

FoodDrinkEurope Reformulation & innovation

The basics



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Summary



Today, more than half of EU adults are overweight and malnutrition remains a major challenge. Both contribute to a high prevalence of diet-related diseases and related healthcare costs. The EU food and drink industry can help address these challenges with product reformulation and innovation.

Regulatory relevance



To accelerate the transition to more sustainable food systems, the European Commission will make a legislative proposal for a sustainable food systems framework by the end of 2023. It will prioritise making sustainable food affordable and making the healthy choice, the easy choice.

To this end, the Commission has sought commitments from food and drink manufacturers to reformulate and develop new products in line with guidelines for healthy, sustainable diets and reduced, sustainable packaging. The Commission also aims to require businesses to integrate sustainability into corporate strategies (EU Farm to Fork Strategy, 2020).



Reformulation & innovation



Drivers for reformulating an existing product or developing a new one include:

- Modifying calorie content or portion size.
- Improving nutritional profile (e.g., through ingredient selection, fortification with micronutrients, increasing fibre or protein, or decreasing salt, sugars, or fat)
- Reducing costs.
- Resolving supply chain issues.
- Extending shelf-life.
- Improving sensory profiles (e.g., texture, mouthfeel).
- Responding to regulatory changes or consumer perceptions.
- Improving sustainability (e.g., ingredients, production methods, packaging).

It is essential to have a clear set of objectives, including “must-have” and “nice-to-have” outcomes. The following factors should be taken into account as well:

Ingredients: Establishing the desired properties and functionalities of a product is critical to identifying and selecting suitable ingredients.

Production method(s): New methods or adaptation of current manufacturing parameters may be required per the processability of new or altered ingredients.

Regulations: It is best practice to account for current and emerging regulatory considerations from product conception to launch, including ingredients, processing aids and on-pack nutritional labelling. Particular attention must be given to food additives, flavourings, imported and novel ingredients, novel manufacturing technologies and production methods critical to food safety.

Taxes: EU Member States are free to choose the tax systems they consider most appropriate, including VAT rates, and tariff codes vary by product. Several Member States have implemented other fiscal measures on food and drink products.

Shelf life and product safety: Food safety implications should be considered from start to finish in product development and reformulation. In both cases, a product’s microbiological safety, stability, and organoleptic properties must be reviewed and tested. For example, salt or sugars may be used to preserve certain foods and any change in their levels can alter shelf-life. Packaging options may also need to be reviewed in order to maintain product freshness.

Consumer and sensory testing: Both types of testing are key to reformulation as they can impact product flavour, aroma, texture, appearance, and more. Sensory testing assesses product performance, functionality, and attributes to accelerate formulation. Panel testing analyses consumer response to product attributes, including taste, appearance, texture, and smell. Both types of testing can also help determine a product's shelf-life and storage conditions. For example, sensory testing can determine off-flavours and textural changes, while consumers may perceive them as well.

How to reformulate

[FoodDrinkEurope guidance for product innovation and reformulation:](#)
Outlines product innovation and reformulation considerations

[The Institute of Grocery Distribution \(IGD\) best practice reformulation guide:](#) Interactive decision-making tool to help determine if and how a product can be improved nutritionally

[Food and Drink Federation \(FDF\) Scotland booklet on reformulation:](#)
Overview of the benefits and steps of reformulation for better nutrition

Case studies



- [Reformulation of reduced-fat Greek-style yoghurt](#)
- [Development of fortified, whole grain breakfast products](#)
- [Reduction of sodium and saturated fat in potato products](#)
- [Salt reduction in popular breakfast cereal](#)
- [Trans fat removal and sodium reduction in confections](#)
- [Sugar, calorie, sodium and/or saturated fat reduction in several food and drink products](#)
- [Reduction of salt and saturated fat in potato crisps](#)



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