

Supplementary Material

Supplementary Table 1. Key Insights and Actions from the Three Working Groups of HATDT.

Working Group	Key Insights	Possible Actions
1. Dietary Strategies for Preventing Age-Related NCDs	- Investigate the impact of reducing salt, sugar, and saturated fats, while increasing fiber and polyunsaturated fats. - Focus on bioactive nutrients, such as vitamin D, to reduce risks like hypertension, glucotoxicity, and lipotoxicity. - Explore the role of chronic inflammation and deregulated nutritional signaling in NCD development. - Understand that large-scale cohort data confirm that structured dietary patterns like AHEI and Mediterranean-style diets are predictive of successful aging.	- Educate stakeholders (healthcare professionals, consumers, food producers) on the link between diet, lifestyle, NCDs, and healthy aging. - Promote dietary shifts to healthier options (e.g., whole grains, low-salt foods, plant-based proteins) while maintaining taste and appetite. - Personalize nutrition by identifying interventions to reduce chronic inflammation, oxidative stress and strengthen immune health. - Advocate for policies that promote access to healthy diets through educational programs. - Use validated dietary pattern scores (e.g., AHEI, DASH) as educational tools to benchmark dietary quality in interventions or public awareness campaigns.
2. Enhancing Health and Wellbeing Through Microbiome	- Focus on preventing dysbiosis through diet, given the microbiome's high intra-individual variability. - Utilize low-grade inflammation markers as indicators of microbiome balance. - Balance the focus on protein with the importance of dietary fibers, which are essential in preventing dysbiosis.	- Conduct proof-of-concept studies to demonstrate the benefits of fiber, polyphenols, and probiotics to improve the health of humans and their microbiome (holobiont). - Explore opportunities to enhance the circularity of the food system by valorizing waste streams from fruits and vegetables. - Educate consumers on the impact of diet on gut health to encourage behavior change. - Use effective communication strategies to deliver clear, engaging messages on microbiome health.
3. Targeted Approaches for Healthy Aging	- Identify barriers preventing individuals from adopting healthy choices, despite knowledge. - Define "critical windows of change," when individuals are more likely to adopt healthy lifestyle practices. - Analyze the impact of socio-environmental factors on sustained behavior change.	- Identify windows of opportunity when individuals are most motivated to change their lifestyle. - Shape policies targeting populations most receptive to food-related behavioral changes. - Educate healthcare professionals and policymakers on preventive techniques and support systems. - Collaborate with industry to develop products that support a healthy diet across various life stages.