Objective: Despite longstanding dietary recommendations for reduced saturated fatty acid (SFA) intake, growing evidence highlights distinct effects of individual circulating SFA on cardiometabolic outcomes, with potential protective effects of odd and longer-chain SFA. Less is known, however, regarding the impact of individual SFA on subclinical inflammation, a known predictor of type 2 diabetes and CVD. The study investigated cross-sectional associations of individual serum SFA (12:0, 14:0, 15:0, 16:0, 18:0, 20:0, 22:0, and total SFA) with pro-inflammatory biomarkers and adiponectin.
Methods: The study analyzed data from 624 White, African American, and Hispanic adults, aged 40-69 years and free of diabetes at baseline from the IRAS cohort. Serum SFA were analyzed using gas chromatography. Clinical measures included oral glucose tolerance tests, fasting serum pro-inflammatory markers (fibrinogen, CRP, white cell count, PAI-1 and TNF-α), and adiponectin, an adipokine which is inversely related to inflammation. Outcome variables included adiponectin concentrations as well as inflammatory variable clusters defined by principal components (PC) analysis of the five pro-inflammatory markers. Two PCs were identified, PC 1: fibrinogen, CRP and white cell count; and PC 2: PAI-1 and TNF-α. Multiple regression analyses were adjusted for demographic, lifestyle and dietary variables, waist circumference, and glucose tolerance status.
Results: Total SFA was not significantly associated with pro-inflammatory markers (PC 1 or PC 2) or with adiponectin ($p>0.05$), however, individual SFA had unique effects. 15:0 ($\beta=-0.10$; $p=0.01$) and 22:0 ($\beta=-0.08$; $p=0.04$) were negatively associated, while 14:0 ($\beta=0.13$; $p=0.0003$) and 16:0 ($\beta=0.17$; $p<0.0001$) were positively associated with PC 2 in fully adjusted models. Furthermore, 20:0 ($\beta=0.08$; $p=0.03$) was positively, and 14:0 ($\beta=-0.15$; $p<0.0001$) and 16:0 ($\beta=-0.15$; $p<0.0001$) were negatively associated with adiponectin in fully adjusted models. None of the SFA were associated with PC 1.
Conclusions: Lower circulating odd- and longer-chain, and higher even-chain SFA, were related to worsened subclinical inflammation status.
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10. Nutrition related behaviors among parents who attended a Health Promotion camp organized by the School health Club, Sri Lanka. (Chamil Senavirathne)

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Introduction: Non communicable diseases which are caused by modifiable lifestyle factors, are in fact a worldwide pandemic of devastating proportions. It is required to introduce effective tools to improve skills on change the unhealthy lifestyle factors.
Aim- to observe the dietary and physical activity related behaviors among parents, attending the health promotion camp organized by school health club with the participation in Moneragala District, Sri Lanka.
Methods: Target population (n=119) was parents of school children. 32 we males (26.8%) This observational study was conducted through the school health club of the area. Students were trained to obtain physical measurements (BMI). Model dining table, model boutique was used to observe the nutrition related behaviors. Exercise session was carried out in order to encourage participants to improve the leisure time physical activities.