

YOUTH'S FOOD WASTE IN 2020-2021 – INTERMEDIATE STUDY ON FOOD WASTE DURING THE COVID-19 PANDEMIC

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***Abstract:** During the first year of the COVID-19 pandemic, due to isolation, on the one hand, and on the other hand, due to restricted access to purchase food, by reducing the working hours of food markets, consumers changed their food behaviour. Young people aged 18-25, who largely no longer live with their parents, have undergone changes in their daily routine, which has often affected the level of food waste. Most of them said they bought more food and wasted more than they usually did. The topic of food waste is of great interest to many Romanian consumers, most of whom say they are interested in this topic. However, food waste is very present in the behaviour of consumers in Romania, being in an upward trend, especially during the last year, the first year of the COVID-19 pandemic.*

Key words: food waste, food security, consumer behavior, meat, vegetables

INTRODUCTION

The topic of food waste is of great interest to many Romanian consumers, most of whom say they are interested in this topic. However, food waste is very present in the behaviour of consumers in Romania, being in an upward trend, especially during the last year, the first year of the COVID-19 pandemic. Thus, there is a contradiction between “interest” and “effective behavior”, which denotes an insufficient education regarding the sustainable consumption behavior of the Romanian population [3,6,7]. In this context, it is estimated that the representatives of the young population, immediately after reaching the age of majority and until the end of studies, if necessary, respectively between 18 and 25 years, are those who can be educated effectively, in order to reduce the manifestation of this type of behavior, extremely unfavorable both environmentally and with a major impact on the application of the rules of human ethics. In the context in which more and more scientific sources highlight the fact that, on the one hand, a large part of the global population suffers from hunger, and on the other hand that the world population is growing, which leads to limited access to food resources, the population of developed and developing countries wastes enormous amounts of food. Ethical and humanitarian aspects cannot be neglected, and the young generation must be aware of them, which leads to limited access to food resources, the population of developed and developing countries wastes huge amounts of food. Ethical and humanitarian aspects cannot be neglected, and the young generation must be aware of them [1,2,4,6]. This study is part of a more complex research and presents preliminary data [1,2,5].

MATERIALS AND METHODS

To conduct the research, 428 young people from Romania, aged between 18-25 years, were interviewed regarding food waste during the first year of the COVID-19 pandemic, respectively March 2020 - April 2021. This age range was assessed by the authors. as the interval in which young people complete their studies and, to a large extent, their education. They represent the generation of the future, the one that will be able to choose whether or not to want to get involved in reducing food waste, a social phenomenon of particular importance in the field of environmental protection, as well as

ensuring food security worldwide. The questioned aspects were formulated on food typologies, as well as on total purchased and unconsumed foods, which were subject to food waste. The age ranges for the respondents are presented in Table 1.

Table 1.

Classification of respondents by age categories

| Age range | Number of respondents | % respondents |
|-------------------|-----------------------|---------------|
| 18 - 21 | 157 | 36.68 |
| 21 - 23 | 187 | 43.69 |
| 23 - 25 | 84 | 19.63 |
| TOTAL RESPONDENTS | 428 | 100 |

At the same time, the residential area where the young people come from was taken into account (Table 2).

Table 2.

Classification of respondents according to residential area

| Residential area | Number of respondents | % respondents |
|-------------------|-----------------------|---------------|
| Urban | 199 | 46.50 |
| Periurban | 121 | 28.27 |
| Rural | 108 | 25.23 |
| TOTAL RESPONDENTS | 428 | 100 |

RESEARCH RESULTS

1. Approximate total amount of food purchased in larger quantities in the last year (March 2020 - April 2021) than usual

Table 2.

Approximate total amount of food purchased more than usual in the last year (March 2020-April 2021)

| % Wasted food more than usual | Number of respondents | % respondents |
|-------------------------------|-----------------------|---------------|
| ≅ 10% | 103 | 24.07 |
| ≅ 25% | 76 | 17.76 |
| ≅ 50% | 25 | 5.84 |
| > 50% | 9 | 2.10 |
| 0% | 215 | 50.23 |
| TOTAL RESPONDENTS | 428 | 100 |

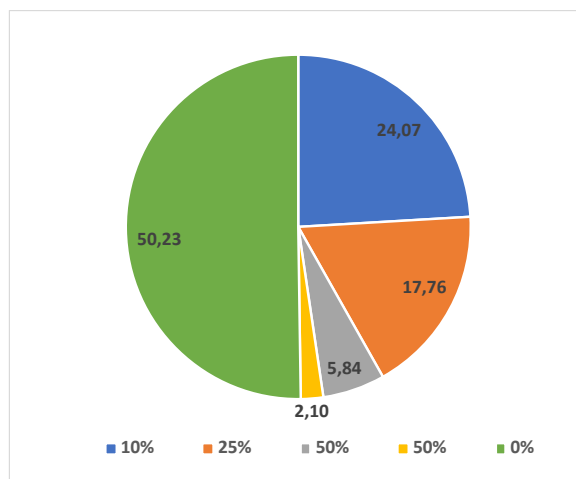


Figure 1. Total food purchased in addition to the usual in the first year of the COVID-19 pandemic by consumers aged 18-25 (%)

Compared to the total amount of food purchased in the last year, compared to what was usually purchased during the COVID-19 pandemic, almost 50% of 18-25 year olds estimated that they bought more than they bought usually.

