Abstract Code	P1002
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Abstract Title	Body Mass Index (BMI), Nutritional Status, Dietary and physical activity pattern of preparatory School Age Children (11-14 Years) of Selected UNISCO Affiliated Schools

Abstract Background: The lifestyle of children is susceptible to rapid changes and these may affect the nutritional status of children.
Objectives: To provide information on Body mass index (BMI), nutritional status, dietary and physical activity pattern of 11- 14 years old, preparatory school age children in 4 selected UNISCO affiliated schools in the urban areas of Cairo and Giza Governorates.
Materials & Methods: This study was a part of Nutrition Education for school age adolescents in associated school UNISCO s project network (ASPNET). It was carried out by team of the National Nutrition Institute in the year 2008. Cross-sectional descriptive study, where purposive non–probability sample was selected from four ASPNET Urban schools from four Educational directorates, two from Giza Governorate and two from Cairo Governorate. Total sample was 330 students equally distributed between selected schools, they were 148 male and 183 female and covered the age from 11-14 years. Pre designed questionnaire was used to collect information on gender, date of birth, dietary pattern and physical activity levels. The studied students were subjected to anthropometric and dietary assessments.
Results: Overweight and obese males accounted for 21.0% of the total sample while the percentage is mostly doubled among females to reach 40%. About half of the males consumed vegetables and half of females consumed fruits on daily basis. Nearly half of students consumed milk, yogurt and cheese daily. About one fourth of the students consumed effervescent drinks and about one third of them consumed tea daily. The median of caloric intake of overweight and obese children of the current study (3139.9 and 2941.9 calories respectively) is considered very high compared to recommended daily estimated requirements. almost one half of females and one third of males did not meet their requirements from Vitamin A, more than half of females (63.9%) consumed more than 100% of their adequacy of folic acid daily versus (45.6%) of males. Nearly half of males (49.7%) and females (59.0%) consumed less than 50% of their adequacy of vitamin C and about 30.6% of males versus 26.2% of females got

Abstract Code	P1006
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Abstract Title	A novel oral medical nutrition formula (PLP10) for the treatment of relapsing remitting multiple sclerosis: a randomized, double-blind, placebo-controlled proof-of-concept clinical trial

Background: For many years, the role of polyunsaturated fatty acids (PUFA) in the pathophysiology and development of neurodegenerative diseases and specifically multiple sclerosis has been a subject of considerable discussion and research but without proof of efficacy. Current available multiple sclerosis (MS) treatments are products of reductionism, partially effective with no (re)myelinating/neuroprotective abilities and mostly associated with adverse and/or significant side-effects. We aimed to assess whether our novel intervention, formulated based on systems medicine concept, comprising specific fatty acids and vitamins within a specific ratio, quantity, quality, and structural form reduce disease activity in patients with relapsing remitting multiple sclerosis who were either treated with disease modifying treatment (DMT-interferon or glatiramer acetate) or untreated.
Methods: We contacted a 30-month randomized, double-blind, placebo-controlled, parallel design, phase II proof of concept clinical study at the CING. An experienced neurologist, a registered clinical dietitian and a medical biochemist with specialties on lipidology and immunology, were the investigators involved in the trial. Of a total of 80 patients, 20 were randomly assigned to receive intervention A (docosahexaenoic acid (DHA)/eicosapentaenoic acid (EPA) (3:1 wt/wt) omega-3, linoleic acid (LA)/gamma (γ)-linolenic acid (GLA) (2:1 wt/wt) omega-6 fatty acids, omega-3/omega-6 (1:1 wt/wt), other specific PUFA, monounsaturated fatty acids (MUFA), minor quantity of specific saturated fatty acids (SFA), vitamin A and vitamin E), 20 to receive γ-tocopherol, intervention C, 20 to receive the combination of interventions A and C, intervention B (PLP10) and 20 to receive placebo, as an oral solution, once daily. The first six months were used as normalization period and considered as pre-entry period. The primary end point was the annualized relapse rate (ARR) and the key secondary end point was the time to disability progression. This study is registered as an International Standard Randomized Controlled Trial, number ISRCTN87818535.
Findings: PLP10 reduced the annual relapse rate (ARR) by 70% (p=0.003), in relation to the baseline ARR and the placebo increased by 46% (p=0.354). During study, for the primary end point, PLP10 reduced the ARR by 58% (95% confidence interval 0.10 to 0.79, p=0.016) and for the secondary end point, significantly reduced the risk of sustained progression of disability by 86% over the two-year period (hazard ratio, 0.11; 95% confidence interval 0.01-0.97, p=0.047) versus placebo. The cumulative probability of progression on basis of survival analysis was 10% in the PLP10 group, and 70% in the placebo group. Proportionately more patients in the PLP10 group (72%) versus placebo group (20%) were free from new or enlarging T2-weighted lesions on brain magnetic resonance image (MRI) scans over the two-year study. No adverse events were reported. Interventions A and C showed no significant efficacy. Interpretation PLP10 treatment significantly reduced the ARR, and the risk of sustained disability progression without any adverse or significant side effects. This is the first clinical study of systems

medicine approach medical nutrient formula that holds strong promise as an effective treatment for relapsing remitting multiple sclerosis.

Abstract Code	P1010
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Abstract Title	STUDY OF GROUP EDUCATION AND NURSE TELEPHONE FOLLOW UP EFFECT ON BLOOD GLUCOSE CONTROL AND TREATMENT ADHERNCE IN TYPE 2 DIABETS MELLITUS PATIENTS

Background: Training and continuous dynamic communication between patients and health professionals in chronic diseases like diabetes, is important. The aim of this study is to evaluate the effects of diabetes self-care group education and nurse telephone follow up on glycemic control and compliance with treatment orders in patients with type 2 diabetes attending to diabetes clinic in khomein.
Material & Methods: In this clinical trial, 62 patients with type 2 diabetes who attending to the diabetes clinic selected and were randomly assigned to experiment and control groups. Self-care group education was applied for case group (n=31) and they were followed up using telephone for 12 weeks by a nurse. The control group (n=31) received the conventional management Demographic charactristics, compliance with treatment recommendations(diet, drug use, exercise) and blood glucose indcators were recorded before and after intervention.
Results: The mean age of intervention and control group was 50.9±7.3 and 55.1±10.1 years respectively. Blood glucose indcators were improved in both case and control group after intervention but it was statistically significant in case group (p> 0.0001). Score of compliance with treatment recommendations was improved significantly in case group too (p>0.0001). Conclusion: According to the results of the present study self-care group education and 12 weeks follow up by a nurse using telephone causes significant improvement in metabolic parameters and scores of compliance with treatment recommendations in diabetic patients. Due to availability and low cost of telephone follow-up, it can be a part of diabetes control program.
Keywords: group education, telephone follow up, diabetes control, treatment adherence

