1721st Conference



21st European

Nutrition and Dietetics Conference

June 11-13, 2018 | Dublin, Ireland

Workshop Day 1

21st European

Nutrition and Dietetics Conference

June 11-13, 2018 | Dublin, Ireland



Kenneth Olson

Life Sciences Technologies International, USA

Diet-induced postprandial inflammation: Consequences on human health

Statement of the Problem: After ingesting a meal, postprandial inflammation occurs transiently and may have significant negative consequences on human health. Postprandial inflammation is dependent on the food quality and quantity in terms of its energy content and its nutritional value. Minerals and vitamins constitute the nutritional value while carbohydrate, protein and fat are the sources of energy content.

Objective: Since energy content varies significantly between carbohydrates (4 kcal/g) and fats (9 kcal/g), the objective is to assess postprandial inflammation of an isocaloric, isonitrogenous high carbohydrate (66%) and low fat (20%) diet (HC) versus a high fat (56%) and low carbohydrate (30%) diet (HF) by measuring diet-induced postprandial thermogenesis (DIPT) and inflammation.

Methodology: Healthy, never-obese, postmenopausal, Caucasian female subjects (n=12) participated in this study for 3 weeks each in a crossover design. Fat-Free Mass (FFM) and Fat Mass (FM) were measured by under-water weighing before and after each diet exposure. Resting Metabolic Rate (RMR) was assessed fasting and for five 40-minute periods over a 6 hours DIPT after ingesting 14.3 kg/FFM of either HC or HF diet.

Results: A low Respiratory Quotient (RQ) is usually indicative of lipid peroxidation, an important index of inflammation, measured in this study as TBARS (Thiobarbituric Acid Reacting Substances). RQ for HC diet was significantly higher than that of HF in this study. A significant elevation of Free Fatty Acid (FFA) was also observed after ingesting HF diet, which is well-known to be associated in the pathophysiology of Type 2 Diabetes Mellitus (T2DM), a significant risk factor for cardiovascular disease (CVD).

Conclusions & Significance: Postprandial inflammation is also intimately implicated with Glucotoxicity and Lipotoxicity as displayed under the Image are well known to be associated with T2DM and CVD. Significant other related facts and figures will be illustrated in the presentation.

Biography

Kenneth Olson, MD, PhD, is certified in Internal Medicine and in Clinical Nutrition. His PhD is in Nutrition Sciences. He has an active consulting practice of Nutritional Medicine for 30 years in both hospital and outpatient settings. He has taught nutrition to medical students, dental students, postgraduate physicians and to dietitians as well as community groups. He has published within the field of nutrition and in clinical medicine and animal research directed toward clinical applications. He previously presented posters on Nutrition and AIDS at the National Institutes of Health and at similar meeting in Houston, Texas USA. He has collaborated with Mohammad Khaled, PhD, for many years in the areas of diet composition and the functionality of food associated with clinical outcomes especially involving the immune system and inflammatory processes.

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Martha Dawson

Life Sciences Technologies International, USA

Diametrol: A functional food to support normal blood sugar and wellness

Current drug therapies for the Type 2 Diabetes Mellitus (T2DM) do not address the detrimental interactions of circulating Greactive sugar molecules. Postprandially, these sugar molecules along with fats/lipids, as contained in a normal diet are capable of invoking glucotoxicity and lipotoxicity in human body leading to the formation of Insulin Resistance (IR), the hall mark of T2DM. Metformin, one of the most important hypoglycemic drugs being used for decades to treat T2DM, originated from the plant, goat's rue. Similarly, there exist many such sources in the nature which together in an appropriate proportion may provide synergistically a greater support to maintain normal blood sugar and wellness in humans. Diametrol is such a product known as a functional food, which in addition to proving many important nutritional benefits is also capable of maintaining a better quality of life by improving many bodily functions. Since IR is known to be detrimental to human health, Diametrol was, therefore, tested anecdotally on some pre-diabetics (n=10), to investigate initially if this product could have any efficacies. The results are summarized below under the image showing a significant reduction of IR in these pre-diabetics, indicating thus, that Diametrol could be useful for people with blood sugar related problems. A randomized case-control clinical trial was therefore conducted on non-ambulatory T2DM patients (n=20, F=10) having uncontrolled blood sugars with concomitant diabetes-related diseases. Diametrol showed significant effects in lowering blood sugars and as a remarkable anti-inflammatory product. The overall observations indicate Diametrol to be highly beneficial to both diabetics and pre-diabetics.