It is really worrying that about 2% bought with more than half of the quantity they bought annually in previous years.

2. Meat (pig, beef, poultry, game) and meat preparations thrown away (scattered) out of the total purchased in the last year (from March 2020 to the present) by consumers aged 18-25 years than usual

Table 3.

Amount of meat and meat products dumped in the last year than usual (March 2020-April 2021)

| % Wasted meat and meat products | Number of respondents | % respondents |
|---------------------------------|-----------------------|---------------|
| ≅ 10% | 99 | 23.13 |
| ≅ 25% | 81 | 18.93 |
| ≅ 50% | 14 | 3.27 |
| > 50% | 19 | 4.44 |
| 0% | 215 | 50.23 |
| TOTAL RESPONDENTS | 428 | 100 |

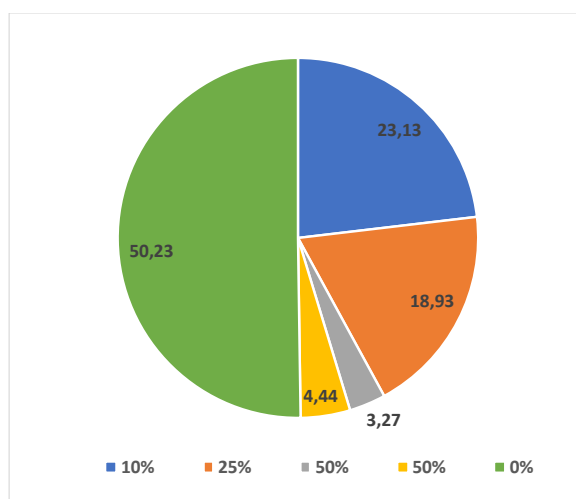


Figure 2. Meat and meat products disposed of in the first year of the COVID-19 pandemic by consumers aged 18-25 compared to usual (%)

Compared to the amount of meat and meat preparations that was wasted by dumping, 50.23% of young people aged 18-25 estimated that they did not waste any more than usual, while approx. 25% of them dumped between 10% and over 50% more than in previous years, from the quantities they purchased.

The fact that such a large proportion of the purchased quantities of meat and meat preparations were wasted affected the environment very much, given that 1 kg of meat consumes far more resources than 1 kg of vegetables [9, 11].

3. Fruit and vegetables thrown away (scattered) out of the total purchased in the last year (from March 2020 to the present)

Table 4.

The amount of vegetables and fruits thrown in the garbage in the last year than usual (March 2020-April 2021)

| % Wasted vegetables and fruits | Number of respondents | % respondents |
|--------------------------------|-----------------------|---------------|
| ≅ 10% | 189 | 44.16 |
| ≅ 25% | 153 | 35.75 |
| ≅ 50% | 39 | 9.11 |
| > 50% | 11 | 2.57 |
| 0% | 36 | 8.41 |
| TOTAL RESPONDENTS | 428 | 100 |

A particular situation is revealed in the case of fruits and vegetables. Almost 90% of respondents estimated that they wasted more vegetables and fruits than in previous years. Only about 8% said that the COVID-19 pandemic did not affect their behavior in relation to food waste.

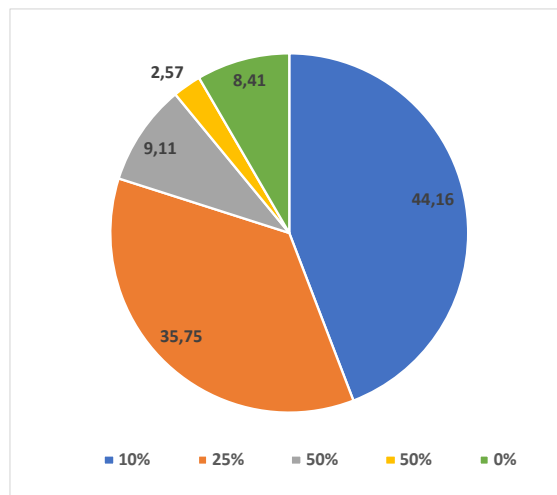


Figure 3. Vegetables and fruits thrown in the trash in the first year of the COVID-19 pandemic by consumers aged 18-25 years compared to usual (%)

Fruits and vegetables are the most wasted food, and the main reasons why study participants throw away food are their perishability [2,8].

CONCLUSIONS

During the first year of the COVID-19 pandemic, due to isolation, on the one hand, and on the other hand, due to restricted access to purchase food, by reducing the working hours of grocery stores, consumers changed their eating behaviour [12,13,14,15]. Young people aged 18-25, who largely no longer live with their parents, have undergone changes in their daily routine, which has often affected the level of food waste. Most of them said they bought more food and wasted more than they usually did.

However, the fact that they are aware of this, the fact that they see this situation as a negative thing, reveals that it is possible that in the future they will try to apply tools to reduce food waste. But food education has a crucial role to play in this context. In this last year, in Romania, food has been purchased excessively, often far beyond consumption needs. As no one was prepared for this COVID-19 pandemic, young people aged 18-15, who are still in their studies, were totally surprised by the new restrictions and the limitation of access to food purchases. We consider that this was a decisive factor that determined the increase of food waste [1,7,10,11].

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