Professional Board for Dietetics and Nutrition

THE ROLES AND COMPETENCIES OF THE NUTRITION PROFESSION IN THE WELL-BEING OF THE SOUTH AFRICAN POPULATION

15 January 2016

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on behalf of the Professional Board for Dietetics and Nutrition
Document based on previous Reports of the Task Teams and Professional Board
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1 EXECUTIVE SUMMARY

The Professional Board for Dietetics and Nutrition embarked on a process to assess if the scopes of practice of the dietitian and nutritionist are still relevant in South Africa. After a long consultative process the Board decided that only one nutrition professional (NP) should be trained in future to address the nutrition-related challenges in South Africa.

The main contributing factors for this decision are:
1. Changes in the burden of disease in South Africa;
2. Changes in nutrition service delivery within the context of the SA developmental agenda and Health System;
3. Changes in the South African and global economic climate;
4. Changes in the nutrition agenda in South Africa and globally;
5. Need to interact with other disciplines/sectors/organizations/stakeholders/etc;
6. Lack of community service positions for nutritionists;
7. Lack of positions for nutritionists;
8. Training and registration of two nutrition professionals with the current overlap between the scopes of practice and the unclear role delineation is not viable;
9. The attempt to create differences between the two professions by ensuring that dieticians and nutritionists will operate at a facility and community level respectively has resulted in uncertainties and antagonism between the two professions at the implementation level;
10. The unclear role delineation between the two professions is confusing for some employers resulting in the inappropriate appointment of nutrition professionals;
11. At some levels there is a perception that the nutritionist is a duplication of the dietitian;
12. The gap in service delivery to address nutrition problems at the community and household level has not been closed;
13. The polarization of the nutrition workforce does not serve either of the professions or the future of nutrition in South Africa well;
14. Changes in the teaching-learning environment with emphasis on innovation and inter-professional training;
15. See also the points under 8.1.3.
The **purpose** of the nutrition professional is: The nutrition professional use appropriate policies, programmes and nutrition principles to prevent, treat and manage nutrition related diseases and promote the nutritional well-being of the individual, community and population.

The **scope of practice** is formulated as:

Optimizing the nutritional well-being of individuals, groups, communities and the population in different settings by:

- Utilizing (critically appraise and apply) a comprehensive body of evidence-based food and nutrition theory and principles;
- Assessing the nutritional status, food and nutrition situation(s) and concomitant health risks of clients/patients, groups, communities and the population using relevant methodologies;
- Advocating for the nutrition professionals, services and programmes;
- Conceptualizing, planning, implementing, managing, monitoring, evaluating and documenting appropriate nutritional prescriptions for patients/clients with specific nutritional needs;
- Conceptualizing, planning, implementing, managing, monitoring, evaluating and documenting appropriate nutrition interventions programmes, nutrition policies, strategies and guidelines for individuals, groups, communities and the population with specific needs;
- Taking responsibility for using/applying appropriate nutrition policies, strategies and guidelines;
- Influencing the national food systems/environment to enable all individuals to have access to affordable, nutritious and safe food;
- Applying information, communication, education and counselling skills and social mobilizing to empower individuals/communities/populations to change their food/nutrition behaviour to make safe, healthy food choices to prevent nutrition-related diseases and to improve quality of life;
- Planning and executing an effective food service system based on the specific food and nutritional needs of the healthy and ill;
- Managing human, financial and other resources to ensure optimal and equitable delivery of nutrition services at all levels of service delivery including PHC and population level;
- Conceptualizing, formulating, implementing and communicating nutrition related research;
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- Planning, implementing, managing, evaluating, monitoring and documenting procedures and policies relating to human, financial, operational and other resources;
- Applying critical and creative thinking in working effectively within a multidisciplinary environment, the community and stakeholders in contributing to the personal, social and economic development of society in an ethical and professional manner.

The skills and competences of the NP are summarized under the following headings:
1. Nutritional and other basic sciences
2. Screening / needs assessment / situation analysis
3. Nutrition planning, implementation, monitoring and evaluation
4. Food service (management)
5. Food and nutrition security
6. Communication and advocacy
7. Management and leadership
8. Education, training, promotion and capacity building
9. Research
10. Strategies, policies and guidelines
11. Critical cross-field outcomes / Student attributes

The Professional Board is now giving stakeholders another opportunity for input and comments before the set of skills and competencies and NQF level of each skill and competency is finalized in collaboration with the training institutions.

2 THE PROFESSIONAL BOARD FOR DIETETICS AND NUTRITION

As a statutory body, the HPCSA is guided by a formal regulatory framework and this includes the founding Act, the Health Professions Act 56 of 1974. The vision of the HPCSA is “Quality and Equitable Health Care for All”.

The motto of the HPCSA is: Protecting the public and guiding the professions.

The Professional Board for Dietetics and Nutrition has its own vision and mission:

Vision
A trustworthy, credible, transparent and accountable Board that serves the interest of the profession and the public.
Mission
To protect and serve the public and guide the profession
The above is given practical effect through ensuring excellence of dietetics and nutrition service delivery and thereby protecting the South African public by:
- Maintaining and enhancing quality of practice
- Safeguarding the integrity of dietetics and nutrition professionals registered with the Board
- Promoting the nutritional health of all South Africans
- Being a Board that is willing and able to be efficient in their support and service delivery
- Communicating effectively to all stakeholders.

The Professional Board for Dietetics and Nutrition decided to start the process of training only one Nutrition Professional (NP) in the future. The decision was taken collectively with members of the Task Teams, representing all the stakeholders, after a long open consultative process. This consultation process also included the current registered dietitians and nutritionists.

The Professional Board has not yet finalized the name of the NP and hence the use of NP.

3 PURPOSE OF THIS REPORT

The purpose of this report is to provide a brief summary on the background and process followed for the decision taken regarding the future training of the NP in South Africa. As part of the bigger consultative process we want to give stakeholders another opportunity to give constructive feedback on the scope and competencies of the NP before finalization in collaboration with the training institutions.

4 BACKGROUND

The registration of the dietetics profession with the HPCSA was promulgated in 1980 and the first Professional Board for Dietetics was established in 1981 with Prof Elma Nel from the then Natal University as the Chairperson. The first task of the Board was the development of the minimum standards for the training of dietitians. Since then the competencies of the dietitian have been revised by working groups in 1994 and in 2001. The most significant
development in the competencies of the dietitian during this period has been the extension of the area of community nutrition from none in 1980, to about 5% in 1987 (then identified as functions performed by Department of Health), to at least 25% in 2001.

After a long and interrupted process which started around 1980, momentum towards the registration of a Nutritionist was gained again in 2000 with regular meetings and workshops between 2000 and 2005 when the registration of this cadre was finally approved by the Professional Board for Dietetics and documentation for promulgation prepared. The register for nutritionists was eventually promulgated in the Government Gazette in 2008 with the Grandfather clause registration process closing in March 2010.

Currently the training of both dietitians and nutritionists is of high quality and a number of registered dietitians and nutritionists are working outside the country in for example the UK, USA and Australia.

5 STAKEHOLDERS AND TASK TEAMS

At a Stakeholder meeting held on 23 February 2012 a Task Team was mandated to look into the overlap between the two professions. The stakeholders included all the training institutions, the National Department of Health, the nutrition provincial managers of all nine provinces, the South African Defence Force, the Association for Dietetics in South Africa (ADSA) and the Nutrition Society of South Africa (NSSA).

At the Stakeholder meeting of 26 February 2014 the Report of the first Task Team was discussed and it was decided to appoint a second Task Team to do a comprehensive situation analysis to inform the Board and stakeholders on decisions to be taken regarding the nutrition professional in South Africa. The appointment and mandate of the second Task Team was confirmed at the Education Committee of the Professional Board meeting on 27 February 2014.

The Report of the second Task Team was tabled at the Education Committee meeting of 22 July 2014. The Committee recommended to the Professional Board that the principle to register only one nutrition professional in future should continue.
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The Report was also shared and discussed at the Nutrition Congress held during September 2014 in Gauteng. The Report was tabled at the full Professional Board meeting held on 25 September 2014. Feedback and comments received were considered and discussed.

At the Stakeholder meeting held on 23 February 2015 the final report was tabled, discussed and approved by the Stakeholders.

The stakeholders consulted during the process included:

- Higher Education in South Africa
- National Department of Health: Directorate: Nutrition and Human Resources
- Provincial Nutrition Departments of all nine provinces
- Department of Agriculture
- Department of Education
- Department of Social Development
- South African Defence Force
- Early Childhood Development
- UN agencies and NGOs such as Unicef
- Professional organisations: ADSA. NSSA
- Training institutions
- Registered dietitians and nutritionists

6 DEPARTMENT OF HEALTH: HUMAN RESOURCES

The Professional Board presented and discussed the NP with the National Department of Health, Directorate Human Resources at a meeting on 25 February 2014 after a delegate from HR attended a meeting of the Board. On 28 September 2015 the Board presented the NP to the Department of Health: Human Resources with representation from both National and Provincial levels.

