



24<sup>th</sup> International Conference on

## **Clinical Nutrition**

March 04-06, 2019 | Barcelona, Spain

# Posters

Clinical Nutrition 2019

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## Does repetitive transcranial magnetic stimulation have positive effects on adults with eating disorders and or excessive weight

Pedro G Batista<sup>1</sup>, Pedro Vasconcelos<sup>1</sup>, Nuno Pinto<sup>1,2</sup> and Maria da Assunção Vaz Patto<sup>1,3</sup><sup>1</sup>University of Beira Interior, Portugal<sup>2</sup>Escola Superior de Saúde Dr. Lopes Dias, Portugal<sup>3</sup>CICS- Health Sciences Research Center, Portugal

Eating Disorders (ED) are chronic illnesses with treatments of limited proven efficacy. There is increasing data to support therapeutic effects of repetitive Transcranial Magnetic Stimulation (rTMS) given its success in treating disorders such as treatment-resistant depression. Along with the encouraging studies on ED symptoms, there is a strong rationale for further exploring its therapeutic potential. Literature search was performed using PubMed/MEDLINE and Embase databases, using MeSH terms, Emtree terms and word combinations based in the following keywords: "Transcranial Magnetic Stimulation", "Theta Burst Stimulation", "rTMS", "TBS", "bulimia nervosa", "feeding and eating disorders", "anorexia nervosa", "binge-eating disorder", "obesity", "overweight", "food addiction", "craving", "body weight". Van den Eynde (2010), showed that the real rTMS group had a significant reduction in cue-induced food craving. M. Walpoth (2008) studied 14 women with a decline on average number of binges per day between baseline and the end of treatment. Aurelia Gay (2016), investigated 47 women and concluded that there were no significant improvement in bingeing symptoms. Se-Hong Kim (2017) concluded that 4 sessions of rTMS resulted in weight loss among 60 overweight patients. McClelland (2016), examined the effects of one rTMS session in 60 patients with anorexia, with no significant effects on reduction of symptoms. Given the heterogeneity of the participants and outcomes, a meta-analysis was not possible to be carried. Excitatory rTMS appears to reduce cravings and may be an important weight management tool in subjects with overweight. Further studies, especially with randomized, double-blind, sham controlled trials with large samples, on the neural effects of neuromodulation with rTMS, are needed.

### Biography

Pedro G Batista is a Medical Student at University of Beira Interior (UBI) currently researching on eating disorders for his MD. Pedro Vasconcelos is a medical student currently researching in economics.

pedro.gbatista@hotmail.com

### Notes:

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## The influence of dietary habits on fatty acid composition of visceral adipose tissue in colorectal cancer and obesity

Massimo D'Archivio, Beatrice Scaccocchio, Rosaria Vari, Carmela Santangelo, Manuela Del Cornò, Lucia Conti, Annalisa Silenzi, Sandra Gessani, Claudio Giovannini and Roberta Masella

Istituto Superiore di Sanità, Italy

**Introduction:** Colorectal Cancer (CRC) is one of the major causes of cancer-related mortality in both men and women worldwide. Obesity and dietary habits are primary determinants of cancer risk. We have previously demonstrated the existence of a pro-inflammatory microenvironment associated with a particular Fatty Acid (FA) profile in adipocytes of CRC patients. Stearoyl-CoA-desaturase 1 (SCD-1) is involved in pathways regulating lipid metabolism and is differentially expressed in normal and tumor tissues.

**Aim:** To define the eating habits of four different groups of subjects lean (nw) and obese (ob), affected or not, by CRC evaluating the possible association with functional and metabolic alterations. These data could allow understanding whether the quality of the diet, other than the quantity of energy consumed, might have a main contribution in maintaining the AT altered microenvironment observed in CRC-affected subjects.

**Methodology:** AT biopsies (n=20/category) were collected and analyzed for FA composition by gas-liquid chromatography. Desaturase activities were estimated as FA product-to-precursor ratio. Food intake was estimated by an interviewer-guided FFQ. The intakes of energy and nutrients were calculated by the WINFOOD software.

**Results:** Inadequate dietary habits characterize ob and CRC subjects. Furthermore, nwCRC patients showed an increased intake of SFA and a reduction of MUFA consumption. Estimated SCD-1 activity in AT was increased in all subject groups in comparison with lean individuals.