Abstract Code	P1025
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Abstract Title	LONG TERM CLINICAL AND NUTRITIONAL INFLUENCE OF ORAL NUTRITIONAL SUPPLEMENTATION IN MAINTENANCE HEMODIALYSIS PATIENTS

Introduction: Protein-energy wasting (PEW) is common in patients with chronic kidney disease (CKD) and is one of the major factors adversely affecting their prognosis. Clinical guidelines and reviews support the use of enteral nutrition in patients with renal failure. In literature there are few clinical trials with oral nutritional supplement (ONS) and their follow-up periods are relatively short and the number of patients included are low. The aim of this study was to evaluate the six months' nutritional effect of ONS in maintenance hemodialysis (MHD) patients with malnutrition.
Material and Methods: Patients with serum albumin concentration <4 g/dl and/or loss of dry weight (DW) 5% over the last 3 months were included in the study. Patients who accepted to use the ONS (Nutrena®, Abbott Nutrition) were defined as the study group the individuals who refused to use the ONS served as the control group. All patients' clinical, laboratory data, antropometric measurements [DW, body mass index (BMI), intradialytic weight gain (IDWG), the triceps skin-fold thickness (TSFT)] were analysed. For bioelectrical impedance (BIE), a Body Composition Analyzer (Tanita BC-420MA) was used. All patient's malnutrition inflammation score (MIS) was calculated at the initation and at the 6. months' evaluation. Additionally, erythropoietin dose received (U/kg/week) was recorded monthly.
Results: 29 subjects in each arm completed the study. No significant difference was found between two groups in demographical and clinical characteristics. The study groups' DW, BMI and TSFT significantly increased at the end of the study however the control group had a significant decline in all parameters ($p<0.001$ for all). At baseline, malnutrition and inflammation score (MIS) was similar between two groups but at the end of the study in study group MIS did not differ from baseline whereas in the control group MIS significantly increased [(8.27 ± 2.76 vs. 7.27 ± 2.69) ($p< 0.682$); (8.17 ± 2.98 vs. 8.79 ± 3.44) ($p<0.006$)]. In study group variation ratio of fat free mass and muscle mass significantly increased whereas patients in control group mean BEI parameter significantly decreased from baseline to the 6. month [(+1.87 ± 5.28), (+1.78 ± 5.31) vs. (- 3.90 ± 4.74), (- 3.86 ± 4.85); $p< 0.001$ for all). At the end of the study mean (± SD) serum albumin level significantly increased in the study group ($p< 0.027$), whereas in the control group serum albumin level did not differ from baseline values ($p< 0.327$). The percentage of patients with serum albumin level under 3.5 g/dl was 48.3% versus 58.6% ($p< 0.430$) at the initiation and 17.2% versus 48.3% ($p< 0.012$) at the end of the study. There was a significant increase erythropoietin dose requirement of the control group compared with the study group at the end of the follow-up period (+1.38 (24.14) vs.-14.77 (35), $p< 0.012$).
Conclusion: Our results indicate that ONS significantly improves nutritional parameters in malnourished CKD patients. We suggest that a rational approach to detect minor signs of PEW, search for its causes and plan an early treatment should be developed.

***Category: Nutrition in Hemodialysis Patients

Abstract Code	P1032
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Abstract Title	Fat intake and breast carcinogenesis in a case-control study, Doha, Qata

The aim of this study is to evaluate the relationships between dietary fat intake and breast carcinogenesis in a control-case survey. The study conducted in Doha from March to June 2012 included 15 cases (newly diagnosed with CA-BR by NCCCR) and 30 controls (female students and staff enrolled in Qatar University); 21-55 y. Nutritional assessment (total Kcal, fat intake) is performed using Nutri-calc plus 3.0 software. 80% of patients have excessive dietary fat intake (>30% of the total energy intake) compared to 14.4% of healthy women ($p \leq 0.001$). About 75% of the patients and only 13.33% of healthy have excessive saturated fat intake (>10% of the total fat intake) ($p \leq 0.001$). Among the fat composition, significant differences are observed in saturated fats (28.26% vs 13.77%; $p \leq 0.001$) and monounsaturated fats (28.26% vs 11.96%) in cases and controls respectively. However, polyunsaturated fat percentage of the total fat intake does not differ significantly between the two groups (8.70% vs 9.06%; $p=0.575$). Our results support the positive relationship between saturated and monounsaturated fat intake and breast cancer in young premenopausal women.

Abstract Code	P1037
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Country	Egypt
Abstract Title	Vitamin D Status in Children and Adolescents with Newly Diagnosed Type 1 Diabetes Mellitus

Some studies in humans suggest that vitamin D intake early in life may reduce the subsequent risk of type 1 diabetes. This work aimed at studying the prevalence vitamin D deficiency in children and adolescents with recently diagnosed type1 diabetes.
Patients and Methods: fifty children and adolescents within the first six months of diabetes onset were recruited from patients attending the diabetes clinic during the period from July 2010 till February 2011, forty healthy children with matched age and sex were recruited as controls. History taking, clinical examination and quantitative determination of 25-hydroxyvitiamin D, Parathyroid Hormone (PTH), and serum calcium were done for patients and controls. Results: 25 hydroxy vitamin D level was insufficient in 34 (68%) of cases compared to 9 (22.5%) of controls, this difference was statistically significant (p=0.000). Serum calcium, phosphorus, and PTH levels, were not significantly different among the studied groups. The nutritional history (type of feeding, duration of breast feeding, introduction of cow milk products during the first year of life and the timing of introduction of complementary foods) all didn't have significant relation with vitamin D status. Vitamin D supplementation whether appropriate or subtherapeutic and the exposure to sun also didn't affect vitamin D status (P=1 and 0.45respectively).
Conclusion: vitamin D insufficiency is more common in children with newly diagnosed type1 diabetes mellitus than controls which may be a factor related the disease etiology; more randomized controlled trials are needed to test such a hypothesis.

