

FOOD AND NUTRITION POLICIES IN EUROPEAN COUNTRIES WITHIN THE CONTEXT OF DEVELOPMENT OF FAST FOOD INDUSTRY

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Abstract: *The starting point of this communication is one of the Conclusions of the European Congress on the Problem of Obesity (September 2020) and of Global Obesity Observatory according to which "24.22% of Romania's population is obese". We all know that in a society where people are in a hurry to get from one place to another, the possibility of serving food quickly (even, sometimes, without leaving the car) may seem like an irresistible offer. In addition to speed, accessibility, the standardization of products and the emphasis on low price are some of the so-called "advantages" of fast food, which have made this industry develop massively in the last 30 years: according to statistics, fast food generates revenue of over \$570 billion. However, we also know that fast food products accumulate a lot of calories (approximately all the calories needed for a whole day are used at one meal), and regular consumption of such products leads to disruption of normal metabolism. This article presents, in a comparative manner, the response of EU in terms of public policies, national regulations in the field of food and nutrition.*

Keywords: fast-food; EU policies; healthy nutrition; food consumption

1. Introduction: Tracing the roots and growth of the fast food industry

The emergence of the fast food industry was determined by several factors. The first of these is related to the change in people's lifestyle, starting with the 1920s. the 20th century, which came amid the development of urbanization and industrialization processes (Baudrillard, 2016). These led to the emergence of a middle class in American society, with its own lifestyle, which enjoyed greater access to leisure, vacations, and contract activities. In the most recent period, the development of technology has generated, in its turn, the appearance of a new addiction, from smartphone addiction (Popescu et al, 2022), to the addiction of consuming services and products, including food products, procured through digital platforms.

Gradually, the 20th century and, later, the 21st century generated, against the backdrop of globalization and the development of modern commerce, best illustrated by the appearance of large shopping centers, hypermarkets and malls and, later it was called the "McDonaldization of society" (Schlosser, 2001; Bryman, 2017; Ritzer, 2013). All these changes have encouraged dining out and thus the emergence of chain restaurants offering fast food and minimal service. In the context of the perpetuation of the phrase "time is money" (Ritzer, 2013), the idea of fast food came as a saving solution - which allows the individual to serve the meal quickly to be able to return to his activities. Starting from this argument, many times, the main advantages offered by this type of food were mentioned in the marketing strategies of fast-food chains, and the first of these is speed. Fast food is often marketed as a quick and convenient option for busy

individuals who do not have time to cook. Also, they are presenting fast food like being cheaper than other dining options, making it accessible to a wider range of people.

However, there are many disadvantages of fast food, and the first of these is related to the nutritional capacity that these foods offer. First of all, fast food is often high in calories, which can contribute to weight gain and obesity; many fast food options are high in unhealthy fats, such as saturated and trans fats, which can increase the risk of heart disease. The production and distribution of fast food can have a negative impact on the environment, including increased greenhouse gas emissions and the generation of waste. Also, fast food can be addictive due to its high fat, sugar, and salt content, which can lead to a dependency on these foods and make it difficult to adopt healthier eating habits (Fuhrman, 2018; Janssen, H., Davies, I., Richardson, L., & Stevenson, L. (2018: 16-17)

According to a report by Zion Market Research, the global fast food market was valued at USD 647.7 billion in 2019 and is expected to reach USD 931.7 billion by 2027, growing at a compound annual growth rate (CAGR) of 4.6% from 2020 to 2027. The report also notes that North America held the largest share of the global fast food market in 2019, followed by Europe and the Asia Pacific region. However, the Asia Pacific region is expected to exhibit the highest CAGR during the forecast period (Zion Market Research, 2021).

In Europe, according to a report by Statista, the revenue of the fast food industry in Europe amounted to approximately 130 billion euros in 2020. The United Kingdom was the largest market in Europe, followed by Germany and France. The report also states that the market is expected to grow at a compound annual growth rate of 4.6% between 2021 and 2025 (Statista, 2022).

A study published in the journal *Nutrients* in 2020 found that the highest consumption of fast food in Europe was among young adults aged 18-24, with males consuming more fast food than females. The study also found that fast food consumption was associated with higher BMI and lower diet quality (Papadaki et al., 2007: 169-170)

2. Literature review: theories on food consumption

There are several important theories of food consumption, each with their own unique perspective on why and how people choose to eat. Here are some of the most notable theories: social learning theory; cultural theory; evolutionary theory.