**Conclusions:** Unhealthy eating habits characterize obese and CRC subjects. The quality of the diet, other than the quantity of energy consumed, might have a contribution in maintaining the inflammatory microenvironment in AT observed in CRC-affected subjects.

### Biography

Massimo D'Archivio has been studying the role of dietary polyphenols and n-3 fatty acids in preventing the development of chronic-degenerative diseases, unraveling the molecular mechanisms by which these compounds exert their biological activities. He has collaborated in nutritional intervention studies, investigating the role played by dietary polyphenols and/or different fatty acids in counteracting inflammatory/oxidative processes in obesity and T2D. Finally, he has been studying the mechanisms responsible for the pathogenesis of obesity and its complications in human primary adipocytes isolated from visceral fat biopsies, assessing the relationship between obesity and chronic-degenerative diseases, highlighting the influence of the dietary habits.

massimo.darchivio@iss.it

### Notes:

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## Maestra Natura: A nutrition education program tested for efficacy in Italian children

Annalisa Silenzi<sup>1</sup>, Roberta Masella<sup>1</sup>, Rosaria Vari<sup>1</sup>, Beatrice Scazzocchio<sup>1</sup>, Sara Del Papa<sup>1</sup>, Antonio d'Amore<sup>1</sup>, Claudio Giovannini<sup>1</sup>, Patrizia De Sanctis<sup>1</sup>, and Annamaria Gimigliano<sup>2</sup>

<sup>1</sup>Istituto Superiore di Sanita, Italy

<sup>2</sup>AMG Edutainment s.r.l., Rome, Italy

**Introduction:** The prevalence of paediatric overweight/obesity is a public health problem worldwide. Educational programs have been carried out in the last few years in Italy. However, their real effectiveness is still uncertain. Maestra Natura (MN) is an innovative education program implemented by our institute to fill the gaps in children knowledge on nutritional issues overcoming possible gender differences. It has been tested from 2012 to 2017 in six Italian regions by involving 20000 students aged 6-13.

**Aim:** To assess the effectiveness of MN program in enabling children to transfer the food pyramid contents in a practical context and to highlight possible gender differences in dietary habits.

**Methodology:** The didactic contents were distributed by a web platform to about 1000 students of primary school (V class) and secondary-first level school (second class). Dietary habits were assessed by a validated questionnaire. The students were required to organize a weekly meal planner before and after the completion of the educational programs. Each menu was evaluated on the basis of established criteria to reward the insertion of fruit, vegetables, legumes and fish and to penalize the wrong use of protein food.

**Results:** Data collected evidenced gender differences in behaviours/eating habits. In addition, females had better basic nutrition knowledge than males; interestingly, this difference disappeared at the end of the didactic path. Significant differences between the beginning and the end of the scholastic year were found in terms of student knowledge.

**Conclusions:** The MN program was effective in transferring information contained in the food pyramid to the real context of a daily menu. Furthermore, MN program was able to fill the gender-driven gap in nutrition knowledge. This activity favored a greater awareness on the importance of having appropriate dietary habits.

## Biography

Annalisa Silenzi has been studying the role of dietary components in the pathogenesis, prevention and treatment of pathologies with dietary-nutritional risk factors such as obesity, type II diabetes and cancer. Specifically, her studies has been focusing on the mechanisms of action exerted by dietary polyphenols and n3/n6 fatty acids by studying their biological properties and effects in *in vivo*, *ex vivo* and *in vitro* systems. For many years she has been involved in nutrition education programs addressed to primary and secondary first level school children and in the promotion of healthy lifestyles among young and adult people.

annalisa.silenzi@iss.it

## Notes:

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## Food and nutrient intake of women change during pregnancy: Results from the PRINCESA Cohort

Monica Ancira Moreno<sup>1</sup>, Marie S O'Neill<sup>2</sup>, Juan Ángel Rivera-Dommarco<sup>3</sup>, Carolina Batis<sup>3</sup>, Sonia Rodríguez Ramírez<sup>3</sup>, Brisa N Sánchez<sup>2</sup>, Marisol Castillo-Castrejón<sup>2</sup> and Felipe Vadillo-Ortega<sup>4</sup>