Abstract Code	P1053
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Abstract Title	Nutritional behavioural changes using dietary related Islamic teachings

Conference Theme Area: Nutrition Behaviour Change

It is widely agreed that human behavior and interactions between people's behaviour and the environment are among the primary causes of the increasing trend of obesity epidemic. Therefore, population education strategies need a solid base of policy and environmental based changes, as well as behavioural change programs to reverse the current trends in weight gain, and in the development of chronic diseases prevention. So the success of community and clinical nutrition education programs depend on behavioural change models and theories. Unfortunately, current trends in obesity prevalence and consumption of unhealthy foods are not limited anymore to developed countries. The obesity epidemic has spread to developing countries with the penetration of big food companies into developing and middle income countries. Environmental, behavioural, social and cultural factors can amplify this problem and can worsen its impact on future generations. Therefore, it is important to look closely at the interaction of the above factors in order to understand behaviours conducive to obesity. Models and interventions should consider all of these factors and address them to reach the desired goal and to boost the effectiveness of the interventions plans. Moreover, health planners should be mindful of all successful programs that used health behaviour change and try new approaches with wide range of interventions which can provide promising models. Faith based health promotion programs can be one of these promising models. A successful intervention program that uses health behaviour models as a basis cannot disregard religiousity and religious beliefs. Culture, values and beliefs are all interrelated with religious upbringing, religious affiliation and religiousity. That is why religion can be a great tool that can improve effectiveness of the intervention if used carefully and meticulously. Research studies have shown that spirituality and belief systems can ensure mental and psycho-social stability and can lead to a healthy physical wellbeing. Many existing faiths include teachings that can be health promoting. Amongst these faiths is the Islamic faith that has over 1.5 billion followers across the globe. Islamic teachings include a wide range of health related ones including teachings related to nutrition and dietary practices. Islamic sources, namely Quran and Sunnah, contain many teachings that can be health promoting with a considerable number of verses and prophetic sayings that are related to diet and nutrition. Applying health behavioural models, such as health belief and transtheoretical models, through the reinforcement of certain Islamic religious guidelines and teachings on optimal nutrition with Muslim communities, may be a promising model to reduce obesity and weight gain problems related to chronic diseases. This paper will discuss Islamic teachings related to diet and food habits from the Quran and Sunnah perspectives. These teachings can be classified into four main categories: dietary practices, recommended food to be consumed, prohibition of unlawful and unclean food and eating manners and behaviours. The paper will also discuss the potential of using Islamic health promotion messages to prevent obesity and weight gain among Muslims through the application of behavioural change models.

Abstract Code	P1054
Authors' Names	Mrs. Kenanah, Amal Clinical Dietitian Director King Saud Medical City, Riyadh, Kingdom of Saudi
Corresponding Author	Amal Hamdi Kenanah
Country	Saudi Arabia
Abstract Title	Nutritional Concerns of Bariatric Surgery Patient

DIET PROTOCOL FOR THE BARIATRIC SURGERIES: 1- Pre-operation program: a. Fluids must be at least 2- 3 liters/day b. High protein intake 30 – 35% / day c. Increase food high in vitamins and minerals d. Low carbohydrate intake from the total calories e. Increase omega 3 and 6 2- Step one post-operation program: a. After 24 hours fluids must be room temperature 20 – 30ml/hour b. Clear liquid for at least 3 days c. Full liquid for at least 3 weeks depend on the type of surgery 3- Step two post-operation program: a. Pureed food for at least 2 – 4 weeks depend on the type of surgery b. Soft food for 2 -3 weeks c. Calories must not be more than 800 kcal/day d. Fluids must be 30minutes before meal and 60 minutes after meal e. Concentrate on food rich of vitamins and minerals f. Avoid high fatty and sugary food 4- Step three post-operation program: a. Calories must be 800 – 1100 kcal/day b. Protein must be 45 – 60 gm/day c. Patient should not exceed 3 meals /day, 120 – 180 ml/meal d. Fluids must be between meals 30 minutes before meal and 60 minutes after meal e. Patient must take plenty of time during meal time and chew well to avoid nausea, vomiting, gases f. Avoid hard food such as bread, vegetable and fruits skin, hard meat, hardboiled egg, coconuts, nuts, chips g. Avoid high fat and sugary food.

Abstract Code	P1059
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Corresponding Author	K.N.Antonas
Country	USA
Abstract Title	An effective culturally appropriate dietary education program to prevent Metabolic Syndrome (Pre-Diabetes) in female Pakistani immigrants

Migrant populations from South Asia, including Pakistan, often display a greater prevalence of Metabolic Syndrome and the prevalence is higher on migration to western countries. Increased prevalence of Metabolic Syndrome (MS) in Pakistani migrants has been linked to decreased levels of physical activity and changes in diet post migration. The health of many female Pakistani migrants is further adversely impacted due to factors such as language barriers, and social isolation. In Australia dietary guidelines exist for the general population, however those that are available for migrant populations are limited or do not reflect cultural food preferences. We present data demonstrating the positive effect our culturally appropriate dietary modification program had on the dietary habits of female Pakistani migrants (n=60), aged 20-60 yrs, presenting with at least one component of MS. The goals of the program were to achieve an overall decrease in energy intake and increase in physical activity. Methods A culturally appropriate dietary modification program ("Step to Good Health") was developed and delivered via bilingual native-speaker (Urdu) health educators as a series of 12 weekly modules, each with a different focus and goal. Culturally sensitive discussions were used to educate participants about+ healthy dietary practices, the benefits of increasing physical activity, and how to implement changes in their own diets. The effectiveness of the program was assessed via a food frequency questionnaire in Urdu, completed before and after the program. Results Most of the participants originally had a diet high in saturated fat and low in fruits and (green) vegetables, however on completion of the program fewer subjects were consuming saturated fat and more were consuming healthy fats (particularly from fish), and green vegetables. There was a significant reduction in the intake of fast foods (mostly fried), and soft drinks. Importantly, at the completion of the 12 week program Pakistani-style food was still being prepared by participants, albeit using healthier ingredients and techniques, which was an important factor contributing to their family's acceptance of the program. Self-empowerment and self-improvement were important aspects of the dietary education program employed, and were essential motivational factors that fostered change in our participants. Conclusions Through the interactive workshops, behavioural change was effectively implemented within the context of the women's traditional eating habits and lifestyles. Recommendations from this project include utilising workshops with bilingual health educators, delivery of in-community health promotion and disease awareness/prevention programs using an 'out-reach' approach, and building programs to inform and train ethno-specific agencies in delivery of this health promotion approach. Culturally appropriate intervention programs should be implemented at an early stage on migration to encourage healthy eating and physical activity.

Abstract Code	P1062
Authors' Names	Dima Abousaleh
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Country	Saudi Arabia
Abstract Title	Nutrition care in high risk neonate presentation

The Newborns admitted to the Neonatal Intensive care unit (NICU) are mostly at increase nutritional risk, secondary to their diagnosis. Most of the admissions are premature; who mostly cannot tolerate full enteral feeding until gastrointestinal motor function has matured. During this process some will develop Necrotising Enterocolitis (NEC), a devastating failure of adaptation to postnatal life that may result in death, or severe complications. Providing the needed nutrition and promoting growth rates while optimizing long term health outcomes represent a challenge for neonatologists and NICU dietitians. This presentation will focus on the nutritional assessment and interventions for those newborns, feeding intolerance & GERD, finally we will discuss the appropriate formula & importance of following those babies nutritionally after discharge.

