Eating Patterns among Different Generations:
A Descriptive Survey

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Abstract

Background: Eating patterns changed during the latest decades. This study aimed to illustrate the relationship between eating daily intakes and eating patterns among different Caucasian Italian generations.

Materials and Methods: A dietary questionnaire previously constructed and tested was self-administered. 40 Caucasian participants were interviewed in order to remember their typical school day, specifically what they ate, in order to investigate eating patterns for each generation.

Results: The oldest Caucasian generation group consumed more vegetables, fruit and fish portions than the youngest generations, who ate more fast food and junk food. This trend could explain some differences in anthropometric measures and in occurrence of chronic diseases.

Conclusion: This survey highlights new eating behaviors among Caucasian generations which represents the latest trends in eating patterns among the youngest people.

Keywords: Eating Behavior; Eating Questionnaire; Eating Pattern; Generation

Introduction

It is well know and documented that diet and nutrition play an important roles in maintaining health and preventing diseases. Decrease in morbidity and mortality associated with lifestyle diseases may be achievable if satisfactory nutritional habits are adopted in early life and maintained in the long term. During childhood and adolescence, young people are assuming responsibility for their own eating habits, health attitudes and behaviors. Although adolescents' growing independence is often associated with unconventional eating patterns. Moreover, several studies have showed that human diet could be described in terms of limited number of eating patterns [1-8]. Most of them have reported healthful eating patterns, which were characterized by the consumption of fruit, vegetables and fish.

Nowadays, the "globesity", especially among the youngest people were continuing to grow, so any measures that might help in facilitating healthy food choices deserve to be put into consideration [9,10].

Moreover, it has been widely believed that parents had a strong influence on children' s eating behaviors [11]. Parents were gate keepers and could serve as role models for their children' s health - related behaviors [12]. Consequently, there was a widespread perception of a strong parent - child association in dietary intakes [13,14].

Moreover, many environmental and social conditions also influenced eating patterns and eating behaviors [15].

So, eating patterns in the youngest people were influenced by many complex factors and, in addition family' s environment played a partial role [16].

By considering this context, this study aimed to illustrate eating patterns and eating intakes among four generations, who illustrated their eating habits in a typical day, specifically when they attended the primary school.

This comparison wanted to highlight if there were any differences about eating daily patterns introduced by these four different generations.

Participants were invited to remember their usual eating habits at the time that they attended the primary school.

Methods and Materials

Design

A dietary questionnaire previously constructed and tested with regard to its reliability was self-administered. The eating style constructs to be included in the questionnaire were obtained from the evaluation of the existing literature on school - children's eating patterns and both by considering the "National Diet and Nutrition Survey", that was a survey carried out in Great Britain on behalf of the Food Standards Agency and the Department of Health in 2002.

Setting

Each participants was invited to remember when they attended the primary school, by focusing on a typical day of that period. By considering their memories, participants should answer to the questionnaire (Table 1).

Range of age of participants: [ ] 15 - 20 years old; [ ] 21 - 40 years old; [ ] 41 - 60 years old; [ ] 61 - 80 years old
1. How often did you have breakfast?   [ ] Always [ ] Sometimes [ ] Never
2. What did you usually eat?   [ ] Milk [ ] tea [ ] yogurt [ ] Coffee [ ] Cookies [ ] Cereal [ ] Fruit [ ] Juice [ ] Chocolate [ ] Coffee
3. Did you eat something else during the morning?   [ ] Always [ ] Sometimes [ ] Never
4. What did you usually eat?   [ ] Bread [ ] Snacks (crisps, chocolate) [ ] Juices [ ] Chocolate cream [ ] Snacks [ ] Yogurt
5. How often did you have lunch?   [ ] Always [ ] Sometimes [ ] Never
6. What did you eat?   [ ] Bread [ ] Pasta [ ] Meat [ ] Fish
7. Did you eat something else during the afternoon?   [ ] Always [ ] Sometimes [ ] Never
8. What did you usually eat?   [ ] Chocolate cream [ ] Snacks [ ] Yogurt [ ] Bread [ ] Snacks (crisps, chocolate) [ ] Juices
9. How often did you have dinner?   [ ] Always [ ] Sometimes [ ] Never
10. What did you usually eat?   [ ] Bread [ ] Pasta [ ] Meat [ ] Fish
11. How many portions par day of vegetables and fruits did you eat?   [ ] 1 -2 times / day [ ] 3 - 4 times /day [ ] > / = 5 times /day

Table 1: Questionnaire administered to explore eating patterns among generations.

Subjects

Forty participants were informed and then involved in this study. They were classified in four different classes of age:

- 10 participants were 15 - 20 years old;

- 10 participants were 21 - 40 years old;

- 10 participants were 41 - 60 years old;

- 10 participants were 61 - 80 years old.

Participants should respect inclusion and exclusion criteria as follow.