7 CURRENT NUTRITION SITUATION IN SOUTH AFRICA

7.1 Burden of diseases in South Africa

South Africa has four concurrent epidemics, a health profile found only in the Southern African Development Community region. Poverty-related illnesses, such as infectious diseases, maternal death, and malnutrition, remain widespread, and there is a growing
burden of non-communicable diseases. Although South Africa is considered a middle-income country in terms of its economy, it has health outcomes that are worse than those in many lower income countries. Within the public sector, key challenges are presented by the large inequalities in the distribution of infrastructure and financial and human resources between geographical areas, and inefficiency in the distribution of resources between levels of care.

Health indicators are determining a demand for health workforce development and service provision, which must be addressed. Under-five mortality, infant mortality and maternal mortality in South Africa are still high. The under-five mortality rate has reduced from 56 (2009) to 42 (2011) per 1000 live births, whereas the 2015 MDG target is 20. The infant mortality rate has also gone down from 40 (2009) to 30 (2011) per 1000 live births, which is equally far from the 2015 MDG target of 18. The Neonatal mortality rate (<28 days) has remained static at 14 (2011) per 1000 live births. Notable is the maternal mortality ratio which has risen from 369 (2001) to 625 (2007) per 100,000 live births, almost doubling and almost 20 times higher than the 2015 MDG target of 38.

HIV/AIDS accounts for 31% of the total disability-adjusted life years of the South African population, with violence and injuries constituting a further cause of premature deaths and disability. There has been a rapid increase in infectious diseases, with tuberculosis becoming the leading registered cause of death, and the proportion of the deaths due to infectious and parasitic causes has increased from 13.1% to 25.5% from 1997 to 2006. The National Burden of Disease Study highlighted the need for the provision of a wide range of health services, but emphasised the need to promote health and prevent disease. In addition, other non-fatal health problems such as adult-onset hearing loss and cataract-related blindness feature among the leading single causes of health loss. Interpersonal violence and alcohol harm are other risk factors from the social sphere. These are accompanied, on the one hand, by risk factors related to poverty and under-development, such as under-nutrition, unsafe water, sanitation and hygiene and indoor smoke from solid fuels, and on the other hand by risk factors associated with an unhealthy lifestyle related to tobacco, diet and physical activity.

### 7.1.1 Burden of non-communicable diseases

The WHO estimates of the burden of disease in South Africa suggest that non-communicable diseases caused 28% of the total burden of disease measured by disability-
adjusted life years (DALYs) in 2004. Cardiovascular diseases, diabetes mellitus, respiratory diseases, and cancers together contributed to 12% of the overall disease burden, and neuropsychiatric disorders (such as schizophrenia, bipolar depression, epilepsy, and dementia) accounted for 6%. On the basis of the DALYs per 100 000 population, the WHO estimates place the burden from non-communicable disease in South Africa as two to three times higher than that in developed countries, and similar to that in some other sub-Saharan countries and central European countries that fall into the highest burden quintile. These diseases are on the increase in rural communities in South Africa; they disproportionately affect poor people living in urban settings, and are driving a rise in the demand for chronic disease care.

Many non-communicable diseases share common risk factors such as tobacco use, physical inactivity, and unhealthy diet that translate into cardiovascular disease, diabetes, and cancer. The South African adult population has high levels of these risk factors, and large proportions of the burden of disease can be attributed to these potentially modifiable risk factors. In childhood and adolescence, paradoxically, obesity and stunting coexist—both of which increase the risk of non-communicable diseases in adult life. The burden of disease related to non-communicable diseases is predicted to increase substantially in South Africa over the next decades if measures are not taken to combat the trend. An insight into the extent of and risk factors for non-communicable diseases in South Africa is crucial for effective advocacy and action.

The Global Burden of Disease study 2013 (Ng et al, 2014) described the prevalence of overweight and obesity combined and obesity alone for South Africa. From this it is clear that South Africa is facing a major challenge regarding the prevention of overweight and obesity.

**Table:** Age-standardised prevalence of overweight and obesity combined and obesity alone for girls, boys, men and women for 2013

<table>
<thead>
<tr>
<th>Boys &lt; 20 years</th>
<th>Men &gt;= 20 years</th>
<th>Girls &lt; 20 years</th>
<th>Women &gt;= 20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overwt &amp; obese</td>
<td>Obese</td>
<td>Overwt &amp; obese</td>
<td>Obese</td>
</tr>
<tr>
<td>18.8%</td>
<td>7.0%</td>
<td>38.8%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Obese</td>
<td>Overwt &amp; obese</td>
<td>Obese</td>
<td>Overwt &amp; obese</td>
</tr>
<tr>
<td>26.3%</td>
<td>9.6%</td>
<td>37.7%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Women &gt;= 20 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obese</td>
<td>Overwt &amp; obese</td>
<td>Obese</td>
<td></td>
</tr>
<tr>
<td>69.3%</td>
<td>42.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adapted from Ng et al, 2013
7.1.2 Burden of malnutrition in South Africa

Sound nutrition is a basic human right and a prerequisite for the attainment of a person’s full intellectual and physical potential. Nutrition is also the outcome of development processes in society and not simply a service to be delivered. Improving nutrition is therefore an ethical imperative, a sound economic investment and a key element of health care at all levels. South Africa is in a nutrition transition in which under-nutrition, notably stunting and micronutrient deficiencies, co-exist with a rising incidence of overweight and obesity and the associated consequences such as hypertension, cardiovascular disease and diabetes.

Within the context of the HIV and AIDS pandemic and food insecurity, the high prevalence of under-nutrition, micronutrient deficiencies and emergent over-nutrition presents a complex series of challenges. Under-nutrition has stayed roughly constant in South Africa since the early 1990s. Despite our relatively high per capita income, we have rates of child stunting (SANHANES-1 (Shisana et al, 2013): 0-3 yrs 26.9% (boys) & 25.9% (girls); 7-9 yrs: 10% (boys) & 8.7% (girls)) comparable to low-income countries in its region, and higher rates of stunting than lower-income countries in other regions. In addition; children’s nutritional status varies considerably among the nine provinces and possibly within each province. This has bearing on targeting and prioritization for interventions and resource allocation.

A similar pattern emerged for the prevalence of underweight, with almost one out of ten children being affected nationally. Wasting is less prevalent, affecting one out of twenty children nationally. In line with global trends, there is an alarming increase in the prevalence of overweight and obesity among all South Africans. The SANHANES-1 (Shisana et al, 2013) reported that in 2012, when the study was done, the prevalence of overweight and obesity among children aged 2-14 years was significantly higher in girls (16.5% & 7.1%) than boys (11.5% & 4.7%). About 26.6% of women are overweight (excluding obesity) and 24.9% are obese. The South African National Youth Health Behaviour Survey reported that 20% and 5% of grades 8 to 11 learners were overweight and obese respectively.

While substantial progress has been recorded with regard to folate and iodine status, findings on other micronutrient deficiencies among women and children from the National Food Consumption Survey (NFCS) indicate that problems persist and nutritional status may be deteriorating. About 63.6% of children between 1 and 9 years were vitamin A deficient (NFCS 2005) and the prevalence of vitamin A in women of child bearing age was 27.2%. SANHANES-1 (Shisana et al, 2013) reported that the prevalence of Vitamin A deficiency dropped to 43.6% in children.
The prevalence of anaemia in children and women was at 27.9% and 29.4% respectively in 2005. About forty five per cent (45.3%) of children were found to be zinc deficient. South Africa has essentially achieved the virtual elimination of Iodine Deficiency Disorders (IDD). At both the national and provincial level there has been a consistent increase since 1998 in the percentage of households using and consuming salt with an iodine content of more than 15ppm. However, the Limpopo Province needs special attention given that it had both the lowest mean iodine concentration at 20ppm and the lowest percentage of households with adequately iodized salt (45.3%). The new data from SANHANES-1 (Shisana et al, 2013) reported for the under-five year olds, that the prevalence of anaemia was 10.7%, mild anaemia 8.6% and moderate anaemia 2.1%.

7.1.3 Changes in the burden of diseases in South Africa from 1990 - 2010

The Global Burden of diseases, injuries, and risk factor study 2010 (Institute for Health Metrics and Evaluation, 2013) showed changes in the top 25 causes of YLLs (years of life lost) due to premature mortality from 1990 to 2010. The following table indicates the major changes (details not given).

