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ULTRA-PROCESSED FOODS AND IMPACT ON PUBLIC HEALTH

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Introduction

Chronic Non-Communicable Diseases (NCDs) are the leading cause of death globally, accounting for 74% of annual deaths. Conditions like cardiovascular diseases, diabetes, and cancers are closely linked to behavioral factors such as unhealthy diets and physical inactivity.

Ultra-processed foods (UPFs), rich in sugars, unhealthy fats, and sodium, but low in essential nutrients, are associated with increased risks of obesity, type 2 diabetes, and cardiovascular diseases. The elderly population, especially in Italy, is particularly vulnerable, with 68.1% of individuals over 75 affected by multiple chronic diseases. Aging-related metabolic declines further amplify the negative effects of poor diet, contributing to frailty, sarcopenia, and cognitive decline.

Aims

This project aims to explore the relationship between UPF consumption and the presence of NCDs in elderly individuals (>65), providing a foundation for future public health strategies while also considering potential confounding factors such as physical activity levels and socio-demographic characteristics.

Methods

A total of 1000 participants over 65 years old, who do not adhere to any specific dietary restrictions and are not living in care facilities, will be recruited through their general practitioners in the province of Asti (Piedmont) both from urban and rural areas. Data collection will include anthropometric measurements (height, weight, hand grip test, circumference), health history, sociodemographic information, assessment of physical activity (PASE questionnaire), quality of life (SF12), sensory perception (TASTE) and dietary habits using the Nova Food Frequency Questionnaire. The activities will follow the Gantt diagram (**table 1**)

Attended results

Expected outcomes include a detailed understanding of the correlation between UPF consumption and NCDs among the elderly. The study will provide insights for developing strategies to improve dietary choices, potentially reducing the incidence of preventable chronic diseases and promoting healthy aging. This research fills a critical gap in current data on elderly dietary patterns, challenging the assumption that older adults maintain healthier diets. The findings will serve as a foundation for implementing effective, scalable interventions, both nationally and internationally.

Table 1 Gantt diagram for the study

Activity	Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A1)	***Protocol design***	■	■	■	■																				
	1) Methods, questionnaires and materials		■																						
	2) Recruitment methods		■	■																					
	3) Bioethics committee submission			■	■																				
A2)	***Organization of data collection***		■	■	■																				
A3)	***Recruitment and data collection***					■	■	■	■	■	■	■	■	■	■	■	■	■	■						
A4)	***Data processing***																■	■	■	■					
A5)	***Analysis of relsults***																■	■	■	■	■	■			
A6)	***Thesis and Paper Preparation***	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

References

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