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RESEARCH ARTICLE



## **Health Consciousness and Eating Habits among Non-medical Students in Ghana: A Cross-sectional Study**

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### **Abstract**

Health consciousness is a determinant of healthy lifestyle. A healthy lifestyle in effect is a necessary condition for academic success. The study was conducted to examine the relationships that existed between health consciousness and eating habits. A sample of one hundred and fifty (150) students from the University of Ghana comprising of all four levels in the undergraduate programme were selected through a convenience sampling technique for the study. Data was collected through self-administered questionnaires which included questions that captured demography, health consciousness and eating habits of the respondents. The age range of the respondents was between 17 and 25 years. Results revealed a significant positive relationship between health consciousness and eating habits ( $p < 0.05$ ). Findings and limitations as well as conclusions are discussed.

**Keywords:** Health Consciousness; Eating Habits; Non-Medical Students; Cross-sectional Study; Ghana.

### **Introduction**

Attitudes towards individuals and circumstances in general refer to the relatively stable analysis of objects, individuals and events that occur in the environment. Attitudes towards eating habits especially the consumption of fast foods is due to a lot of factors such as lack of time and stress which most young adults do through a lot at this stage of their lives (Nelson, Story, Larson, Neumark – Sztainer & Lytle, 2008). Some of these factors may be conscious or unconsciously stored in the mind of the individuals. In view of this, individuals may develop attitudes towards eating that they are not aware of. Eating habits are the various patterns of behaviour exhibited by individuals towards foods, eating and lifestyle in general. An attitude towards circumstances depends on the individuals' knowledge. The importance of any knowledge affects their behaviour as well as their behaviour change including their eating habits (MacDowell, Bonnell & Davies,

2006). In addition to this, individuals make change easily when they realize that the benefits of the change are more than that of the costs involved (Nutbeam & Harris, 2004).

A research conducted by Dutta-Bergman (2005) investigated health orientation using four subscales which included health consciousness, he found out that patients' orientation toward their health impacted the extent to which they actively participated in their physician-patient relationships such that patients who were actively oriented toward health, sought out health information, held strong health beliefs, and participated in a variety of healthy activities. These findings suggest that a person's health orientation of consciousness may determine whether he/she would engage in behaviours that may promote health such as healthy eating behaviour.

Though our cognitive processes influence our eating habits, our environment and upbringing – mood, kind of work / job do influence our eating habits and other behaviours as a whole. One of the best predictor of a human beings food preference, habits and attitudes would be information about the ethnic group of that individual rather than a biological measure. This implies that the longer a person lives in a society, the person easily adapts to the norms and values of the society even if it is the individuals' place of birth or not. Moreover, individuals are affected by what they see especially children. A study conducted by Odgen (2003), suggested a general association between a parent and a child's attitudes to food. They reported a consistent correlation between parents and children in terms of their snack food intake, eating motivations and body dissatisfaction. In addition to that, they conducted a study into the relationship between a parent and a child's eating behaviour and they reported a clear relationship between a mother's food nutrient intake and that of her pre-school children and also, suggested that parents could be targeted to help combat negative eating habits. Most of the researches carried out on eating habits were conducted in Europe especially the USA and the UK and few in Australia. Fewer researches have been conducted in Asia and in Africa.

The outcome of these researches cannot be fully generalized to individuals in Ghana because of the cultural differences that exist between these settings. With less research in Ghana and the current rise in obesity and other unhealthy eating habits among young adults there is a need for a study in these areas to find the cause. This study is aimed at examining the relationship between health consciousness and eating habits.

## **Method**

### ***Population and design***

The study was carried out on the Legon campus of the University of Ghana using a cross – sectional design. A single population of 150 made of students in various levels in the undergraduate level. The students from level 100 to 400 were targeted population because of the ease in access. Students were used also because they have attained certain level of education – primary, Junior High School (JHS) and Senior High School (SHS) and thus have a wider level of knowledge. With this technique – convenience sampling technique, the levels of the variable were represented as well as the sub – group of the sample hence it reduced sampling error. Objectives and benefits of the study were explained to respondents orally and in a written form attached to the questionnaire and they were assured that information obtained was kept confidentially.

An approval from the department was sought before the research was carried out in that a copy of the questionnaire was submitted and approved before it was administered to the participants. Participants were asked to participate in the study voluntarily considering their interests and time schedules.

### ***Measures***

The first part captured the demography of the participants such as age, level and religion. The second part was the health consciousness scale which was developed by Gould (1990). The 9–item Health Consciousness Scale was used to capture the participants' dispositional attitude about their health on a 4–point Likert scale from 1 to 4, where 1= describes you very little to 4 = describes you very well. The Cronbach alpha of the scale reported by the authors was 0.72. In the present study the Cronbach alpha recorded was .88.

The third section of the question comprised of the Eating Attitude Test [EAT-16] (Berland, Thompson & Linton, 1986). There are various versions of the EAT. Though EAT-26 is the most commonly used version, EAT- 16 was used instead of EAT- 26 because of the similarities of items

on the EAT – 26. Also some validation studies report a better fit for the 4-factor 16 item version of the EAT compared to the 26 item version (Belon, et al., 2011; Ocker, Lam, Jensen & Zhang, 2007). The factors that make up the EAT- 16 include dieting, food pre-occupation, bulimia and oral control of the EAT – 26. The internal consistency recorded for the EAT-16 in this study was .79. The EAT – 16 has a 6–point interval response key in which case responses ranged from “Never” (1 mark) to “Always” (6 marks). The scale measured the attitudes of participants as well as concerns and behaviours related to food, weight and body shape towards eating and such items included: “I am aware of the calorie content of foods”, “I avoid foods with high carbohydrate content” and “I am terrified about being overweight”.