Biography

Martha Dawson has been actively engaged in the practice of Dentistry in private as well as Teaching and Dental Research at the University of Alabama at Birmingham School of Dentistry, and has served on the Executive Committee of Dental Practice Based Research in Evidence Based Dentistry as well as Preventive Health. She has remained involved and committed to the study and practice of health lifestyle and nutritional practices. She has published several important papers in well reputed journals dealing with particularly health of elderly populations. Since the concept and efficacies of functional food are significantly beneficial for human health, particularly for the geriatric populations, she is closely working on evaluating and promoting several nutritional supplements.

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Scientific Tracks & Abstracts Day 1

Sessions:

Clinical Nutrition | Sports Nutrition & Kinesiology | Plant Nutrition | Animal and Diary Nutrition | Malnutrition or Nutritional Deficiency | Nutrient related Chronic diseases | Nutrition and Cancer | Nutrition in Pregnancy and Lactation | Pediatric Nutrition

Session Chair Teruyoshi Amagai Mukogawa Women's University, Japan Session Co-Chair Lonnie Lowery University of Mount Union, USA

Session Introduction		
	Title:	Carer experience of appetite changes in people living with dementia at home
		Emily R Walters, University of Southampton, UK
	Title:	How sensory properties of an oral nutritional supplement affect intake, satiation
		and satiety
		Nikos Pagidas, Kerry Group, Ireland
	Title:	The effects of yoga on the weight management
		Yunus Emre Uzun, Istanbul Okan University, Turkey
	Title:	Assessment of nutrition knowledge and dietary behavior of post bariatric surgery
		patients in Rashid Hospital Outpatient Clinic in Dubai, UAE
		Souheir Alia, United Arab Emirates University, UAE
	Title:	Importance of yoga for sports persons
		Shibashis Chakraborty, Indus Valley Ayurvedic Centre, India

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Carer experience of appetite changes in people living with dementia at home

Emily R Walters, Sue Green and Ruth Bartlett University of Southampton, UK

Statement of the Problem: The number of people providing unpaid care across the world is significant. 15.4million Americans and 670,000 UK adults provide US\$216billion and £8billion of unpaid care each year for people living with dementia. The term carer in this context relates to individuals who provide unpaid or informal care and usually comprise of family members. Being a carer often brings a sense of satisfaction but is also associated with greater risk of developing physical and psychological health problems. This 'cost' of caring is commonly described as carer burden. Appetite changes in people with dementia are a recognised cause of carer burden. This is significant as appetite change is one of the known behavioural and psychological symptoms of dementia and can cause malnutrition, hyperphagia and pica. These can significantly impact the health and function of the person with dementia and effect relationships and family dynamics. However appetite changes are also described as difficult to manage by both healthcare professionals and carers. The purposes of this study are to explore how carers of people with dementia living at home manage and respond to appetite changes and to understand their views on what resources or interventions they would consider useful to enable them and other carers to manage these changes.

Methodology: This study was developed with patient and public involvement and takes a narrative inquiry approach; a recognised method used to explore experience. Interviews using open-ended questions allow participants to tell the stories of their experience. The transcribed, anonymised data is analysed using logic and intuition with judgments made about meaning and relevance. This approach enables participant experiences to be described and interpreted providing insight into carer experience and how to best support carers in managing appetite changes in people living with dementia.

Biography

Emily R Walters has a passionate interest in the identification and management of disease related malnutrition in adults. As an experienced clinical dietitian she has spent many years working with patients and their family members in managing this and the associated appetite changes, which often occur. Much of the literature examines appetite changes in disease or illness from a quantitative perspective, focusing on mechanisms for appetite changes, interventions to improve or control appetite and dietary changes or nutritional treatment to support good nutrition. Her National Institute for Health Research doctoral fellowship has enabled her to take a novel approach to studying appetite changes in disease using qualitative methods. Her research explores the experience of family carers in the context of dementia. This innovative approach to a clinical challenge provides novel insight and understanding giving impetus to review how we support those affected by appetite changes and the advice provided.