**Table:** Ranks for top causes of YLLs rom 1990 - 2010

<table>
<thead>
<tr>
<th>Rank 1990</th>
<th>Disorder 1990</th>
<th>Rank 2010</th>
<th>Disorder 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Diarrheal diseases</td>
<td>1</td>
<td>HIV/AIDS</td>
</tr>
<tr>
<td>2</td>
<td>Lower respiratory infections</td>
<td>2</td>
<td>Diarrheal diseases</td>
</tr>
<tr>
<td>3</td>
<td>Tuberculosis</td>
<td>3</td>
<td>Interpersonal violence</td>
</tr>
<tr>
<td>4</td>
<td>Interpersonal violence</td>
<td>4</td>
<td>Lower respiratory infections</td>
</tr>
<tr>
<td>5</td>
<td>Preterm birth complications</td>
<td>5</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>6</td>
<td>Stroke</td>
<td>6</td>
<td>Stroke</td>
</tr>
<tr>
<td>7</td>
<td>Ischemic heart disease</td>
<td>7</td>
<td>Preterm birth complications</td>
</tr>
<tr>
<td>8</td>
<td>Neonatal encephalopathy</td>
<td>14</td>
<td>Hypertensive heart disease</td>
</tr>
<tr>
<td>9</td>
<td>Mechanical forces</td>
<td>9</td>
<td>Mechanical forces</td>
</tr>
<tr>
<td>10</td>
<td>Congenital anomalies</td>
<td>10</td>
<td>Ischemic heart disease</td>
</tr>
<tr>
<td>11</td>
<td>Diabetes</td>
<td>8</td>
<td>Diabetes</td>
</tr>
<tr>
<td>12</td>
<td>HIV/AIDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Protein-energy malnutrition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Hypertensive heart disease</td>
<td>47</td>
<td>Protein-energy malnutrition</td>
</tr>
</tbody>
</table>
Only some changes showed, specifically those with a potential nutrition-related indication.

The top 10 causes of DALYs (taking into consideration both YLLs and YLDs) in 2010 were HIV/AIDS, diarrheal diseases, interpersonal violence, lower respiratory infections, tuberculosis, diabetes, stroke, preterm birth complications, COPD and major depressive disorder. Globally, non-communicable diseases and injuries are generally on the rise, while communicable, maternal, neonatal and nutritional causes of DALYs are generally on the decline.

The three risk factors that account for most of the disease burden in South Africa are alcohol use, high body-mass index, and high blood pressure. The leading risk factors for children under 5 and adults aged 15-49 years were suboptimal breastfeeding and alcohol use, respectively, in 2010.

### 7.2 Dietary intake of adult South Africans

A recent review (Mchiza et al, 2015) identified dietary studies undertaken in South Africa to describe diets consumed by adult South Africans and to assess possible dietary deficiencies. Only seven studies were included in the review all conducted between 2005 and 2015 in the North West, Cape Town area, Free Stake, Vaal region and KwaZulu-Natal. The studies provided data on energy and micronutrient intakes. Although large variations were reported in energy and macronutrient intakes, the intakes were consistently lower than the recommendations except for two groups.

The food most frequently consumed were added sugar, tea, maize porridge, brown bread, full cream milk, coffee, white bread, margarine, potatoes, fruit and vegetable and rice. The % energy intakes from fat and added sugar are higher than those living in rural areas (KZN and North West) confirming the nutrition transition from rural to urban settlements. The intakes of fruit and vegetables are also too low in comparison with the recommendation of at least 400g per day leading to a less than optimal intake of micronutrients. The review speculated that overconsumption of fortified staple foods (maize porridge and bread), dietary fat and added sugar may contribute to the risk of NCDs in South Africans. Although full cream milk is one of the most frequently consumed foods, the calcium intake of men and women remains low and could contribute to the high incidence of hypertension seen in South Africa.
The high intake of sugar and sucrose-sweetened beverages could have a negative effect on the health of South Africans. Vorster et al. (2014) showed that the proportion of adults who consume sucrose-sweetened beverages doubled over a 5 year period from 2005 to 2010 with an increase in NCDs risk factors. The mean sugar intake for the urban women is reported to be 147 grams, for those who consumed sugar.

Bread is frequently consumed and the preferred staple food for a large proportion of the South Africans. The salt intake of South Africans is too high and bread is one of the main contributors to the high salt intake. The discretionary salt intake is higher than in the UK and USA and can be as high as 40% of the total salt intake (Wentzel-Viljoen et al, 2013). A high salt intake contributes to an increase in blood pressure. The South African government promulgated regulations in an effort to reduce the salt content of bread, breakfast cereals and other products.

8 THE SOUTH AFRICAN GOVERNMENT

The majority of the registered dietitians and nutritionists are employed by the Department of Health at national and provincial level.

8.1.1 The South African Government Development Agenda: Vision 2030

The National Planning Commission (NPC) was established by the President “to take a broad, crosscutting, independent and critical view” of the challenges and opportunities facing South Africa. This resulted in the release of a Diagnostic Document in 2011 which identified the main challenges confronting the country and also examined their underlying causes. The Diagnostic Report of the NPC sets out South Africa’s achievements and its shortcomings since 1994. While the country has made some progress in reducing poverty, poverty is still pervasive because many working households still live close to the poverty line. The commission was then tasked to develop a vision of what the country should look like in 2030, and a plan for achieving that vision, based on the diagnostic review of the current situation. The plan consists of 9 pillars, which will enable South Africa to realize its 2030 vision. Amongst these pillars, three of them have made an extensive reference to nutrition. They are:
• **Improving the quality of education, training and innovation**
  
  In order to improve the quality of education in South Africa, the NPC acknowledge the role that proper nutrition and diet can play in the physical and mental development for children under the age of three. The commission made recommendation on child nutrition, with specific reference to addressing micronutrient deficiencies. As part of early childhood development and nutrition, the commission also recommended the design of a nutrition programme for pregnant women and young children to be piloted by the Department of Health.

• **Quality health care for all**
  
  The commission acknowledges that good health is essential for a reproductive and fulfilling life. Long-term health outcomes are shaped by factors largely outside the health system: lifestyle, nutrition, education, diet, sexual behaviour, exercise, road accidents and the level of violence. The commission makes recommendations with regard to areas that should be prioritized in order to realize quality health care for all, as well as addressing social determinants of health. They include; sex education, nutrition, exercise, and combating smoking and alcohol abuse, and a focus on maternal and infant health care.

• **Social protection**
  
  Effective social protection and welfare services are an integral part of our programme for inclusive economic growth and central to the elimination of poverty and reduction of inequality. At present, given South Africa's extremes of unemployment and poverty, many people regularly experience hunger and find it difficult to meet the basic needs of their families. To achieve the objectives of broader social security coverage, the commission proposed the following reforms, amongst others: an acceptable minimum standard of living must be defined as the social floor, including what is needed to enable people to develop their capabilities, and this includes nutrition as one of the elements.

### 8.1.2 National Department of Health Priorities and Policies

National Department of Health is responsible for national health policy. The nine provincial departments of health are responsible for developing provincial policy within the framework of national policy and public health service delivery. Three tiers of hospitals exist namely; tertiary, regional, and district level. The primary health-care system—a mainly nurse-driven service in clinics—includes the district hospital and community health centres. Local government is responsible for preventive and promotive services. The private health system
consists of private practicing health professionals and private hospitals, with care in the private hospitals mostly funded through medical schemes.

One of the major goals of the South African government’s Medium Term Strategic Framework (MTSF) for 2009–2014 is to improve the health profile of all South Africans. The Strategic Plan of the National Department of Health (NDOH) provides a framework of the implementation of the 10 Point Plan of the health sector for 2009-2014. The National Department of Health’s 10 Point Plan is detailed below:

- Strategic leadership and creation of a social compact for better health outcomes
- Implementation of the National Health Insurance
- Improving the quality of health services
- Overhauling the healthcare system
- Improving human resources, planning, development and management
- Revitalisation of the infrastructure
- Accelerated implementation of HIV and AIDS, STI, TB and communicable diseases
- Mass mobilisation for better health for the population
- Review of drug policy
- Strengthening research and development.

The 10 Point Plan is aimed at creating a well-functioning health system capable of producing improved health outcomes. The outcome-based approach adopted by government to accelerate the implementation of the National Department of Health strategic plan guides the development of specific strategies in the sector. The four focus areas of the Health Negotiated Service Delivery Agreement are:

- Increasing life expectancy;
- Decreasing maternal and child mortality;
- Combating HIV and AIDS and decreasing the burden of disease from Tuberculosis; and
- Strengthening health system effectiveness.

A number of policy initiatives have been put in place in order to achieve the departmental goals, with specific reference to improving the nutritional status of all South Africans. The following policy documents outline nutrition-specific interventions that address the immediate causes of suboptimum growth and development:

• Campaign for Accelerated Reduction of Maternal Mortality in Africa (CARMMA) Strategy
• Non-communicable diseases strategy.

_Nutrition-specific interventions_ included in these strategic documents include, amongst others:
• Preconception nutrition
• Maternal dietary supplementation
• Micronutrient supplementation and/or fortification
• Breastfeeding and complementary feeding
• Dietary supplementation for children
• Dietary diversification
• Feeding behaviours and stimulation
• Treatment of severe acute malnutrition
• Disease prevention and management
• Nutrition interventions in emergencies

_Nutrition-sensitive interventions_ that address the underlying determinants of malnutrition include programmes and services from various government departments and civil society such as:
• Agriculture and food security (e.g. Agriculture, Forestry and Fisheries, Rural Development and Land Reform)
• Social safety nets (e.g. Social Development)
• Early child development (Social Development and Basic Education)
• Maternal mental health (Health)
• Women’s empowerment (various government institutions and civil society)
• Child protection (various government institutions and civil society)
• Classroom education (Basic Education)
• Water and sanitation (Water Affairs, Human Settlements, Health)
• Health and family planning services (Health)

Complementary strategies and an integrated approach to ensure optimal nutrition for all South Africans is a pre-requisite. Routine operations of government through existing sector-specific actions alone will not successfully and effectively address malnutrition. High level political will and sustained commitment to improving the nutrition security through a
multisectoral approach that involves several government departments at national, provincial and local level, the private sector and civil society, is of critical importance.

