

The Evolution of Personalised Nutrition: Recommendations for the FSA

The FSA may wish to consider whether it would be appropriate to develop a broader framework that would cover all PN companies, or just the ones that also provide supplements and functional/personalised food items or vitamins, which are already within its remit.

Although explicit regulation of all PN providers may currently not fall directly under the FSA remit it is advisable that FSA collaborates with medical regulatory agencies, such as the Department of Health and Social Care in drawing up a joint framework of understanding for necessary regulation to ensure that general quality standards in the PN sector can be enforced effectively. This includes collaborating with relevant organisations that cover the data aspect of the sector, such as validation criteria for biospecimen and DNA testing, algorithm standards and data ownership and privacy rules.

Harmonising the regulatory framework for PN across agencies will enable the industry to evolve in line with consumer protection across the service offering.

Short-term FSA priorities (within 3 years)

- Establish within the FSA whether a more active role in regulating businesses that are operating at the intersection between health/wellness and the food system would be desirable for protecting consumers from low quality services linked to food, or outright fraud. This may involve changing existing remit definitions. In terms of the early developmental stage of the industry this could be an opportunity to shape its further evolution.
- Build the necessary collaborations with other regulatory agencies that have responsibility for different areas of this multidisciplinary space.
- Ensure that the FSA has the relevant expertise required for monitoring the emerging PN sector by connecting with relevant experts. This will require maintaining networks of experts in the basic sciences who understand relevant scientific trends that may lead to applications relevant for the PN sector. Other additional expertise required would be:
 - Experts from the social sciences to provide insights into other societal trends that may be relevant for this sector.
 - Artificial intelligence (AI), privacy, and data security experts to provide a deeper understanding of how science is translated into advice and its implications for personal privacy of consumers.
 - Monitor activities and connect with experts in the areas of general food personalisation, in particular where synergies with the PN sector could lead to a sudden market growth of PN services due to production capacities that may become available from different segments of the food processing sector. This is advisable as already a number of large multinational food producers are supporting the PN sector via partnerships and start-up funding.
- Explore whether existing regulation of supplements and vitamins is adequately covering the various aspects of PN services and whether a closer analysis of the sector would be required to establish to what extent existing regulation is adhered to.

Medium-term FSA priorities (3 to 5 years)

- Consider whether the FSA might be a relevant partner in potential efforts to make PN services available to larger segments of society with public health goals in mind. This may involve connecting with the NHS and the Department of Health and Social Care (DHSC) to explore to what extent such efforts are realistic.
- Consider establishing strategic partnerships with the public health, healthcare and social services regulatory bodies in order to bring food safety aspects to health regulation relevant for the PN sector.

Long-term FSA priorities (5 to 10+ years)

- It remains crucial to closely monitor the sector's evolution as novel science results from areas such as epigenetics, gut microbiome, metabolism research among others, will come to market, again at an early stage of understanding, potentially claiming to be more valid than current applications.
- Explore to what extent a growing PN market might impact the way consumers interact with the wider food system in a networked fashion, how such network effects might be utilised for achieving public health goals, and whether as a food regulator there would be opportunities for supporting such goals.