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How sensory properties of an oral nutritional supplement affect intake, satiation and satiety

Nikos Pagidas and Annick den Boer Kerry Group, Ireland

Oral Nutritional Supplements (ONS) can be used to improve nutritional status of malnourished patients(1) but their effectiveness depends on adequate intake(2, 3). This is not always achieved due to the disliked flavour and satiating properties of ONS (1, 3, 4, 5, 6). The aim of this study was to investigate the effect of thickness and sweetness intensity on intake of an ONS. It was hypothesized that lower sweetness and thickness intensities would decrease oro-sensory stimulation and satiety, improve the sensory profile and thus improve ONS intake. The effect of sweetness and thickness intensities was investigated using a 2x2 design (low-/high-sweetness and thin/thick). Participants (n=36) consumed each ONS to satiation. Each ONS was identical in macronutrient and calorie content. Appetite and thirst were measured throughout the morning of the test. Additionally, an expert sensory panel (n=11), performed a sensory sequential profile of each ONS (results not presented here). No effect of sweetness intensity was found. Results showed that 33% more of the thin compared to thick, ONS was consumed without affecting satiation or satiety. In conclusion, this study showed that an ONS with a lower thickness increased intake in healthy adults without affecting satiation and satiety. This implies that, for ONS attention should not be solely focused on nutritional content.

Biography

Nikos Pagidas is the Sensory & Consumer Sciences Manager at Kerry Europe & Russia, supporting new product development and strategic taste & nutrition initiatives. Previously, Dr. Pagidas was the Sensory & Consumer Insights Director at Sensory Research Ltd. providing multinational companies with training and also support on their sensory and consumer research needs. He has also worked as a researcher at University College Cork, developing nutraceutical products with optimised sensorial properties.He received his Ph.D. from University College Cork and his M.Sc. from the University of Teesside.

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The effects of yoga on weight management

Yunus Emre Uzun and Keyifle Yaşam Istanbul Okan University, Turkey

7 oga is a technique and doctrine of almost 5,000 years. According to *Patanjali*, *yoga* is the period of conscious control of the mind. Yoga is the union with the universe, integrity, peacefulness, serenity and communicating with the whole universe at the same time. Today yoga mostly calls for breathing exercises, specific yoga postures (asana), even meditation only. In general, however, there are eight stages in all yoga genres. Originally, yoga was part of traditional Indian spiritual self-care and medical practice. Day by day, yoga has become a favourite practice to promote physical and mental well-being worldwide. Moreover, yoga was introduced to the western world in the 19th century. In the past few decades, it has been the subject of research and a therapeutic solution in many diseases such as diabetes, hypertension, dyslipidemia, coronary heart disease, mental stress, autoimmune conditions, and chronic obstructive pulmonary disease. Moreover, yoga has been found to be helpful in the management of obesity. Training of yoga asnas and pranayama for three uninterrupted months, one hour every day in the morning reduces body weight, waist-hip ratio and Body Mass Index (BMI). Similarly, In another study, a six-day yoga program led to decreased BMI, waist and hip circumference, fat-free mass as well as reduced total cholesterol, high-density lipoprotein and fasting serum leptin levels. R. Lauche et al., (2017) investigated the effects of yoga/meditation on body weight control and body satisfaction. They concluded that yoga/meditation users with normal BMI appear to be more satisfied with their body weight and shape than non-yoga/meditation users. While women with normal BMI or overweight tend to rely on healthy weight control methods, women with obesity occasionally using yoga/meditation may more likely utilize unhealthy weight control methods. More research is needed to better understand the effects of yoga on body weight management and weight regulation.

Biography

Yunus Emre Uzun graduated from Gazi University, Department of Nutrition and Dietetics in 2013. He is currently pursuing his Master's Degree in the Department of Nutrition and Dietetics at Okan University. He lives in Istanbul and continues his career with the brand, "Life with Enjoyment". His areas of expertise are Obesity, Weight Management and Eating Disorders. He also provides nutritional counseling services for institutional firms.

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June 11-13, 2018 | Dublin, Ireland

Assessment of nutrition knowledge and dietary behavior of post bariatric surgery patients in Rashid Hospital Outpatient Clinic in Dubai, UAE