Social Learning Theory suggests that people learn about food preferences, tastes, and habits from those around them, particularly within their family and cultural context. The social learning theory, developed by psychologist Albert Bandura, proposes that people learn by observing others and their behaviour, and by receiving feedback on their own behaviour. In the context of food consumption, this theory suggests that people's eating habits are shaped by their social environment, including the attitudes, beliefs, and behaviours of those around them (Bandura, 1977).

Cultural Theory emphasizes the importance of cultural and societal factors in shaping food choices and consumption patterns. It suggests that people are influenced by the food customs and traditions of their culture. M. Douglas argued that food is not just a physical necessity, but also a powerful symbol that carries important cultural meanings and values. She emphasized the role of culture in shaping people's attitudes and behaviours towards food and suggested that food preferences and taboos are closely tied to social norms and cultural beliefs (Douglas and Isherwood, 1996). One of Douglas's key contributions to the cultural theory of food was her concept of "cultural purity," (Douglas, 1966) which refers to the idea that certain foods or food combinations are seen as "pure" or "impure" based on cultural norms and beliefs. For example, in some cultures, certain meats or dairy products may be seen as impure or unclean, while in other cultures, they are considered essential components of the diet.

Evolutionary Theory suggests that food preferences and consumption patterns are influenced by evolutionary factors such as taste preferences that evolved to help our ancestors survive and thrive. According to Richard Wrangham (2009), our food choices and eating behaviours are the result of a complex interplay between our evolutionary history, our cultural practices, and our individual preferences and motivations. He argues that our evolutionary adaptations to different types of foods and nutrients can explain why some people may have a natural preference for certain types of foods, while others may find them unappealing or even aversive (Wrangham, 2009)

Symbolic interactionism suggests that our food choices and eating habits are shaped by the meanings we attach to different types of foods. For example, certain foods may be associated with specific cultural or religious traditions or may be seen as symbols of wealth or status. One sociologist from symbolic interactionism who has analyzed food consumption is Claude Fischler. In his book "L'omnivore", Fischler argues that our food choices are shaped by the social and cultural meanings we attach to different types of foods. He suggests that we are "omnivorous" not just in terms of the range of foods we eat, but also in terms of the cultural meanings we attach to them (Fischler, 1990). Fischler examines the ways in which food choices are shaped by social and cultural factors, such as gender, social class, and ethnicity. In other papers, Fischler also explores the role of food in the construction of personal (self) and group identities (Fischler, 1988).

All these theories provide insight into the complex and multifaceted nature of food consumption and can help inform strategies for promoting healthy and sustainable food choices.

EU policies and regulations on food and nutrition

Food consumption is important on the EU agenda for several reasons. Firstly, it is closely linked to public health, as diet-related diseases such as obesity, diabetes, and heart disease are major public health challenges in Europe. Improving diets and reducing the consumption of unhealthy foods can help to prevent these diseases and improve overall health outcomes (Rosenheck, 2008) .

Secondly, food consumption has significant environmental impacts, including greenhouse gas emissions, water use, and land use. The EU has set ambitious targets for reducing greenhouse gas emissions and promoting sustainable food production, which require changes in food consumption patterns.

Thirdly, food consumption has important social and economic implications, as it is closely tied to issues such as food security, food waste, and the livelihoods of farmers and food producers. Addressing these issues requires a comprehensive approach to food policy, which takes into account the complex interrelationships between food consumption, public health, environmental sustainability, and social and economic factors.

Finally, food consumption is an important cultural and social practice that shape identity, values, and norms (Poulain, 2002; Niță and Ilie Goga, 2017: 6-7). As such, it is an important area for research and policy development, which can help to support more sustainable, healthy, and equitable food systems in Europe.

The European Union has several social policies related to food and safe alimentation, which we are describing below:

General Food Law Regulation

The General Food Law Regulation (Regulation (EC) No 178/2002) is a key piece of legislation that establishes the general principles and requirements of food law in the European Union. This regulation sets out general principles and requirements for food safety, including the responsibility of food business operators to ensure that food placed on the market is safe.