Building an *enabling environment to support nutrition interventions and programmes* to enhance growth and development and their health consequences is important. Some of the initiatives include:

- Rigorous evaluations
- Advocacy strategies
- Horizontal and vertical coordination
- Accountability, incentives regulation, legislation
- Leadership programmes
- Capacity investments
- Resource Mobilisation

Some of the policy initiatives that the National Department of Health has put in place to create an enabling environment for effective delivery of health and nutrition related interventions and programmes include, amongst others:

- Human Resources for Health Strategy
- National Health Insurance
- Re-engineering of Primary Health Care
- Mid-level workers Policy
- Office of Standards Compliance

*A brief explanation of these policy initiatives is outlined below:*

**A. Human Resources for Health**

From 1994, the health sector in South Africa has been affected by a legacy of mal-distribution of staff and poor skills of many health personnel, which has compromised the ability to deliver key programmes, notably for HIV, tuberculosis, child health, mental health, and maternal health. The staffing crisis is especially acute at the district level and has persisted, despite 60% of the health budget being spent on human resources. There has been a substantial increase in the number of nutrition workforce in the public sector since 2004. This increase has been attributed to the integration of nutrition related interventions into HIV/AIDS care and treatment programmes. More financial resources were allocated to nutrition related interventions, including recruitment of qualified nutrition personnel. However, this is currently not the situation.
Human resources have also been unevenly distributed between the public and private sectors, within the public sector (between the provinces in favour of those that have large, mostly urban-based medical schools), and in the case of dietitians, between hospitals and primary level care. Despite the development of a national human resources strategy in 1999/2000 and a human resources plan in 2006, there have been few concrete proposals, and fewer actions, to address the human resource needs for the nutrition programme, especially at community and primary levels. Important positive policies have included increased uptake by medical schools, legislated community service for newly graduated dietitians, the introduction of Nutritionists, and the proposed introduction of mid-level health workers in the form of Assistant Nutritionist/Dietitian. Unfortunately, the initiative to start producing mid-level workers has not yet started due to lack of policy direction from the National Department of Health.

The process of planning improvements in Human Resources for Health is guided by the national Department of Health’s 10 Point Plan. It incorporates human resources planning, development and management as one of the priorities. The fifth point in the 10 point plan, “Improving human resources, planning, development and management” has six documented strategic priorities in the Medium Term Strategic Framework (MTSF) for 2009–2014:

- Refinement of the HR plan for health;
- Re-opening of nursing schools and colleges;
- Recruitment and retention of professionals, including urgent collaboration with countries that have an excess of these professionals;
- Focus on training of PHC personnel and mid-level health workers;
- Assess and review the role of the Health Professional Training and Development Grant (HPTDG) and the National Tertiary Services Grant (NTSG);
- Manage the coherent integration and standardisation of all categories of Community Health Workers.

Work has started on the determination of norms and staffing needs for the country for primary and secondary care. This is being done with support from the World Health Organization (WHO) using the Workload Indicators of Staffing Needs (WISN) method with the aim of improving the HR data extraction, capture and analysis. This will ensure the appropriate level and mix of staff at facilities. Six provinces have been trained in WISN and it will be used within all 11 NHI pilot districts to estimate and cost future staff requirements.
B. Re-engineering of Primary Health Care (PHC)

In a move to improve the health status of the population, the South-African Department of Health has reviewed the way PHC services are delivered and has defined the ‘PHC Re-engineering’ approach. This approach builds a stronger preventative component with a ward-level community and home-based intervention by Community Health Workers supervised by a nurse and a refocused nurse-based school health programme. At the same time curative services are re-enforced in clinics and Community Health Centres through strong links between community-based and facility-based services and through a higher quality of care in facilities with systematic clinical governance and support from a district specialist team. However, a strong element of its success is dependent on the availability of the right quantity of the right categories of staff. The PHC system will be located in a district-based service delivery model focusing especially on maternal and child mortality. The three main streams are:

a. **District Clinical Specialist Support teams:** These teams will consist of four specialist clinicians (paediatrician, family physician, obstetrician & gynaecologist and anaesthetist), an advanced midwife, advanced paediatric nurse and advanced PHC nurse and will be deployed in each district.

b. **School Health Services:** This programme aims to address basic health issues amongst school going children such as eye care, dental and hearing problems, as well as immunisation programmes in schools. Contraceptive health rights, teenage pregnancy, HIV and AIDS programmes, and issues of drugs and alcohol in school will be part of this initiative.

c. **Municipal Ward-Based Primary Health Care Agents:** This team will be based in a municipal ward and will involve about 7 PHC workers or PHC agents per ward comprised of 6 community health workers and a specialist PHC nurse.

The Minister has stated that improved management of health care institutions and health districts will be essential to facilitate the re-engineering of PHC.

C. National Health Insurance

South Africa is in the process of introducing an innovative system of healthcare financing with far reaching consequences for the health of South Africans. The National Health Insurance commonly referred to as NHI will ensure that everyone has access to appropriate, efficient and quality health services. The NHI is intended to bring about reform that will improve service provision. It will promote equity and efficiency so as to ensure that all South Africans have access to affordable and quality healthcare services regardless of their
economic status. To successfully implement a healthcare financing mechanism that covers the whole population such as NHI, four key interventions need to happen simultaneously: (a) a complete transformation of the healthcare service provision and delivery (b) the total overhaul of the entire healthcare system (c) the radical change of administration and management, and (d) the provision of a comprehensive package of care underpinned by re-engineered Primary Health Care. Therefore, improvement of the quality of health care in the public health system is at the centre of the health sector's reform endeavours. As part of the overhaul of the health system and improvement of its management, hospitals in South Africa have been re-designated as follows:

- District hospital;
- Regional hospital;
- Tertiary hospital;
- Central hospital; and
- Specialized hospital.

Health care services will be rendered at different levels of care with specific core packages.

D. Mid-Level Workers (MLW) Policy

A small number of MLWs are trained at Higher Education Institutions (HEI), specifically at the Universities of Technology. These are Emergency Medical Care Technicians, Radiographer Assistants, Pharmacy Technicians, and Forensic Pathology Assistants. Clinical Associates are the only MLW trained in a Faculty of Health Sciences at the University of the Witwatersrand (Wits), Walter Sisulu, and Pretoria Faculties of Health Sciences. The training output of MLWs is very small since there was a delay with the finalization of the policy by the National Department of Health to develop MLWs. Some Provincial departments of health such as Kwazulu-Natal have started to address this by making their own plans given the lack of a national plan and the demand for MLWs in the services. The issue of formalizing and expanding the training of MLWs at HEIs would require thorough planning and development phases. The requirements, based on service plans, should be determined, how the training would be financed, and the plans for employment and career pathing. HEIs did express capacity challenges which should be addressed through appropriate planning and financing. It is important to formalize the training and accreditation of MLWs to meet the needs of the country and ensure that training is standardized throughout and agreed upon by all stakeholders.
8.1.3 Strategic implications for Human Resource Development for nutrition within the context of the South African developmental agenda and the Health System

The Department of Health’s role in providing overall guidance on activities that contribute to improving nutritional status of all South Africans has generally been characterised by good policies, but with short-comings on the implementation, monitoring, and assessment of these nutrition interventions throughout the system. The scarcity of nutrition personnel, especially in rural areas and at lower levels of the health system, have presented one constraint to policy implementation, but another key constraint is that at all levels of the health system there has been inadequate leadership and management of the available resources. This was also identified during the Landscape Analysis on identifying bottlenecks to scale-up evidence based nutrition interventions to address child and maternal under-nutrition. Poor stewardship at the policy level and weak management and supportive supervision at the implementation level are major obstacles to improving the health system in South Africa.