Souheir Alia, H Ali, T Zoubeidi, S Maqsood and M Ali United Arab Emirates University, UAE

besity is considered to be a disease, which stands alone by itself, and it is accompanied by many co-morbidities, and that is why many means to treat obesity comes into account and one of the most prevalent ways in UAE is by bariatric surgery. Despite the vast research assessing nutrition knowledge of patients of several health conditions none of the papers assessed the nutrition knowledge of patients' post-bariatric surgeries, although this category of patients is very susceptible to malnutrition post-surgery. My aim in this study was to assess the general nutrition knowledge and the knowledge specific to the dietary protocol post-surgery, the medical and nutritional complications and their awareness and understanding of dumping syndrome specifically, the clarity of information conveyed by the dietitians and its effect on their levels of compliance of the post-bariatric surgery dietary protocol and the follow up appointments with the dietitians and finally a small part gave a glimpse of their quality of life post-surgery. The methods used to analyze the questionnaire was with the help of SPSS version 23.0. Descriptive statistics such as frequencies, proportions, means and standard deviations were used. Statistical tests such as Chi-Square test of independence and Pearson's correlation were used to test correlation. To test significant differences between values of quantitative variable were used using the statistical test ANOVA or its equivalent non-parametric test named Kruskal-Wallis. Normality was tested using the Shapiro-Wilk test, while Levene's test was used to test the equality of variance. The results of this study showed a fairly good general nutrition knowledge of both groups, the questions assessing nutrition knowledge of the dietary protocol post-surgery were added up and given a score out of 14, in which it showed that only 19.4% of participants had very good knowledge, 66.2% had average knowledge, and 14.4% had poor knowledge. In addition, most patients didn't know what dumping syndrome is, and of those who knew what it is 66.6% of them knew the food that promote its occurrence and almost half of the participants who answered yes knew the symptoms of it. On the other hand, 79.5% of the patients followed up with a dietitian and only 30.1% showed compliance to the dietitian's instructions, which was strongly related to patients finding the information conveyed vague and unclear as 71.2% considered it as aforementioned. However, the most experienced symptom post-bariatric surgeries was nausea followed by dizziness, dehydration and finally vomiting. As for the overall quality of life of participants the highest percentage 45.8% was given to participants who never felt agitated, fatigued and/or regretted their decision of getting operated and as much as 83.1% found their daily activities to be more enjoyable. In conclusion, patients who undergo bariatric surgeries are a great area of improvement now that we can spot some gaps in the health care provided.

Biography

Souheir Alia has her expertise in health education and promotion in both community setting as well as hospital setting and works as a clinical dietitian in Rashid Hospital, DHA, in the city if Dubai, UAE and is in the process of finishing the requirement to finish her masters' degree in food science and her thesis being research based focusing on patients post bariatric surgery dietary protocol.

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Importance of yoga for sports persons

Shibashis Chakraborty Indus Valley Ayurvedic Centre, India

In order to understand how Yoga can benefit sports persons, it is necessary to explore what is required to play a sport well. Having a body that is flexible, strong and controlled is important consideration, similarly skill, continuous training, endurance, focus, confidence dealing with stress is an important component. Sporting mentor B.P Bam highlights this point by stating "sporting skills require the attainment of deep focus", "living in every moment" and emphasizes that 'the toughest part of any achievement is the handling of distractions and adverse conditions". Swami Vishnudevananda mentions "through pranayama, mans will-power, self-control and concentration power can be increased'. B.P Bam also highlights this point, he states "coming into the present by focusing on breath is one of the best habits to be cultivated. That marks the beginning of concentration." Swami Vishnudevananda highlights this point, he states "when the body is free from physical impurities, the concentration power of the mind increases to a very high degree." . "yogic exercises are mainly designed to keep the proper curvature of the spine and to increase its flexibility", they also state that "balancing asanas develop the function of the cerebellum, the brain centre that controls how the body works in motion, improve muscle coordination and posture including physical and nervous balance which helps to achieve grace and fluidity of movement." Inverted asanas can be particularly beneficial to break bad habits and old patterns of behaviour, for example, an inefficient swimming stroke or volleyball swing. For a professional athlete wishing to optimize their performance, it is essential that they have the ability to change body movements and behaviours. Inverted asanas change the normal thinking patterns. The use of Yoga Nidra and visualisation can assist in the development of a skill and to reinforce a new pattern of behaviour or beliefs. B.P. Bam highlights this point, he states "all of the top Indian sport persons who have worked with me have been making extensive use of various techniques of visualization". "Purification of memory or reinforcing the best from the past, by remembering it again and again, makes a major contribution to the perfecting of a skill." A new study that was released in the International Journal of Yoga provides more evidence - The new research aimed to show that just ten weeks of yoga would increase balance, flexibility and Joint Angles (JA) measures in collegiate soccer players. One group of baseball players performed their usual sport training other group of soccer players did the same but added in two hour-long yoga sessions per week. Tests done before and after 10 weeks consisted of three categories: Flexibility, Balance, and Joint Angles. At the end of the study, the yoga group subjects showed significant improvements in ankle dorsiflexion, knee flexion, hip flexion.

