

# BENEFITS OF REFORMULATING WITH FIBRE

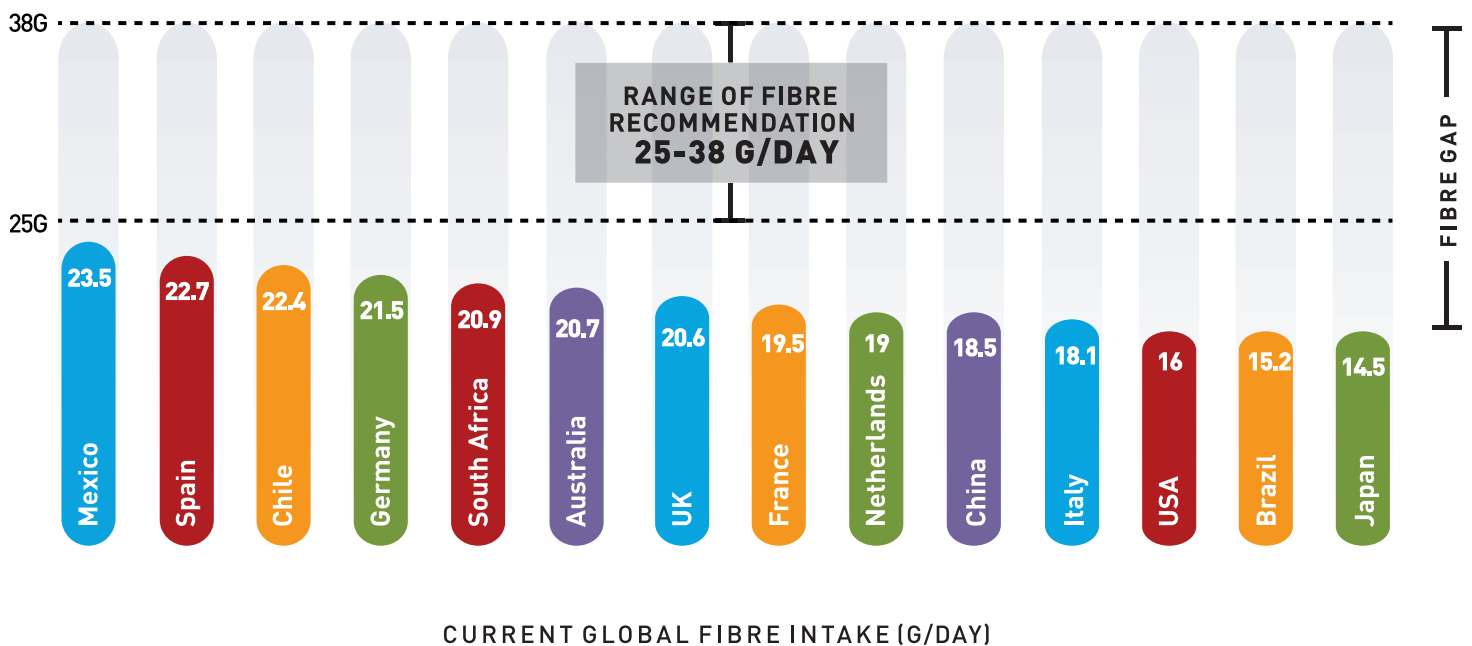
Tate & Lyle's research study  
shows potential health gains<sup>1</sup>



# GLOBAL SHORTFALL IN FIBRE INTAKE

Dietary fibre provides a host of health benefits beyond supporting digestive health. Some fibres help keep blood glucose levels healthy, support weight management, prevent cardiovascular disease and enhance calcium absorption, which is essential for bone health. Yet, fibre intake in most countries is well below the national recommendation.

## GLOBAL SHORTFALL IN FIBRE INTAKE



Source: Data taken from various sources. See [tatandlyle.com/fibre-gap](https://tatandlyle.com/fibre-gap) for full list of references

Reformulation can be a tool for improving public health. It allows it allows individuals to consume products they prefer, while reducing intake of less desirable nutrients, such as sugars and fats, and potentially increasing intake of beneficial nutrients such as dietary fibre.

# PURPOSE OF THE STUDY

How can fibre fortification impact the diet and health of consumers?