<sup>1</sup>Universidad Iberoamericana, Mexico

<sup>2</sup>University of Michigan, USA

<sup>3</sup>National Institute of Public Health, Cuernavaca, Mexico

<sup>4</sup>UNAM - Instituto Nacional de Medicina Genómica, México

An optimal diet during pregnancy support the physiological changes that occur in the mother and plays a fundamental role on fetal growth rate and organ development. The objectives of this study were to characterize maternal diet in second and third trimesters and to determine what changes women make through pregnancy in alignment with Mexican dietary recommendations. Data on maternal diet (multiple-step 24-hour dietary recall) were collected in a sample of 660 pregnant women from the Pregnancy Research on Inflammation, Nutrition, & City Environment: Systematic Analyses (PRINCESA) cohort in Mexico City. The estimation of daily intake of energy, nutrients and foods was calculated by using a food-composition table of the National Institute of Public Health. In the second trimester, we identified that the highest energy contribution (EC) (% ,  $\pm$ SD) was from high in saturated fat and or added sugar (HSFAS) foods (17.92% $\pm$ 12.08), followed by Sugar Sweetened Beverages (SSBs; 17.51% $\pm$ 11.49), cereals and tubers (CT; 15.83% $\pm$ 8.31) and fruits and vegetables (FV; 15.31% $\pm$ 9.02). In the third trimester, the highest %EC was from CT (16.92% $\pm$ 10.2), followed by HSFAS (16.71% $\pm$ 12.83), FV (16.33% $\pm$ 10.09) and SSBs (15.22% $\pm$ 11.48). The prevalence of excessive saturated fat consumption was elevated, especially in the second trimester (53.04%; 95% CI: 49.60, 57.31). We found that the prevalence of excessive added sugar intakes decreases from 35.67% (95% CI: 32.22, 39.09) to 26.80% (95% CI: 23.42, 30.19) from the second to third trimester. In conclusion, nutrient intakes and energy contribution of food groups between trimesters indicate that the diet composition of women is modified for the better as pregnancy progresses.

### Biography

Monica Ancira Moreno has completed her PhD in 2018 from National Institute of Public Health, Mexico. She has been working as Academic at Universidad Iberoamericana (IBERO) since 2017. Her areas of research interest include maternal and child nutrition and the prevention of non-communicable chronic diseases over the life course. Currently, she is the Principal Investigator of the project "Maternal and Health Observatory", whose mission is to create a systematized information platform through the collection, monitoring and reporting of maternal and child health and nutrition indicators that works as supplies to the formulation and implementation of public policies in Mexico.

monica.ancira@ibero.mx

### Notes:

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## Aspects of mental health and its relation to nutritional intake in two community based hospital: Its importance in behavior

**Jose Rodriguez Gomez**

University of Puerto Rico, Puerto Rico

**Introduction:** Different specialists point out that modern diet could be changing deeply the architecture and functioning of our brain, which can influence the behavior of subjects. In Puerto Rico, due to inadequate nutritional intake, persons may have inadequate behavior, especially, those people who are nutritional deprived, thus, personality development can be altered, translated into an inability to recognize social regulation and be classified as deviants, with the usual negative implications of marginalization and criminality that can arise.

**Method:** We explore, main diagnostics, in two leading hospitalized patients psychiatric units of community-based hospitals in Puerto Rico, via secondary data analyses of the last year, to identify most prevalent mental health disorders and if they are related to nutritional patterns limitations.

**Results:** Major diagnoses of admissions to psychiatric units of community-based corresponding to affective mood disorders with a 53% (95% CI=41-72) and mental disorders, due to substances psychoactive abuse 19% (95% CI=11-32). Dietary restrictions are correlated inversely and significantly (high-moderate correlation according to Champion (1981)  $r=-.56$  ( $p<.05$ ) with both main diagnoses.

**Discussion:** Limitations of nutritional intake reinforce an improper capacity of adequate access to a balanced diet in patients, factor that influence patient recovery of their conditions.

**Conclusions:** It is necessary to strength educational, public health trainings and to promote balanced diets in mental health hospital patient's and professionals, in order to ensure a better recovery and diminished co-morbidities and mortality indexes.