Inclusion criteria

- Each participant belonged to a family that was made up of a maximum of 7 members;

- At least one between parents worked;

- Families considered lived in Bari city, in the Southern of Italy;

- Participants considered had a remembrance of their typical working day, specifically when they attended the primary school;

- Participants were not affected by chronic diseases.

Exclusion criteria

- Participants were affected by chronic diseases;

- Participants' parents did not work;

- Participants did not attend the primary school.

Results

The table 2 and figure 1-11 showed how participants answered for each question. Further, the results suggested a fairly coherent way between the answers given and age for each participants. The table showed a particular trend as regards eating patterns among generations, which could be considered a gradual trend from the oldest group to the youngest group, by considering the economic and the technology innovations that contributed to unify the eating pattern among countries and cultures.

1. How often did you have breakfast?			
15 - 20 years old	21 - 40 years old	41 - 60 years old	61 - 80 years old
[n = 3] Always	[n = 6] Always	[n = 7] Always	[n = 9] Always
[n = 5] Sometimes	[n = 3] Sometimes	[n = 2] Sometimes	[n = 1] Sometimes
[n = 2] Never	[n = 1] Never	[n = 1] Never	[n = 0] Never

2. What did you usually eat?

15 - 20 years old	21 - 40 years old	41 - 60 years old	61 - 80 years old
[n = 3] Milk	[n = 6] Milk	[n = 7] Milk	[n = 10] Milk
[n = 0] Tea	[n = 2] Tea	[n = 2] Tea	[n = 0] Tea
[n = 2] Yogurt	[n = 2] Yogurt	[n = 1] Yogurt	[n = 0] Yogurt
[n = 0] Coffee	[n = 0] Coffee	[n = 0] Coffee	[n = 0] Coffee
[n = 0] Cookies	[n = 0] Cookies	[n = 0] Cookies	[n = 0] Cookies
[n = 0] Cereal	[n = 0] Cereal	[n = 0] Cereal	[n = 0] Cereal
[n = 0] Fruit	[n = 0] Fruit	[n = 0] Fruit	[n = 0] Fruit
[n = 2] Juice	[n = 0] Juice	[n = 0] Juice	[n = 0] Juice
[n = 3] Chocolate	[n = 0] Chocolate	[n = 0] Chocolate	[n = 0] Chocolate

3. Did you eat something else during the morning?

15 - 20 years old	21 - 40 years old	41 - 60 years old	61 - 80 years old
[n = 7] Always	[n = 2] Always	[n = 1] Always	[n = 0] Always
[n = 3] Sometimes	[n = 5] Sometimes	[n = 3] Sometimes	[n = 1] Sometimes
[n = 0] Never	[n = 3] Never	[n = 6] Never	[n = 9] Never

4. What did you usually eat?

15 - 20 years old	21 - 40 years old	41 - 60 years old	61 - 80 years old
[n = 0] Bread	[n = 1] Bread	[n = 4] Bread	[n = 1] Bread
[n = 6] Snacks	[n = 2] Snacks	[n = 0] Snacks	[n = 0] Snacks
[n = 2] Yogurt	[n = 1] Yogurt	[n = 0] Yogurt	[n = 0] Yogurt
[n = 0] Cookies	[n = 3] Cookies	[n = 0] Cookies	[n = 0] Cookies
[n = 0] Juices	[n = 0] Juices	[n = 0] Juices	[n = 0] Juices
[n = 2] Chocolate cream	[n = 0] Chocolate cream	[n = 0] Chocolate cream	[n = 0] Chocolate cream

5. How often did you have lunch?

15 - 20 years old	21 - 40 years old	41 - 60 years old	61 - 80 years old
[n = 8] Always	[n = 9] Always	[n = 10] Always	[n = 10] Always
[n = 2] Sometimes	[n = 1] Sometimes	[n = 0] Sometimes	[n = 0] Sometimes
[n = 0] Never	[n = 0] Never	[n = 0] Never	[n = 0] Never

6. What did you eat?

15 - 20 years old	21 - 40 years old	41 - 60 years old	61 - 80 years old
[n = 3] Bread	[n = 2] Bread	[n = 1] Bread	[n = 0] Bread
[n = 3] Pasta	[n = 6] Pasta	[n = 9] Pasta	[n = 10] Pasta
[n = 2] Meat	[n = 1] Meat	[n = 0] Meat	[n = 0] Meat
[n = 2] Fish	[n = 1] Fish	[n = 0] Fish	[n = 0] Fish

7. Did you eat something else during the afternoon?

15 - 20 years old	21 - 40 years old	41 - 60 years old	61 - 80 years old
[n = 6] Always	[n = 4] Always	[n = 1] Always	[n = 0] Always
[n = 4] Sometimes	[n = 5] Sometimes	[n = 3] Sometimes	[n = 0] Sometimes
[n = 0] Never	[n = 1] Never	[n = 6] Never	[n = 10] Never

