

# Food Habits in the University Environment: Promoting Nutritional Health through Student Food Choices

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#### **Abstract**

A moment of life which is particularly interesting for the promotion of dietary habits is the period when a young adults begins to acquire autonomy in his/her choices. In today's society, in a part of the population, this beginning of personal independence coincides with the beginning of university life. Several studies conducted in the university environment have shown the presence of unhealthy eating habits amongst students. The eating habits of university students can be influenced by factors such as personal characteristics, living inside or outside the university campus, the amount of available free time and the presence of campus cafeteria services.

A variety of strategies have been used in recent years to promote nutritional health in university students, each obtaining a different level of success. Educational campaigns and new/old technologies have been used to promote healthy eating habits. However, some more innovative approaches could be offered by the use of visual signals/labels in university cafeterias and social marketing techniques including a Customer Satisfaction analysis. It would also be positive to introduce university courses on Human Nutrition that have curricular value. The present paper aims to analyse in a systematic way the factors that influence the dietary habits in a university student population.

Keywords: Food Habits; University Environment; Nutritional Health

#### Introduction

It is widely recognized that the increasing access of the population to some low-cost high-calorie-dense food products, in itself a positive consequence of technological progress and of globalization, can represent a risk factor for overweight and obesity. In fact, unhealthy diets and obesity are two important emerging health problems which society must face urgently not only because of the impact on health but also on that of health care costs [1,2].

Obesity is often associated with several predisposing factors such as: hereditary factors, low levels of physical activity and the excessive consumption of food [2]. Furthermore, the close relationship between dietary choices and the onset of some diseases such as cancer, cardiovascular diseases and type II diabetes has been widely observed. A careful and conscious choice of foods is considered a fundamental factor in obtaining the short/long term benefits that the individual and society derive from the adoption of healthy lifestyles [3].

A moment of life which is particularly interesting for the promotion of dietary habits is the period when a young adults begins to acquire autonomy in his/her choices. In today's society, in a part of the population, this beginning of personal independence coincides with the beginning of university life. This period of transition is, therefore, rather delicate. In fact, it is in this period that many young adults find themselves for the first time in full independence determining, consolidating and confirming food choices that can prove to be inadequate or unbalanced [3,4].

The present paper aims to analyse in a systematic way the factors that influence the dietary habits of the university student population and different more/less innovative intervention strategies, which have been used to promote the nutritional health of this population.

#### Dietary habits of university students

Several studies conducted in the university environment have shown the presence of unhealthy eating habits amongst students. In particular, students tend to consume an inadequate number of portions of fruit and vegetables each day, preferring to consume foods that are high in fats and calorie [3,5]. According to the American College Health Association [6], a study conducted in 2004 revealed that only 7.3% of university students regularly consumed at least five servings of fruit and vegetables a day. The eating habits of those enrolled in the first years of university tend to show little differences compared to those of students who are further on in the academic path. It would seem that the eating habits acquired during the first academic years often remain unchanged until the last years [7].

Besides the characteristics of the individual student, the university environment can also influence eating habits and lifestyles. In fact, residency inside or outside the campus significantly influences the students' eating habits. The students who live on campus in colleges or in buildings located within the university campus generally have the possibility to use collective catering services, eating healthy meals in comfortable settings. Most of the university catering facilities are committed to providing their students with a balanced, varied and healthy diet, by proposing menus that can satisfy everyone's needs. Students who live outside the university campus, on the other hand, often find themselves forced to choose foods according to their capacity to prepare them and the time they can dedicate to preparing the meals.

In general, it has been shown that the transition to university life frequently has a negative effect on eating habits among students, leading in some cases to problems related to body weight. This effect on eating habits can be observed especially during the first year of university life [8] and often persists throughout the university experience [3,5,7].

A variety of strategies have been used in recent years to promote nutritional health in university students, each obtaining a different level of success. Educational campaigns can act upon both the fear of the consequences of an incorrect diet and the benefits deriving from a healthy diet and life style. It is important that these educational campaigns be sufficiently targeted to take into account specific determinants of eating behaviour (e.g. gender, psychological and cultural traits, geographical location, residence on or off of campus, etc.) and, on the other hand, to remember that educational actions must always be associated with an approach which collects feedback from the student population.

New technologies can also be useful in promoting healthy lifestyles and proper nutrition. In fact, smartphones, tablets, social networks, educational videogames and electronic devices, which monitor physical parameters, are all instruments which are being used by health education campaigns for young adults. The main concept is to divulge the importance of a healthy lifestyle by using the technological devices, most popular amongst young people. Special applications have been developed, which offer information on nutrition, sports and lifestyle, with in aim of preventing obesity. The concept behind using social media and games for nutritional purposes involves the participation in forms of competition/challenges, either as individuals or as groups. In addition, the method of drawing attention to healthier foods through the use of visual signals/labels in university cafeterias has proven to be rather effective. Finally, a more structured approach could be to offer students university courses in nutrition that have a curricular value.

Some interventions have applied the principles of "social marketing", the use of marketing techniques and strategies, in order to influence a particular group towards adopting or abandoning or even deliberately correcting particular behaviours. This method could be used, for example, in promoting the consumption of tasty yet healthy food through studying food options that are attractive for the given population [3].

In addition to the various previously used strategies and interventions, an effective and innovative tool for favouring proper nutrition within the university environment, could be the application of the Customer Satisfaction analysis.

This tool can make it possible to identify students' opinions and expectations regarding the university catering service, so as to identify strategies and actions to implement in order to improve the performance of the service and increase the compliance of the student population to current nutritional guidelines. Customer Satisfaction analysis, within the university student context, can be used to reveal the critical issues in the catering services offered so as to intervene and formulate innovative solutions that aim at increasing the nutritional health of the young adult population.

#### **Conclusion**

The transition to university life often worsens students' eating habits, causing problems related to body weight control and, in general, to health. The main cause of this problem is represented by the possibility of university students to start choosing independently the foods to eat on the basis of their commitments, needs, tastes and also the psychological factors associated with this period of transition. Studies show that students who live on campus and who use university catering services tend to have better eating habits. The eating habits acquired during the first academic years seem too often remain unchanged until the last years.

Many different strategies have been used to promote nutritional health among university students. Educational campaigns usually act upon the fear of the consequences of an incorrect diet and explain the benefits deriving from a healthy life style. In fact, offering courses with curricular value for university students would be a very effective method. New technologies such as smartphones, tablets, social networks, educational videogames and electronic devices, which monitor physical parameters, are being used to promote healthy lifestyles among young adults. Visual signals/labels in university cafeterias have proven to be rather effective in drawing attention to healthier foods.

Some more innovative interventions have applied the principles of "social marketing" within the university student context. In fact, in universities a Customer Satisfaction analysis could be used to reveal the critical issues in the catering services offered so as to intervene and formulate innovative solutions that aim at increasing the nutritional health of the young adult population.

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