# Welcome letter from the Organizing and Scientific Committee

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Dear colleagues and participants,

Welcome to this special supplement dedicated to compiling the abstracts of the communications and lectures of the FINUT 2020 Conference. The supplement accounts for 339 abstracts for oral and poster communications from 18 countries. It also comprises the abstracts of more than 80 selected guest speakers participating in the scientific symposia and special lectures.

The main objective of the FINUT Conference, which will be held every two years, is to create a space for exchange and discussion of ideas regarding the main challenges of Food and Nutrition in Iberoamerica, to provide solutions aimed at improving the health of the populations of the region, where all the stakeholders, both public and private, are present and can share their thoughts. In addition, the Conference seeks to open a place for contrasted science shared by the Iberoamerican region, a necessary space to open opportunities and to display the research work done in Food and Nutrition, especially that from Latin American countries.

The scientific program of the Conference includes 32 parallel symposia, 4 meetings with the experts and 10 special lectures. In this first edition the Conference focused on 4 topics:

- Challenges of nutrition and public health in Iberoamerica.
- Nutrition in the prevention and treatment of chronic diseases.
- Safe, healthy, and sustainable foods.
- Challenges for an effective and efficient public-private partnership in food and nutrition.

The Conference is organized by the Iberoamerican Nutrition Foundation (FINUT), a nonprofit organization founded in 2011 by the International Union of Nutritional Sciences (IUNS), the Latin American Society of Nutrition (SLAN), and the Spanish Nutrition Society (SEÑ) to promote knowledge, research, development and innovation of Nutrition and Food in Iberoamerica. The FINUT programs are aimed at training professionals and researchers interested in these areas and building partnerships with governments, universities, research centers and other organizations.

Although we are living moments full of uncertainty, the FINUT 2020 virtual Conference organizers would like to thank all our speakers, attendees, and collaborators for their effort to share the scientific advances in the fields of nutrition and food sciences. The organization acknowledges and congratulates all the FINUT 2020 participants and members of the committees for their ability to adapt to new communication needs and hope that in the next edition of the Conference we can give you all the very personal thanks for moving forward

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and for continuing the valuable work of providing the world with true and scientifically verified research, so essential in these times.

¡We are looking forward to seeing you at the FINUT 2022 Conference!

Very truly yours,

### Prof. Luis Moreno

President of the Organizing Committee

**Prof. Benjamín Caballero** President of the Scientific Committee

# Prof. Angel Gil

President of the Ibero-American Nutrition Foundation (FINUT)

# Dr. María José Soto-Méndez

Executive Secretariat of the Conference

# Organizer



# Collaborators



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**Introduction:** During pregnancy, there is an accumulation of maternal body fat that will be used for milk production and maintenance of breastfeeding.

**Objective:** Evaluate weight gain in pregnant women according to their gestational trimester.

**Methods:** It is a pilot study conducted on December 2019 on 20 pregnant women in a Health Center in the city of Puebla, as part of a larger project called "Sociodemographic factors of pregnant women and their relationship with weight". Nursing students collected self-reported anthropometric data (height, pregestational weight and current weight), age and gestational weeks. Weight gain was evaluated according to WHO recommendations. A descriptive analysis was performed to present the results.

**Results:** The average age was 23.0 ± 5.3 years, being the minimum 16 and the maximum 35 years. According to the trimesters, 10% (n = 2) were in the first trimester, in the second and third trimesters they had 45% (n = 9) each according to the pre-gestational nutritional status (PGNS), 25% (n = 5) were underweight, 45% (n = 9) adequate weight, 25% (n = 5) overweight and 5% (n = 1) obese. The average weight gain in women in the first trimester was 3.5kg for those who were in adequate PGNS and 4kg for those who were in overweight PGNS. Those in the second trimester gained  $4 \pm$ 5.2kg those who had low weight PGNS (n = 5), 2.5 ± 3.5kg those who were with adequate PGNS (n = 2) and  $8 \pm 5.7$ kg those who were overweight (n = 2). In relation to those in the third quarter, the average weight gain was  $7.5 \pm 4.7$ kg those with adequate PGNS (n = 6),  $2 \pm 2.8$  kg those who were overweight PGNS (n = 2) and the one who was obese had a weight loss of 7 kg.