Abstract Code	P1067
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Corresponding Author	Ravinder Mamtani
Country	USA
Abstract Title	Use of herbal and nutrition supplements among college students in Qatar

The demand for herbal and nutrition supplements is strong and growing. Today about 80% of the world's population use herbal medicines as one component of their medical health regimen [1, 2, 3, 4]. Scientific studies documenting use of supplements in the Middle Eastern nations are few and far between. In one such rare report (5) over 60% of the athletes in Qatar reported using vitamin supplements. The most common supplements used were vitamin C, vitamin E and multivitamins. While there have been episodic reports of supplement use among individuals with certain diseases (6), the availability of population based epidemiological data on the use of herbal and nutrition supplements in the Middle East is scarce. The data on the use of supplements among young healthy adults such as college students is almost non-existent. We thus propose a survey that will, in the first instance, be directed to the college students in Qatar. The objective of our study is to evaluate the current use of herbal and nutrition supplements among college/university students in the State of Qatar with the longer-term objective of providing evidence-based recommendations concerning their use. We will present study findings to include a) demographic information of subjects included in the study, b) prevalence of supplement use among college students, c) reasons for their use and d) medical / health conditions and or symptoms for which college students use supplements. References 1. Eisenberg, DM, Davis, RB, Ettner, SL et al. Trends in alternative medicine use in the United States, 1990-1997: results of a follow-up national survey. JAMA 280: 1569-1575, 1998. 2. Farnsworth, NR, Akerele, O, Bingel, AS., Socjata, DD, Eno, Z. Medicinal plants in therapy. Bull World Health Organization 1985: 63: 965-981. 3. Gesler, WM. Therapeutic landscape medical issues in light of the new cultural geography. Soc.Sci. Med. 1992; 34: 735-746. 4. Rafferty, AP, McGee, HB, Miller, CE, Reyes, M. Prevalence of complementary and alternative medicine use: state-specific estimates from the 2001 Behavioural Risk Factor Surveillance System. Am. J. Public Health 92: 1598-1600, 2002. 5. Knez WL and Peake JM, The prevalence of vitamin supplementation in ultraendurance triathletes. Int J Sport Nutr Exerc Metab. 2010 Dec;20(6):507-14. 6. Abu-Irmaileh, BE, Affi, F.U. Herbal medicine in Jordan with special emphasis on commonly used herbs. J. Ethnopharmacology 89: 193-197, 2003.

Abstract Code	P1069
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Corresponding Author	Kimberly Y.Z. Forrest, Ph.D. & Marcy J. Leeds, Ed.D.
Country	USA
Abstract Title	Macronutrient Intake Patterns among Older Americans

Objectives: To combat obesity, heart disease, and other nutrition-related chronic diseases, public health education about healthy eating using the Dietary Guidelines for Americans has been a focus in the U.S. This study analyzed the intake patterns of macronutrients among an American population aged 65 years or older to examine if the seniors followed these recommendations.
Methods: Data from the 2009-2010 National Health and Nutrition Examination Survey (NHANES) were utilized. The NHANES collects data from interviews and physical and laboratory examinations. Nutrient intakes, demographics and other health-related variables were analyzed using the statistical software SUDAAN, which can account for the complex multistage sample design.
Results: A total of 1,460 (≥65 years) individuals were included in this analysis, representing 13.9% of the NHANES sample. Sex distribution was relatively equal. Nearly 40% of participants were from ethnic backgrounds other than Caucasian. The means±SD of total energy intake were 1920±716 and 1524±624 kilocalories for males and females, respectively. Across all age groups in this study population, the percent intakes of protein, fat and carbohydrate (including sugar) were within the recommendations identified by the 2010 Dietary Guidelines for Americans. However, saturated fat was 11% of the total energy intake among both males and females, which was more than 1% higher (p-value < 0.05) than recommended.
Conclusion: Based on these findings, it appears that public health education efforts to encourage healthy eating patterns in this older adult U.S. population have been relatively successful, and future nutrition education efforts should focus on decreasing saturated fat intake.

Abstract Code	P1082
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Country	Bahrain
Abstract Title	Vitamin D status. A cross-sectional study in Adult Bahrainis

High prevalence of hypovitaminosis D has been reported to be common in different regions of the Middle East. The objective of this study was to examine vitamin D status in relation to age, sex, season, clothing style and supplement use in the healthy adults living in the Kingdom of Bahrain. In this cross-sectional study vitamin D status was assessed in 500 healthy Bahrainis (250 males and 250 females) aged between 15-65 years with no history of major organ diseases or any other health problems. In the entire cohort the mean total serum 25(OH)D was alarmingly low (22.9± 10.1 nmol/l) and total serum 25(OH)D concentrations in 49.4%, 37.0% and 13.6% of participants were 50.0 nmol/l (optimal), respectively. The prevalence of vitamin D deficiency was significantly higher in females than males (67.6% vs. 31.2%, p30) in the entire cohort (53% vs. 45.4%, $p<0.001$) and among younger age females than older age females (75.1% vs. 59.5%, $p<0.0001$). The prevalence of vitamin D deficiency was significantly higher during October to March than April to September in the entire cohort (69.2% vs. 12.5%, $p<0.0001$) and also in females (80.4% vs. 28.6%, $p<0.0001$). In addition, the prevalence of vitamin D deficiency were significantly higher in women with conservative than those with non-conservative clothing style (66.8% vs. 45.5%, $p<0.0001$). In this study only 13.6% of the participants had optimal level of vitamin D suggesting an alarming vitamin D deficiency in Bahrainis.

Abstract Code	P1088
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Abstract Title	Risk Factors for Overweight Status in Adolescent Girls in Jeddah City, Saudi Arabia

There are growing concerns about increasing levels of obesity in adolescents in Saudi Arabia. To address the problem requires an understanding of the determinants. The objective of the study was to quantify the problem of overweight and obesity in adolescent girls in Jeddah, Saudi Arabia and to explore the determinants, with a view to informing policy. A cross-sectional survey was conducted among girls aged 13 to 18 in Jeddah. Height and weight measurements were taken and girls completed a questionnaire, which explored a range of nutrition-related issues. A total of 1519 female adolescents participated in the study, 24% were overweight or obese and 14% were underweight. This is the first Saudi study to use a theoretical framework to investigate comprehensively factors that might have an effect on adolescents' eating behaviors and overweight status.

