

Food Habits of Saudi Girls: A Sample Healthy School Canteen to Coach Schools in Providing Healthier Food Choice

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Received: November 22, 2017; **Published:** February 13, 2018

Abstract

The project aimed to introduce and pilot a school prevention program “community activities” to control risk factors related to physical environment that influence food habits. The project focused on the introduction of a Sample Healthy School Canteen (SHSC) to control risk factors for food habits of young girls in Jeddah, Saudi Arabia. The Sampled School Canteen was created to include samples of food that is low in HFSS (Food high in saturated fats, sugar and salt) and displayed healthy meals and snacks with printed recipes. This was presented in intermediate schools in Jeddah city and in the 10th Students’ Annual Meeting for Faculty of Applied Medical Sciences (FAMS)’s at King Abdulaziz University in the academic year 2014 - 2015. A satisfactory feedback with good agreement from a number of health professionals and decision makers was received in the annual meeting for students. This encouraged students and their academic instructor to implement the project at schools for girls

Social Implications: The project could be generalized at national level and used to conduct a National Healthy Canteen Campaigns.

Keywords: *Food Choice; Food Habits; School Canteens; HFSS Food; Physical Environment; Saudi Arabia*

Abbreviations

SHSC: Sample Healthy School Canteen; KAU: King Abdulaziz University; FAMS: Faculty of Applied Medical Sciences; CLN: The Clinical Nutrition Program

Introduction

The Saudi Ministry of Higher Education defines the role of the faculty member at all Saudi Universities in three areas: The teaching and learning process, research and community service [1]. The Clinical Nutrition (CLN) Program at King Abdulaziz University (KAU) follow the KAU’s mission “Community Responsibility: Knowledge Development, Research, Innovation and Entrepreneurship”. The CLN’s faculty members are powerfully applying their role in the community.

The role and practice of dietitians in community settings such as schools is well defined. Nutritionists and dietitians are counsellors and practitioners in scopes related to education.

They can also alternate factors those influence food habits and provide prevention and treatment of nutrition-related diseases. Personally, the author has conducted different community service programs and trained dietetics’ students to conduct “with close supervision” some community services in the scope of nutritional screening, assessment and application of prevention-intervention programs to control weight status and improve eating habits [2].

Schools are one of the targeted areas in the community to apply dietetics practices, particularly those related to food habits of young population. Different scopes of practices are applied during this type of community service. This include assessment of students’ nutritional status, nutrition counselling and application of prevention and intervention programs to control weight status.

The overall prevalence of overweight status (overweight and obesity) for Saudi young girls (BMI ≥ 95th) is ≈ 24% (n = 366 out of 1517), its determinants [3] and the defined risk factors that influence food habits and behaviors of Saudi adolescent girls (Figure 1) [4], were defined using the model of Story and her colleagues [5] “with permission for adoption and modification”. The factors influencing Saudi eating behaviors are defined at three-levels. Levels are defined as individual, social and physical environment and macro-systems influences. At individual level, risk factors were defined as a high prevalence of skipping breakfast, consumptions of snacks, sugar-carbonated drinks and a low consumption of fruits and vegetable. A 53% of young Saudi girls think that their peers/families are influencing their meal sizes and about 40% of them eat outside their homes [4].

