

High EOSS Scores Associated With Poor Diet and Increased Cardiometabolic Risk in Young Adults

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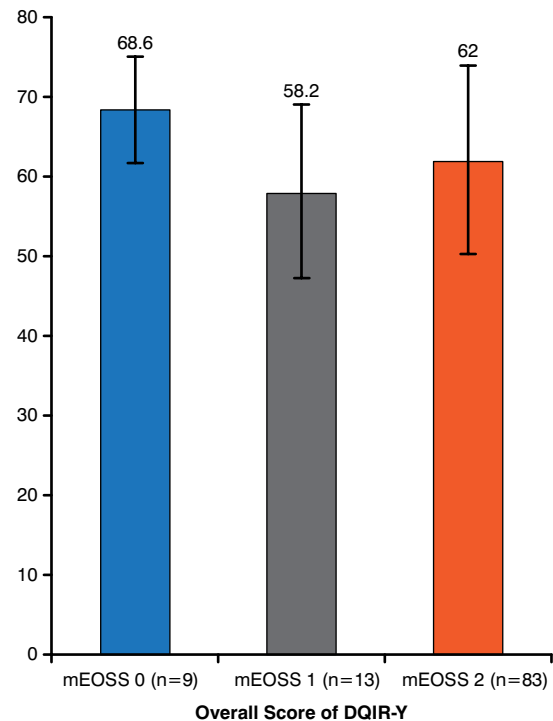
EunSeok Cha, PhD, MPH, Emory University, Atlanta, Georgia, USA, presented results from a study demonstrating that young adults with slightly higher modified Edmonton Obesity Staging System (EOSS) scores had diets that were of poorer quality and with more calories. In addition, higher EOSS scores were associated with factors previously shown to increase the susceptibility to cardiometabolic diseases, such as increased body mass index (BMI).

The prevention of obesity is important for young adults; however, this condition remains poorly studied in the young adult population. Dr. Cha noted that some have expressed concerns with existing obesity definitions and cardiometabolic risk assessment tools such as BMI. Some studies have suggested that EOSS may be a better predictor of the risk of developing obesity [Padwal RS et al. *CMAJ* 2011].

With this in mind, Dr. Cha and colleagues conducted a descriptive correlational cross-sectional study to determine the prevalence of overweight or obese young adults in each stage of a modified EOSS. They also sought to describe lifestyle factors that influence the progression of obesity. The study included overweight or obese male and female young adults (n = 106; 77% women; BMI ≥ 25; range, 18 to 29 years; 73% black) who performed <90 minutes of exercise weekly. Individuals diagnosed with diabetes, cardiovascular disease, and serious illnesses that required physician-supervised dietary and exercise regimens were excluded from the study.

The majority (79%) of young adults in the study were classified as modified EOSS Stage 2. BMI was significantly higher in individuals classified as modified EOSS Stage 2, compared with those classified as Stages 0 and 1 (37.7 [Stage 2] vs 31.4 [Stage 1] vs 34.8 [Stage 0]; p = .022). Individuals with Stages 1 and 2 obesity typically had a poorer-quality diet with more overall calories, fewer vegetables, less dietary fiber, and more fried foods, late-night snacks, and added sugars, sodium, and saturated fat than did those in Stage 0. These differences were reflected by worse scores on the Dietary Quality Index Revised for Young Adults (DQIR-Y; 62.0% [Stage 2] vs 58.2% [Stage 1] vs 68.6% [Stage 0]; p = .110; Figure 1). Individuals with Stages 1 and 2 obesity drank more sugar-sweetened beverages than did those in Stage 0. Compared with

Figure 1. Relationship Between DQIR-Y and Modified EOSS



DQIR-Y=Dietary Quality Index Revised for Young Adults; EOSS=Edmonton Obesity Staging System.

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those in Stages 0 and 1, however, individuals in Stage 2 drank the most diet soda and had higher physical activity levels, possibly indicating an awareness of their condition and an attempt to change it.

Dr. Cha emphasized that the results of this study highlight the need for increased education of young adults who are overweight or obese to improve cardiometabolic health. In particular, increased instruction on diet quality and diversity, beverage choice, sources of macronutrients and micronutrients, and physical activity is needed. She stressed that the results demonstrate the importance of both BMI and diet quality in changing obesity risk and how each should not be considered in isolation. For instance, some young adults who want to lose weight focus only on reducing their BMI or weight instead of also considering lifestyle factors such as diet. Consequently, they have an unbalanced diet. Although this may help these young adults to lose weight, it does not help to reduce their cardiometabolic risk, she added. Dr. Cha concluded that further research is needed to verify these results, using a longitudinal observational study in a larger sample of overweight and obese young adults who engage in a wide range of physical activity levels.