Abstract Code	P1095
Authors' Names	Allal Ouhtit, Somya Shanmuganathan, Ishita Gupta, Ishraq Al-Kindy, Hamad Al-Riyami Department of Genetics, College of Medicine and Health Sciences, Sultan Qaboos University, Sultanate of Oman.
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Abstract Title	Molecular mechanisms underpinning the effectiveness of the combination of camel milk and urine in the clearance of breast cancer cells

Background: Conventional Medicine faces serious challenges in cancer treatment such as drug resistance and non-target specificity. Hence, Complementary Alternative Medicine (CAM) is increasingly being practiced worldwide due to its safety and beneficial therapeutic effects. Camel Milk (CM) and Camel Urine (CU) have been traditionally used to treat several ailments in the Arab world. Recent studies have reported the effectiveness of CM or CU, used individually in killing cancer cells. The purpose of this study was to determine whether the combination of CM and CU can inhibit the growth and induce apoptosis of Breast Cancer (BC) cells, and to further determine their underlying molecular mechanisms. Methods: Mesenchymal Stems cells (MSC control) and various BC cell lines were treated, either with CM, CU or their combination to determine their effect on cell growth. In addition, in vivo syngeneic rat and mouse models were employed. Urine samples from virgin, pregnant and lactating camels were obtained from Oman region and tested. Alamar Blue Assay was used to investigate cell proliferation and cell death. Proteins associated with both cell cycle and apoptosis were also analyzed to study the molecular mechanisms involved. Results: Virgin CU (VCU) was the most effective in killing maximum number of BC cells when compared to CU from either lactating or pregnant camels. More interestingly, the combination of CM and VCU synergized to kill a maximum number of BC cells, compared to individual treatments. On the other hand, the combination of CM and VCU increased the expression of both p53 and p21 genes, suggesting that CM+VCU combination induced cell cycle arrest via p53/p21 pathway. Furthermore, our results showed that CM+VCU induced apoptosis which might be mediated via p53/Bax-Bcl-2 pathway. Conclusion: This is the first report showing the effectiveness of the combination of CM and VCU in inducing BC cell death perhaps via p53/p21/Bax-Bcl-2 pathway.

Abstract Code	P1104
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Country	Lebanon
Abstract Title	Comparison of pre-diabetes and cardio metabolic risk factors between urban and rural adult non-diabetic Lebanese population samples

In many countries, obesity rate in urban areas is known to be higher than that in rural areas and this difference is believed to be related to several factors including dietary habits and physical activity levels. Moreover, prediabetes is known to be a risk factor for the development of diabetes and its associated cardio metabolic risk factors. However, it is not clear whether the incidence of prediabetes among non-diabetic subjects is similar between rural and urban areas. The objective of the present study is to compare the prevalence of prediabetes and other cardio metabolic risk factors of non-diabetic subjects between an urban and a rural Lebanese area. A cross-sectional study was conducted in which the prevalence of prediabetes and cardio metabolic risk factors of 160 adult Lebanese non-diabetic subjects was compared between participants from a health center in Beirut (urban) and others from Arsal, a village in the Bekaa valley (rural). Fasting and 2 hour OGTT blood samples were collected and analyzed. Fasting plasma glucose, 2 hour plasma glucose, and insulin sensitivity (ISI) were significantly higher in the Arsal sample as compared to Beirut. Whereas fasting plasma insulin, HbA1c, and insulin resistance (measured by HOMA-IR) were significantly higher in the Beirut sample than the Arsal sample. There were no significant differences between the two in the prevalence of elevated blood lipids and low HDL. More of the Arsal subjects had indicators of the metabolic syndrome according to the 2009 definition. Significant correlations existed between fasting plasma glucose and 2-hour OGTT, BMI, waist circumference, SBP, HOMA-IR and ISI. HbA1c, FBG, and 2 hour OGTT were found to be discordant in diagnosing pre-diabetes. Conclusion: Both rural and urban communities are suffering from different cardio metabolic risks and further research is needed to explore the factors behind such differences.

Abstract Code	P1112
Authors' Names	Manal M Hassan University of Texas MD Anderson Cancer Center, Houston, Texas, USA
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Abstract Title	Early Obesity and Risk of Hepatocellular Carcinoma in USA

Despite the public health problem of obesity and the increasing incidence of hepatocellular carcinoma (HCC) in the United States (US), the relationship between obesity and HCC has never been examined extensively in US population. At the University of Texas MD Anderson Cancer Center we conducted a case-control study aimed at examining HCC risk factors in USA. Cases were patients with pathologically confirmed diagnosis of HCC and U.S. residency. The healthy control subjects were spouses of patients at MD Anderson who had cancers other than liver, gastrointestinal, lung, or head/neck cancer. A self-reported weight and body size (Stunkard pictograms) at ages 20, 30, 40, 50, 60, 70" was obtained from participants by personal interview. Between 2005 and 2011 we enrolled 403 cases and 661 controls. Body mass index (BMI) was classified into "underweight" (BMI < 18.5), "normal" (BMI range, 18.5-24.9), "overweight" (BMI range, 25- 29.9), and "obese" (BMI ≥ 30.0). We found that individuals who were obese from the ages of 30 to 49 had a significant increased risk of HCC, independent of HCC established risk factors. The estimated odds ratio (OR) and 95% confidence interval (CI) was 4.1(1.6-10.5). The association was observed in men and women; the ORs (95% CIs) were 2.3(1.1-4.9) and 2.9(1.2-8.9) respectively. Moreover, individuals who were overweight or obese from the ages of 30 to 49 years had an earlier onset of HCC by 3 to 6 years (median age of onset was 65 years for patients with normal weight, 62 years for overweight patients [P=.02], and 59 years for obese patients (P

Abstract Code	P1122
Authors' Names	Joseph R. Sharkey
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Country	USA
Abstract Title	Physical Limitations in Meal Preparation and Consumption

Physical Limitations in Meal Preparation and Consumption are Associated with Lower Musculoskeletal Nutrient (calcium, vitamin D, magnesium, and phosphorus) Intakes in Homebound Older Adults Program for Research in Nutrition and Health Disparities, School of Rural Public Health, USA
Objectives: Although homebound older adults are at increased risk for poor nutritional health and adverse nutrition-related outcomes, little attention has focused on the tasks involved in meal preparation and consumption and the influence of those tasks on dietary intake.
Methods: We examined the self-reported dietary intake from 3, 24-h dietary recalls and physical limitations in meal preparation and consumption (LMPC) activities from a randomly recruited sample of 345 homebound older men and women. Ordered logistic regression was used to examine the correlation of demographic characteristics and 6 activities with relative intakes of key musculoskeletal nutrients (calcium, vitamin D, magnesium, and phosphorus). Results: At least 70% reported not meeting ⅔ recommended intakes for calcium and vitamin D; 12.5% failed to achieve ⅔ recommended intakes in at least three of the four nutrients. More than 12% of the sample reported it was very difficult or they were unable to perform at least 3 LMPC tasks. Regression results indicated that reporting the greatest LMPC increased the odds for lower intake of musculoskeletal nutrients. Conclusion: Regardless of sociodemographic characteristics, there was an association between reported difficulty in meal preparation and consumption and lower dietary intakes of calcium, vitamin D, magnesium, and phosphorous. These results suggest the need to assess difficulty in meal preparation and consumption for the growing population of homebound older adults who participate in supplemental nutrition programs. This brief, 6-item measure may help identify older adults at risk of poor nutritional health and declining function.