**Conclusions:** It was found that during the second trimester the participants presented a lower weight gain than recommended, while in the third trimester they had an adequate weight gain.

#### Conflicts of interest: none.

**Keywords:** Pregnant woman / pregestational weight / gestational weight gain

### P181

### NUTRITIONAL EDUCATION PROGRAM FOR OVERWEIGHT AND OBESE STAFF OF CIE, CELAYA GTO

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Nutrition in the prevention and treatment of chronic diseases

**Introduction:** Obesity is a chronic degenerative disease, the main characteristic of which is the increase in adipose tissue, one of the most important causes is the excessive intake o sedentary lifestyle, triggering consequences such as chronic degenerative diseases. This is why it is of utmost importance

to carry out interventions focused on improving nutrition and health in people who are overweight or obese.

**Objectives:** Improve feeding habits and body composition of overweight or obese staff at CIE Celaya, Guanajuato

**Methods:** A diagnostic evaluation was carried out using food frequency and anthropometric measurements such as: weight, size, tricipital and bicipital skin fold and abdominal circumference. Subsequently, all staff were invited to participate with an BMI greater than 24.9 and with an unfavourable food frequency. Individualized nutritional plans and nutritional talks of personal interest were implemented along with workshops for the improvement of eating habits. Anthropometric and food frequency measurements were completed, initial and final data after intervention were compared with the SPSS statistical package and Studen's statistical test T

**Results:** The average age was 33 years, the improvement of anthropometric markers was achieved: weight (78.3 ± 19.4 a 76.63 ± 18.3; p= 0.028), BMI (29.98 ± 4.99 a 29.30 ± 4.79; p= 0.023) PCT (21.25 ± 8.81 a 19.70 ± 7.46; p=0.02), (92.36 ± 13.91 a 91.99 ± 13.95; p=0.09); P; and increased consumption of foods such as: vegetables (3.91 ± 1,62 a  $5.25 \pm 1.28$ ; p= 0.018), natural water ( $1.79 \pm 0.72 a 2.25 \pm 0.45$ ; p= 0.043), and food reduction such as: pork ( $2.75 \pm 1.86 a 1.83 \pm 1.74$ ; p = 0.013), industrialized juices ( $1.58 \pm 1.62 a 0.91 \pm 1.08$ ; p= 0.012) and soft drinks ( $3.58 \pm 2.27 a 2.58 \pm 2.06$ ; p= 0.05)

**Conclusions:** It was concluded that nutritional intervention in a correct way to prevent to the people a have not diseases with: Obesity, over weught and DM and make a improve in your health and more production in the companies

**Conflict of Interest:** We have not conflicto to interestnt **Keywords:** Obesity/Nutrition /Intervention/

#### P182

### NUTRITIONAL STATUS AND ORAL HEALTH: AN INTERDISCIPLINARY CHALLENGE OF HEALTH EDUCATION IN STUDENTS OF AN EDUCATIONAL INSTITUTION FROM MEDELLIN - COLOMBIA

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Nutrition in the prevention and treatment of chronic diseases

**Introduction:** "There is a two-way relationship between health, diet and nutrition" J AcadNutrDiet. 2013 May; 113 (5): 693-701. doi: 10.1016 / j.jand. 2013.03.001.). The oral health situation compromises an individual's ability to consume food,

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consequently, the nutritional status; likewise, diet and nutrition affect the development and integrity of oral structures and their functioning. Some studies have shown that in populations with low sugar consumption, tooth-decay levels are also lower.

As a result, a multidisciplinary articulation between nutrition and oral health to develop comprehensive research and education actions in health is necessary.

**Objective:** To identify the relation between nutritional state and oral hygiene in schoolchildren of a public institution in Medellin-Colombia.

**Methodology:** Dental and nutritional assessments were done on 372 schoolchildren between 8 and 12 years of age, as well as the Simplified Oral Hygiene Index (SOHI), obtaining good, fair, and bad hygiene. For the Nutritional Status, an anthropometric evaluation (weight, height, age, and gender) was performed based on the BMI / E, using the WHO's AnthroPlus, obtaining the classification of: Thinness, Risk of thinness, Adequate weight, Overweight and Obesity. The "SOHI" variables were matched against the "Nutritional Status" numbers.

