

IMPACT OF FOOD REFORMULATION ON FOOD CHOICES, NUTRIENT INTAKES AND HEALTH STATUS

A SYSTEMATIC REVIEW

Considering the high levels of processed food intake in Europe, **reformulating food products to improve their nutritional properties** can help create healthier food environments and reduce the impacts of diet-related health conditions, such as obesity.

This review investigated **the impact of food reformulation on food choices, nutrient intake and health status.**

Behaviour and choices

The review found that people **usually accept, buy and consume reformulated products**, resulting in an overall **improvement in the nutritional composition of food purchases.**

Reformulation towards **less sugar or more fibre** tended to be more often noticed and less accepted by consumers, while **salt-reduction** has higher acceptance.

Nutrient intake

Overall, food reformulation tends to lead to improved nutritional intakes. Analysing studies from Europe and the US, the review found that daily population-wide **salt intake after reformulation was 0.57g lower than before.**

Product reformulation to **reduce trans-fatty acid (TFA) content also results in reduced TFA intake.** An overall decrease in intake between 38% - 85% were reported in North America, Costa Rica and the United Kingdom.

The review could not identify studies assessing the impacts of reformulation for other nutrients, like **sugar**, or for **total energy.**

Health status

The review found that a ban on TFAs in processed and restaurant foods has led to a **reduced mortality from cardiovascular disease** in Austria, Denmark, Costa Rica and the US. Mortality was reduced **by 4.3% - 6.2%.**

One British study on sodium reduction in foods **showed a positive effect on blood pressure.**

Only three studies investigated the effect of reformulation on children and adolescents, finding **similar results as for adults.**

Effective reformulation strategies should:

- Be accepted by consumers
- Not lead to compensation of reduced nutrients
- Include a wide variety of products
- Cover food categories that are major sources of targeted nutrients
- Not lead to additional products being placed on the market

Other findings include:

- Mandatory standards are more effective than voluntary actions
- Out-of-home foods are promising targets for reformulation policies
- Multi-component strategies that include food reformulation are more promising to improve population diets than reformulation alone





Science and Technology in
childhood Obesity Policy

Impact of food reformulation on food choices, nutrient intake and health

Salt and trans-fatty acid reformulation



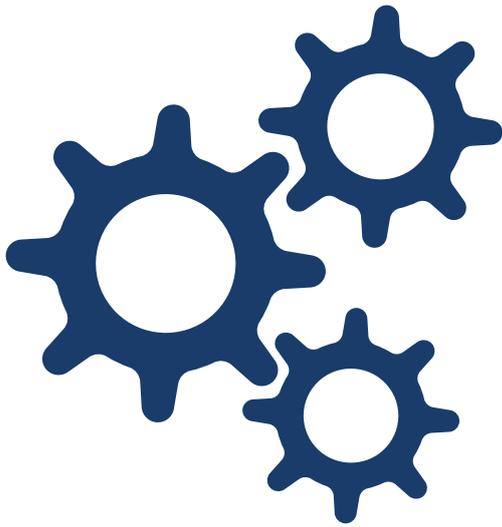
accepted by
consumers



improved daily nutrient
intake



positive health
changes



FOOD REFORMULATION IS MOST
EFFECTIVE AS PART OF A
MULTI-COMPONENT STRATEGY
AND INCLUDES MANDATORY STANDARDS

Future research should focus on:

sugar and
fibre reformulation



consumer acceptance

whole diets rather
than single nutrients



children