Abstract Code	P1125
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Corresponding Author	Theodora Psaltopoulou
Country	Greece
Abstract Title	Consumption of added lipids and breast cancer: a case-control study

Background: The aim of this study was to investigate the association of added lipids consumption (seed oil and butter/margarine) with breast cancer. Methods: Two hundred and fifty breast cancer patients with first diagnosis of the disease (56 ± 12) and two hundred and fifty healthy individuals (56 ± 12) were recruited from November 2010 to July 2012. Participants completed a validated 86-item food frequency questionnaire through which the frequency of consumption of added lipids was recorded. Anthropometric characteristics, family history, dietary and smoking habits and physical activity were also recorded.
Results: Logistic regression analysis showed that patients with breast cancer are 1.08 (95% CI 0.906 – 1.289) and 1.39 (95% CI 1.191-1.623) times more likely to consume seed oil and butter / margarine, respectively, compared with healthy individuals, taking into account confounding factors such as age, economic and educational level, family history of breast cancer, smoking, body mass index (BMI) and physical activity (IPAQ score).
Conclusions: These findings highlight the detrimental effect of the consumption of seed oil in cooking and of butter / margarine in cooking or at the table in relation to breast cancer.

Abstract Code	P1126
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Corresponding Author	Suresh T. Mathews
Country	USA
Abstract Title	Serviceberry leaf extracts inhibit mammalian alpha-glucosidase activity and delay carbohydrate absorption

Serviceberry (Amelanchier alnifolia) (also called Saskatoon Berry or Okinoki by the Native Indians) has been traditionally used by the Blackfeet American Indians of Montana, in the management of diabetes. In this study, we present scientific evidence for its antidiabetic effects. Serviceberry plant samples consisting of leaves, twigs, and leaves with berries were extracted and fractionated. Ethyl acetate and water fractions were tested for mammalian intestinal alpha-glucosidase inhibitory activity and delayed carbohydrate absorption. Serviceberry leaf extracts demonstrated moderate alpha-glucosidase inhibitory activity. Sub-fractionation of water extracts from leaf samples revealed two fractions that significantly inhibited intestinal alpha glucosidase activity, at doses comparable to and as effective as acarbose, a specific alpha glucosidase inhibitor and anti-diabetic drug. These fractions were tested for alpha glucosidase inhibition in animals. Male, C57Bl/6 mice (4 weeks old) were fed a high-fat diet (45% kcals from fat) for a period of 8 weeks. Mice were administered serviceberry extracts (50 mg/kg or 100 mg/kg) orally, 60 min prior to an oral gavage of sucrose (4g/kg) or starch (3g/kg). Blood samples were obtained at -60, 0, 15, 30, 60, and 120 min to assay glucose concentrations. Control animals received vehicle (water) instead of serviceberry extracts. Acarbose (5 mg/kg) was used as positive control, and administered 60 minutes prior to sucrose or starch loading. Animals administered serviceberry extracts (50 or 100 mg/kg) prior to sucrose or starch loading, showed a significantly lower AUCglucose, which was similar to acarbose. To confirm that the lower AUCglucose was because of serviceberry extract-mediated inhibition of intestinal alpha-glucosidase, another group of mice were administered glucose and serviceberry extracts. As expected, serviceberry was without effect in glucose-loaded mice. In conclusion, our studies indicate that serviceberry leaf extracts demonstrate potent alpha-glucosidase inhibitory activity, and suggest that delayed absorption of carbohydrates, may be at least one mechanism that confers its anti-diabetic properties.
ABSTRACT CATEGORY: NUTRITION THERAPY IN DIABETES

Abstract Code	P1132
Authors' Names	Dr. Nawal Al Qaoud Administration of Food and Nutrition, Ministry of Health, Kuwait
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Abstract Title	Anemia and associated factors among Kuwaiti preschool children and their mothers

Objectives: To determine the prevalence and the factors associated with anemia among Kuwaiti children aged 4-5 years.
Method: A sample of 578 Kuwaiti preschool children (4-5 years of age) and their mothers were selected from ongoing Kuwait Nutrition Surveillance System from September 2003 to June 2004. Mothers participated in a brief interview where demographic; health and nutrition information was collected. A blood sample was collected from children and their mothers. Child's anemia was defined as hemoglobin < 11 g/dl and < 12 g/dl for mothers, height and weight for children and mothers were collected. Results: The prevalence of anemia was significantly high among children of 5 years and among children of anemic mothers. The risk of having anemia was 1.8 times more for children of 5 years than children of 4 years; a moderately to severely stunted child (height for age z score <-2.0 SD) was 2.3 times prone to be anemic than a normal child; a moderately to severely overweight child (weight for height z score > 2.0 SD) was less likely to be anemic; a child who was breastfed for less than one month was 2.8 times more at a risk of being anemic than a child who was breastfed for more than 6 months; a child who was given cereals as a wean food was 3.5 times of becoming anemic than a child given meat and egg as a wean food. Children of mothers whose age was < 30 years, mothers who had their hemoglobin level < 12 g/dl were more likely to become anemic.
Conclusion: Anemia remains a common problem for Kuwaiti preschool children and further studies is needed to focus on etiologies and interventions.

Abstract Code	P1137
Authors' Names	A. Alhazmi1, 2, E. Stojanovski 1, M. McEvoy1, M.L. Garg1 1University of Newcastle, Australia 2Minister of Higher Education, Saudi Arabia
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Country	Australia
Abstract Title	Is macronutrient intake associated with development of type 2 diabetes?