Biography

Shibashis Chakraborty has 15 years of experience in wellness & spa industry in various management roles, out of that 8.5 years abroad (Dubai, Mauritius, Austria, Maldives, Moscow). He organized many yoga workshops for various governmental and non-governmental organizations in India, Mauritius, Maldives, Dubai, Austria & Moscow. Experienced in managing Wellness centre / Medical institute. Having yoga followers in different parts of world (India, Maldives, Singapore, UK, Mauritius, Russia and Dubai). His interview was published in Japanese health magazine DANDO in 2007. He has been interviewed by Dubai ONE TV / Physique Tv/ Russian Tv – Moya planeta/ MBC Tv of Lebanon, NEWS TIME Tv - Kolkata. He himself is a national level master athlete in India.

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Scientific Tracks & Abstracts Day 2

Sessions:

Food and Nutrition | Nutritional Epidemiology | Public Health Research | Diet & Appetite | Vitaminology & Lipidology | Nutritional Neuroscience & Eating Disorders | Nutrition & Metabolism | Nutraceuticals & Medicinal Food

Session Chair Maria Luz Fernandez University of Connecticut, USA Session Co-Chair Marianne O'Shea PepsiCo, USA

Session	Introduction
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Title:	A swallowing function as an indicator of total physical functional improvement in patients with cerebral hemorrhage
	Akiko Takezawa, Mukogawa Women's University, Japan
Title:	The study of an association between outcome and an energy intake achievement during
	the first 2 or 3 days after admission to the general word – A single institute study
	Kazumi Matsumoto, Mukogawa Women's University, Japan
Title:	The Carbohydrate/Protein ratio in daily intakes as outcome indicator in post-operative patients with oesophageal cancer
	Mari Hasegawa, Mukogawa Women's University, Japan
Title:	Nutritional status, energy expenditure, segmental body composition and physical activity performance with metabolic holter assessment in non-obese women with PCOS

Gulcan Arusoglu, Kirklareli University, Turkey

June 11-13, 2018 | Dublin, Ireland

A swallowing function as an indicator of total physical functional improvement in patients with cerebral hemorrhage

Akiko Takezawa^{1,2}, Yusuke Tamamura¹, Takao Shimizu¹, Toshio Nishikimi¹, Kazumi Matsumoto² and Teruyoshi Amgai² ¹Wakakusa Tatsuma Rehabilitation Hospital, Japan ²Mukogawa Women's University, Japan

Aim: To examine an association between functional improvement and nutritional factors in patients with cerebral hemorrhage.

Methods: All consecutive patients with cerebral hemorrhage in thalamic and/or putamen admitted to the recovery ward in a single institute between Apr. 2015 and Mar. 2017 were enrolled. The following data were collected in all subjects: [Demographics] sex, age, height, BMI, site of cerebral hemorrhage, hemorrhage volume (ml), Charlson Comorbidity Index (CCI), Grip strength (kg), Functional Independence Measure (FIM), [Nutritional parameters] daily energy/protein intake on the day after admission (day 1) and one day before discharge (day 2) (kcal or gram/kg of actual weight/day, respectively), oral/ total energy ratio (%) on day 1, [Functional parameters] FIM, Functional Oral Intake Scale (FIOS) on day 1 and 2, rehabilitation hours (expressed in unit), [Others] serum albumin [Outcome parameter] primary: FIM gain during 30, 60,and 90 days, FIM efficacy (FIM gain/LOS), the length of stay in the institute (days). After all subjects were divided into two groups according to FIM interest (cutoff value set at 23), all data of patents with FIM int≥23 (I group) and <23 (N group) were compared.

Results: Subjects' number was 41. (1) Data at admission, an oral intake (%) in I group was significantly higher (81 vs. 50%, p<.05), (3) Data at discharge, FIOS in I group was also significantly higher (6±2 vs. 4±3, p<.05), (3) By simple linear regression analysis, FIM gain was associated with age, LOS, FOIS and Alb at discharge (p<.05), (4) By multiple regression analysis, FOIS at discharge were associated with FIM gain (p<.001).

Conclusion: This study showed that functional improvements in patients with cerebral hemorrhage, expressed in FIM score, was strongly associated with swallowing function evaluated by FIOS at discharge.