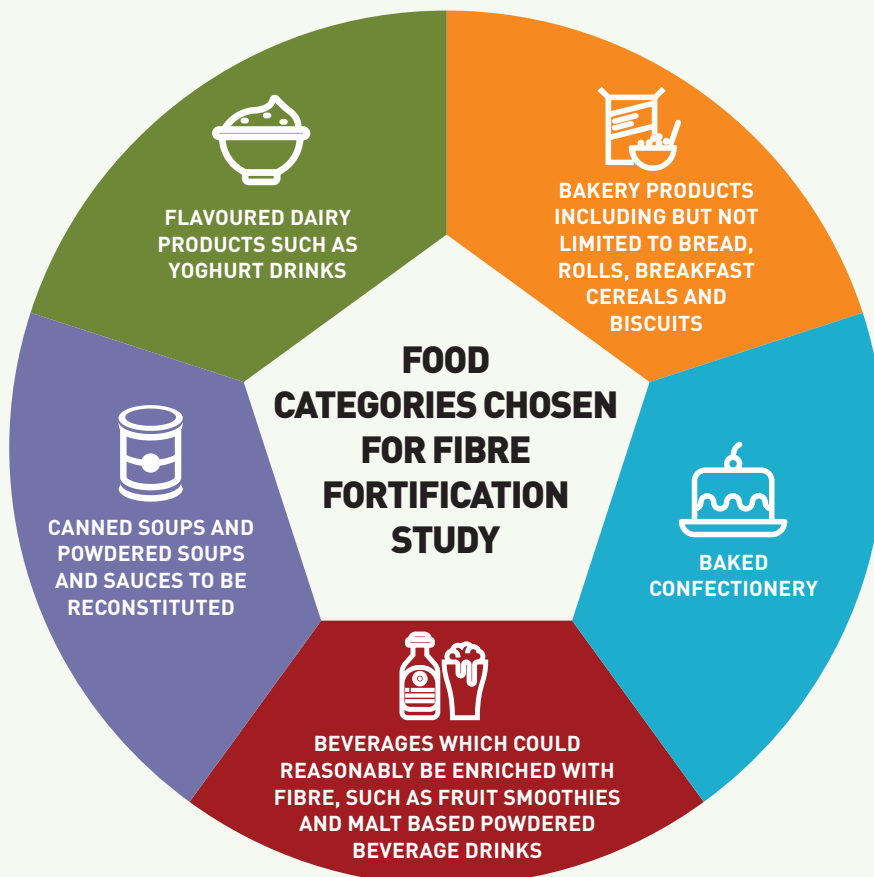


## WHY WE DID IT

While traditional sources of fibres like whole grains, fruits, and vegetables should be encouraged, fibres added to foods are also important contributors to dietary fibre intake and positive health outcomes. However, the impact of fibre fortification for improving public health has not been well researched or understood.

## HOW WE DID IT

Tate & Lyle looked at what consumers currently eat and drink using the UK's National Diet and Nutrition Survey. A statistical modelling scenario was applied to see how food that had been reformulated with additional fibre, would change consumers diet and health.



# FIBRE FORTIFICATION LEVELS



Theoretical fibre fortification was calculated based on 50% market penetration and in commercial food and beverage products according to the EU REGULATION No 1169/2011. The only change made to the nutritional composition of the products was the addition of fibre. Food products were fortified with fibre according to the following scenarios, based on 'source of fibre' or 'high fibre' EU nutrition claims:

- For a food or beverage containing 0 g fibre/100 g there was no change
- For a food containing less than 3 g fibre/100 g the concentration of fibre was brought to 3 g/100 g or a beverage was brought to 1.5 g/100 kcal, corresponding to a 'source of fibre' claim
- For a food containing greater than or equal to 3 g fibre/100 g, 3 g of fibre was added, corresponding to a "high fibre" claim

## TATE & LYLE'S NEW MODELLING STUDY SHOWS THE POTENTIAL PUBLIC HEALTH GAINS OF ADDING MORE FIBRE TO EVERYDAY FOODS



**Fibre fortification** would enable **50%** more **UK adults** to consume the recommended amount of fibre.



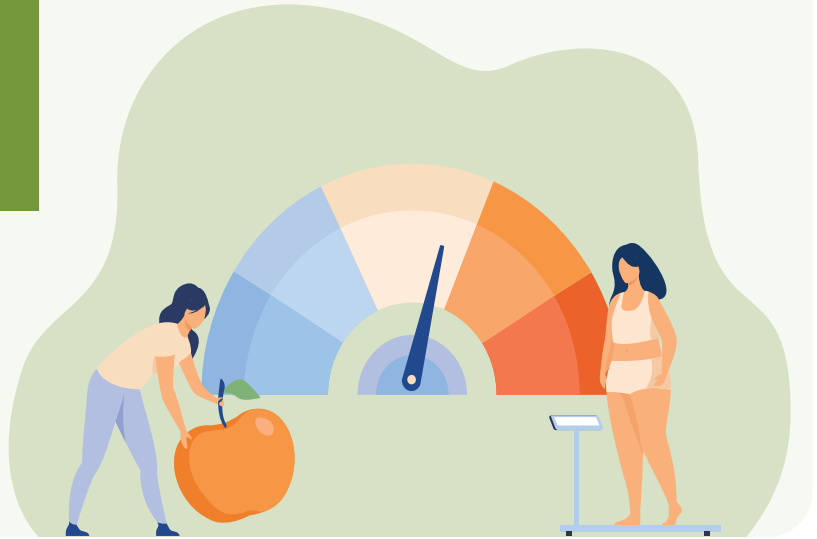
**6% of population** would achieve a **weight reduction** because of fortification.



