

## POSTER PRESENTATION ABSTRACTS

**P001**

### EVALUATION OF THE RELATIONSHIP BETWEEN EATING ATTITUDES AND SUSTAINABLE NUTRITION

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**Objectives:** In order to increase awareness about sustainable nutrition, to develop policies on this issue and to contribute to the literature, this study aimed to evaluate the eating attitude behaviors of female individuals and the adaptation to the Mediterranean diet, which is a sustainable nutrition model.

**Methods:** An online questionnaire, which includes questions about socio-demographic characteristics, anthropometric measurements and nutritional habits, was applied to the individuals participating in the research. The test was applied to measure the sustainable nutrition knowledge level of individuals, the Mediterranean Diet Adaptation Scale (MEDAS) consisting of 14 questions to measure Mediterranean diet compliance, and the Eating Attitude Test-26 to determine the eating behaviors of individuals.

**Results:** The Eating Attitude Test-26 (EAT-26) was used to screen for the risk of eating disorders. In this study, low-level positive correlations were found between individuals' eating attitudes and body mass index (BMI) and bulimia and eating preoccupation variables, and low-level negative correlations between BMI and control variables. When the scores they got from the Eating Attitude Scale ( $t(504)=2.16$ ,  $p<0.05$ ) and the dieting subscale ( $t(504)=2.31$ ,  $p<0.05$ ) were evaluated according to the groups whether they received sustainable nutrition education or not, a significant difference was found between the groups.

**Conclusion:** It is necessary to carry out more research to increase the knowledge and awareness of sustainable nutrition in the society and to provide sustainable nutrition education to individuals.

**Keywords:** Mediterranean diet; nutrition education; eating attitudes

**P002**

### COMPARISON OF TAX4FUN2 AND PICRUST2 USED TO PREDICTIVE FUNCTIONAL ANNOTATIONS IN METAGENOMIC DATA

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**Objectives:** With the advent of culture-independent methods such as 16S rRNA-targeted metagenomic sequencing, we are able to work on the interaction between microbiota and internal and external factors such as diet, age, genetic factors, and various diseases. These works provide an understanding of functional diversity as well as taxonomic diversity, and this information may be helpful for health professionals. In this work, we aimed to compare the efficiency of two bioinformatic tools (Tax4Fun2 and PICRUST2) which are used to predict functional attributes based on metagenomic data.

**Methods:** The metagenomic data of 18 healthy subjects were included in this work. We generated an OTU table using SHAMAN and performed functional annotation predictions by using Tax4Fun2 and PICRUST2. The analyses were carried out in R.

**Results:** We compared the obtained results from the tools based on the number of functions annotated and the most represented functions. We found the results were significantly different, as the number of functions that were not annotated in Tax4Fun2 analysis but annotated in PICRUST2 is 117, while in the opposite case, it is 1622.

**Conclusions:** Our findings show that bioinformatic analysis tools affect the obtained results of microbiome studies. We suggest that the observed differences may be related to different reference data, although

both tools use the same database. Therefore, we can recommend the observations or findings can be compared for meta-analyses only if obtained from the same experimental designs and bioinformatics pipelines.

**Keywords:** Gut microbiota; 16S rRNA; functional prediction; metabolism

### P003

#### EFFECTS OF MEAT AND MEAT PRODUCT CONSUMPTION HABITS AT BREAKFAST ON ANTHROPOMETRIC MEASUREMENTS AND BLOOD LIPID PROFILES

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**Objectives:** The present study aimed to investigate the effects of meat and meat product consumption habits at breakfast on anthropometric measurements and blood lipid profiles.

**Methods:** This institution-based cross-sectional study included a total of 168 randomly selected adults who electively admitted to outpatient department of a training and research hospital in the Southeastern-Anatolia Region of Turkey. Among these individuals, those who consume meat for breakfast at least 3 days a week and consume red meat in accordance with the reference amounts of Turkey Dietary Guidelines constituted Group-2 (n=138), and others Group-1 (n=30). Socio-demographic characteristics and dietary assessment data were collected face-to-face by applying questionnaires for dietary habits and a food frequency questionnaire. The anthropometric measurements, body compositions and blood lipid profiles of the subjects were recorded. Various statistical tools were used for data analysis.