**Results:** The overweight index was 26.07%, the obesity index was 10.75%, the proper weight was found in 53.22% of the children, 8.60% were at risk of thinness, and 1.34% were thin. Of the 62.4% that showed good oral-hygiene, 53.4% had adequate weight, 27.6% were overweight and 11.2% were obese. Similarly, of the 37.4% that indicated fair oral-hygiene, 53.2% had adequate weight, 23% were overweight and 10.1% were obese. Finally, 0.3% showed poor oral hygiene, of which 100% were overweight. According to ENSAB IV, 92.06% of Colombian school children show signs of tooth-decay; in our case, the overweight problem deserves special attention when compared to the oral-hygiene issue.

**Conclusions:** Among the factors that lead to the development of dental decay, is the consumption of a cariogenic diet coupled with unhealthy habits such as poor oral hygiene. This calls for a joined effort between nutrition and dentistry professionals in the planning and execution of educational activities for health.

**Keywords:** nutrition/ diet/ oral health/ health education/ schoolchildren.

This work is part of the Colon Cancer Prevention (ECNT) project. Educational perspective against obesity, in food, nutrition and physical activity, in schoolchildren in Antioquia and Quindío, within the Scientific Academic Alliance for the strengthening of IES, focusing on nanobioengineering for the prevention, diagnosis and treatment of colon-cancer-Nanobiocancer. Scientific Colombia. 2017

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### ASSESSMENT OF THE NUTRITIONAL STATUS OF FRESHMEN STUDENTS FROM A PRIVATE UNIVERSITY IN THE STATE OF PUEBLA

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Nutrition in the prevention and treatment of chronic diseases

**Introduction:** Obesity in an early stage of adult life has as consequence the risk of developing cardiovascular and chronic diseases. University age, between 17 and 24 years old (young adults), suggests that during this period of life, unhealthy habits could be acquired, resulting in deterioration in health indicators.

**Objectives:** Evaluate the nutritional status of new students from a private university in the state of Puebla, Mexico.

**Methods:** Data were collected with university students belonging to a common core discipline. Anthropometric measurements of weight, height, hip, and waist were made. The Body Mass Index (BMI) were obtained and the nutritional status was classified, with the parameters of the World Health Organization (WHO). Cardiovascular risk was also estimated with waist circumference. In addition, surveys were conducted with questions to obtain information on age, physical activity practices and the degree they are studying, among others.

**Results:** 247 students with an average age of 18.7 ± 1.5 years were evaluated, 65.9% (n = 162) women; 43.3% (n = 107) mentioned living alone. Of the total sample evaluated, 56.7% belonged to the health sciences department, followed by 15% that belonged to engineering and the rest corresponded to the other careers offered at the university. On the other hand, 64.4% (n = 159) said to practice physical activity, so 44.5% (n = 110) are classified as active according to the WHO criteria. The average waist circumference of the 247 students was 78.9 ± 10.5 cm; Average hip circumference was 97.1  $\pm$  8.4 cm. The BMI results were 23.8  $\pm$  4 kg / m2. According to the evaluation of the nutritional status, 63.6% (n = 157) are eutrophic; 24.7% (n = 61) are overweight; 6.9% (n = 17) present some type of obesity; 4.9 (n = 12) have low weight. Of the total of the students evaluated, 22.8% (n = 55) have estimated cardiovascular risk through waist circumference according to sex.

**Conclusions:** Obesity and cardiovascular risk diagnosed in youth should be of concern, because of the predisposition of these people to suffer from chronic degenerative diseases at earlier ages.

#### Conflict of Interest: None

**Keywords:** Nutritional status, cardiovascular risk, young adults.

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### NUTRITIONAL PREOPERATIVE EVALUATION IN PATIENTS WITH DIGESTIVE NEOPLASSIC PATHOLOGIES INTERNETS IN THE CENTRAL HOSPITAL OF THE INSTITUTE OF SOCIAL FORECAST. 2019

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