The regulation sets out the responsibilities of food businesses, competent authorities, and the European Food Safety Authority (EFSA) in ensuring the safety and quality of food for human consumption.

The regulation applies to all stages of the food chain, from primary production to processing, distribution, and sale. It requires that all food placed on the EU market must be safe and comply with specific requirements on labeling, traceability, and hygiene.

The European Food Safety Authority (EFSA) is an independent agency of the European Union (EU) responsible for providing scientific advice and communication on food safety issues. It was established in 2002 under the General Food Law Regulation (Regulation (EC) No 178/2002). Its role is to ensure that food is safe for consumption and to provide scientific advice to inform policy decisions. The EFSA communicates its scientific findings to the public in a transparent and accessible manner, to help consumers make informed decisions about the food they eat. Overall, the EFSA plays a key role in ensuring that the food consumed in the EU is safe and of high quality, and that consumers are provided with accurate and transparent information about the food they eat.

Regulation on the Provision of Food Information to Consumers requires that all food products sold in the EU provide clear and comprehensive information on ingredients, nutrition, and allergens to help consumers make informed choices. The Regulation (EU) No 1169/2011 on the provision of food information to consumers, also known as the Food Information Regulation (FIR), is a key piece of legislation that sets out the requirements for food labeling and the provision of information to consumers in the European Union. The regulation applies to all food and drink products sold to consumers in the EU, and it establishes rules on the mandatory and voluntary labeling of food, including information on allergens, nutrition, and origin.

Common Agricultural Policy (CAP): The CAP is a policy that aims to support farmers and ensure a sustainable and secure supply of food for EU citizens. It includes measures to promote sustainable agriculture, support rural development, and provide financial support to farmers. The CAP was established in 1962, and it has undergone several reforms over the years to adapt to changing economic, social, and environmental conditions (Baldock, Hart, Witzke, 2014).

School Fruit Scheme provides free fruit and vegetables to school children to encourage healthy eating habits and improve their nutrition and it is implemented in all EU member states. Under the program, schools receive funding to purchase and distribute free fruit and vegetables to students during the school day (European Commission, 2009). The types of fruits and vegetables provided vary depending on the season and the availability of produce. In addition to providing free fruits and vegetables, the School Fruit Scheme also includes educational materials and activities aimed at promoting healthy eating habits and increasing children's awareness of the importance of a balanced diet. The School Fruit Scheme is part of the broader EU strategy to promote healthy eating habits and improve nutrition across Europe.

Food Donation Guidelines. The EU has developed guidelines to facilitate food donation by food businesses, to help reduce food waste and support food aid organizations. The Food Donation Guidelines were developed by the European Union (EU) in 2017, in response to the growing concern about food waste and food insecurity in Europe. The guidelines provide practical advice on food donation, including recommendations on food safety, quality, labelling, and transportation (European Commission, 2017).

The guidelines encourage food businesses to donate safe and edible food that would otherwise be wasted, while ensuring that the donated food meets the nutritional needs of the recipients. They also encourage charities and other organizations to accept and distribute donated food safely and efficiently, while maintaining the dignity and privacy of the recipients. In addition to providing practical guidance on food donation, the Food Donation Guidelines also aim to raise awareness of the importance of food donation and to promote a culture of

responsible food consumption and waste reduction. The guidelines have been widely adopted by food businesses and charities across the EU and have helped to increase the amount of surplus food that is donated to those in need.

All these policies are designed to ensure that food is safe and of high quality, while promoting healthy and sustainable food choices. Also, these policies and all the other EU policies on food and nutrition aim to support the agricultural sector and promote social welfare through initiatives such as the school fruit scheme and food donation guidelines.

4. Healthy nutrition across EU countries. A Comparative analysis based on statistical data.

Healthy nutrition is essential for maintaining good health and preventing chronic diseases. However, there is significant variation in healthy eating patterns across EU countries. According to Eurostat data, in 2020, the average consumption of fruit and vegetables ranged from 274 grams per day in Malta to 546 grams per day in Denmark. Similarly, the consumption of sugar and saturated fats also varied significantly across EU countries. To provide a more in-depth comparative analysis of healthy nutrition across EU countries, we can look at several indicators, such as: fruit and vegetable consumption, and sugar consumptions, because these types of consumption are associated either with a healthy lifestyle, with a lifestyle in which individuals can be exposed to risks of chronic diseases.