8. What did you usually eat?

15 - 20 years old	21 - 40 years old	41 - 60 years old	61 - 80 years old
[n = 0] Bread	[n = 3] Bread	[n = 3] Bread	[n = 0] Bread
[n = 4] Snacks	[n = 3] Snacks	[n = 0] Snacks	[n = 0] Snacks
[n = 2] Yogurt	[n = 0] Yogurt	[n = 0] Yogurt	[n = 0] Yogurt
[n = 2] Cookies	[n = 3] Cookies	[n = 1] Cookies	[n = 0] Cookies
[n = 2] Juices	[n = 1] Juices	[n = 0] Juices	[n = 0] Juices
[n = 0] Chocolate cream	[n = 0] Chocolate cream	[n = 0] Chocolate cream	[n = 0] Chocolate cream

9. How often did you have dinner?

15 - 20 years old	21 - 40 years old	41 - 60 years old	61 - 80 years old
[n = 10] Always	[n = 10] Always	[n = 10] Always	[n = 10] Always
[n = 0] Sometimes	[n = 0] Sometimes	[n = 0] Sometimes	[n = 0] Sometimes
[n = 0] Never	[n = 0] Never	[n = 0] Never	[n = 0] Never

10. What did you usually eat?

15 - 20 years old	21 - 40 years old	41 - 60 years old	61 - 80 years old
[n = 2] Bread	[n = 2] Bread	[n = 1] Bread	[n = 1] Bread
[n = 0] Pasta	[n = 0] Pasta	[n = 0] Pasta	[n = 0] Pasta
[n = 5] Meat	[n = 2] Meat	[n = 3] Meat	[n = 2] Meat
[n = 3] Fish	[n = 6] Fish	[n = 6] Fish	[n = 7] Fish

11. How many portions par day of vegetables and fruits did you eat?

15 - 20 years old	21 - 40 years old	41 - 60 years old	61 - 80 years old
[n = 4]1 - 2 times/day	[n = 5]1 - 2 times/day	[n = 2]1 - 2 times/day	[n = 1]1 - 2 times/day
[n = 5]3 - 4 times/day	[n = 4]3 - 4 times/day	[n = 4]3 - 4 times/day	[n = 4]3 - 4 times/day
[n = 1] > 5 times/day	[n = 1]> 5 times/day	[n = 4] > 5 times/day	[n = 5] > 5 times/day