The extensive and changing burden of disease in South Africa has several implications for human resource development and planning on nutrition in South Africa:

1. Scaling up nutrition programmes will require substantial resources to enable government to strengthen their institutions and management capabilities in the nutrition sector
2. The scarcity of nutrition personnel, especially in rural areas and at lower levels of the health system, have presented one constraint to policy implementation, but another key constraint is that at all levels of the health system there has been inadequate leadership and management of the available resources
3. Training and development for nutrition professionals should provide for a wide spectrum of conditions, with specific reference to these areas
   a. Maternal nutrition
   b. Child nutrition
   c. NCD
   d. TB
   e. HIV/AIDS
4. Addressing social determinants of nutrition needs to be high on the training agenda, which should include nutrition sensitive programmes
5. Innovative approaches, communication and advocacy are needed, in particular for the non-communicable diseases
6. More emphasis should be put on the preventive and curative nutrition services

7. In order to meet the demands at facilities, as well as at community level, a different nutrition cadre, in the form of a mid-level worker should be explored

8. To advocate for the implementation of nutrition sensitive interventions and policy advocacy issues on the basic causes of malnutrition would require different set of skills such as economics, communication, leadership, advocacy, social sciences, advanced clinical and public health issues, etc. A need to ensure that nutrition indicators for nutrition-specific and nutrition-sensitive interventions are located within an additional number of vertical goals, such as gender equity, education, and employment will require strong advocacy skills. All these indicators should be linked across the different goals to generate a horizontal nutrition goal. These sets of skills may require advanced training, preferably at a post graduate level

9. With the implementation of the NHI, facility-based nutrition interventions, with specific reference to the management of food service units, will become the cornerstone of improving quality of care to patients. This critical area of patient care provides the profession with a ‘window of opportunity’ to become the voice of nutrition through improving quality of care at the facility level

10. A need to have experienced nutrition leaders at the district level is long overdue. This is the future of implementation of health programmes, including nutrition through the three streams of Primary Health Care. Strong coordination, communication, advocacy and technical skills will be needed. Given an environment of limited funding, maximizing resources and preventing duplication of effort require high levels of collaboration and coordination among stakeholders working to develop and implement nutrition programmes

11. Training platforms for nutrition professionals should be revisited to ensure that the proposed skills that these cadres should have, are adequately embedded at different levels of their development

12. Training and development should also equip nutrition professionals with the necessary skills to lead nutrition in the private sector, non-governmental organizations, or any other level wherein food-system policies are implemented.

8.1.4 Other initiatives within the State structures

The Cabinet has established an Inter-Ministerial Committee (IMC) on Food Security, jointly led by the Ministers of Social Development and of Agriculture, Forestry and Fisheries, aimed
at fighting food insecurity, hunger and malnutrition. The IMC has been tasked with delivering an integrated, intersectoral food security programme based on the Brazilian ‘Fome Zero’ (Zero Hunger) programme which has played a key role in addressing citizens’ rights to food. Efforts to observe this right will generate demand for the supply of nutritious food, and the government intends to use the state procurement of food as a catalyst for local food production and procurement. Female-headed households, children, people with disabilities, and people who are falling prey to gaps in social assistance will form part of the primary target.

No positions for nutrition specific professionals have been made in the Department of Social Development.

**The Zero Hunger Programme of the Department of Agriculture** seeks to link subsistence producers and smallholder producers/producers to government institutions such as government schools (i.e. to supply the School Nutrition Programme), public hospitals and prisons, and in the medium term also be a conduit through which food produced by smallholders can be used to meet the nutritional needs of low-income individuals and households in communities at large. As such, the Zero Hunger Programme seeks to provide a boost to existing smallholder producers/producers, and an opportunity through which subsistence producers can start generating a sustainable income through farming, and thereby become smallholder producers in their own right. While Zero Hunger has not been adopted yet as a formal policy, its implementation is already being tested and refined through the collaboration of DAFF and the provincial departments of agriculture and by means of linking it to the Comprehensive Agricultural Support Programme (CASP).

The department of Agriculture also include a focus on employee health and wellness. The department will align with the approved Employee Health and Wellness (EH&W) Framework for the public service led by the DPSA. The DAFF will continue to render services and advocacy programmes in disease management, HIV counselling and testing, psychosocial services and access to health information through the Health Promotion and Employee Assistance Programme (EAP). All the employees of the department will access the services as per the Batho Pele principles. The HIV and AIDS Strategy for the Agriculture, Forestry and Fisheries Sector (HASAFFS) will be implemented to ensure accessibility to care and support, the importance of adherence to treatment and disclosure, and good nutrition for employees in the department and the sector.
Through its strategic objectives, the Agricultural Research Council will drive the transfer of technology and commercialisation, ensure sustainable use and management of natural resources, enhance nutrition, food security and safety and manage and mitigate agricultural risks.

However no positions for appointment of nutrition professionals have been made within the Department of Agriculture.

9 CURRENT TRAINING AND REGISTRATION OF DIETITIANS AND NUTRITIONISTS IN SOUTH AFRICA

9.1 Training of dietitians and nutritionists

Currently training of dietitians is taking place at 10 Universities in South Africa, namely:
- Nelson Mandela University – Port Elizabeth; Eastern Cape Province: started in 2013
- North-West University – Potchefstroom; North West Province
- Sefako Makgatho Health Sciences University (previously University of Limpopo; Medunsa) – Pretoria; Gauteng
- Stellenbosch University – Bellville, Tygerberg; Western Cape Province
- University of Cape Town – Cape Town; Western Cape Province
- University of KwaZulu Natal – Pietermaritzburg; KwaZulu Natal
- University of Limpopo; Turfloop Campus - Polokwane; Limpopo Province
- University of Pretoria – Pretoria; Gauteng
- University of the Free State – Bloemfontein; Free State
- University of the Western Cape – Bellville; Western Cape Province

Nutritionists are currently trained at 3 Universities, namely:
- North-West University – Potchefstroom; North West Province
- University of KwaZulu Natal – Pietermaritzburg; KwaZulu Natal
- University of Venda – Thohoyadou; Limpopo Province

The University of KwaZulu Natal has indicated that they will not take in new students in this programme in 2014 and has since exited all enrolled students either to their current dietetic programme or other programmes at the university. They currently have no pipeline students in this programme. North-West University also indicated that they will not take in new
nutrition students in 2016 due to the low number of applications in previous years, and will deliver their last batch of student at the end of 2016. UNISA and the University of Pretoria have formally indicated that they are investigating the possibility to train nutritionists. Both these universities were requested to put the implementation on hold.

At present the Professional Board is not accrediting any new applications for training of dietitians or nutritionists and will not do so until such time that the final decision regarding the training of nutrition professionals has been taken.

9.2 Registration of dietitians and nutritionists in South Africa

The registration of nutrition professionals as on 8 January 2014 is given in the table below.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number – 2014/01/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietitian</td>
<td>2 734</td>
</tr>
<tr>
<td>Student dietitian</td>
<td>1 418</td>
</tr>
<tr>
<td>Nutritionist</td>
<td>180</td>
</tr>
<tr>
<td>Student nutritionist</td>
<td>259</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4 591</strong></td>
</tr>
</tbody>
</table>

This only captures the numbers registered in each category and does not give where each category may be employed, be it private sector, government sector, industry or registered but non-practicing professionals. This type of information is currently lacking in SA.

10 INTERNATIONAL TRAINING OF NUTRITION PROFESSIONALS

It is difficult to obtain relevant information on the training of undergraduate dietetic and/or nutrition programmes in Africa. A recent study by Sodjinou et al (2014) assessed the capacity for human nutrition training in West Africa. The following countries participated (divided according to three major language groups): Anglophone countries (Ghana, Liberia, Nigeria, Sierra Leone and The Gambia); francophone countries (Benin, Burkino Faso, Côte d’Ivoire, Guinea, Mali, Mauritania, Niger, Senegal, and Togo) and Lusophone countries (Cape Verde and Guinea-Bissau). They reported that 83 nutrition programmes are offered in these 16 countries. Of these 32 were BSc programmes, 34 MSc programmes and 17 PhD programmes. Nigeria offered 15 of the undergraduate programmes. Six countries did not
offer any nutrition programmes. The programmes are heavily oriented to food science (46%), with little emphasis on public health nutrition (24%). The programmes required 3 to 4 years full-time study. The authors of the study concluded that these programmes have a number of challenges including the need to emphasize for community-based management of acute malnutrition, overnutrition and chronic non-communicable diseases. There is also a need to have competency-based training in nutrition.

Information of other countries is difficult to get, but we know that Ghana and Kenya are training dietitians. Zambia and Rwanda is also in the process of developing training for dietitians.

In addition, some of the Task Team members attended the ‘Strengthening the human resource base for nutrition in East and Southern Africa Region: Report of the assessment of the nutrition learning needs and gaps and development of a standard mid-to high-level pre-service curriculum for the Region’ workshop in Burundi in July 2014.

The Chair of the Professional Board was invited to attend the ‘Multisectoral nutrition capacity: a must for building healthy global food systems - Assuring the quality of nutrition workforce preparation; WPHNA Capacity Building Task Force Workshop’ in Oxford, UK on 7 September 2014.

11 SUMMARY OF SITUATION

Although improvements in some selected aspects of the nutritional status of the population have been documented, it is clear that the improvements are not sufficient. Swart et al. (2008) indicated that South African nutrition strategies and programmes are in line with current international recommendations and that the limited success of these is due to inadequate implementation. They suggested that the improvement of impact of these strategies are dependent on programme choices, the development of a range of capacities such as technical, operational, programme / action research, information management and strategic capacity as well as the provision of adequate numbers of appropriately trained human resources.

