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

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Introduction

Being in medical school is a very stressful process for students, but depending on one’s diet, stress can either be promoted or reduced (Gonzalez & Miranda-Massari, 2014). A good quality diet that meets the Dietary Guidelines (DG) and Dietary Reference Intake (DRI) shows improvement in mental health and reduces stress (Errisuriz et al., 2016). Past studies show that only 32 of 106 medical schools in the United States (US) provide nutritional training for students that affects of diet on health (Adams et al., 2008), creating a content gap that affects students and their future patients. To close this gap, nutritional tools should be introduced during the first year of medical school, which would not only benefit students but allow them to provide better patient care in the future. However, in order to provide the most effective nutritional tools, more research needs to be done on what students’ diets consist of. In this study, students’ diets are analyzed to develop nutritional tool that target problem area in their diet.

Specific Aim & Objectives

Specific Aim: Determine the quality of student’s diets.

Objectives:
• Report the aggregate diet quality intake data from three separate first-year medical student classes.
• Compare medical students’ diets to the the US population.
• Determine if medical students have the same Healthy Eating Index (HEI) as the US population

Materials & Methods

Medical students for 3 separate classes that were one year apart took a stress reduction program:
• Food intake was recorded for a 2 weekdays and one weekend day on ASA24 software
• The program’s de-identified data was collected and cleaned according to ASA24 recommendations

Results

Food Groups

Figure 1. The average of food groups consumed by LSUHSC students from 2019-2021, which were represented by the colored bars. Grey bars represent the average food groups consumed by the US population.

Vitamins

Figure 4. The average of vitamins consumed by LSUHSC students from 2019-2021, which were represented by the colored bars. Grey bars represented the average vitamins consumed by the US population.

HEI

Figure 5. HEI scores of the average of LSUHSC medical students from 2019-2021 versus the average of the US population.

Minerals

Figure 3. The average of minerals consumed by LSUHSC students from 2019-2021, which were represented by the colored bars. Grey bars represent the average minerals consumed by the US population.

Conclusion

Students’ diet quality is similar to the general population. This shows that students need guidance in selecting nutritionally adequate diets that meet the DV and US Dietary Guidelines, which may help students cope with stress experienced while attending medical school. The most beneficial way to introduce these standards is via nutrition education sessions at the beginning of their medical education.

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References