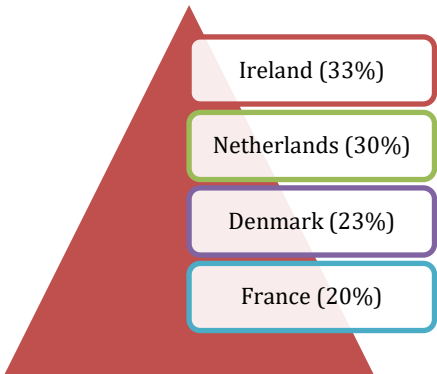
Fruit and Vegetable Consumption

Socialization theories suggest that fruit consumption is learned through socialization processes. Parents, peers, and media may all influence fruit consumption habits through modelling, reinforcement, and social norms. Socialization theories would examine how fruit consumption habits are transmitted and reinforced through social networks and institutions. As mentioned above, the consumption of fruit and vegetables varies widely across EU countries. In general, the countries with higher consumption rates tend to have lower rates of obesity and related diseases.

Among the EU Member States, the highest daily intake of 5 portions or more was reported in Ireland (33% of the population), the Netherlands (30%), Denmark (23%) and France (20%). The lowest daily intake was found in Romania, where only 2% of the population ate at least 5 portions of fruit and vegetables, followed by Bulgaria and Slovenia (both 5%) and Austria (6%) (Eurostat, 2022)

Figure 1: EU countries with the highest daily intake of 5 portions or more - fruits and vegetables

(% of the population)



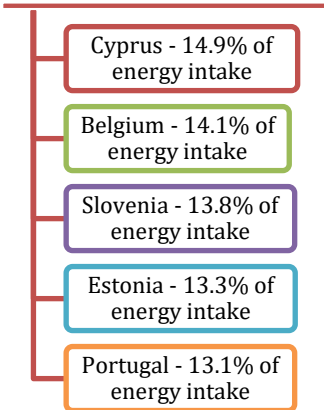
Source: Eurostat (2022). *Food Consumption Database*. retrieved from <https://www.efsa.europa.eu/en/data-report/food-consumption-data>

It is important to note that these consumption rates are averages and can vary significantly within each country. Also, the data that Eurostat is giving are based on the *European Health Interview Survey*¹ (EHIS), which collects information on a range of health-related topics, including dietary habits. Additionally, the recommended daily intake of fruits and vegetables varies by age, gender, and other factors. According to the latest data available from Eurostat, in 2020 the average daily consumption of fruits and vegetables in Romania was below the EU average. The breakdown by gender shows that women in Romania consume slightly more fruits and vegetables than men. The age group with the highest consumption of fruits and vegetables in Romania is 65 years and over. The 15-24 age group has the lowest consumption.

Sugar Consumption

According to the European Food Safety Authority, the average intake of sugar across EU countries ranges from 7% to 25% of total energy intake. Excess sugar intake is linked to several health problems, including obesity and dental caries. Regarding sugar consumption, Eurostat provides data on the proportion of energy consumed from free sugars, which include added sugars and those naturally present in honey, syrups, and fruit juices. According to Eurostat data for 2020, the EU countries with the highest proportion of energy from free sugars are:

Figure 2: EU countries with the highest proportion of energy from free sugars



Source: European Food Safety Authority. (2020). *Dietary habits and nutrient intake in the European Union: A review of the data. EFSA Supporting Publication, 17(12), e06420*

The World Health Organization recommends limiting free sugar intake to less than 10% of total energy intake and preferably below 5% for additional health benefits.

Also, there is a connection between sugar consumption and quality of life. Excessive consumption of sugar is associated with several negative health outcomes, which can impact an individual's overall quality of life. Consuming too much sugar can lead to obesity, type 2 diabetes, cardiovascular disease, and dental caries.