### Biography

Jose Rodriguez Gomez, Doctor in Medicine, Gerontologist and Epidemiologist, is current Director of the Department of General Social Sciences at the Social Sciences Faculty of the University of Puerto Rico, Rio Piedras Campus. He has Fellow status at the American College of Nutrition and is a Certify Nutrition Specialist, in USA. He has published over 115 peer-review academic articles in well know national and international journals. He has been in multiple editorial boards, research panels and governmental agencies as Consultant.

jose.rodriguez15@upr.edu

### Notes:



24<sup>th</sup> International Conference on

## **Clinical Nutrition**

March 04-06, 2019 | Barcelona, Spain

# Accepted Abstracts

## Clinical Nutrition 2019

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## Glutamine use in pelvic sarcopenia: A prospective, randomized, placebo controlled, double blind study

Birkan Ilhan<sup>1</sup>, Gulistan Bahat<sup>2</sup>, Nalan Capan<sup>2</sup>, Cihan Kilic<sup>2</sup>, Cenk Yasa<sup>2</sup>, Funda Gungor<sup>2</sup>, Ozlem Persil Ozkan<sup>3</sup>, Ayse Karan<sup>2</sup> and Mehmet Akif Karan<sup>2</sup><sup>1</sup>Dr. Ersin Arslan Research and Training Hospital, Turkey<sup>2</sup>Istanbul University, Turkey<sup>3</sup>Istanbul Arel University, Turkey

The pelvic floor muscles are important in the maintenance of continence. The weakness of muscles may lead to stress incontinence and facilitate urgency and functional incontinence. We aimed to determine the effect of additional oral glutamine supplementation to Kegel exercise on pelvic floor strength and clinical parameters of urinary incontinence in females. Females with urinary incontinence were included. Digital test and a vaginal manometer were used for measuring the strength of the pelvic floor muscles. Twenty four hours pad weight test was examined. Participants were randomized into 2 groups as oral glutamine 30 g/day and placebo. It was asked to use the supplementation and Kegel exercises to all participants for 3 months. Basic and 3rd month measurements were compared. Also, the progression between measurements at basic and 3rd months was compared. There were 11 patients in the glutamine arm and 18 patients in the placebo arm. Mean age was 58.2±6.6 years. There was no age difference between the groups [glutamine 59±3.8, placebo 57.8±7.9 years,  $p>0.05$ ]. In glutamine arm, vaginal muscle strength assessed by digital test was higher at the end of 3 months [ $2.9±0.7$  vs.  $4±0.9$ ; 0-3 months respectively,  $p=0.014$ ]; perineometer measurements were not statistically different [ $27.4±8.3$  vs.  $31.2±8.9$ ; 0-3 months respectively,  $p>0.05$ ]; 24 hour pad weight was not different [ $p>0.05$ ]. In the placebo arm, there was statistically significant progress in vaginal muscle strength assessed by both digital test and perineometer and 24-hour pad weight ( $p$  values: 0.005, 0.011, and 0.002 respectively). When we compare the progression scores between the groups; there was no statistically significant difference [ $p>0.05$ ]. Our study suggests that glutamine supplementation does not provide additional benefit in the treatment of pelvic muscle sarcopenia in patients without protein-energy-malnutrition.

birkanilhan@hotmail.com



24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## The effects of kombucha tea on intestinal integrity in mice

**Elaheh Mahmoudi**

Alborz University of Medical Sciences, Iran

Zonula Occludens (ZO) proteins (ZO-1 and ZO-2) are important intracellular Tight Junction (TJ) proteins which link the cell cytoskeleton to the transmembrane TJ proteins. Destruction of TJ which is called the leaky gut syndrome attributed to the cause of many autoimmune and inflammatory diseases such as Inflammatory Bowel Disease (IBD). So, reducing intestinal permeability is the goal of therapeutic approaches. Healing effect of Kombucha Tea (KT) on the gastrointestinal system particularly its extraordinary effect on the healing of intestinal ulcer has been purported traditionally and reported scientifically. To evaluate the therapeutic effect of fKT on leaky gut syndrome, fKT was administered to mice colitis model. The model was set up by administration of 3.5% (w/v) dextran sodium sulfate salt for seven days and then fKT was administered for the next 14 days. Our results showed, fKT could ameliorate the disease symptoms of DSS-induced colitis, including body weight loss, bleeding, diarrhea, survival rate and histological injury contains: epithelial defects, crypt atrophy, edema, PMN infiltration and mucosal disruption in mice. Along with these changes ZO-1 and ZO-2 expression as major constituent of intestinal TJ were also decreased in mice with colitis and improved by fKT treatment. Such a decrease may explain the defect and less degree of complexity in the intestinal tight junction during leaky gut phenomenon. Since fKT reduced the symptoms of colitis in our experimental models, our findings may increase its promising medicinal value in the treatment of human IBD.

