food and Agriculture				
Food service / hospitality	39	93	37	90
Food producer, food manufacturing company or association	38	90	34	83
Government departments (food/agriculture)	32	76	24	59
Military food service	27	64	20	49
Other				
Academic or research organisation	39	93	31	76
Pharmaceutical company	34	81	28	68
Advocacy association in health field (E.g. Diabetes Association, Coeliac Association)	33	79	25	61
Recreation or sports facility	31	74	26	63
School or school system	31	74	26	63
Media	27	64	24	59

Comparing the two surveys there was a noticeable increase in the number of countries reporting non hospital work and a more diverse range of settings. The greatest increase was seen in military food service followed by public health, governmental departments

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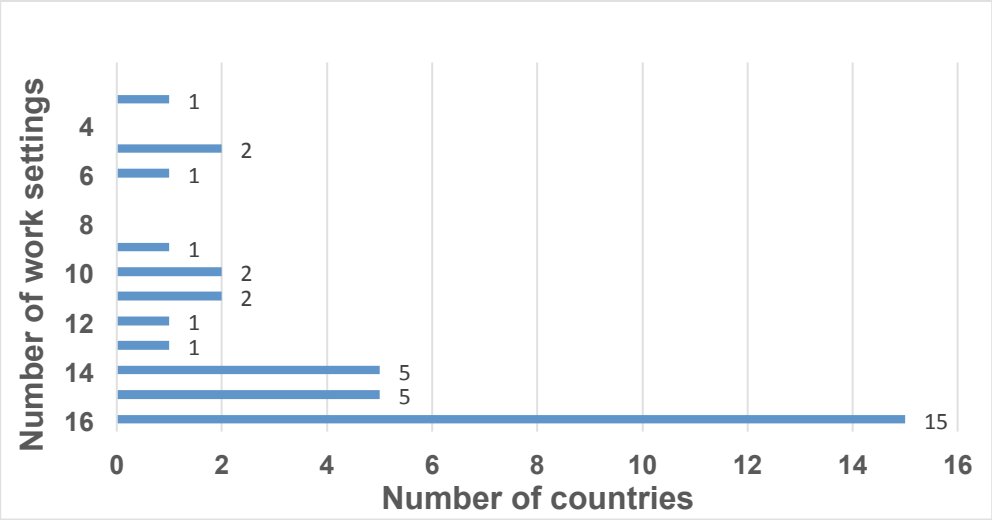
(food/agriculture) and the advocacy associations with greater than 30% more countries reporting dietitians-nutritionists working in each of these areas.

Changes in work settings since 2012	
Greatest increase	% Increase (number of countries)
Military food service	35
Public Health	33
Government departments	33
Advocacy Associations	32
Community Health Centres	28
Academia/Research	26
Long term care	22
Pharmaceutical Company	21

Based on information from the thirty-six (36) countries completing the survey in both 2012 and 2016 and the sixteen (16) work settings listed in both surveys, seventeen (17) countries (47%) reported a greater number of work settings, of which five (5) were now working in all sixteen settings; ten (10) countries (28%) were working in all settings in 2012 and reported no changes in 2016; and nine (9) (25%) were working in less settings but reported no change.

In the 2016 survey the lowest number of work settings were reported in Korea where dietitians-nutritionists worked in three (3) areas – hospitals, food service and schools; Iceland and Luxembourg where five (5) settings were reported and Turkey, which reported six (6).



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Ways of working

In addition to work settings changes were reported in the way in which dietitians-nutritionists were working. This was qualitative information and not possible to quantify meaningfully but there appeared to be more engagement with other professions, working in multi and inter-professional teams, particularly in primary care locations, and a growth in clinical care outside of hospitals.

Several reported dietitians-nutritionists extending their scope to include exercise, working in sports facilities and gyms, or in clinical practice taking on tasks previously undertaken by nurses, doctors or other professionals.

Many also talked about dietitians-nutritionists becoming more entrepreneurial, creating businesses and working as private practitioners.

The biggest change reported was in the use of technology. Some of the many examples given were the use of:

- Online resources for many purposes including finding evidence for practice using the PEN Practice based Evidence in Nutrition global resource and the Academy of Nutrition and Dietetics Evidence Analysis Library.
- Standardised languages for recording the nutrition care process.
- Webinars, web conferencing, web-based teaching materials, distance learning as alternatives to face to face teaching and materials.
- Many forms of social media as a means of general communication and communication and consultation with clients.
- Blogs, nutrition apps.
- Telemedicine.

All of these examples were designed to improve services, interactions with clients, colleagues and students, allow greater flexibility, reduce the need for time consuming and expensive travel and generally improve efficiency and effectiveness of services.

View of the Profession

An additional section added to the 2016 survey allowed the NDAs to comment on how they thought dietetics was perceived in their country. It was acknowledged that this was subjective but a number had conducted polls with consumers and stakeholders. Twenty-three (23) of the thirty-five (35) NDAs (66%) who responded from thirty-two (32) countries were generally very positive and a further four (4) NDAs (11%) were fairly positive. Many talked about the increased number of dietitians-nutritionists, an increased awareness of the importance of nutrition and the increased diversity in

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employment opportunities. This was however tempered by the continued issue of high profile unqualified or poorly qualified self-claimed experts working in the nutrition field and the observation that though awareness of nutrition was high it had not influenced employment opportunities in some countries. Others sited financial constraints as the cause of loss of jobs in some sectors and highlighted the continued need to market and raise the profile of the profession.

Conclusions

As concluded in previous reports, the education and work of dietitians-nutritionists around the world is a very complex and multifaceted subject.

The 2016 survey, with a response rate of 92% of NDAs including the new members completing the full questionnaire and 100% supplying some information, has provided ICDA with the most comprehensive set of information to date. It also provided a snapshot of how the NDAs felt the profession was perceived in their country at the time of completion, which though subjective appeared to be generally positive.

ICDA has a greater knowledge of the professional status, basic and on-going education and work of dietitians-nutritionists. More countries have a registered title for dietitians-nutritionists and almost all have a Code of Ethics / Practice / Conduct. The education of dietitians-nutritionists worldwide has continued to improve, with the majority of countries now meeting the standard of a bachelor degree with a compulsory practicum of 500 hours.

The role, scope and education of the dietitian-nutritionist is constantly evolving to meet the needs and expectations of clients and employers, to cope with the demands on the service being provided in a changing environment and to seize opportunities as they arise.

The profession of dietitian-nutritionist has changed dramatically and will continue to do so as nutrition becomes embedded in the global agenda. The rate of evolution will vary across the world as it is influenced by the differing environments in which the profession is practised and the stage of development of the profession in each country.

To enable promotion of the dietetic/nutrition professional in the global arena it is important that we continue to develop our knowledge and understanding of both the education and the work of dietitians-nutritionists.

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