These conditions can cause physical discomfort, pain, and in some cases, can be life-threatening. They can also limit an individual's ability to engage in physical activity, enjoy

¹ The European Health Interview Survey (EHIS) aims at measuring on a harmonised basis and with a high degree of comparability among Member States (MS) the health status (including disability), health determinants (lifestyle) of the EU citizens and use of health care services and limitations in accessing it.

certain foods, and participate in social activities. Additionally, the negative health consequences of excessive sugar consumption can lead to increased healthcare costs, which can have financial implications and cause stress for individuals and their families.

On the other hand, consuming a healthy diet that limits added sugars can have numerous positive effects on an individual's quality of life. A diet rich in fruits, vegetables, whole grains, lean protein, and healthy fats can help maintain a healthy weight, prevent chronic diseases, and support overall well-being. Overall, we may say that reducing sugar consumption can have a positive impact on an individual's physical and mental health, as well as their overall quality of life.

Saturated Fat Consumption.

It is well known that high intake of saturated fat is associated with an increased risk of heart disease. The average consumption of saturated fat across EU countries ranges from 7% to 18% of total energy intake. Based on the Eurostat Statistics from 2019, the EU average intake of saturated fats was 12.2% of total energy intake. The country with the highest intake of saturated fats was Latvia with an average intake of 15.6% of total energy intake. The country with the lowest intake of saturated fats was Greece with an average intake of 9.2% of total energy intake. Other countries with high intakes of saturated fats include Hungary (15.1%), Bulgaria (14.7%), and Lithuania (14.5%). Other countries with low intakes of saturated fats include Italy (9.8%), Portugal (10.1%), and Spain- 10.6% (Eurostat, 2022).

By analyzing these indicators across EU countries, we can identify areas where healthy nutrition is particularly challenging and where targeted interventions may be needed. For example, countries with high sugar consumption rates may benefit from initiatives to reduce added sugar in food products and promote healthier alternatives. Similarly, countries with low fruit and vegetable consumption rates may benefit from programs to increase access to affordable and healthy food options.

Conclusions and recommendations

The fast food industry has grown rapidly in recent decades, with many large multinational chains operating in countries around the world. Fast food restaurants have become ubiquitous in many cities and towns, offering convenient and affordable food options to consumers. However, the fast-food industry has also been criticized for promoting unhealthy diets and contributing to the global rise in obesity and diet-related diseases. Some of the common criticisms of the fast food industry include its reliance on highly processed and unhealthy ingredients, its marketing practices targeted at children and young people, and its contribution to the industrialization and globalization of the food system. As a result, there have been calls for greater regulation and oversight of the fast food industry, as well as efforts to promote healthier and more sustainable food systems. To better put into practice the EU regulations on food consumption it is necessary to raise awareness among consumers, food businesses, and policymakers about the benefits of healthy and sustainable food choices is crucial. Thus, education and public campaigns can help promote healthy eating habits and inform consumers about the nutritional content of foods.

Also, EU regulations require food businesses to provide clear and accurate information about the nutritional content of foods, and this can be reinforced by ensuring that labelling is easily understandable and visible to consumers. EU regulations on food consumption must be enforced to ensure compliance with food safety and nutrition standards. This can involve inspections and monitoring of food businesses to ensure they are following the regulations, as well as penalties for non-compliance. Finally, other important recommendation is the collaboration among stakeholders, including governments, food businesses, civil society, and consumers. This collaboration can help promote healthy and sustainable food consumption,

because engaging with stakeholders can help identify and address barriers to healthy eating and find solutions that work for everyone.

References:

1. Bandura, A. (1977). *Social learning theory*. Oxford, England: Prentice Hall.
2. Baldock, D., Hart, K. and Witzke, H. P. (2014). *The Common Agricultural Policy after 2013: Towards a New Partnership between Agriculture and Society?* London: Routledge.
3. Baudrillard, J. (2016). *The Consumer Society: Myths and Structures*, New York: Sage
4. Bryman, A. (2017). *The McDonaldization of Society: An Investigation into the Changing Character of Contemporary Social Life*. London: Sage.
5. Douglas, M. (1966). *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. London: Routledge.
6. Douglas, M., and Isherwood, B. (1996). *The world of goods: Towards an anthropology of consumption*. London: Routledge.
7. Niță, AM, and Ilie Goga, C. (2017). Cultural values of urban population Case study: Cultural values of the Romanians in the regions South-West Oltenia, South-Walachia and West. *Sociology and Social Work Review* 1.1: 6-21.
8. Papadaki A, Hondros G, A Scott J and Kapsokefalou M. (2007). Eating habits of university students living at, or away from home in Greece. *Appetite*. Jul;49(1):169-76. doi: 10.1016/j.appet.2007.01.008. Epub 2007 Feb 11. PMID: 17368642.
9. Popescu, A. M., Balica, R. Ș., Lazăr, E., Oprea Bușu, V., and Vașcu, J. E. (2022). Smartphone addiction risk, technology-related behaviors and attitudes, and psychological well-being during the COVID-19 pandemic. *Frontiers in Psychology*, 5092.
10. Poulain, J-P. (2002). *The Sociology of Food: Eating, Diet, and Culture*. London: Sage Publications.
11. European Food Safety Authority. (2020). *Dietary habits and nutrient intake in the European Union: A review of the data*. *EFSA Supporting Publication*, 17(12), e06420
12. Eurostat. (2021). *European Health Interview Survey*. retrieved from <https://ec.europa.eu/eurostat/web/microdata/european-health-interview-survey>
13. Eurostat. (2022). *Fruit and vegetable consumption statistics*, retrieved from: <https://www.farmersfresh.eu/wp-content/uploads/2022/03/Fruit-Vegetable-consumption-statistics-in-the-EU.pdf>
14. Eurostat, 2022, Food Consumption Database retrieved from <https://www.efsa.europa.eu/en/data-report/food-consumption-data>
15. Fischler, C. (1988). Food, self, and identity. *Social Science Information*, 27(2), 275-292. doi: 10.1177/053901888027002004
16. Fischler, C. (1990). *L'Homnivore: Le goût, la cuisine et le corps*. Paris: Odile Jacob.
17. Fuhrman J. (2018). The Hidden Dangers of Fast and Processed Food. *Am J Lifestyle Med*. 2018 Apr 3;12(5):375-381. doi: 10.1177/1559827618766483.
18. Janssen, H., Davies, I., Richardson, L., and Stevenson, L. (2018). Determinants of takeaway and fast food consumption: A narrative review. *Nutrition Research Reviews*, 31(1), 16-34. doi:10.1017/S0954422417000178
19. Pendergrast, M. (2013). *Food Trucks: Dispatches and Recipes from the Best Kitchens on Wheels*. Abrams.
20. Ritzer, G. (2013). *The McDonaldization of Society*. New York: Pine Forge Press.
21. Rosenheck, R., 2008. Fast food consumption and increased caloric intake: a systematic review of a trajectory towards weight gain and obesity risk. *Obesity reviews*, 9(6), 535-547.
22. Schlosser, E. (2001). *Fast Food Nation: The Dark Side of the All-American Meal*. Houghton Mifflin Harcourt.

23. Statista Research Department. (2022). *Fast food industry - Statistics & Facts*. Statista. Retrieved from <https://www.statista.com/topics/863/fast-food-industry/>
24. Watson, J. L. (1997). *Golden Arches East: McDonald's in East Asia*. Stanford University Press.
25. Wrangham, R. W. (2009). *Catching fire: How cooking made us human*. Basic Books.
26. Zion Market Research. (2021). *Fast Food Market by Type (Chicken, Burger/Sandwich, Asian/Latin American Food, Pizza/Pasta, Sea-Food, and Others) and by Distribution Channel (Quick Service Restaurants (QSRs), Food Trucks, and Others): Global Industry Perspective, Comprehensive Analysis, and Forecast, 2020-2026*. Retrieved from <https://www.zionmarketresearch.com/report/fast-food-market>

EU regulations:

Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety. Available at: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32002R0178>

European Food Safety Authority. (2022). About EFSA. Retrieved from <https://www.efsa.europa.eu/en/aboutefsa>

European Commission. (2011). Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council. Official Journal of the European Union, L 304, 18-63. Retrieved from <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:304:0018:0063:EN:PDF>

European Commission. (2009). School Fruit Scheme. Retrieved from https://ec.europa.eu/agriculture/sfs/index_en.htm

European Commission. (2017). EU Guidelines for Food Donation: information and procedures to facilitate food donation in the European Union. Retrieved from https://ec.europa.eu/food/safety/food_waste/eu_actions/food_donation_en