

The food environment of students on a financial assistance programme at the University of the Free State, Bloemfontein

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The research study was undertaken to determine the food that students on the financial assistance program at the University of the Free State, Bloemfontein, could buy on campus. Students on this program can buy food from six food outlets on campus from their daily allowance. The types of foods sold were mostly sugar-containing products. The availability of healthy food choices should be promoted in an environment where food assistance programs are offered to students.

Objectives: Enrolment at institutions of higher learning is associated not only with poor eating habits, but also food insecurity. This cross-sectional descriptive study aimed to determine the food environment for students on the financial assistance programme at the University of the Free State, Bloemfontein.

Study population and sample: Six food outlets providing food for students on the food assistance programme.

Methods: All food items sold at the specified outlets were recorded using a store audit form.

Results: The food outlets allocated to the recipients were two take-away food outlets, three cafeterias and one tuck shop. Of the food items sold at these outlets, only 1% was classified as dairy. Sugar-containing products represented 29.2% of the food items sold, followed by starches (19.3%) and protein-containing foods (18.6%).

Conclusion: The quality and diversity of foods available on campuses should be considered when implementing food assistance programs.

Keywords: financial assistance, food environment, university students

Introduction

Food environment is defined as the social, policy, and spatial factors that influence access to food and the types of food accessible to people.¹ Evidence on the relationship between the dietary habits of students and the campus food environment has been reported. The effect of the campus food environment on students' eating habits can either be positive or negative.²

South Africa, as a country, is food secure. However, at household and individual level, half of the population is food insecure.³ As many students attending South African universities come from food insecure communities, levels of food insecurity can be expected to be high in institutions of higher learning. In an effort to combat student hunger, institutions of higher learning have put into place various assistance programs, such as providing food hampers and vouchers.⁴ These programs aim to provide students access to balanced meals on a daily basis. The No Student Hungry (NSH) campaign is an initiative aimed at combating student hunger at the University of the Free State (UFS) in Bloemfontein, South Africa. This campaign provides financially challenged students with a daily allowance, which can be used to purchase meals at selected food outlets on campus.

The directors of the NSH campaign approached the researchers to determine the impact of the campaign on the recipients' nutritional habits, as well as the appropriateness of the selected stores in terms of the quality of food sold. However, this short commentary will only report on the food environment of students on the NSH campaign on the Bloemfontein campus of UFS, South Africa.

Methods

The study sample consisted of six food outlets on the UFS main campus in Bloemfontein, South Africa, where students are allowed to spend their daily allowance. Consent was obtained from participating store managers/owners. The food environment was assessed firstly by classifying the types of food outlets as tuck shops, cafeterias or take-away food outlets. Secondly, all food and drink available at the six food outlets were recorded and classified as dairy, protein, legumes, fruit, vegetables, starches, fats, sugar and alcohol. The components of composite meals were broken down and classified according to these specific food groups. Descriptive statistics were calculated by the Department of Biostatistics at UFS, Bloemfontein.

The Ethics Committee of the Faculty of Health Sciences, UFS (ETOVS No. 08/2013) approved the study, and permission was obtained from the board of directors of the NSH campaign, and the owners of the food outlets.

Results

Of the food outlets allocated to the students, there was one tuck shop and one restaurant, two take-away food outlets and three cafeterias. One of the cafeterias is situated at a student residence, one at the Faculty of Health Sciences building and one, along with the remaining outlets, at the University's Thakaneng Bridge Student Centre. The food groups available in the stores are indicated in Figure 1. Overall, none of the stores sold legumes. Of the food items recorded, only 1% could be classified as dairy, 4.8% as fruit and 5.7% as vegetables. Sugar-containing food items comprised approximately one third (29.2%) of the food items sold, with starches representing the second largest food group sold at the stores.

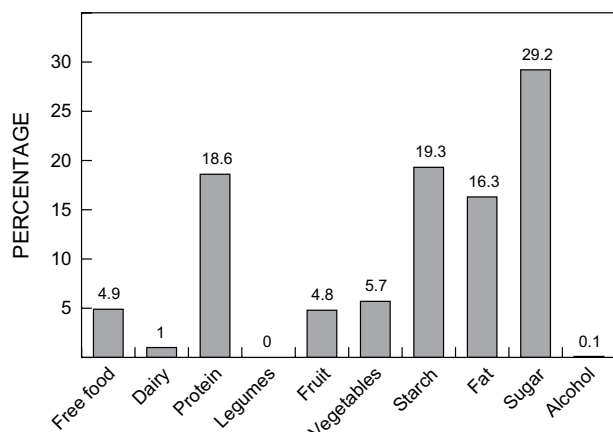


Figure 1: Foods available at approved outlets for beneficiaries of the No Student Hungry (NSH) campaign at the University of the Free State, Bloemfontein.

Discussion

Sugar-containing foods, starches and protein foods made up the biggest proportion of food available at the food outlets allocated to the NSH beneficiaries. These were in the form of sugar-sweetened beverages, refined carbohydrates and meat sold either as convenience food (such as pies and burgers) or composite cooked meals (plates of rice, vegetables and meat). For these students, access to healthier foods such as fruit, vegetables, dairy and legumes was limited because they were represented by a very small percentage of food items sold in the outlets. The findings are similar to those found in small South African communities, where the availability of healthier options of food is limited.⁵ The limited availability of the healthier dairy products, legumes, fruit and vegetables can possibly be explained by the high cost of these foods,⁵ as well as by a low demand from students,² thereby leading to a loss of profit.

Becoming a university student is associated with several lifestyle changes, including increased alcohol consumption, irregular eating patterns, inactivity and poor food choices.² These changes often result in a positive energy balance, which most often results in weight gain.² Food insecurity, on the other hand, has been linked with over-nutrition due to the low cost of energy dense foods.^{1,5} Therefore, the NSH beneficiaries (who are food insecure) may be at risk of becoming overweight.

The South African food-based dietary guidelines advocate for the inclusion of fruit, vegetables, dairy and legumes, amongst others, in order to ensure a healthy diet.⁶ The double burden of disease and the high rate of weight gain and obesity in South African communities require that food environments be carefully monitored as drivers of over-nutrition and therefore lifestyle diseases.

Conclusion

Where environments do not provide healthier food options, it becomes difficult to make informed choices when purchasing food.⁵ When addressing food insecurity at universities, the quality and diversity of foods available on campuses should be considered.

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