

Master Degree in “Nutritional Science”


**Department of Pharmacy, Health and Nutritional Sciences,
University of Calabria, Italy**

The Degree course in Nutritional Science stems from the aim set out in the international cooperation agreement occurred in November 2015 at the University of Calabria between the signatory countries of the UNESCO dossier on the Mediterranean Diet: Cyprus, Croatia, Greece, Italy, Morocco, Portugal, Spain. We believe that the educational commitment of this degree essentially relays on the food culture rooted in the modern pedagogic health model of Mediterranean diet.



This model in itself claims the rights to respect and preserve biodiversity in our ecosystem as a source of all macro/micro-nutrients featuring the biological properties of Mediterranean foods. However, Mediterranean food style risks today to be eradicated in some Mediterranean regions wherein the lifestyle tends to be more and more westernized in unhealthy way, thus the master claims the rights to food sovereignty understood as self-determination and food production to satisfy once own needs based on autonomous agricultural policies capable of blocking any speculative kind of monocultures and any abusive interference. All these prefiguring a Mediterranean agro-food system to be built progressively also through a training network wherein this master degree could represent the founding expression.

All these values may allow to locate in proper way the commitment of this Master Degree in the holistic view linking biodiversity and food democracy of Vandana Shiva, graduated “honoris causa” in Nutritional Science at the University of Calabria on April 2013. So, we entrust to the mission of “Navdanya International” also the commitment of spreading worldwide the educational values of this Master Degree at the University of Calabria.

Hon. Mario Oliverio
Governor of the Region of Calabria

Prof. Gino Mirocle Crisci
Rector of the University of Calabria

Prof. Sebastiano Andò
Head of the Department of Pharmacy, Health and Nutritional Sciences
University of Calabria

UNESCO Delegates

Rut Carek (Croatia)

Eliza Markidou (Cyprus)

Theodora Psaltopoulou (Greece)

Gino Mirocle Crisci (Italy)

Mohamed Sefiani (Morocco)

Jorge Queiroz (Portugal)

Anna Bach (Spain)

Regional Citadel, Germaneto (Catanzaro)

November 26th 2015

Master Degree in “Nutritional Science”

*Department of Pharmacy, Health and Nutritional Sciences,
University of Calabria, Italy*



The Master's Degree in Nutrition Science born within the Department of Pharmacy Health and Nutrition Sciences, recently recognized by ANVUR as a Department of National Excellence, is characterized by a strong interdisciplinarity, due to the ability to access very different skills of the teaching staff. These skills are necessary for the professional training of a complex figure as that of the Nutritionist, called to intervene in very different fields of work.

In fact, the main educational aim that characterizes this degree course is to build the new figure of the Nutritionist with in-depth knowledge of the influence of food on the state of health and well-being of people and on the prevention of diseases, including those endocrine, chronic and degenerative nature, as well as the nutritional problems of populations, in particular physiological conditions such as pregnancy, breastfeeding, growth, aging, senescence and sporting activities and on national and community food and health legislation regarding the marketing of food.

This allows graduates to be able to operate in situations aimed at the correct application of nutrition, and current regulations, using the specific technologies of nutrigenomics, proteomics and clinical proteomics applied to food and human nutrition, in order to assess quality, safety and the suitability of food for human consumption.

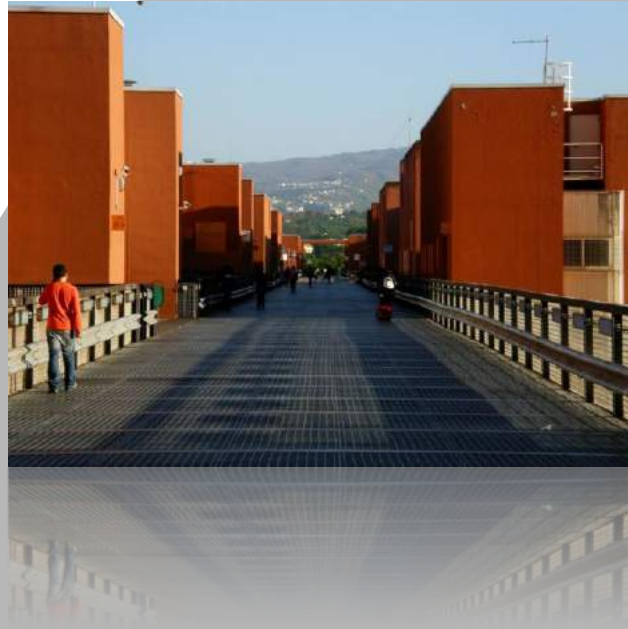
Therefore, this professional figure must be able to possess the following main skills consistent with the qualifying training objectives provided for by the LM61 class:

- Know how to evaluate the chemical characteristics of nutrients, their bioavailability in food and food supplements, the modifications induced on them by technological and biotechnological processes and their biological effects.
- Know how to verify the correct food intake to reach the recommended levels of nutrients for the maintenance of the state of health;
- Know how to apply the main laboratory techniques for assessing the state of nutrition related to macro and micronutrients and learn how to interpret the results according to the correlated clinical-pathophysiological features;
- Know how to apply dietary techniques according to the different frameworks of endocrine-metabolic pathophysiology;