In summary, there is a need for change in the training of the nutrition professional for South Africa, due to:
1. Changes in the burden of disease in South Africa;
2. Changes in nutrition service delivery within the context of the SA developmental agenda and Health System;
3. Changes in the South African and global economic climate;
4. Changes in the nutrition agenda in South Africa and globally;
5. Need to interact with other disciplines/sectors/organizations/stakeholders/etc;
6. Lack of community service positions for nutritionists;
7. Lack of positions for nutritionists;
8. Training and registration of two nutrition professionals with the current overlap between the scopes of practice and the unclear role delineation is not viable;
9. The attempt to create differences between the two professions by ensuring that dieticians and nutritionists will operate at a facility and community level respectively has resulted in uncertainties and antagonism between the two professions at the implementation level;
10. The unclear role delineation between the two professions is confusing for some employers resulting in the inappropriate appointment of nutrition professionals;
11. At some levels there is a perception that the nutritionist is a duplication of the dietitian;
12. The gap in service delivery to address nutrition problems at the community and household level has not been closed;
13. The polarization of the nutrition workforce does not serve either of the professions or the future of nutrition in South Africa well;
14. Changes in the teaching-learning environment with emphasis on innovation and interprofessional training;
15. See also the points under 8.1.3.
12 THE NEW NUTRITION PROFESSIONAL

The Professional Board approved the concept of a single general nutrition professional cadre at entry level – starting from the needs of the population i.e. primary health care perspective – and allows for advanced qualification(s) and accompanied registration to address the tertiary level needs of the population.

12.1 Purpose and scope of the nutrition professional

The **purpose** of the nutrition professional is:
The nutrition professional use appropriate policies, programmes and nutrition principles to prevent, treat and manage nutrition related diseases and promote the nutritional well-being of the individual, community and population.

The **scope** of the nutrition professional is formulated as:
Optimizing the nutritional well-being of individuals, groups, communities and the population in different settings by:

- Utilizing (critically appraise and apply) a comprehensive body of evidence-based food and nutrition theory and principles
- Assessing the nutritional status, food and nutrition situation(s) and concomitant health risks of clients/patients, groups, communities and the population using relevant methodologies
- Advocating for the nutrition professionals, services and programmes
- Conceptualizing, planning, implementing, managing, monitoring, evaluating and documenting appropriate nutritional prescriptions for patients/clients with specific nutritional needs
- Conceptualizing, planning, implementing, managing, monitoring, evaluating and documenting appropriate nutrition interventions programmes, nutrition policies, strategies and guidelines for individuals, groups, communities and the population with specific needs
- Taking responsibility for using/applying appropriate nutrition policies, strategies and guidelines
- Influencing the national food systems/environment to enable all individuals to have access to affordable, nutritious and safe food
- Applying information, communication, education and counselling skills and social mobilizing to empower individuals/communities/populations to change their food/nutrition behaviour to make safe, healthy food choices to prevent nutrition-related diseases and to improve quality of life
- Planning and executing an effective food service system based on the specific food and nutritional needs of the healthy and ill
- Managing human, financial and other resources to ensure optimal and equitable delivery of nutrition services at all levels of service delivery including PHC and population level
- Conceptualizing, formulating, implementing and communicating nutrition related research
- Planning, implementing, managing, evaluating, monitoring and documenting procedures and policies relating to human, financial, operational and other resources
- Applying critical and creative thinking in working effectively within a multidisciplinary environment, the community and stakeholders in contributing to the personal, social and economic development of society in an ethical and professional manner.

### 12.2 Competencies of the nutrition professional

The competencies of the nutrition professional are based on the work done by the Second Task Team (and include some of the current competencies of a dietitian and nutritionist) as well as discussions with and comments received from stakeholders.
COMPETENCIES OF THE NUTRITION PROFESSIONAL

The nutrition professional will be able to:

### NUTRITIONAL AND OTHER BASIC SCIENCES

<table>
<thead>
<tr>
<th>Nutritional science</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand the science and principles of human nutrition, the relationship between</td>
<td>Understand other basic sciences (e.g. physiology, biochemistry,</td>
</tr>
<tr>
<td>nutrients found in food and their influence on human physiology, nutritional</td>
<td>microbiology, pathophysiology, pharmacology) for a better</td>
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<tr>
<td>assessment and the application to health</td>
<td>understanding of the science of human nutrition and its</td>
</tr>
<tr>
<td></td>
<td>relationship with growth, development, health and ill-health and</td>
</tr>
<tr>
<td></td>
<td>recovery</td>
</tr>
<tr>
<td>Understand the factors determining the nutrient requirements in different stages of</td>
<td>Understand the influence of different factors in promoting</td>
</tr>
<tr>
<td>the life cycle</td>
<td>healthy eating during the life-cycle</td>
</tr>
<tr>
<td></td>
<td>Demonstrate the ability for in-depth cause analysis of nutrition</td>
</tr>
<tr>
<td></td>
<td>related health issues based on appropriate conceptual</td>
</tr>
<tr>
<td></td>
<td>frameworks and scientific and contextual information</td>
</tr>
<tr>
<td></td>
<td>Understand factors contributing to nutritional well-being and</td>
</tr>
<tr>
<td></td>
<td>the multi-causality of nutritional problems (causal processes</td>
</tr>
<tr>
<td></td>
<td>and risk factors)</td>
</tr>
<tr>
<td>Food science</td>
<td></td>
</tr>
<tr>
<td>Understand the science of food and the impact of food handling and preparation</td>
<td>Understand the principles of food technology and food</td>
</tr>
<tr>
<td>methods on the nutritional value, quality and sensory properties of food</td>
<td>preservation and its impact on the nutritional value, quality</td>
</tr>
<tr>
<td></td>
<td>and sensory properties of food</td>
</tr>
<tr>
<td>Understand the role and optimal utilisation of organic foods and genetically</td>
<td>Understand the role and optimal utilisation of functional</td>
</tr>
<tr>
<td>modified foods</td>
<td>foods and nutrient and food supplements</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Food systems</td>
<td></td>
</tr>
<tr>
<td>Understand theories of development</td>
<td>Understand indigenous knowledge in food, nutrition and</td>
</tr>
<tr>
<td></td>
<td>development</td>
</tr>
<tr>
<td>Food service system management</td>
<td></td>
</tr>
<tr>
<td>Understand the production and management principles and practices of large scale</td>
<td></td>
</tr>
<tr>
<td>food production</td>
<td></td>
</tr>
<tr>
<td>Social science, sociology, nutritional anthropology and communication</td>
<td></td>
</tr>
<tr>
<td>Understand the underlying economic and social conditions as related to food and</td>
<td>Understand the influence of local conditions (ecological, social,</td>
</tr>
<tr>
<td>nutrition security</td>
<td>political and economic) on the adoption and effectiveness of</td>
</tr>
<tr>
<td></td>
<td>various nutrition-related programmes</td>
</tr>
<tr>
<td>Identify and apply cultural and religious influences on food preferences,</td>
<td></td>
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<tr>
<td>acceptance, preparation, etc.</td>
<td></td>
</tr>
<tr>
<td>Proficient in the use of information technology and social media</td>
<td></td>
</tr>
</tbody>
</table>
NUTRITIONAL AND OTHER BASIC SCIENCES

Governance
- Understand and experience the functioning of the health system and development structures in South Africa
- Understand the economic, political and social contexts of nutrition
- Understand the goals and importance of nutrition policy
- Demonstrate the ability to provide input in the development processes and appraisal of nutrition policy
- Demonstrate the ability to plan a stakeholder analysis process
- Understand the role of the nutrition professional in a multi-stakeholder engagement process

The nutrition professional will be able to:

SCREENING / NEEDS ASSESSMENT / SITUATION ANALYSIS

Individual nutrition assessment and diagnosis
- Assess nutritional status and the concomitant health risk of clients/patients and groups in communities/ institutions / schools by applying the following (only one or a combination):
  - socio-demographic evaluation
  - anthropometric evaluation and body composition analysis
  - biochemical evaluation
  - clinical evaluation
- dietary evaluation
- Integrate, analyse, classify (where appropriate) and interpret nutritional assessment data to identify nutrition and related health risks and problems
- Predict types and severity of nutrition-related health issues, based on the appropriate methods of nutritional assessment, which may occur in individuals or communities
- Diagnose, based on the appropriate methods of nutritional assessment, the type and severity of the nutritional disorder or special nutritional needs of individual patients/clients
- Assess patient/client/group food preferences

Community assessment and diagnosis
- Conduct a comprehensive nutrition situation analysis or community diagnosis (incl sanitation, water, etc)
### SCREENING / NEEDS ASSESSMENT / SITUATION ANALYSIS

- Identify, characterize and prioritize nutrition-related problems in different socio-economic, occupational, age, cultural and religious groups in communities and populations
- Identify and monitor vulnerable and at risk groups
- Understand nutrition indicators relevant to health, development and management systems and participate in operation of information systems


The nutrition professional will be able to:

### NUTRITION PLANNING, IMPLEMENTATION, MONITORING AND EVALUATION

#### Nutritional care for individuals
- Select, plan, implement, monitor, evaluate and document appropriate nutrition care and education for individual patients/clients with specific disease conditions or special nutritional needs in different settings.
- Promote and monitor patient / client compliance with the nutrition care plan
- Take appropriate action after monitoring and evaluation, if needed
- Collaborate with the different members of the health care team to select, plan, implement and evaluate the nutrition care and education of individual patients/clients with specific disease conditions or special nutritional needs
- Participate in multidisciplinary / interdisciplinary ward rounds / discussions and provide nutritional recommendations for managing the patient nutritionally
- Provide home-based nutrition support (tube feeds and targeted supplementary feeding for patients)
- Compile normal and therapeutic menus to comply with patient / client and/or group nutritional needs and food preferences
- Apply evidence-based dietary measures as part of managing patients nutritionally, including critical patients and patients with multiple diagnosis requiring complex medical care
- Understand drug-nutrient interactions

#### Nutritional care at public / communities levels
- Conceptualise, plan, implement, monitor, evaluate and document appropriate intervention strategies to address nutrition and related health issues of groups in communities and/or the public and to improve wellness
- Contribute to the development of a comprehensive monitoring and evaluation framework for nutrition interventions
- Develop and implement a comprehensive monitoring and evaluation framework for nutrition interventions
- Operationalize plans for nutrition and integrate within the provincial, district and local authority contexts
The roles and competencies of the Nutrition Professional in the well-being of the SA population: 15 January 2016

**NUTRITION PLANNING, IMPLEMENTATION, MONITORING AND EVALUATION**

- Understand the factors for success of nutrition programmes
- Apply analytical skills in the evaluation of food and nutrition security in a particular community
- Collaborate with relevant stakeholders in the selection, conceptualisation, planning, implementation, monitoring, evaluation and documentation of appropriate intervention strategies to address nutrition and related health problems of groups in communities and/or the public
- Facilitate and monitor community or public participation in the selection, planning, implementation and evaluation of appropriate intervention strategies
- Understand the principles and concepts in monitoring and evaluation of nutrition programmes
- Adapt the intervention strategy/nutrition care plan / food service based on feedback from continuous monitoring of the quality of nutrition service delivery
- Identify and recommend nutrition indicators to measure nutrition performance and outcomes
- Participate in multidisciplinary / interdisciplinary discussions
- Evaluate, analyse, interpret and act upon appropriate nutrition indicators
- Establish links and referral system to community support groups and health facilities
- Provide technical support to support groups focusing on diseases of lifestyle, breastfeeding, etc.
- Compile a database of the causes of malnutrition
- Identify vulnerable individuals (children, orphans, women and/or elderly) and enrol them to appropriate programmes
- Measuring the effectiveness of programmes in improving nutrition of individuals (example by checking the anthropometric measurements of beneficiaries before enrolment to the programme and continue monitoring progress)

**Nutrition service delivery**

- Monitor patient / client/group satisfaction with nutrition service delivery
- Support implementation of nutrition services (both at facility and community settings)

**Inter- and intra-sectorial support and co-ordination**

- Provide technical support to stakeholders
- Initiate and strengthen Private Public Partnership, e.g. to create demand and supply for nutritious foods
- Provide technical support and monitor and evaluate nutritional services provided in community centres (e.g. ECD centres, community nutrition centres, old age homes, etc.)
The nutrition professional will be able to:

### FOOD SERVICE (MANAGEMENT)

- Plan, execute and control food procurement, storage, production, distribution, and consumption of the final product
- Develop and standardise normal and therapeutic recipes for specific needs of patients/clients and/or groups in communities
- Apply food quality standards as well as procedures to monitor food standards with reference to nutritional, sensory and microbiological aspects
- Interpret and apply specifications for food preparation areas, space and equipment needed for optimal work flow and production based on the menu and purchasing and production policies
- Compile food and nutritional product specifications
- Integrate the food service system in nutrition service delivery in the private and public sectors, as well as community settings
- Adapt the food service based on feedback from continuous monitoring of the quality of nutrition service delivery
- Plan and implement drop-in centres/soup kitchens (select food items and plan the menu, purchasing of products and overseeing the programme)
- Plan and implement poverty relief programmes such as food parcel distributions to poor households
- Plan and implement programmes for emergency situations in communities

### FOOD AND NUTRITION SECURITY

- Understand the concepts of food and nutrition security
- Identify food and nutrition problems and factors influencing food and nutrition security
- Identify and understand the causes of food and nutrition insecurity at household, community and national level
- Understand the consequences of food and nutrition insecurity
- Understand the concepts of multisectoral approaches (i.e. agriculture, water, sanitation, social development, etc) in addressing food and nutrition insecurity
The roles and competencies of the Nutrition Professional in the well-being of the SA population: 15 January 2016

The nutrition professional will be able to:

**COMMUNICATION AND ADVOCACY**

<table>
<thead>
<tr>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Understand the concepts of behaviour change communication (BCC)</td>
</tr>
<tr>
<td>• Understand how to implement behaviour change communication</td>
</tr>
<tr>
<td>• Communicate effectively with individuals and groups in different contexts</td>
</tr>
<tr>
<td>• Communicate effectively using the oral, written and electronic media</td>
</tr>
<tr>
<td>• Use effective communication techniques in persuading, informing and educating the public on nutrition (communication for behaviour change)</td>
</tr>
<tr>
<td>• Develop information, education and communication material and disseminate</td>
</tr>
<tr>
<td>• Apply basic marketing skills and principles</td>
</tr>
<tr>
<td>• Harness innovation and technology in nutrition advocacy and communication</td>
</tr>
<tr>
<td>• Translate nutritional knowledge and guidelines into food-based advice within socio-economic-cultural contexts</td>
</tr>
<tr>
<td>• Understand and apply the principles of health promotion</td>
</tr>
</tbody>
</table>

**Advocacy (could also be with Leadership)**

<table>
<thead>
<tr>
<th>Advocate for nutrition-related issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Advocate for and incorporate nutrition objectives into development projects</td>
</tr>
<tr>
<td>• Plan and implement nutrition-related campaigns</td>
</tr>
<tr>
<td>• Mediate in nutrition matters between authorities at various levels of health, education, social service systems, and others systems such as finance</td>
</tr>
<tr>
<td>• Act as a catalyst by facilitating the prioritization of nutrition considerations at the community level</td>
</tr>
<tr>
<td>• Advocate for child and women health rights (advocacy for reduction of child and maternal mortality; focusing on prevention of diarrhoea, malaria, pneumonia and malnutrition in communities)</td>
</tr>
<tr>
<td>• Liaise with other role players in relevant settings such as education or social services, regarding for example food quality, safety, socio-economic circumstances, etc</td>
</tr>
<tr>
<td>• Collaborate with members of food industry to ensure their compliance with dietary guidelines, food regulations and other legislative frameworks, and objectives of local food and nutrition policy</td>
</tr>
<tr>
<td>• Network with other relevant role players through the provision of knowledge and information on food, nutrition and health</td>
</tr>
<tr>
<td>• Develop a variety of nutrition and health promotion activities and materials using different media such as newsletters, pamphlets, publications, public relations and audio-visual material, to support various activities in health care relevant to nutrition</td>
</tr>
<tr>
<td>• Stimulate and contribute to mass-media initiatives on matters of nutrition and health</td>
</tr>
<tr>
<td>• Determine needs for nutrition services, including nutrition health promotion</td>
</tr>
<tr>
<td>• Assist with the planning and implementation of a vegetable garden (planting, fertilization and watering)</td>
</tr>
</tbody>
</table>
The nutrition professional will be able to:

### MANAGEMENT AND LEADERSHIP

| Management                                                                 |                                                                 |                                                                 |
|                                                                             | o Development of a business plan                                |                                                                 |
|                                                                             | o Human resource management                                     |                                                                 |
|                                                                             | o Financial management                                          |                                                                 |
|                                                                             | o Time management                                               |                                                                 |
|                                                                             | o Procurement (supply chain) management                         |                                                                 |
|                                                                             | o Operational management                                        |                                                                 |
|                                                                             | o Programme management                                          |                                                                 |
|                                                                             | o Project management                                            |                                                                 |
|                                                                             | o Legislation                                                  |                                                                 |
| Leadership                                                                  | Understand leadership skills                                     |                                                                 |
|                                                                             | Communicate the importance of nutrition on the national developmen |                                                                 |
|                                                                             | Provide leadership at all levels of the health care system, coupled with a strong sense of responsibility and accountability for the development and improvement of nutrition services as an integral component of the health system |                                                                 |
|                                                                             | Establish effective networks and strong alliances                |                                                                 |
|                                                                             | Build relationships with internal teams including systems and marketing in developing and implementing new wellness products |                                                                 |
|                                                                             | Provide strategic and policy direction                          |                                                                 |
|                                                                             | Ensure timely and decisive action on pertinent nutrition issues in the country |                                                                 |
|                                                                             | Understand the process of mentoring and coaching                 |                                                                 |
|                                                                             | Liaise with relevant stakeholders at various levels and sectors in the implementation of nutrition programmes |                                                                 |
|                                                                             | Make a case for resources and prioritization of nutrition actions |                                                                 |
|                                                                             | Mentor junior nutrition staff members                            |                                                                 |
The nutrition professional will be able to:

**EDUCATION, TRAINING, PROMOTION AND CAPACITY BUILDING**

- Assess the training needs of individuals and/or groups in communities/ institutions involved in nutrition service delivery to build capacity in this regard
- Plan and provide nutrition education/training to individuals and groups as identified
- Use effective communication techniques in persuading, informing and educating individuals and groups on nutrition
- Provide (plan, organise, implement and evaluate) nutrition information to relevant groups (professionals, organisations, public) and in different settings
- Communicate to the nutrition community and higher learning institutes on practical experience, lessons learned and competence needed in community nutrition
- Develop educational materials and use them as an aid in nutrition counselling and education
- Co-ordinate and provide training to other health professionals & stakeholders
- Develop and disseminate nutrition information, education and communication material
- Train community members to administer growth monitoring
- Facilitate and co-ordinate individual, organizational and systemic capacity
- Participate in national and provincial conferences and workshops to improve the knowledge base and competency of health professionals and planners
- Provide, use and maintain appropriate tools, equipment, job aids

**Health hygiene education programmes and promotion**

- Plan low cost behavioural changes that can improve health and nutrition
- Health and hygiene education and promotion
- Educate mothers on complimentary feeding
- Facilitate programs that will improve breastfeeding practices
- Development of community support groups for example for EBF, CBF, OVC programmes

The nutrition professional will be able to:

**RESEARCH**

**Basic research**

- Understand and apply the principals of nutrition-related research
- Understand and apply epidemiological sciences
### RESEARCH

- Assess, critically review and apply relevant scientific information, in order to identify research needs in the public health sector
- Initiate, undertake and participate in all aspects of the research process:
  - the identification of a research problem and formulation of a research question
  - the design of an appropriate research project
  - the presentation and dissemination of the results
  - the writing of a research report
  - the identification and formulation of practical applications of the research results
- Participate in research initiated by other health care professionals and provide expertise in the evaluation of nutritional status/nutrition interventions
- Participate in operational research of delivery, implementation and scale up of nutrition actions

**Applied research skills** (statistics; epidemiology; survey and field study design; data handling, analysis, and interpretation; application to community needs assessment, programme monitoring, and evaluation; qualitative and quantitative methods)

- Understand and apply the principles of human nutrition and epidemiology sciences – including factors influencing food patterns and nutritional status
- Understand how scientific information is used to develop policies and programmes, public health strategies, dietary recommendations and guidelines, and government and international reports
- Identify research areas based on scientific literature and public health needs, develop hypotheses, design protocols to test hypotheses, execute research with appropriate methods, analyse and interpret results, and communicate results to fellow scientists, practitioners, and beneficiaries through appropriate channels
- Critically evaluate, interpret and summarise key findings of original research papers
- Use scientific information to develop policies and programmes, public health strategies, dietary guidelines, protocols, and government and international reports

The nutrition professional will be able to:

### STRATEGIES, POLICIES AND GUIDELINES

**Policies**

- Understand policies and legislation relevant to nutrition (local, national and international)
- Contribute to formulation of nutrition policy at various levels (local, regional, national), by communicating nutritional needs and scientific methods to address these needs
- Contribute to development of policies pertaining to politics and economy of nutrition
- Develop implementation guides for nutrition policies

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The roles and competencies of the Nutrition Professional in the well-being of the SA population: 15 January 2016
### STRATEGIES, POLICIES AND GUIDELINES

- Conduct evidence based policy reviews and updates
- Advise relevant authorities on inclusion and integration of nutritional considerations in general health development
- Contribute to development of policies pertaining to politics and economy of nutrition
- Evaluate the effects of nutrition policies in other sectors
- Evaluate the impact of policies in other sectors on nutrition
- Evaluate other sectors’ policies effectiveness and sensitivity in addressing nutrition
- Lead interdisciplinary groups in planning food and nutrition policy
- Advocate for the streamlining nutrition policies into other governmental policies
- Communicate and disseminate policies to the stakeholders
- Translate food and nutrition legislation, policies and guidelines to other stakeholders
  - within health
  - other government departments
  - developmental partners
  - private sector
  - NGO’s/CBO’s etc

#### Strategies
- Understand strategies relevant to nutrition (local, national and international)
- Develop nutrition strategies at various levels (local, regional, national)
- Develop implementation guides for nutrition strategies

#### Norms and standards
- Develop norms and standards for nutrition on different levels
- Implementation of nutrition norms and standards

#### Protocols, guidelines and standard operating procedures (SOPs)
- Develop nutrition protocols and SOPs
- Provinces will adapt and formulate provincial polices in line with national
- Develop guidelines for school tuck-shops/lunchboxes

#### Tenders specifications and labelling
- Develop tender specifications and evaluate alignment thereof with latest literature
- Facilitate and conduct compliance monitoring
**STRATEGIES, POLICIES AND GUIDELINES**

- Be an expert in food labelling and understand the regulations that relate to the labelling and advertising of foods
- Understand the marketing of food-stuffs and the laws and legislation thereof and nutrition-related claim and the restrictions around these areas

The nutrition professional will be able to:

<table>
<thead>
<tr>
<th>CRITICAL CROSS-FIELD OUTCOMES / STUDENT ATTRIBUTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal qualities</strong> (of leadership, dedication, motivation for working in community nutrition in cross-cultural settings, and an entrepreneurial spirit)**</td>
</tr>
<tr>
<td>Identify and solve problems using responsible decision making processes, based on critical and creative thinking</td>
</tr>
<tr>
<td>Work effectively with others as a member of a team (composed of the social, behavioural and health sciences/professions), group, organisation and community</td>
</tr>
<tr>
<td>Organise and manage oneself and one's activities demonstrating accountability and responsibility</td>
</tr>
<tr>
<td>Collect, analyse, organise and critically evaluate information</td>
</tr>
<tr>
<td>Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written persuasion</td>
</tr>
<tr>
<td>Use science and technology effectively and critically, showing responsibility towards the environment and health of others</td>
</tr>
<tr>
<td>Understand the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation</td>
</tr>
<tr>
<td>Contribute to the full personal development and the social and economic development of the society at large</td>
</tr>
<tr>
<td>Demonstrate ethical and professional behaviour and conduct</td>
</tr>
<tr>
<td>Perform self-evaluation and maintain and expand professional competence</td>
</tr>
<tr>
<td>Participate in workshops/seminars to gain knowledge and skills</td>
</tr>
<tr>
<td>Develop a value system for nutrition work (tolerance and sensitivity for different attitudes and values)</td>
</tr>
<tr>
<td>Operate within a human rights framework (embracing processes that lead to community capacity development) and ensure ethical and professional standards of conduct</td>
</tr>
</tbody>
</table>
13 PRACTITIONERS CURRENTLY REGISTERED AS A DIETITIAN OR NUTRITIONIST

Practitioners currently registered as a dietitian or nutritionist will continue to work in their current scope of practice. The register for dietitians and the register for nutritionists will be maintained, but once the training of the NP is in place these registers will be closed for new registrations.

If a practitioner currently registered as a dietitian or nutritionist wishes to register as a NP, the process guidelines of the Professional Board must be followed. Although the Professional Board has ideas on how to address this, it will be finalized together with the training of the NP in future.

14 THE WAY FORWARD

The skills and competencies of the NP will be updated after receiving input and comments from the stakeholders. The skills and competencies will be finalized in collaboration with the training institutions. This includes deciding on the NQF level (undergraduate NQF levels 5 – 8; postgraduate NQF level 9) of each of the skills and competencies. Once this has been done, the final document must be approved by the Professional Board after which the training institutions can begin the task of developing their individual curriculum and registering the new programme with the Department of Higher Education and Training.

15 CONCLUSION

The Task Teams of the Professional Board for Dietetics and Nutrition was mandated to address the scope of practice of the dietetic and nutritionist professions. However, because of changes in the macro and micro environment of the two professions it is necessary to look at the bigger picture. From the national data on the nutritional status of the population it is clear that there is a need for change. Changes in the training of nutrition professionals could contribute to this change. Although training of dietitians and nutritionists are not for public health services only, the Department of Health is a very important and the largest employer of nutrition professionals. At present the nutritionists are more vulnerable than the dietitians regarding employment due to the lack of positions for nutritionists in the public sector.
The training of a new Nutrition Professional has been approved by the Professional Board for Dietetics and Nutrition to address the nutrition-related challenges in future in South Africa.
REFERENCES

The roles and competencies of the Nutrition Professional in the well-being of the SA population: 15 January 2016

- Department of Higher Education. The Higher Education Qualifications Sub-Framework. Government Gazette no 36003 of 14 December. As revised, January 2013
The roles and competencies of the Nutrition Professional in the well-being of the SA population: 15 January 2016