## Results

Out of the 150 respondents, majority were females with males being the minority. This is as a result of the high interest of females to participate in the study. Thus, the findings ought to be interpreted within this scope. Summary of the demographic data are presented in Table 1.

**Table 1: Summary of demographic characteristics of sample**

Variables	Frequency	Percentage
<b>Sex:</b>		
Male	58	38.7
Female	92	61.3
<b>Age:</b>		
17 – 19	31	20.7
20 – 23	114	76.0
Others	4	2.7
<b>Level of study</b>		
100	43	28.7
200	57	38.0
300	16	10.7
400	32	21.3
<b>Religion</b>		
Christianity	145	96.7
Islam	4	2.7
Others	1	0.7

The main hypothesis in this study was to identify whether an increase in health consciousness will lead to healthy eating habits. A Pearson  $r$  was used to test the hypothesis with outcome summarised in Table 2.

**Table 2: Summary of means, standard deviations and correlations between health consciousness and eating habits**

Variables	N	Mean	Std. Deviation	$df$	$r$	$p - value$
Health consciousness	145	24.04	6.923	143	0.369	$p < 0.05$
Eating habits	141	39.58	11.396	139		

In this hypothesis, it was expected that there should be a link between health consciousness and eating habits. From the summary table, there is a significant relationship between the health consciousness of the students and their eating habits. The higher the health consciousness for the students ( $N=145$ ,  $M=24.04$  and  $SD = 6.923$ ), the better the eating habits of the students [ $r= 0.369$ ,  $p < 0.05$ ].

## **Discussion**

The objective was to explore the relationship that existed between health consciousness and eating habits specifically if higher levels of health consciousness will reflect in higher levels of eating habits and that was supported. This means that if an individual is aware of health benefits, diseases and how to maintain good health, he or she is influenced by this information and it reflects in choice of food as well as time in eating. The study revealed that there is a relationship between health consciousness and eating habits but not a causal effect. In the study, females exhibited high levels of health consciousness than the males. Only few of the males responded for an awareness in their health status while the majority cared less about their health. The increase in health consciousness for females can be attributed to social and psychological factors that influence the way females think about their body shape and health in general. The results indicate that a large number of female respondents were concerned about their health, and interested in acquiring information on health topic.

A measure of positive outcome expectancies, knowledge, self – efficacy, parental consumption (social norms) were important in the success of health consciousness (Reynolds, Yarock, Franklin, & Maloy, 2002). The knowledge about the benefits of healthy living as university students influences the pattern of eating. This adds weight to the argument that positive outcome expectancies are likely to play a significant role in influencing the choices people make about the foods that they consume.

A study conducted by Kempen, Muller, Symington and Van Eeden (2012) on reading of food labels which has an effect on health consciousness and eating habits showed that reading of food labels among respondents increased an awareness in health due to the nutritional information provided as a result the respondents were more health conscious and that reflected in their eating habits. Health conscious eating can give the individual the energy needed to get through the day, while keeping you healthy and strong. Eating for health means more than just aiming to lose weight; the individual may not even need to lose weight at all. A healthy diet is well-balanced and nutritious and is custom-tailored to an individual's lifestyle. Eating habits are health conscious when one makes the time for each of the meals needed for the day. While it's true that overeating is bad for your health, so is not eating enough. If one regularly skips meals, the individual loses the adequate amount of nutrition needed. In fact, skipping of meals to lose weight is an unhealthy choice and may have the opposite effect: because your body thinks it won't be getting enough food throughout the day, it'll actually put more food into storage by converting it to fat if you don't eat three light meals and a few light snacks throughout the day. Nevertheless, as stated by Bandura (2001, p.1), "The capacity to exercise control over the nature and quality of one's life is the essence of humanness". Based on this theory, it can be argued that, individuals feel good if they are able to control their eating habits and health in general, thus the need for health consciousness. In general, respondents were sure whether they knew more than other consumers about nutrition information on food labels, or whether they were able to comprehend nutrition information on food labels. For most male respondents, they were uncertain if they read nutritional information on food packs, however, they were sure not to consume foods that will lead them to develop some diseases especially pot belly. This uncertainty is common, as research has pointed out that consumers still find on-pack nutrition information to be confusing, and not always easy to understand (Kempen, Muller, Symington, & Van Eeden, 2012). However, the expectation that consumers learn more about nutrition when they read nutrition information on food labels, and subsequently increase their nutrition knowledge, still remains and directs that their eating patterns.

## **Limitation**

The sample used was relatively small with unequal gender groupings due to poor interest of students', especially the males. Nonetheless, this study has implications for future studies in the area of psychology, food and nutritional habits.

## **Recommendations**

Based on the outcome of the study, we recommend that a qualitative technique and interviews should be used to have a deeper understanding and analysis of reported behaviour and actual outcomes. Also, we also recommend the development of some instruments among the Ghanaian populace for clinical application.

### **Conclusion**

The fact that a relationship exists between health consciousness and eating habits and that it could be validated in this study statistically, confirms that food labels on food packs and advertisements through the use of classical conditioning are a useful source of information through which a consumer's food choices can be shaped and that will promote healthy lifestyles. New food-labelling legislation needs to promulgate a healthy lifestyle through the use of food labels, to encourage more students and consumers as a whole to engage with the label information.

### **Conflict of Interest Statement**

The authors declare that they do not have any conflict of interest.

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