Master Degree in “Nutritional Science”

*Department of Pharmacy, Health and Nutritional Sciences,
University of Calabria, Italy*

- Know how to collaborate in food consumption surveys aimed at monitoring the nutritional trends of the population;
- Know how to apply methods to evaluate food safety and their suitability for human consumption;
- Know how to collaborate in the accreditation and surveillance procedures of laboratories and health facilities, regarding the preparation, conservation and distribution of food;
- Know how to inform and educate institutional operators and the general population on the principles of food safety; In order to achieve the aforementioned objectives, a training course was developed aimed at achieving specific objectives in each disciplinary area



Within the biomedical disciplines:

- Graduates of this class must know not only solid knowledge of cellular organization and the classification of living organisms on the basis of evolutionary theories but also the main basic notions of clinical biochemistry and biochemistry, related to the needs and metabolism of physiologically active nutrients and non-nutrients, as well as being useful for the evaluation of nutritional status. **They must also know the relationship between nutrients and modulation of the genetic structure and proteome, as well as the effects on the cellular metabolism of industrial pollutants and food additives.** It is also required to know the relationship between food and microorganisms that develop in them, both from the point of view of their conservation, and as a vehicle of diseases and intoxication.

Within the disciplines of human nutrition:

- Graduates must know the techniques of assessment of nutritional status, the concepts of a balanced diet and nutritional requirements, also in relation to the different age levels and conditions of the organism, in addition to the metabolic effects of the most widespread hypocaloric diets. They must also know the mechanism of action and the interaction of drugs with nutrients, in addition to the action of food supplements and nutraceuticals, the endocrine regulation of metabolism, the impact of diseases related to malnutrition due to excess or lack of foods on health Public.

Master Degree in “Nutritional Science”

*Department of Pharmacy, Health and Nutritional Sciences,
University of Calabria, Italy*



They must also be aware of the physio-pathological aspects concerning the digestive system, the role it plays in the development of food intolerances and its correlation with pathologies and the human immune system, as a host of probiotic microorganisms. In the area for the characterization of food and management of the agri-food system: Graduates must know the composition of food, as well as the most advanced techniques for processing and preserving food, in addition to the chemical transformation events induced by its cooking. They must also know the most common instrumentation for laboratory analyzes and the principles on which the related techniques are based, be educated on diseases caused by micro-organisms transmitted by domestic animals and soil and caused by their widespread toxins in foodstuffs. Finally, they must be well informed on the main legal rules that regulate the circulation of foodstuffs at national and community level. Related or additional activities: Graduates with a master's degree are required to know the anatomy of the gastrointestinal apparatus, its endocrine regulation, and its malformations related to pathologies; knowledge of the compound is also required, and how to use supplements of natural origin.

The training program includes laboratory and practice activities on methods and techniques for the detection of food consumption and nutrition status, body composition and energy expenditure, and laboratory activities for the evaluation of macro-micronutrients of individual foods and the biochemical, nutritional and toxicological characteristics, **focusing on Mediterranean diet as a pattern of healthy nutrition, now recognized as a tool for prevention of a wide spectrum of chronic-degenerative pathologies that characterize the epidemiology of the third millennium.** Furthermore, the training course includes a stage-internship activity to be carried out at private or public institutions affiliated with the University of Calabria.

The acquisition of the required knowledge is ascertained by means of different types of tests, established by the teaching staff: oral exam, written exam, multiple choice questionnaires etc. The course at the end includes the discussion of a final experimental or compilation thesis for the final graduation exam.

Didactic planning and teaching outline charts:

http://www.unical.it/portale/strutture/dipartimenti_240/dfssn/insegnamenti/snm/

Master Degree in “Nutritional Science”

*Department of Pharmacy, Health and Nutritional Sciences,
University of Calabria, Italy*



Road map

- 2018-2019** Administrative issues
 - Recruitments of visiting professors
 - Preparation of the call for students
- 2020-2021** Admission of students
 - Beginning of the teaching activities

Expected Visiting Professors

- 2 positions for academic year 2020-2021**
- 4 positions for academic year 2021-2022**
- 4 positions for academic year 2022-2023**

Benefits for Visiting Professors

- **5000,00 euros per course (6 credits)**
- **Free campus services (housing and canteen)**

Benefits for international students

- 10 grants covering tuition fee and housing and canteen for academic year 2020-2021**
- 20 grants covering tuition fee and housing and canteen for academic year 2021-2022**
- 20 grants covering tuition fee and housing and canteen for academic year 2022-2023**

November 2015, University of Calabria: agreement on Mediterranean Diet signed by UNESCO's delegates



UNIVERSITÀ DELLA CALABRIA
DIPARTIMENTO DI
FARMACIA E SCIENZE DELLA SALUTE
E DELLA NUTRIZIONE



REGIONE CALABRIA



Dieta Mediterranea
Mediterranean Diet

Università della Calabria, Aula Magna - Rende (Cs) / University of Calabria, Aula Magna - Rende (Cs)
25 Novembre 2015 / November 25th, 2015

