



# HAROKOPIO UNIVERSITY

SCHOOL OF HEALTH SCIENCE AND EDUCATION  
DEPARTMENT OF NUTRITION AND DIETETICS

## INTERVENTIONAL STUDY WITH TITLE:

***“Effect of a dietary intervention that includes daily consumption of a novel biscuit enriched with Greek edible mushrooms, rich in  $\beta$ -glucans, on intestinal health-related parameters of healthy older adults: a randomized controlled trial”***

## Study Protocol

This is a randomized controlled trial with a cross-over design. Participants will participate in two 3-month dietary interventions in a random order (using a random-number table), with a 2-month washout period: one of the interventions will include the daily consumption of a novel biscuit enriched with mushroom powder containing 3g of  $\beta$ -glucans, whereas the control intervention includes the daily consumption of a placebo biscuit. Basic socio-demographic information and medical history will be recorded for all volunteers. At baseline and at the end of each intervention, all participants will undergo a full assessment of gastrointestinal symptoms, memory-orientation ability, dietary and physical activity habits. Body weight will be also monitored. Blood, urine and faecal samples will also be collected before and at the end of each intervention period. The impact of  $\beta$ -glucan consumption on the faecal microbiota will be estimated through 16SrRNA sequencing and by measuring selected microorganisms (q-PCR). Furthermore metabolic products (i.e. SCFAs) will be quantified.