## Why food waste matters?

## A comparative analysis of university students' behavior in Emilia-Romagna and Oregon

Margherita Del Prete

Former Master student in Scienze e tecnologie agrarie at University of Bologna Department of Scienze e Tecnologie Agro-Alimentari

In 2015, the United Nations estimated the world's population will reach 9.7 billion by 2050. Sustainable food systems are imperative to feed the growing population and minimize the effects of climate change. How food is grown and produced, what types of foods are consumed and how much food is wasted have major impacts on the sustainability of the world's food system.

The food system includes all those activities involving the production, processing, transport and consumption of food. It also includes the governance and economics of food production, its sustainability, the degree to which we waste food, and how food production affects the natural environment.

Sustainable management has been created to be defined as the application of sustainable practices in the categories of businesses, agriculture, society, environment, and personal life by managing them in a way that will benefit current generations and future generations.

Sustainable management is needed because it is an important part of the ability to successfully maintain the quality of life on our planet.

The overall aim of this study was to assess the food behavior and understanding of college students concerning food waste. The purpose of this work was to analyze consumer behavior toward food waste, with a special focus on the reasons that lead consumers to make certain choices. Moreover, the perception of college students on the social, environmental and economic impacts of food waste will be investigated.

Food losses and waste represent a rising global concern in the effort to fight hunger, raise income levels, and to improve food security both in industrialized and less developed countries.

The causes of food losses and waste vary throughout regions and are very much dependent on the specific conditions and on the local situations. Irrespectively of the level of economic development and of the structure of economic systems, food waste and losses represent a severe form of inefficiency that hamper food system sustainability.

In broad terms, food waste is influenced by portion size, labelling, packaging and storage issues on the one hand, and awareness, preferences, planning and socio-economic factors on the other.

According to FAO, the main causes of food waste are to find in "quality standards" (photogenic sensor, aesthetic defects), "food manufacture" (transportation losses during processing), "lack of planning" (lack of communication, food could not be stored for the next day), and "leftovers", from cooking preparing and serving.

The focus on university students is particularly important because the literature suggests that young people tend to waste more food than older people.

This research considered avoidable and possibly avoidable waste, which represents the largest amount of household food waste in terms of volume and which can be modified by stimulating a change in people's attitudes and behavior.

We sent electronic survey links to the email of 1,000 randomly selected Oregon State University students. The study is being conducted with participants 18 years of age (legal adults) or older. The study did not exclude pregnant women, OSU students or employees, or American Indians and/or Alaska Natives (we would not be able to ascertain this information from addresses alone). However, because this is a confidential survey, we have foreseen minimal risk. Because survey participation is on a voluntary basis only, we have not anticipated any issue to arise with vulnerable populations. Study staff includes two Oregon State University professors from the School of Public Policy (PhD in Political Science and PhD in Environmental Science who are qualified to conduct survey research. The principal investigator has received IRB training and has extensive research experience supervising graduate student researchers with human subjects. The graduate student researcher is a master's student with Dr. Wolters and Dr. Steel. She has been trained about human subjects research in her program of study and by the PI and co-PI to obtain informed consent.

The exchange periods were between September 2017 and December 2017 in Oregon, a green and humid area, very rainy but perfect if you like nature and outdoor sports; it's very close to the ocean and in 40 minutes you can visit Newport, its port and its beautiful aquarium. This experience was important because it gave me the opportunity to get to know new places and new cultures, allowing me to open my horizons and knowledge.

I personally have learned that even if it is not easy at the beginning, you should not be discouraged because there is always a solution. We must not be too strict and accept diversity as a life experience. We need to test ourselves and learn to know each other to understand what we can and cannot accept.