e\_m592000@yahoo.com

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## Knowledge, attitudes and practices on sports nutrition, body composition and associated factors among national level athletes in Sri Lanka

H M W A B Wijerathne

University of Colombo, Sri Lanka

**Introduction & Objectives:** This study evaluates the practices on sports nutrition, body composition and associated factors among national level athletes in Sri Lanka.

**Method:** Cross sectional study was carried out among 178 national level athletes aged 18-35 years representing karate, swimming, wrestling, volleyball, weight lifting (indoor) netball, rugby, track and field athletes (outdoor). Self-administered questionnaire obtained data on knowledge, attitude and practices on dietary pattern, hydration and supplements. Body composition (body mass index-BMI and body fat percentage) was determined using stadiometer, weighing scale and body impedance analyser.

**Results:** Practices were poor; consuming fast food (88.8%), missing meals (56.8%), improper meal timing (65.3%) and inadequate hydration during practices (73.8%). Majority (53.4%) had recommended BMI, however only 15.3% had recommended body fat. Majority (60.1%) had adequate overall knowledge on sports nutrition. Knowledge within subcategories varied, where most were of satisfactory knowledge with regard to dietary intake (59.6%) and supplements (55.6%), but not hydration (35.4%). Overall attitudes were positive (58.4%). Compared to outdoor sports, indoor sports significantly associated with improper timing of meals (indoor 65.6%, outdoor 40.6%;  $p < 0.01$ ), missing meals (indoor 64%, outdoor 40%;  $p < 0.01$ ), adequate hydration (indoor 66.3%, outdoor 84.3%;  $p < 0.01$ ) and less supplement consumption (indoor 68.9%, outdoor 48%;  $p < 0.01$ ). Compared to females, males had improper meal timing (males 62.7%, females 42.6%;  $p < 0.05$ ), adequate hydration (males 32.1%, females 16.1%;  $p < 0.05$ ) and recommended body fat percentage (males 19.4%, females 7.8%;  $p < 0.05$ ). Less experienced athletes had adequate BMI (less 63.6%, more 44.4%;  $p < 0.05$ ) but consumed more energy drinks (less 70.3%, more 38.8%;  $p < 0.01$ ). Athletes with higher education level (47.3%) consumed supplements compared to lower educational level (32.3%;  $p < 0.05$ ). Knowledge was not associated with any practices.

viduranga02@gmail.com

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## The antibacterial effect of probiotic Nis-Lact-Bif on *E. coli* and *Campylobacter jejuni*

**Hamidreza Ebrahimi Nezhad**

Baqiyatallah University of Medical Science, Iran

**Background:** Probiotics are live microorganisms acting through varied mechanisms affecting the density of the commensal microbiota against pathogens. Nowadays, because of the problems associated with antibiotic use, probiotic strains provide a new and better option for treatment of infectious diseases like diarrhea. The aim of this study was to investigate the antibacterial synergism of *Lactobacillus* spp., *Bifidobacterium* spp. and *Escherichia coli* strain Nissle 1917 (ECN) on clinical sample of diarrheagenic *E. coli* and *Campylobacter jejuni*.

**Methods:** A paper disk diffusion technique used to evaluate the antibacterial activity. Sterile 6 mm paper disks were saturated with probiotic suspensions made by settling probiotic medications into distilled water. Three kinds of disks were prepared. One disk for *Lactobacillus* spp. and *Bifidobacterium* spp., another disk for ECN and third disk were made by mixing probiotics. Clinical sample of diarrheagenic *E. coli* and *Campylobacter jejuni* were cultivated on separated Muller Hinton agars and disks were placed on the inoculated Muller Hinton agars. The plates were incubated with a microaerophilic gas pack inside an anaerobiosis jar, for 24 h at 37°C.