Table 2: How participants answered to the questionnaire administered.
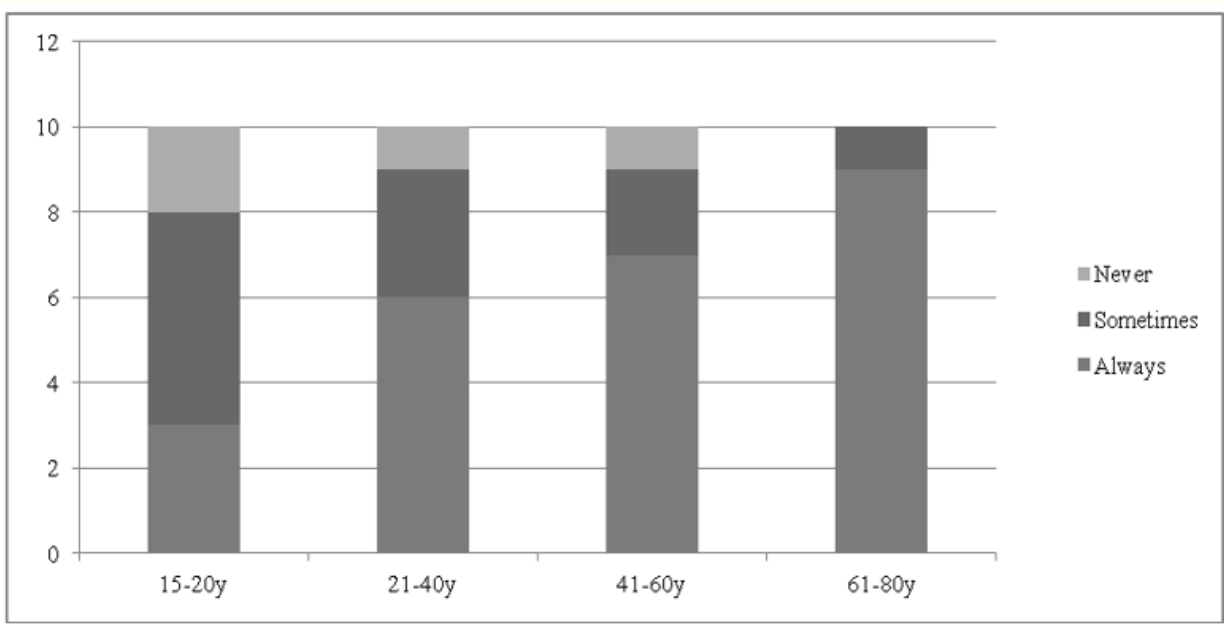
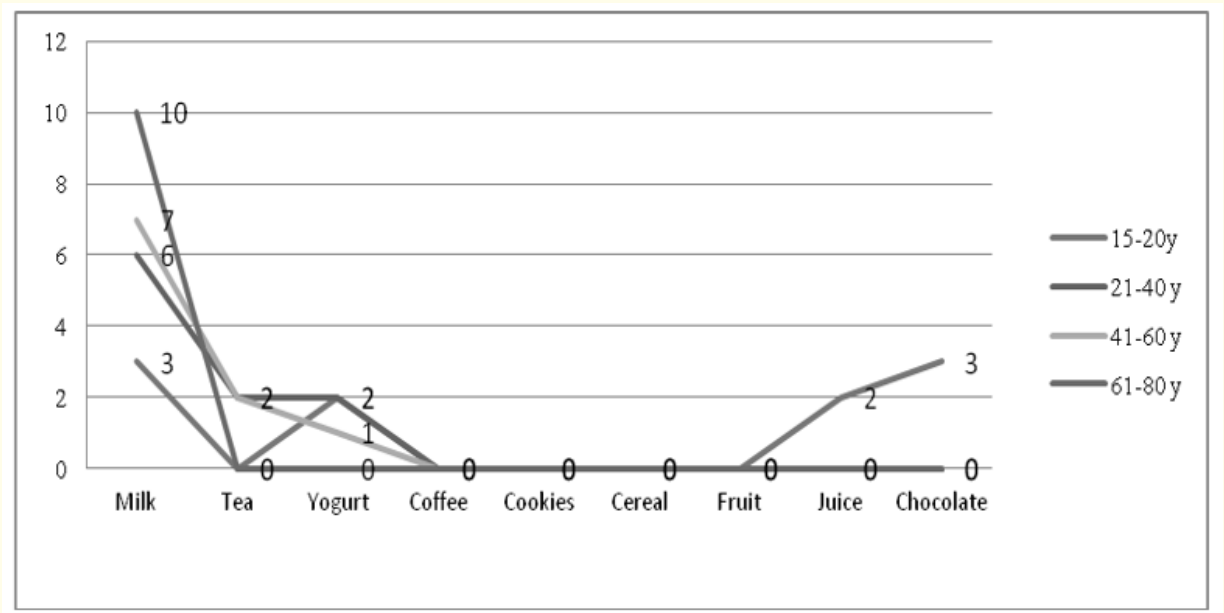***Figure 1:*** *How often participants had breakfast?*