Background: The role of macronutrient intake in the development of type 2 diabetes is uncertain.
Objective: TO critically appraised the literature and conducted meta-analyses to pool the results of studies to clarify the relation between macronutrient intakes and type 2 diabetes risk.
Method: Pertinent studies were identified by searching Medline, Embase, Cinahl, Cochrane Library, Proquest, Mednar, The Joanna Briggs Institute Library of Systematic Reviews and reference lists of all identified studies up to August 2011 to identify published and unpublished studies. Data extraction and risk of bias assessments was performed in duplicate by two reviewers. Random-effects meta-analyses were performed to pool relative risk estimates from individual studies to assess the relationship between dietary macronutrient (carbohydrate, protein, fat and macronutrient sub-types) intake and type 2 diabetes risk. Statistical heterogeneity was assessed using I^2. Sensitivity analyses were performed to assess robustness of results and publication bias evaluated by visual inspection of funnel plots and formal assessment using Egger's test.
Results: Twenty-two cohort studies were eligible for inclusion in this review. High carbohydrate intake was associated with an increased type 2 diabetes risk (relative risk [RR] = 1.11, 95% confidence interval [CI]: 1.01 to 1.22, p = 0.04), while high vegetable fat intake was associated with a decreased type 2 diabetes risk (RR= 0.76, 95% CI: 0.68 to 0.85, p <0.01).Other macronutrient were not associated with type 2 diabetes risk.
Conclusions and Implications: High carbohydrate intake is associated with an increased type 2 diabetes risk, while a high vegetable fat intake is associated with a reduced type 2 diabetes risk. There is a need for further well-designed prospective cohort study to validate these findings.

Abstract Code	P1140
Authors' Names	Loney, T.,[1] Carter, J.M.[2], Allen, D.,[2] Lawton, K.,[2] Al Nuaimi, F.,[1] & Shah, S.M.[1] [1]Institute of Public Health, College of Medicine and Health Sciences, United Arab Emirates University, Al Ain, UAE [2]Optimal Performance Limited, Bristol, United Kingdom.
Corresponding Author	Tom Loney
Country	UAE
Abstract Title	Portion-size control combined with nutritional counselling is a more effective weight loss intervention than nutritional counselling alone for obese adolescents from the United Arab Emirates

Introduction: Recent research estimates that the prevalence of adolescent obesity is over 20% in the United Arab Emirates (UAE) and that excess energy intake is one of the key vehicles driving weight gain in this population. The aim of this study was to investigate the effect of a portion-size intervention on weight loss in obese Emirati adolescents.
Methods: Thirty obese adolescents (aged 14 to 19 yr) were recruited from a UAE weekday residential school to participate in the eight week study and were allocated equally to either a control (BMI 36.3 ± 1.0 kg/m2) or intervention group (BMI 41.3 ± 3.4 kg/m2). Average daily energy expenditure was estimated at 16.3 MJ/d based on 10-day doubly labelled water analysis. Intervention students received four portion-controlled meals daily providing approximately 12.1 MJ/d (energy deficit of 4.2 MJ/d; ~0.7 kg reduction in body mass per week), while control students received four meals where portion size was not regulated during the eight week study. Energy content of meals was estimated using a nutritional analysis program (Nutmeg UK Ltd). All students attended weekly appointments with a registered dietician and received nutritional counselling. Following completion of the eight week study, all participants received the portion-size control intervention coupled with nutritional counselling.
Results: Mean weight loss was significantly greater in the intervention compared to the control group during the eight week intervention period (-4.1 ± 3.0 vs. -2.0 ± 1.4 kg, P<.05, effect size[ES]=0.87). However, there was no significant difference in weight loss from baseline between the intervention and control group at three (-4.6 ± 5.8 vs. -3.7 ± 3.0 kg, P>.05, ES=0.19) and six months post-study (-5.9 ± 8.9 vs. -6.5 ± 5.7 kg, P>.05, ES=0.08) when both groups received the portion-size control intervention and nutritional counselling.
Conclusion: The portion-size control intervention plus nutritional counselling was more effective than counselling alone. Permanent adoption of this initiative is recommended in this and other schools within the Gulf region, where longitudinal implementation is likely to result in greater favourable changes in body size.

Abstract Code	P1150
Authors' Names	Shaaban SY., Nassar MF., Shalaby LM.**, El-Bailey AR.***, Ismaiel GA*, Mekkiah S, Shaaban M Departments of Pediatrics and *Clinical Pathology, Faculty of Medicine, Ain Shams University, **National Cancer Institute, ***Food and Technology Institute, Cairo, Egypt. Presenting author Professor Dr Sanaa Youssef Shaaban Professor in the Department of Pediatrics Faculty of Medicine, Ain Shams University, Cairo, Egypt
Corresponding Author	Sanaa Youssef Shaaban
Country	Egypt
Abstract Title	Impact of Prebiotics on Gastrointestinal Microbiota and Functions in Childhood Leukemia during Induction Chemotherapy

Abstract Aim of the work: This work was designed to study the effect of inulin as a prebiotic on gut microbiota in pediatric patients with acute lymphoblastic leukemia (ALL) undertaking chemotherapy in correlation to the gastrointestinal complains that they may experience. Subjects and methods: This study was performed on 42 pediatric newly diagnosed ALL patients 21 of whom received inulin supplementation. All the studied patients were subjected to full detailed medical history and clinical examination, routine laboratory tests. Follow up was done for weight, height, gastrointestinal complications and any adverse events. Stool cultures for bifidobacteria and lactobacilli were done before the start of chemotherapy, at the end of a 4-6 weeks period of induction and the third sample was taken two weeks after cessation of clinical supplementation trial. Results: We found significant increase in bifidobacteria and lactobacilli counts after a 4-6 weeks period of inulin supplementation. After the 2 weeks washout period there was significant decrease in lactobacilli but not bifidobacteria. This increase in bacterial counts was postulated to be due to the bifidogenic effect of inulin. Significantly lower incidence of oral mucositis and gastrointestinal complications related to chemotherapy were detected in the inulin supplemented group. Conclusion: Inulin supplementation decreases the incidence of oral mucositis and other gastrointestinal complications (anorexia, nausea, vomiting) related to the use of chemotherapeutic agents during the induction period in pediatric patients with acute lymphoblastic leukemia. These effects are thought to be as a result of \"balancing\" the gut microbiota and modulating the inflammatory and immune responses to the injury caused by chemotherapeutic agents.
Keywords: Inulin; Prebiotics; Acute lymphoblastic leukemia.

