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“Assessing Diet Quality to Develop a Nutrition Wellness Module for LSUHSC Incoming Medical Students”

BACKGROUND: Diet has always been an important component of one’s lifestyle, where depending on their habits, stress can be promoted or reduced. With medical school being very stressful, good dietary habits may encourage improved mental health and reduced stress, especially if the diet meets the Dietary Guidelines and Dietary Reference Intakes (DRI). Thus, a wellness program was implemented for first-year medical students, which included learning modules on diet and emphasized how these standards were linked to stress reduction and mental health, so stress could be reduced later on. This program was previously reported in the literature. In order to develop these modules and effectively implement them, knowledge of the student’s dietary intake was needed. Here we report the aggregate data from three separate classes.

OBJECTIVE: To report the aggregate quality intake data from three separate first-year medical student classes.

METHODS: As part of a stress reduction program for incoming medical students, three separate classes that were one year apart were asked to voluntarily record their dietary intake for two weekdays and one weekend day using the online ASA24 software (National Cancer Institute). This program’s de-identified data was collected and cleaned according to ASA24 recommendations. To determine their diet’s nutrient adequacy and quality, the aggregate data was compared to several diet standards: the US Daily Values (DV), Healthy Eating Index (HEI), and the US Dietary Guidelines. Because age and sex were not reported, Daily Value was used instead of the Dietary Recommended Intake (DRI). The students were also compared to the general population’s dietary intake described by NHANES.

RESULTS: Four hundred nineteen medical students recalled their diet on two weekdays and one weekend day. It was determined that students’ consumption of food groups, macronutrients, minerals, and vitamins were similar to that of the US population but still showed that both were below the recommended DV for some groups. Specifically, students did not meet half of the recommended potassium, vitamin D, fruit, or dairy consumption. However, students and the US population differed in the amount of added sugar and saturated fat consumed. With added sugar, students ate only 75% of the recommended DV, while the US population was 42% over. For saturated fat, students were only 21% over the recommended daily value, whereas the US population was 43% over. The Healthy Eating Index (HEI), another measure of diet quality, was 59, in agreement with the US’s average HEI for people between 19 to 30 years. A score of 100 is the goal.

CONCLUSION: The students’ diet quality was similar to the general population. Guidance in selecting nutritionally adequate diets that meet the DV and US Dietary Guidelines may help students cope with stress experienced while attending medical school. Including nutrition education sessions at the beginning of their medical education may help students.