Figure 2: *What did participants usually eat?*
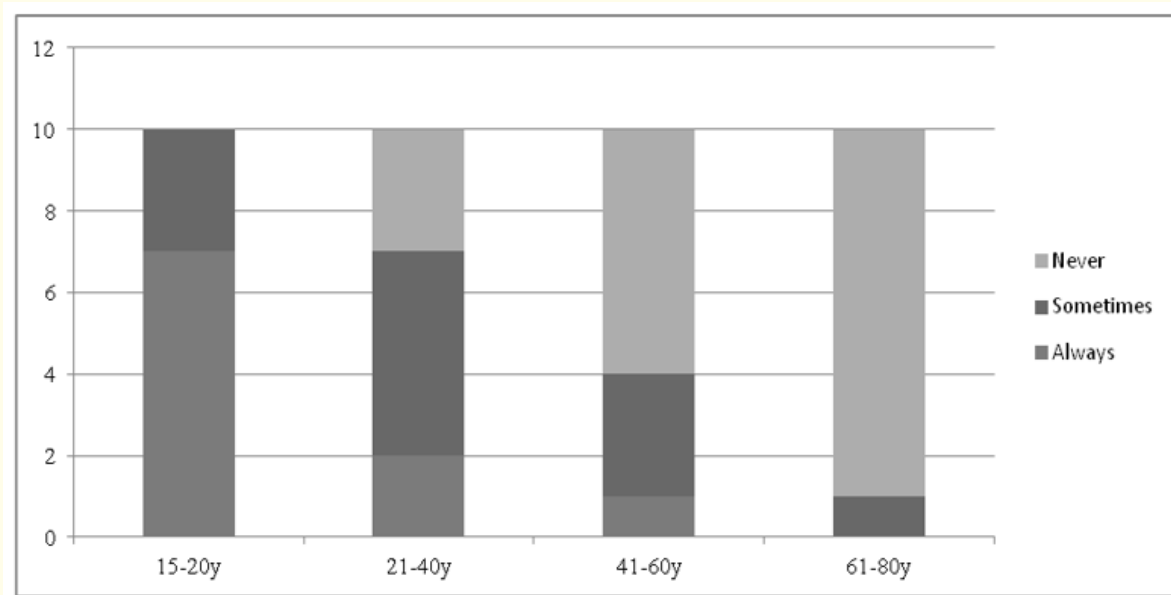
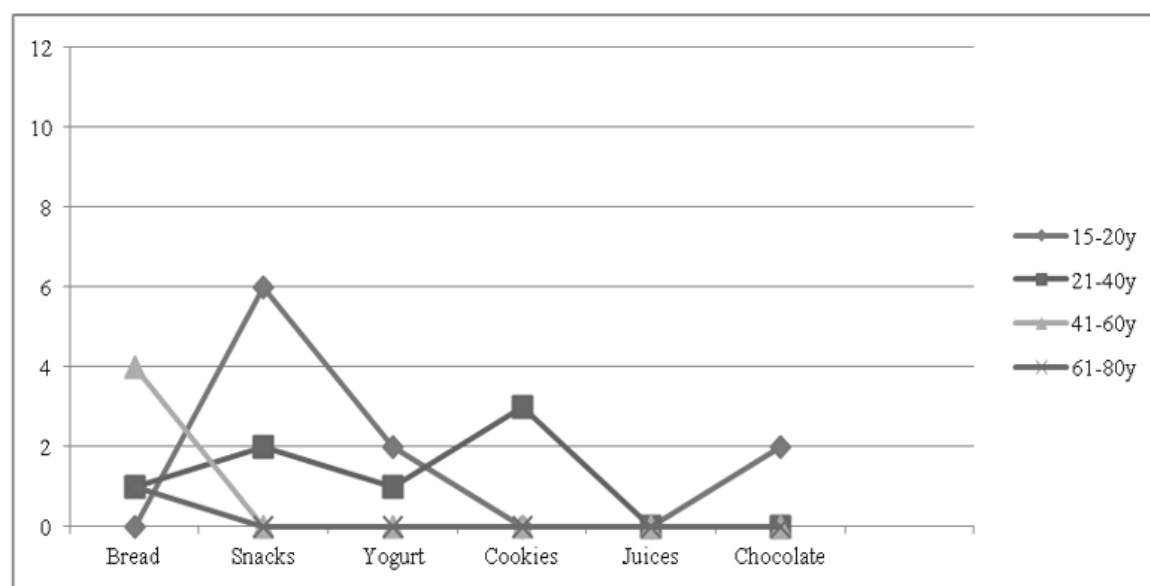**Figure 3:** *Did participants eat something else during the morning?*

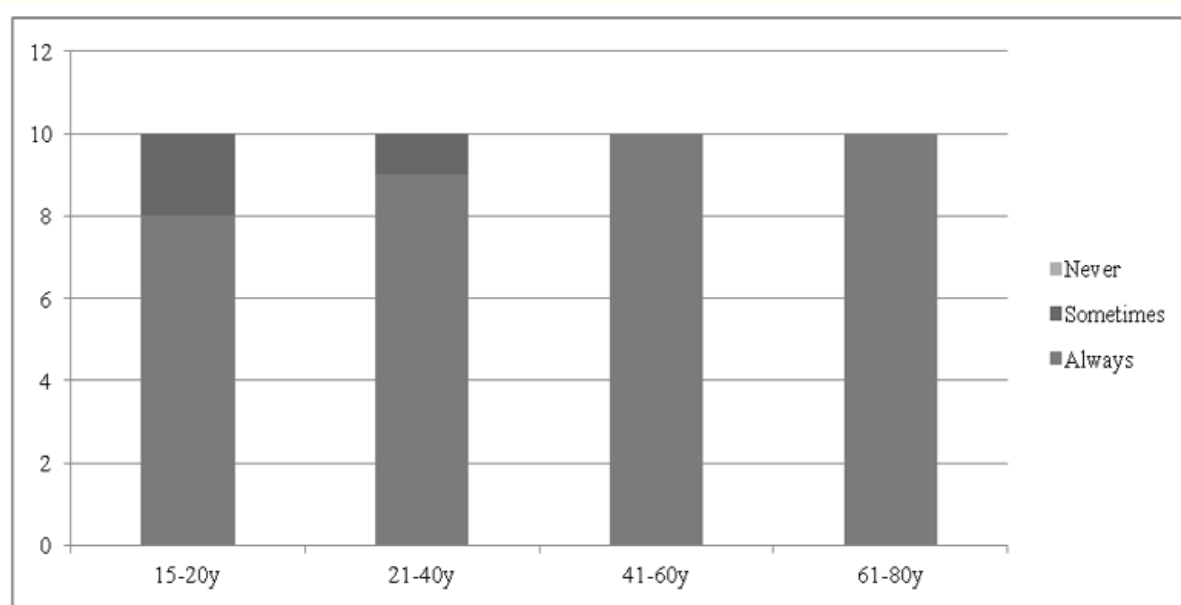**Figure 4:** *What did subjects usually eat?*