**Results:** The Zone of Inhibition (ZOI) of bacterial growth was measured. All pathogenic microorganisms showed sensitivity to the probiotic disks. The combined disk had a better effect against pathogens.

**Conclusion:** A considerable synergistic effect of probiotic strains was observed and it means that combined strains can be more efficient against intestinal pathogens.

hamidrezaebi20@gmail.com

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## Effect of different levels of oral bovine lactoferrin from iron-fortified formula on iron metabolism of anemic infants

**Ke Chen**

Chongqing Medical University, China

**Objective:** To evaluate the effect of iron-fortified formula with different concentrations of bovine lactoferrin (bLF) on improvement of the anemic status in term infants who previously breast-fed.

**Method:** In this prospective multi-center controlled intervention study, a total of 108 infants aged 6-9 months who previously breast-fed but weaned were selected. All subjects were divided into three groups with the sequence of outpatient: fortified group 1 (FG1) with a bLF concentration of 38 mg/100 g, FG2 with 76 mg/100 g, FG0 with free of bLF. The intervention duration were 3 months. The levels of weight, height and head circumference and the concentration of Hemoglobin (Hb), Serum Ferritin (SF), serum Transferring Receptor (sTfR) were measured and sTfR-SF index (TFR-F index) and Total Body Iron Content (TBIC) were computed before and after intervention, respectively.

**Result:** The primary outcome measures were obtained from 96 infants (35, 33 and 28 for FG0, FG1 and FG2, respectively). After one month intervention, the changes of Hb level showed no statistical difference [(113.18±10.2), (109.78±8.3) vs. (111.83±8.6) g/L, for FG0, FG1 and FG2, respectively] among the three groups, however, the Hb level of infants in FG2 were significantly higher than those of infant in the other two groups after 3 months intervention [(116.49±8.0), (116.58±6.4) vs. (121.50±5.1) g/L, for FG0, FG1 and FG2, respectively] ( $p < 0.05$ ).

**Conclusion:** The present data indicated that the formula fortified with bLF by 76 mg/100 g formula positively and additionally affected the Hb of anemic infants who previously breastfed when compared with bLF fortified by 38 mg/100 g formula and formula without bLF.

263662086@qq.com

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## Defying secular trend

**May Fouad Nassar**

Ain Shams University, Egypt

The secular variation of biological anthropology tend to assess the degree of socio-economic development that is why nations try hard to achieve better secular trends of growth. Taller height has been often described as a sign of social status and privilege, therefore it became a personal as well as a society wish. Generally, in the last decades, stature tends to stabilize; however, weight continues to grow causing overweight to take pandemic forms. Nutrition and genetics are the main determinants of height trends and since maximum genetic potential can be restrained; nutrition takes the lead. Growth acceleration, during pursuit of positive height trend, correlates with long-term health problems in humans. most studies show a positive association between rapid growth (height, weight or both) and increased overweight and obesity, regardless of age. Therefore, the ultimate goal is to defy the secular trend and achieve a better height potential without the health burdens of excess weight. Protein quality rather than quantity is what truly makes a difference in height. Although nutrition in most countries can be raised by rational dietary guidelines, the deterioration of the protein index, even in the wealthiest nations is alarming. Thus the myth is giving up on height and believing in the exhaustion of the genetic potential theory. The truth, on the other hand, is that there is still hope lying in our right choice of protein. Current threats to protein quality can explain the observed negative height trends. These threats can result from a combination of the inadequate “fast-food” nutrition and some misleading dietary guidelines. In conclusion, adherence to the classic food pyramid for the required protein quantity and paying attention to the protein index would pave the way for dream realization regarding positive height trends.

maie\_nassar@yahoo.co.uk

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

## A longitudinal study on nutritional assessment and care of Continuous Ambulatory Peritoneal Dialysis (CAPD) patients

**Merina E Alex, Preethi, Vijayashree, Georgi Abraham and Milly Mathew**

Institute of Kidney Diseases, Urology &amp; Organ Transplantation - Madras Medical Mission, India

**Introduction:** Malnutrition inevitably accompanies Chronic Kidney Disease (CKD) and dialysis. This in turn would be associated to higher mortality rate in dialysis patients. In case of PD it has been estimated to be 18–50%. Early nutritional assessment and treatment in PD patients leads to overall better outcome, better quality of life and increased longevity.

