Check for updates

Obesity Reviews

WILEY | WORLD OBESITY

EDITORIAL

Special Issue on Personalized Obesity Prevention and Management

BETTER4U: Insights for Charting the Future of Personalized Obesity Prevention

Maria Kafyra | Ioanna Panagiota Kalafati | George V. Dedoussis | On behalf of the BETTER4U Consortium Members

Department of Nutrition and Dietetics, School of Health Science and Education, Harokopio University of Athens, Athens, Greece

Correspondence: Maria Kafyra (mariakaf@hua.gr)

The BETTER4U project is an EU-funded project (GAP: 101080117) producing a coordinated sequence of publications that together aim to advance the scientific underpinnings of personalized obesity prevention and management. This collection seeks to elucidate how biological and behavioral tailored products, supported by large scale data analyses, innovative assessment tools, and newly emerging digital and artificial intelligence (AI)-enabled technologies, could transform current paradigms in obesity research and care. The series will spell out the objective, the scope, and the scientific rationale of this collective effort to showcase the transformative potential of personalization and its critical importance in achieving meaningful and equitable, as well as scalable, impact.

Across the series, BETTER4U aims to define the parameters of personalization in obesity research. This series makes the case for joining forces between diverse scientific sectors, namely, genomics, metabolomics, microbiome, behavior, digital health, health economics and population level analytics, to accelerate the delivery of personalized obesity prevention and management. The contributions identify gaps and highlight findings in the effective communication of personalized risk, understanding heterogeneity and vulnerability, real-time monitoring tools and the need for stronger economic evaluations to guide policy and practice. Through identification and mapping of these gaps, the series sets out a forward-looking research agenda that could enable the development of the next generation of personalized interventions. Together, the papers outline a roadmap for future research and implementation that can support the emergence of a more precise and context-sensitive standard of care. We are pleased to partner with *Obesity Reviews* in this endeavor.

In addition to the core BETTER4U manuscripts, the Special Issue will also feature a number of papers submitted in response to a dedicated Call for Papers under the banner of "Personalized obesity prevention and management." These contributions, appearing in upcoming issues of *Obesity Reviews*, will further enrich the scientific dialogue and broaden the evidence base supporting personalization in obesity research and care.

The series begins with the strategic framework paper, *Advancing Personalized Strategies for Obesity Prevention Through Biologically and Behaviorally Tailored Interventions*, which explains the conceptual basis of BETTER4U and the scientific pillars of the initiative. Following pieces each take on interrelated aspects of the various personalization elements. One examines the effectiveness of behavior change strategies for communicating genetic risk, offering insights into how individuals interpret and act upon personalized genetic information. Another meta-review identifies the behavior change techniques consistently used in effective interventions for vulnerable populations, showing how personalization can support equity rather than amplify disparity. Additionally, a comprehensive review of microbiome and metabolomics research synthesizes emerging evidence across the lifespan and explores its implications for tailored interventions.

Economic considerations are addressed through a systematic review of the cost-effectiveness of personalized lifestyle interventions, clarifying when personalization may offer added value. Furthermore, methodological innovation is represented by the introduction of the BETTER4U indicators, novel tools for unobtrusive, scalable assessment of behavioral and environmental determinants relevant to obesity risk. Moreover, the BETTER4U Database manuscript demonstrates the power of integrating harmonized data from 14 countries and over 1.1 million participants, enabling unprecedented cross-national analyses of obesity-related determinants. Further empirical depth is provided by an individual-level meta-analysis across 21 BETTER4U cohorts, examining associations between BMI, lifestyle factors,

© 2026 World Obesity Federation.

and mental health in vulnerable contexts. Finally, the clinical trial protocol for the BETTER4All personalized intervention illustrates how AI-driven recommendations and real-time monitoring can be operationalized in a multicenter trial, translating the project's conceptual and methodological innovations into practice.

Collectively, these results represent a well-integrated scientific plan with predictive capacity. Through its examination of the biological, behavioral, environmental, technological, and economic dimensions of obesity prevention, the BETTER4U series demonstrates how complementary lines of inquiry can work collectively toward a new standard of care, one that is data-driven, equitable and responsive across the life course. The series papers are united by a common view; to help the world move away from one size fits all approaches to tailored approaches that can achieve meaningful and scalable impact.

Funding

The BETTER4U project has received funding from the European Union's Horizon Europe Research and Innovation program under Grant Agreement no. 101080117. Additionally, BETTER4U is funded by UK Research and Innovation (UKRI) under the UK government's Horizon Europe funding guarantee (grant number 10093560 for QMUL and 10106435 for BiB) and by the Swiss State Secretariat for Education, Research and Innovation (SERI).

Conflicts of Interest

The authors declare no conflicts of interest.

1467789x, 2026, 3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/obr.70111 by Maria Kafyra - Harokopio University , Wiley Online Library on [23/02/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License