Figure 5: *How often did you have lunch?*

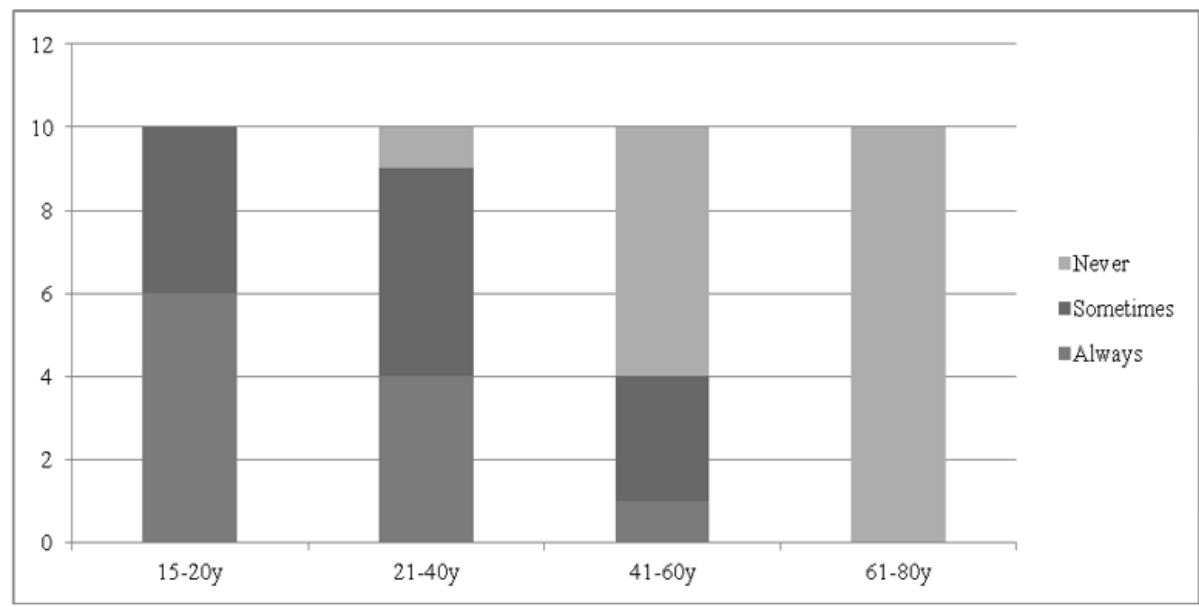***Figure 6:*** *What did participants eat?*

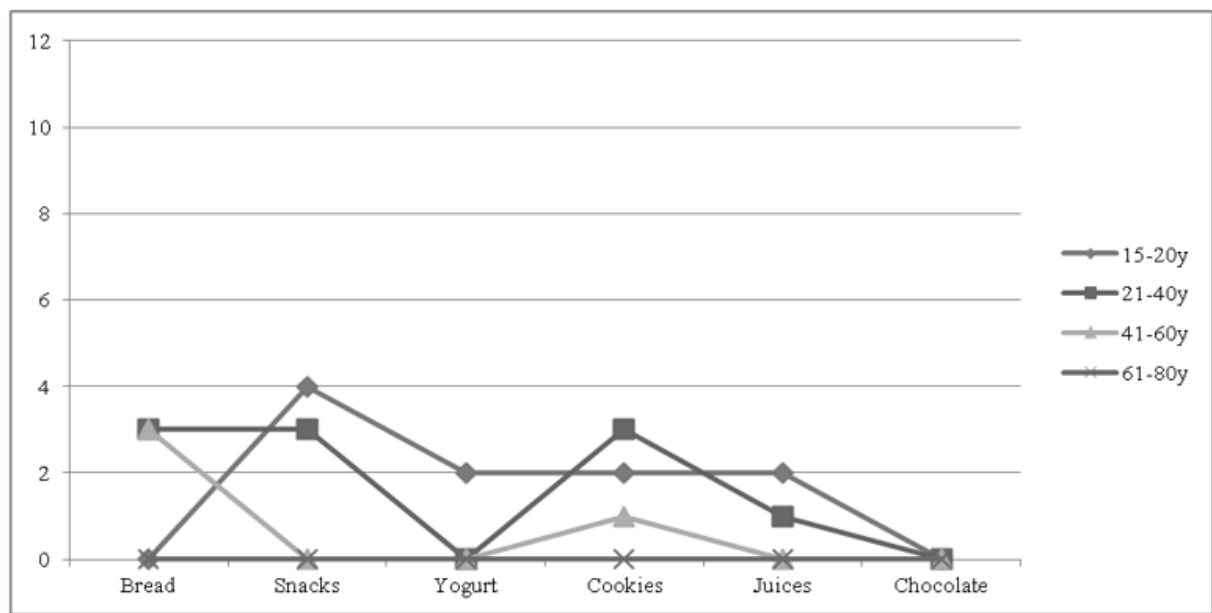*Figure 7: Did participants eat something else during the afternoon?*