**Objectives:** The objective of the study is to assess the nutritional status of the CAPD patients, initiate nutrition therapy and reassess the nutritional status at three months interval to find out the impact of medical nutrition therapy.

**Methodology:** Forty CAPD patients were assessed for their nutritional status at the initiation of therapy. Nutritional assessment was done using anthropometric assessment including body composition analysis, bio chemical observations such as serum albumin, hemoglobin, serum iron, total iron binding capacity, diet history and Malnutrition Inflammation Score (MIS). Based on the nutritional status patients were prescribed and educated on nutritional needs as per the national kidney foundation's requirements. Nutritional assessment was repeated after three months of period and the changes were studied.

**Results & Discussions:** During the initial assessment the malnutrition inflammation score revealed 32% of the CAPD population were well nourished, 54% mild to moderately and 13% severely malnourished. After 3 months of nutrition therapy the MIS showed 34% were well nourished 60% were mild to moderately malnourished and 6% were severely malnourished. This is evident by the increase in the average protein mass (15.27 to 22.8 kg), skeletal muscle mass (21.6 to 22.8 kg), body cell mass (26 to 26.8), mid arm muscle circumference (21.9 to 24). There was no increase in serum albumin levels with the average of 3.2 g/dl.

**Conclusion:** Early identification and treatment of malnutrition may improve nutritional status and patient outcome in CAPD.

maie\_nassar@yahoo.co.uk

24<sup>th</sup> International Conference on

# Clinical Nutrition

March 04-06, 2019 | Barcelona, Spain

**Clinical nutrition is the major industry for the development of health, basic need of life, reduce financial crises, global poverty and hunger in the developing countries of the world like South Asia particularly in Pakistan**

**Muhammad Usman**

Agricultural Research System, Pakistan

The aim of presentation consist of clinical nutrition, food nutrients, health, industry, poverty and hunger, studied and reported that clinical nutrition is the major industry for the development of health, basic need of life, reduce financial crises, global poverty and hunger in the developing countries of the world like South Asia particularly in Pakistan. The study reported that food is the basic need of our life and the food chemistry deals with the production, processing, preparation and utilization of food like plants and animals which are the main source of food and food nutrients. Similarly, clinical nutrition involves studying what nutrients are necessary for your body to function and how what you eat affects your health. Keep reading to find out more about the field of clinical nutrition, including education programs, professional requirements and career information. Schools offering fitness & nutrition degrees can also be found in these popular choices. The study further reported that clinical nutrition is the practice of analyzing if a person is consuming an adequate amount of nutrients for good health. A clinical nutritionist is concerned with how nutrients in food are processed, stored and discarded by your body, along with how what you eat affects your overall well-being. Professionals in this field assess your nutritional needs based on your family and medical history, lifestyle and laboratory tests in order to make recommendations on your diet and individual nutritional needs. A clinical nutritionist may provide advice on changes to your diet that may help prevent disease. Similarly, the different between the clinical nutrition and dietetics showed that the primary role of a clinical dietician is to design nutrition programs to improve or maintain the health of patients. Clinical dieticians most often work in hospitals, clinics, or public and community health settings. Dietitians and nutritionists are both food and nutrition experts. They've studied how diet and dietary supplements affect your health. Both are considered to be healthcare professionals, but the two titles shouldn't be used interchangeably. Food scientists and technologists apply scientific disciplines including chemistry, engineering, microbiology and nutrition to the study of food to improve the safety, nutrition, wholesomeness and availability of food. Food carbohydrates include sugar, starches and fibers, lipids include fats, oil, waxes and cholesterol. Protein is very important component of food and necessary for the life of human being. The study further reported that the industry of clinical nutrition absorbs millions of technical and non-technical people like doctors, engineers, agricultural scientist, technical experts etc. which generate income, create employment as well as reduction of global poverty and hunger in the world.

usmankhan1949@yahoo.com