Biography

Akiko Takezawa has expertise in Nutrition. She is doing Nutrition Management and Nutritional Guidance at Rehabilitation Hospital based on Japanese Nutritionist's license. On the other hand, she is conducting research on clinical nutrition in educational institution (graduate school). She is studying the effects of diet and nutrition rehabilitation on the clinical course and outcomes in patients with elderly.

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June 11-13, 2018 | Dublin, Ireland

The study of an association between outcome and an energy intake achievement during the first 2 or 3 days after admission to the general ward – A single institute study

Kazumi Matsumoto^{1,2}, Akiko Takezawa² and Teruyoshi Amagai² ¹Akashi City Hospital, Japan ²Mukogawa Women's University, Japan

Aim: To examine our hypothesis that energy intake achievements to goal during the first 2, 3 and 7 days after admission to general ward by 20%, 30%, and 66% of the goal set at 25 kcal/ kg of actual body weight, respectively, are associated with good outcome.

Methods: This study was the retrospective chart review and approved by the Ethic Committee of the institute. All consecutive patients admitted to the general medical and surgical words, between Oct. 2016 and Sep. 2017, and fed by enteral nutritional method. Collected data of all subjects were the follows: (1) demographics- sex, age, primary diagnosis, height, weight, body mass index (BMI), Charlson Comorbidity Index (CCI), (2) nutritional parameters- daily energy and protein intake (kcal, grams/kg of actual body weight), achievement of energy and protein intake to goal ratio (%) calculated daily until the first 7 days after admission to the words, here goal of energy /protein were set at 25 kcal / 0.8 gram / kg, (3) laboratory data-Hemoglobin (Hb), Total Lymphocyte Count (TLC), serum total bilirubin (Bil), serum creatinine (Cre), C-Reactive Protein (CRP), all drawn in the study period was collected to analyze, (4)outcome parameters- the length of stay in hospital (LOS) as the primary outcome, rate of weight change between admission(Wt ad) and discharge (Wt dis) (defined as "(Wt dis – Wt ad) / Wt ad", %), living status, highest CRP.

Strengths of this Study: To our knowledge, this is the first to study an impact of an earlier energy / protein intake after admission to general wards. The results might change a clinical practice to achievement of energy intake to 20%, 30% of goal during the first 2, 3 days after admission to shorten LOS and/or prevent the adverse events, such as nosocomial infection with higher CRP.

Biography

Kazumi Matsumoto has expertise in Nutrition. She is doing Nutrition Management and Nutritional Guidance at Acute Care Hospital based on Japanese Nutritionist's license. On the other hand, she is conducting research on clinical nutrition in educational institution (graduate school). She is studying the effects of nutrition therapy on the clinical course and outcomes in patients with elderly.

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The Carbohydrate/Protein ratio in daily intakes as outcome indicator in post-operative patients with oesophageal cancer

Mari Hasegawa Mukogawa Women's University

Background: It was suggested that the average fluid balance during the 7 days after oesophageal cancer surgery may be a predictor of outcomes. Although we did not mention the relevance of nutritional intake and outcome after surgery, many reports state that perioperative nutrition influence outcomes. It has been known that oesophageal cancer resection is a highly invasive surgical procedure and causes prognostic malnutrition. However, the specific nutrition management method, after surgery, is not indicated in the guidelines.

Aim: In this study, we hope to clarify the relationship between nutritional intake and clinical outcome of cases entering ICU post oesophageal cancer resection operation.

Methodology: We conducted a quantitative retrospective chart review and analysis of patients hospitalized for the purpose of therapy oesophageal cancer in a single facility between 1st January and 31st December 2014. The patients who had day spent less than 2 days in the ICU, did not radical surgery and missing data were excluded. We calculated the daily average energy, protein, lipid, intake and Carbohydrate/Protein ratios during their stay in the ICU. We divided the subjects into two groups: high intake and low intake. We used a median score as the cutoff point. We conducted four investigations for each nutritional element:

- (1) daily average energy intake >= vs. < 14.30 kcal/kg/day,
- (2) daily average protein intake \geq vs. < 0.48 g/kg/day,
- (3) daily average lipid intake \geq vs. < 0.07 g/kg/day,
- (4) Carbohydrate/Protein ratios >= vs. < 6.01.

Result:

(1), (3) There was no significant difference in the length of stay in the ICU (days).