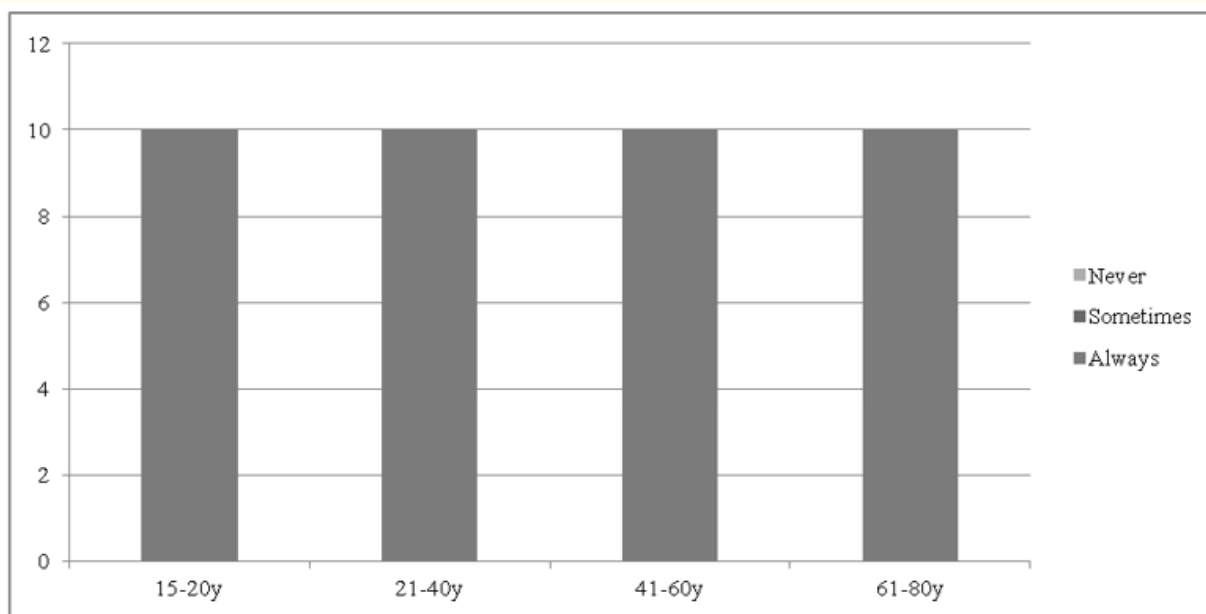*Figure 8: What did participants usually eat?*

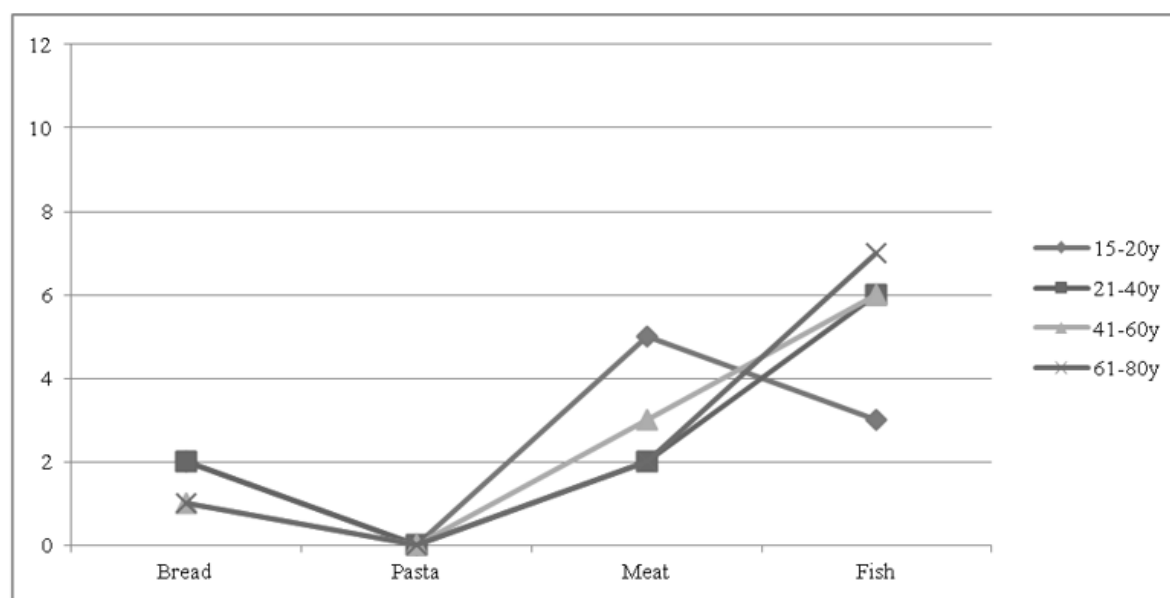*Figure 9: How often did participants have dinner?*