**Results:** Group-2 was shown to have a higher mean body weight (72.2±6.8 kg in Group-1 and 87.27±15.46 kg in Group-2, p<0.01), waist/hip ratio (0.88±0.06 in Group-1 and 0.96±0.1 in Group-2, p<0.01) and a higher body mass index (BMI) (23.7±1.98 kg/m<sup>2</sup> in Group-1 and 30.74±9.34 kg/m<sup>2</sup> in Group-2, p<0.01). In parallel, body composition analysis revealed a higher body fat ratio in Group-2 (20±6.1% in Group-1

and 33.93±12.5% in Group-2, p<0.01). Biochemical analysis has shown dyslipidaemia in Group-2. Higher total-cholesterol (168.1±24.4 mg/dL in Group-1 and 234.9±35.6 mg/dL in Group-2), low-density lipoprotein (99.15±32.2 mg/dL in Group-1 and 146.2±32.3 mg/dL in Group-2), triglyceride (145.8±72.5 mg/dL in Group-1 and 218.2±111.7 mg/dL in Group-2) and lower high-density lipoprotein (50.22±12.7 mg/dL in Group-1 and 42.78±15.4 mg/dL in Group-2) levels were observed in Group-2 (p<0.01 respectively).

**Conclusions:** This study revealed that higher meat and meat product consumption at breakfast may be associated with increased BMI and dyslipidaemia which are risk factors for cardiovascular diseases.

**Keywords:** Meat; breakfast; blood lipid profile; anthropometric measurements; BMI

### P004

#### EXAMINATION OF TWO METHODS USED TO PREVENT LIPEMIA INTERFERENCE IN COMPLETE BLOOD COUNT

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**Objectives:** Lipemia is an important factor that causes interference on complete blood counts (CBC) parameters. It is recommended that lipemic samples be treated with two methods for CBC assay (1). The aim of this study is to evaluate the results of the nonlipemic samples obtained by two methods.

**Materials and Methods:** Twenty patients with lipemic serum samples were included in this study. Two at the same time K2-EDTA whole blood tubes of the patients were used for the study. In the first method, the whole blood sample was centrifuged, and the resulting plasma was replaced with an equal amount of diluent. In the second method, whole blood was diluted with diluent at a ratio of 1:3 (1). CBC assay of lipemic samples and nonlipemic samples obtained by these methods were performed using the Unicel DXH 800 (Beckman Coulter Inc., USA) analyzer. White blood cell (WBC), red blood cell (RBC), hemoglo-

bin (Hb), and platelet (Plt) levels of the samples were compared using paired t-test. The linear relationship between two numerical variables was examined using Pearson correlation analysis.

**Results:** There were significant differences between WBC ( $8.75 \pm 2.26$   $10^3/\mu\text{L}$ ), RBC ( $4.90 \pm 0.46$   $10^6/\mu\text{L}$ ), Hb ( $14.4 \pm 1.52$  g/dL), Plt ( $272.3 \pm 93.9$   $10^3/\mu\text{L}$ ) values of the lipemic sample and WBC ( $8.51 \pm 2.40$   $10^3/\mu\text{L}$ ), RBC ( $4.88 \pm 0.47$   $10^6/\mu\text{L}$ ), Hb ( $14.2 \pm 1.48$  g/dL), Plt ( $253.2 \pm 90.5$   $10^3/\mu\text{L}$ ) values of the nonlipemic sample created by the first method ( $p < 0.001$ ), and WBC ( $8.15 \pm 2.16$   $10^3/\mu\text{L}$ ), RBC ( $4.80 \pm 0.49$   $10^6/\mu\text{L}$ ), Hb ( $14.1 \pm 1.64$  g/dL), Plt ( $227.9 \pm 79.1$   $10^3/\mu\text{L}$ ) values of the nonlipemic sample created with the second method ( $p < 0.001$ ). The correlations of the nonlipemic first method with the lipemic sample were WBC ( $r = 0.99$ ), RBC ( $r = 0.98$ ), Hb ( $r = 0.97$ ) and Plt ( $r = 0.99$ ), and the correlation of the second method with the lipemic sample were WBC ( $r = 0.99$ ), RBC ( $r = 0.93$ ), Hb ( $r = 0.94$ ) and Plt ( $r = 0.95$ ).

**Conclusions:** This study suggests that two methods can be used to examine WBC, RBC, Hb and Plt measured in CBC analysis in lipemic samples. However, further studies including pathological sample levels are needed.

**Keywords:** Blood cell counts; lipemia; interference