**72% of population** would achieve a reduction in **cardiovascular** risk and **type 2 diabetes** risk with fibre fortification.

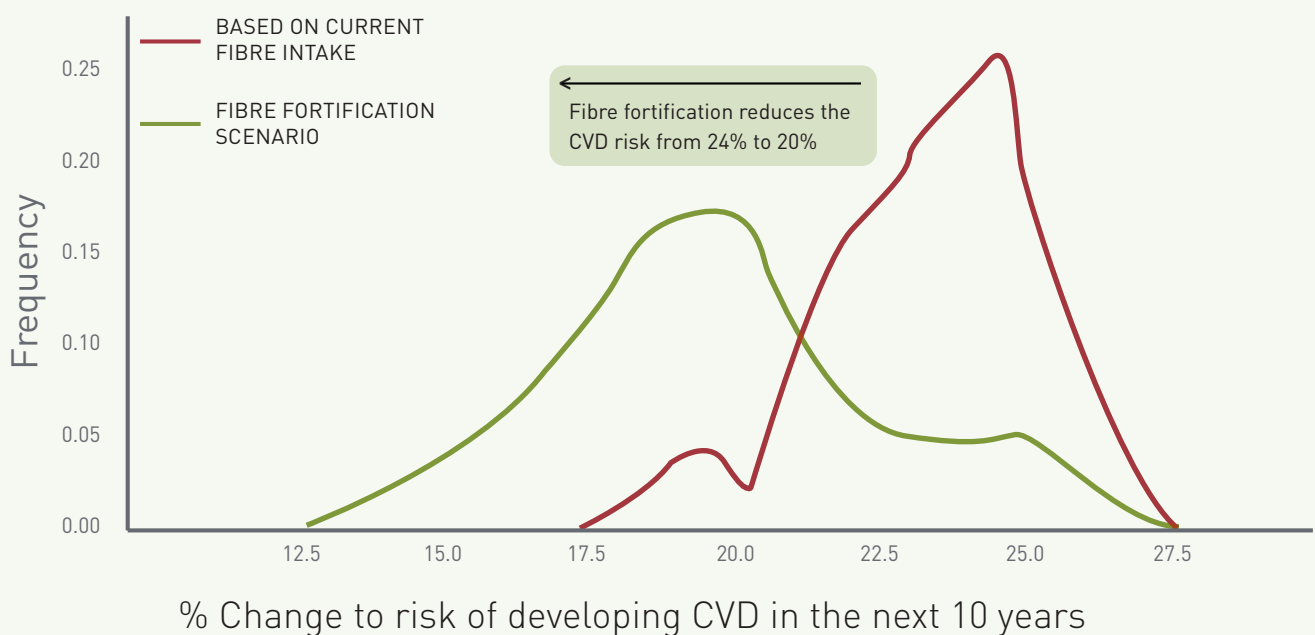
## FIBRE: AN ALLY IN THE FIGHT AGAINST OBESITY AND IN SUPPORTING WEIGHT MANAGEMENT

- Mean body weight would be reduced by 0.03 kg (from 70.36 kg to 70.33 kg) with 6% of adult population achieving a weight reduction ( $p \leq 0.05$ ).

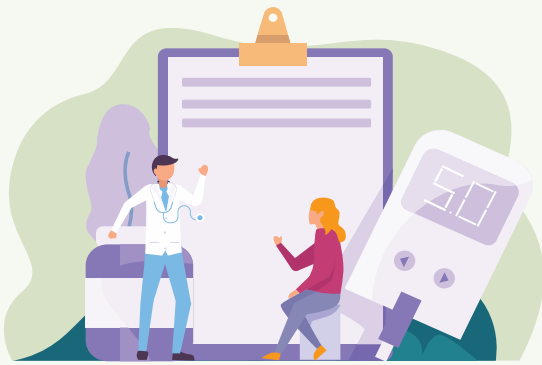


## REDUCED RISK OF CARDIOVASCULAR DISEASE (CVD)

- The CVD risk distribution curve would shift 13% towards lower CVD risk over the next ten years because of fibre fortification, with 72% of adults achieving a reduction in cardiovascular risk ( $p \leq 0.05$ ).