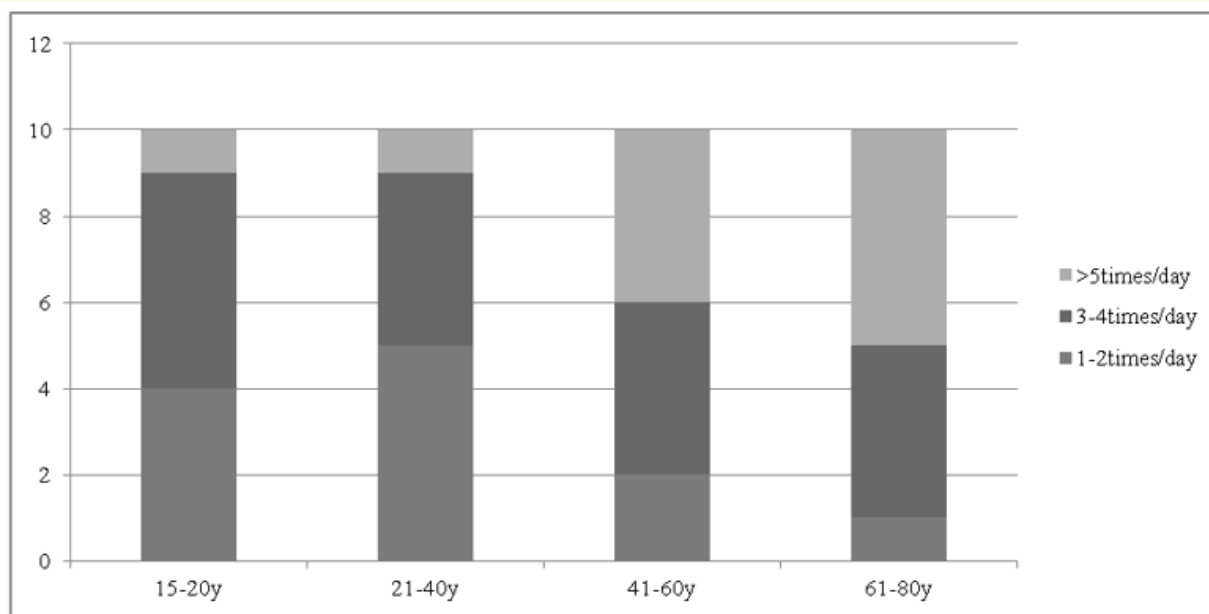*Figure 10: What did participants usually eat?*

Figure 11: How many portions par day of vegetables and fruits did participants assume?

Discussion

The environment and the social conditions could exert a strong influence on people' s food habits [17-20]. In order to promote healthy food intake habits, the interview to different class of age could be helpful to understand what was changed and what could be ameliorate to promote an healthy eating.

The interview showed more differences on eating behaviors among the four different generations.

Although, this study could be an approximate example of the common daily eating habits among children in different generations, but some points could have a key role in the healthy diet habits that were loosing in the years.

In fact, it could be highlight how the frequency of eating was changed during the latest years: the elderly class ate three times per day, such as: breakfast, lunch and dinner were the mostly meals during one day, whereas in the youngest class there were frequently the consumption of four - five meals par day.

The second and the third class of age could be considered as a transition from the youngest to the oldest class of age considered.

Moreover, it could be notified the trend to not consume breakfast in the youngest class of age and to compensate it to the consumption of middle meals in the morning and in the evening, by eating high caloric food. On the other hand, the oldest class of age consumed mostly milk at breakfast and then they ate at lunch time. In this way, their energy intake were less caloric than the energy intake of the youngest class of age.

At lunch time, it could be appreciated a variety of type of food in the youngest class of age; on the contrary in the oldest class of age it was evident the consumption of pasta and sometimes of bread. The consumption of protein was demanded in the evening, at the dinner

time. They ate fish, especially blue fish, which was less expansive than the others specialties and sometimes meat.

Furthermore, the portions of fruit and vegetables consumed among generations were different. It may be a consequence of the changes in the lifestyle and in the social - economic trends, in which the agricultural and rural ways of life were changed in the industrialized habits.

More differences could be appreciated by the table 2.

Finally, the second and the third class of age could be considered as "intermediate classes" among the oldest and the youngest classes.

Limitation of the Study

There are a number of limitations to this study. The questionnaire was developed through piloting with samples of families recruited from people who know the researcher; whereas the questionnaire was administered to people who respected the criteria above mentioned. The different levels of education and probably also the different interest in issues of eating and nutrition could mean that some of the items proposed might be slightly less relevant to participants with less education or less interest in nutrition.

Conclusion

This survey highlights new eating behaviors among Caucasian generations which represents the latest trends in eating patterns among the youngest people.

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