- (2) The group with a daily average of protein intake of < 0.48 g/kg/day showed significantly shorter length of stay in the ICU (days) than that in another group (4 (3, 5) vs. 5 (4, 6), p=0.009).
- (4) The group with Carbohydrate/Protein ratios of >= 6.01 showed significantly shorter length of stay in the ICU (days) than that in another group (4 (3, 5) vs. 5 (4, 6), p=0.037).

Conclusion: The daily average energy and lipid intake may not be suitable variables as predictors of outcome for post oesophageal cancer resection. It can be suggested that lower protein intake and higher Carbohydrate/Protein ratio seem to be associated with better prognosis in post-operative patients with oesophageal cancer.

Biography

Mari Hasegawa has completed her Graduation from Mukogawa Women's University and now working in the same university.

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Nutritional status, energy expenditure, segmental body composition and physical activity performance with metabolic holter assessment in non-obese women with PCOS

Gulcan Arusoglu Kirklareli University, Turkey

Background/Aims: The prevalence of polycystic ovary syndrome (PCOS) is increasing markedly. Inspite that, combined data on dietary intake, satiety, active energy expenditure and body composition are seen limited in PCOS. The aim of this study is to evaluate the relationship between satiety, food intake, active energy expenditure, segmental body composition and weight status in new diagnosed young women with PCOS.

Subjects and Methods: Thirty three (n=33) new diagnosed consecutive women with PCOS, hirsutism and hyperandrogenism, and 31 age and BMI-matched healthy control women were recruited for the study. PCOS is defined according to Rotterdam criteria. Physical activity is assessed by metabolik holter equipment for consecutive three days and anthropometric measurements were taken. Subjective satiety is assessed by satiety index scale (SI). Food intake is recorded with 24-h food record for 3 consecutive days by using a photographic atlas of food portion sizes. Total daily energy, macro and micro nutrient intakes were calculated by food composition database (BEBIS). Assessment of human body composition is used for determining the nutritional status of the population. Body composition analysis of quantity and distribution of body fat and fat free mass parametres were assessed by Bioelectrical Impedance Analyses (BIA). Results were compared with Recommended Daily Allowances (RDAs) according to age and gender.

Results: Mean BMI was 22.63 \pm 3.64, 21.54 \pm 2.77 kg/m² in PCOS and control groups respectively. Mean age was 22.03 \pm 4.21/21.71 \pm 2.67 year respectively. Nutritional habits were similar in both groups. No significant differences were found in total energy intake, percentage of carbohydrates, fats and other micronutrients (p > 0.05). Energy percentage of proteins (% 14.38 \pm 2.69, p= 0.008) were statistically different in control subjects than in the PCOS group. The measurements of physical activity duration (1.39 \pm .86/2.17 \pm .98 hours, *p* = 0.002), active energy expenditure (372.35 \pm 198.32/494.10 \pm 186.50 kcal, *p* = 0.018), steps counting (9370 \pm 3587/11730 \pm 3564 kcal, *p*= 0.013), right leg fat mass (p= 0.035), right arm fat mass (p= 0.040) and right arm fat free mass (p= 0.035) were statistically different between PCOS and control groups respectively.

Conclusion: New diagnosed women with PCOS at baseline had similar satiety sensations, distribution and quantity of body fat parametres, muscle mass and nutritional status when compared to healthy women. Control subjects were found more active in expending energy. There were no differences in respects to their dietary habits.

Biography

Gulcan Arusoglu is completed her graduation from top University in Turkey and she is working now at Kirklareli University, Turkey.

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Scientific Tracks & Abstracts Day 3

Nutrition, Health and Choice | Current Research in Nutrition and Dietetics | Food and Nutrition | Nutritional Epidemiology | Food Science & Chemistry | Public Health Research

Session Chair Wolfgang Herrmann Saarland University Hospital, Germany Session Co-Chair Conor P Kerley Dublin City University, Ireland

Session Introduction

Title: Diet adjustment in later life: A grounded theory study of eating behaviours amongst the ageing population of Limerick
Sharon O Flaherty, Limerick Institute of Technology, Ireland
Title: A novel, 12 week dietitian-led curriculum beneficially modulates nutrition behavior in older adults attending community rehabilitation

Conor P Kerley, Dublin City University, Ireland

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Diet adjustment in later life: A grounded theory study of eating behaviours amongst the ageing population of Limerick