Abstract Code	P1159
Authors' Names	Hanan A. Soliman Assistant prof. of Biochemistry-Biochemistry Department, Faculty of Science , Beni Seuif Univ.Egypt
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Abstract Title	The Impact Of Morus Alba Leaves Extract On Diabetes-Induced Complications In Rats

Diabetes mellitus is one of the most common endocrine diseases. Researchers all over the world are exploring herbal supplements to control diabetes and its complications. This study evaluated the antidiabetic action of Morus alba leaves extract through its effect on hyperglycaemia, DNA damage and apoptosis of brain cells due to oxidative stress in diabetes. Moreover, evaluate the effect of diabetes on neurotransmitters levels of streptozotocin-induced diabetic rats. Application of crude water extract of Morus alba resulted in amelioration of the alterations of serum glucose as well as neurotransmitters including acetylcholine (ACE), nor-adrenaline (NAD), serotonin (S-HT), histamine (HS), dopamine (DA) and gamma amino butyric acid (GABA). Furthermore, Morus alba leaves leaf extract display hypoglycemic effect, diminish DNA damage and apoptosis of brain cells of diabetic rats. In conclusion, our results suggest that The protective effect of Morus alba leaves extract could be attributed to the hypoglycaemic, and antioxidative potential of flavonoids, the major components of the plant extract. Keywords:Morus alba,ACE,NAD,DA,GABA

Abstract Code	P1179
Authors' Names	Mahdi Garelnabi[1] Abdelmoneim Younis[2], William Butler[2] [1] Department of Clinical Laboratory and Nutritional Sciences, University of Massachusetts Lowell, and [2] Department of Obstetrics and Gynecology, Mercer University School of Medicine, & Central Georgia Fertility Institute Macon, GA, 31210, USA
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Abstract Title	Dietary Fatty Acid levels in Women Undergoing Controlled Ovarian Stimulation for IUI or In Vitro Fertilization (IVF)

Purpose: In this study we determined six fatty acids arachidic, palmitic, stearic, oleic, linoleic & linolenic in patients undergoing controlled ovarian stimulation for IUI or IVF. We assessed these levels at baseline and after ovarian stimulations. Additionally we assessed whether there is any relationship between these OS markers and pregnancy of women undergoing IUI or IVF cycles.
Design: This is a prospective single blinded, IRB approved study.
Methods: Blood samples obtained from 15 patients undergoing ovarian stimulation with rFSH or hMG were divided into two groups. Group-1 was baseline blood collected on day-3 of women cycle. Group-2 is blood collected at the end of FSH/hMG injection. Serum was collected and stored in liquid nitrogen at -196°C until analysis. Standard IVF and IUI procedures were followed. The serum levels of Paraoxonase (PON1), 8-Isoprostane, were assayed by ELISA kits obtained from Cayman Chemical; and the fatty acids arachidic, palmitic, stearic, oleic, linoleic & linolenic were measured by methylesterfication and Gas Chromatography. Beckman Access-2 was used for hormone assays. ANOVA and Student's *t*-test were used for statistical analysis.
Results: A significant positive correlation between baseline and peak E2 and that of PON1, and 8-Isoprostane was seen. Fatty acid values at baseline and peak E_2 levels were not different.

Results in above Table show E_2 and PON1 at peak level were significantly higher in women who achieved pregnancy compared to those who did not. The baseline values of palmitic, and stearic acids were higher whereas the peak values were lower in pregnant

than non-pregnant group. No differences were found between groups in patient's age, BMI, Day-3 FSH, baseline E_2 and P4,
levels of arachidic, oleic, linoleic & linolenic acids and 8-Isoprostane. Conclusions: The results of our study indicated that ovarian stimulation has an impact on the production of OS markers. The increased levels of PON1 activity in pregnant patients are suggestive of its role in enhancing implantation. Extended studies are underway to investigate serum levels of superoxide dismutases, Interleukin-6, and glutathione peroxidase among the same group of patients.

Abstract Code	P1193
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Abstract Title	Comparative study of two methods dry and moist dressing and nutrition in healing wound of burn patient

Background and Aim: The care and treatment of wound has undergone important changes, in recent days. The burn management is usually centralized on burn tissues. The increase of our knowledge concerning the molecular and cellular healing mechanisms of our skin tissues have led to the appearance of new treatment techniques and new tissue's dressings. Today, modern dressings are designed, not only to meet this purpose but to maintain a suitable moist environment. Our purpose here is to analyze the efficiency of two types of dressing, dry and moist.
Material and method: Sampling was done constantly. The patients have been selected gradually overtime. Sixty patients were finally, selected all with second level of burning, ranging from (o-10) % of burned surface. Clinical assessments were done in this research. Both types of dressing were done for each patient, covering different areas at the same time. This method was done chiefly to prevent intervening factors such as background diseases, etc in which there was no way of matching."N-A ultra", were used as humid dressing, and the common dressing of the hospital as dry ones. Observation was noted on several intervals such as the third, seventh, thirteenth and twenty first, and inscribed the estimated recovery (healing) level. The next step was to make known the information through descriptive statistics which showed the relative features of each patient. The hypothesis was then checked through the Cholmogroph-Esmir test to verify whether the variant are normally distributed. Then, the paired-t test was done to analyze the hypothesis and particular goals. Result : The findings were concluded that the average age of the patients were 32, the minimum being 3 and the maximum, 80 years.56.7% (33 individual) were men ,43.3% (26 individual) women ,40% (24 person) were single, 60% (36 person) married .Literacy Level: 20% (12 Person) were reported illiterate, 35 % (21 person) under graduate, 36.7 % (22 person) graduated.8.3% (5 person) high degree .
Conclusion: According to the findings of this research, the best average rate of healing were the one to with wet dressing on the 3rd, 7th, 13thand 21, because the paired-t test(p=0/000) has shown the meaningful relationship between two methods. The result was then totally conform to our primary hypothesis that "the average rate of healingand relive pain of two methods might be different ". In addition, the maximum average of healing was related to dry dressing was on 14th day. The paired-t test, p=0.004 and table 23 has shown meaningful relationship between two methods, so according to this findings, the second hypothesis "the average of burn wound healing in two methods is different ", was proved
Keywords: burning, dry dressing, moist dressing ,NA-ultra

Abstract Code	P1195
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Abstract Title	The effect of family oriented education on quality of life of diabetic patients (type2)

Background: Diabetes is one of the most common metabolic diseases and as the most part of diabetic care is given at home, family has an important role in their care.
The aim of this study was to determine the relationship between family education and quality of life (QOL) in patients with type 2 diabetes.
Research methods: The present study was a random clinical trial, with a comparison group was conducted with 80 patients in Imam Khomeini hospital. The education program consist of three sessions in alternative daily were be presented to the patient and one of members of family, in the experimental group and the control group just for patients. Then Follow-up telephone was being taken once every two weeks, until post test. Data collection tools included demographic information form and QOL questionnaire. Data was analyzed using SPSS (v.16) software program, descriptive statistics and ANOVA, Independent t- test, chi-square and Paired sample t.test.
Findings: In all of dimension tests revealed no significant difference between two groups before the intervention, but after the intervention, all modes differences were significant ($p<0.001$) except economic dimension in control group ($p<0.27$) and There were significant difference between two groups in all of the QOL dimensions ($p<0.001$).
Conclusion: Findings of this research added further evidence about the impact of family on the QOL of patient with diabetes. These findings suggest using family centered nursing interventions and collaboration of family members in care of the patient with type-2 diabetes.
Keywords: quality of life, family–based education, type-2 diabetes