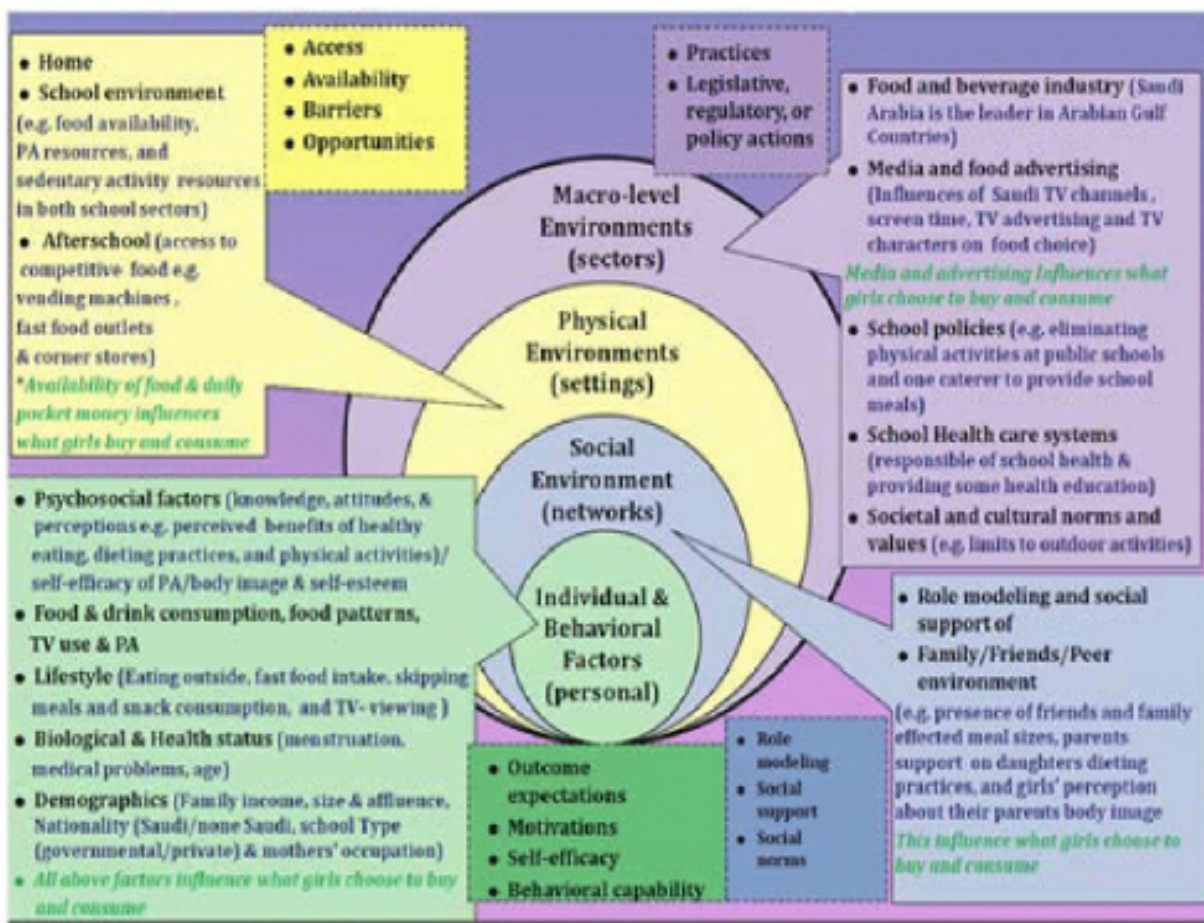


Figure 1: A theoretical framework depicting the multiple influences on Jeddah Girls’ eating behaviors in Saudi Arabia based on Story, et al. model (2008). The figure was reproduced with permission from the main author. Source: Aljaaly, 2015.

The content of food advertising and school meals' systems are the most macro-systems that could have impact on the Saudi young girls' food habits and behaviors [6,7]. Physical environment (where food can be accessed) also has a role in influencing food habits of Saudi adolescents [7]. The definition of risk factors on food habits emphasized the importance of conducting prevention and intervention programs in schools. In addition and based on a community service program to screen and evaluate the weight status of school girls at intermediate level [2], the CLN students under the supervision of faculty members has conducted a prevention and intervention program [2]. Previously, two Saudi studies were also conducted to objectively analyze data for food/ beverage items available in school canteens (in the academic year 2009 - 2010) [8] and in the KAU's food premises (in the academic year 2013 - 2014) [9]. Both studies used the UK Food Standards Agency (FSA) Nutrient-Profiling (NP) model to classify food/ beverage items to either High in Saturated Fat, Sugar or Salt (HFSS) or non-HFSS. Results showed that of the analyzed food/beverages items in schools, 67.5% (n = 40) were HFSS, while in the KAU's food premises, 74.3% (n = 142) of the analyzed items were HFSS. This evidenced that Saudi girls who are exposed to HFSS food and beverage items at high schools, continue to consume HFSS food at the university as well.