Sharon O Flaherty Limerick Institute of Technology, Ireland

The ageing of the population going forward will embody one of the most momentous demographic and social developments L encountered by Irish society. Falling fertility rates and ever-increasing life expectancy will see the number of older people aged 60 or more almost double, with those over the age of 75 expected to almost triple by the year 2050. Older individuals are the fastest growing segment of the world's population, yet they are often overlooked by the food industry, with most food products targeted at those aged 21 to 49. Disruptions in diet and eating behaviours are common among older adults however, little is known about the processes underlying these disruptions. The central goal for assisting individuals to age well is promoting a healthy and nutritious diet however, "Eating behaviour is the result of a complex interaction of physical, psychosocial, cultural and environmental factors that impact food choices and dietary practices", and addressing the barriers of access to food is extremely important to ensure adequate food consumption in older adults, (Brownie & Coutts, 2014, p. 182). Conversely, the extent to which food shopping can constitute a manageable part of older people's daily/weekly routines is strongly influenced by their economic means and health status. The aim of this study was to identify potentials barriers and motivators for food intake in the ageing population. Qualitative methods based on a constructivist grounded theory approach, guided by a critical Realist worldview were used. A mixture of intensive interviews and unstructured non-participant observations were chosen to reach the research objectives, as they fit grounded theory methodology. The sample criteria included those over the age of 65, living independent lives, and who were responsible for most of their shopping/cooking needs. A substantive theory of why and how older adults eating behaviours change in later life was developed.

Biography

Sharon O Flaherty is currently completing her MA in research and is currently in the process of transferring to PhD at Limerick Institute of Technology (LIT) in Ireland. She recently graduated with a BA honours degree in Applied Social Science in Social Care Work at LIT. She received the Social Care Ireland award for academic excellence across her course. She has won two awards for research presentations on her undergraduate thesis titled 'Exploring Food Insecurity among Single Parent Families in Ireland'. Sharon has submitted a Journal for publication with the 'Irish Journal of Applied Social Studies' (IJASS) titled 'Exploring Food Insecurity among Single Parent Families in Ireland'. She has recently been successful in her application for a bursary worth €2500 with the Irish Association of Social Care Educators (IASCE). She is currently working as a Tutor at Limerick Institute of Technology.

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A novel, 12 week dietitian-led curriculum beneficially modulates nutrition behavior in older adults attending community rehabilitation

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Statement of the Problem: Nutrition is regarded as a major modifier of cardiac disease incidence and severity. Cardiac rehabilitation (CR) is a common tool aimed at primary prevention. By definition CD is multi-disciplinary and includes nutritional input.

MedEx is a large, community based exercise program. Until recently there was no nutrition component within MedEx. CPK designed, delivered and evaluated a novel 12 week, dietitian-led nutrition curriculum. The nutrition curriculum involved 12 short (~10min) weekly talks on diverse nutritional topics delivered by a registered dietitian (CPK). Topics were aimed to be most relevant for older adults, those with chronic cardiac disease and those exercising regularly.

112 (83 male) attended >75% of talks. The weekly talks were rated as excellent by 38, very good by 52 and good by 13 subjects. Further, weekly talks were rated as very useful, quite useful or useful by 33, 37 and 34 subjects as well as very practical, quite practical or practical by 66, 35 and 6 subjects respectively. 100% of respondents would recommended the 'curriculum' to a friend. 87 of 102 subjects (86%) reported having changed their dietary habits since the beginning of the curriculum. The largest reported changes were increased consumption of plant protein (n=37), fruit and vegetables (n=35) and wholegrains (n=11).

Nutrition has a major influence on incidence and progression of cardiac disease. However, work from our group and others demonstrates both suboptimal nutritional knowledge and behaviours in these cohorts. CR programs offer a unique and promising opportunity to provide targeted, evidence-based nutritional advice and potentially modify nutritional behaviours.

Biography

Conor P Kerley has his expertise in chronic disease prevention and treatment. He received his Bachelor's degree in Human Nutrition and Dietetics from Trinity College Dublin and his PhD from University College Dublin. He has presented his award winning findings at multiple national and international nutrition and medical conferences. His research has been published in international peer-reviewed medical journals and has attracted over €210,000 in research funding to date In addition to his clinical research, He served as chairperson of the Scientific and Research Steering Group of the Irish Nutrition and Dietetics Institute and is an active member of several professional societies including the Irish Nutrition and Dietetics Institute, Nutrition Society, The National Blood Pressure Council and The True Health Initiative. The current work is based on his design and implementation of a novel, innovative nutrition education intervention in addition to an exercise focused rehabilitation program.

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