Materials and Methods

For all the above reasons, the author and the CLN students designed and developed a Sampled Healthy School Canteen (SHSC) (Figure 2) that was first introduced in the exhibition of the 10th Annual Scientific Meeting for Students of Faculties of Applied Medical Sciences in Saudi Arabia, where CLN programs are belong to. The meeting was conducted in the academic year 2014 - 2015. The students also displayed healthy meals and snacks with printed recipes. The idea for the SHSC was evaluated and appreciated by different health professional, evaluators and decision makers in the involved by the education system "those attended the annual meeting for students". Then, visits to two schools at intermediate levels were conducted to introduce the SHSC. During the each school visit, the faculty member and CLN students checked the school canteens to screen and assess available food/beverage items and meals using subjective assessment approach to define if the available food/beverage items are mostly could be classified as high in saturated fat, salt and sugar (HFSS) or non-HFSS. Then the SHSC is introduced to the administrators of school canteens and displayed in the schoolyard, where students can view and learn from it. In addition, healthy menus and recipes are also provided to students and school administration. This is in order for students to be encouraged to consume healthy food and for schools to provide students with healthy food/beverage items. Moreover, some healthy options could be introduced to the school canteen to replace less healthy options. If new items are introduced to the school canteen, a follow up to assess students' preferences for the introduced options and the purchasing power are required.



Figure 2: A Sample Healthy School Canteen (SHSC).

Results and Discussion

Schools signify a valuable venue for interventions that aims to progress young's diets. They compromise structured chances for continuing intervention and sustainability in consuming healthy food [10]. Interventions with healthy school canteen programs were confirmed to assist schools' directors to provide healthy options and students to consume healthier choices [11]. Saudi schools for girls were found to provide less healthy options for their students [8], and the present study introduced and piloted a Sample Healthy School Canteen (SHSC) to control one of the important risk factors for food habits of young girls in Saudi Arabia that is related to physical environmental.

The introduction of the SHSC was piloted in two schools and reflected on interests and implementation of healthy food choice by students and school administration. The present project for introducing and implanting the SHSC could encourage the CLN staff and students to generalize the ideas on more schools in the city, the country and country sides.

Conclusion

The project aimed to introduce and pilot a project that is focused on the introduction of a Sample Healthy School Canteen (SHSC) as part of a prevention program to control unhealthy food habits for school girls at intermediate level. The canteen where students can buy and access their food at school, which is related to physical environment and could influence food habits. The Sampled School Canteen was created to include samples of food that is low in HFSS (Food high in saturated fats, sugar and salt) and display healthy meals and snacks with printed recipes to a previously screened schools for food habits and weight status. This was presented in intermediate schools in Jeddah city. However, was first displayed in the nutrition corner for the Clinical Nutrition Department at the 10th KAU FAMS's students' annual meeting in the academic year 2014 - 2015. The project could be generalized in other schools and different education levels, at national level and used to conduct a National Healthy Canteen Campaigns. These problems related to unhealthy food habits can be incredulous by convincing young people to consume healthy food choices as a necessary part of their daily life.

Acknowledgements

Thanks must go for the future dietitians, who are students of the KAU CLN program (3rd and 4th level) those participated in the corner for the Clinical Nutrition Department in the 10th KAU FAMS's students' annual meeting in the academic year 2014 - 2015. Special thanks go for students who helped in designing and presenting the Sample Healthy School Canteen (SHSC) at the students' meeting and for schools. Superior thanks to Miss "Khloud Alshebri and Razan Albar for their efforts in getting the beautiful Food Car (Trailer) and to Miss Nirvana Alshaini for leading all students those participated in organizing the corner for the Clinical Nutrition Department. My appreciation also for Ahmed Hussein for his help and provision regarding the proof-reading and technical work of this work.

Conflict of Interest

The author declares no financial or competing interests is exist.

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Volume 13 Issue 3 March 2018

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