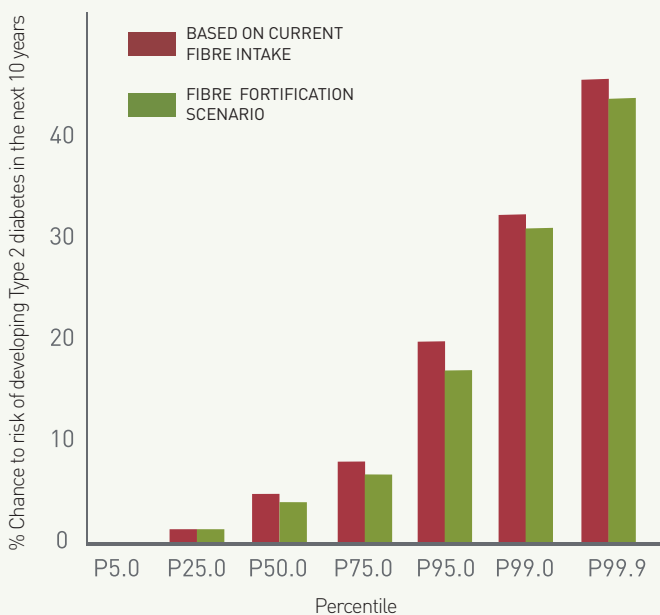


## TREND IN HELPING REDUCE THE RISK OF TYPE 2 DIABETES



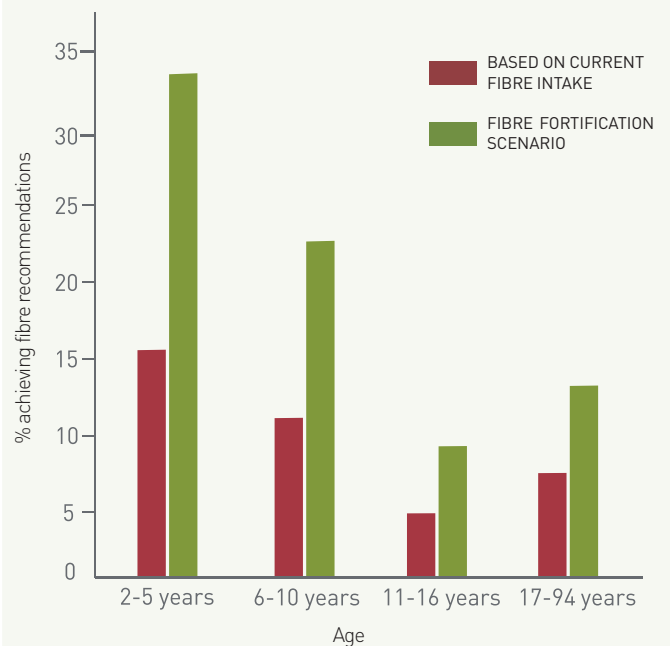
- Fibre fortification would reduce by 0.5% the chance to develop type 2 diabetes within the next ten years with 72% of the adult population achieving a risk reduction ( $p \leq 0.05$ ).

The greatest change in type 2 diabetes risk between current fibre intake and fibre fortification scenario was observed at the higher percentiles, indicating those consumers most at risk will benefit the most from fibre fortification



## THE IMPACTS AND BENEFITS FOR CHILDREN

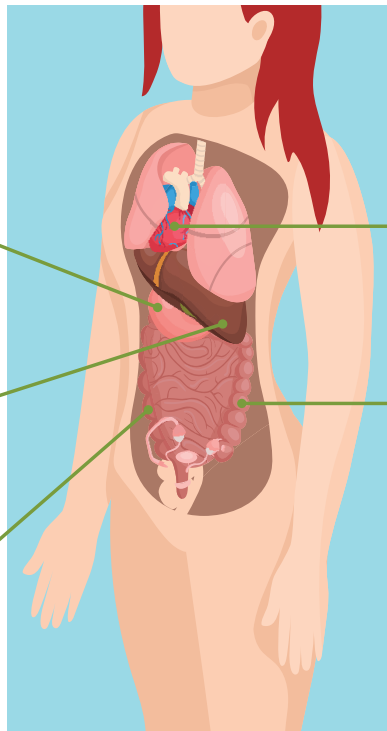
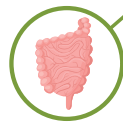
- Fibre fortification would more than double the number of children in the UK meeting fibre recommendations. The number of children aged 2-5 getting recommended dietary reference values (DRV) of 15g/day would increase by 118%.
- The number of children aged 6-10 getting recommended DRV of 20g/day would increase by 111%.
- The number of children aged 11-16 getting recommended DRV of 25g would increase by 65%.



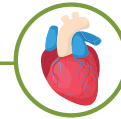
# TATE & LYLE'S PROMITOR® SOLUBLE FIBRE HAS SEVERAL HEALTH BENEFITS

## HEALTH BENEFITS BASED ON SCIENTIFIC EVIDENCE

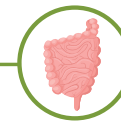
- Helps reduce the calorie content of foods and may help promote satiety <sup>2,3,4</sup>
- Favourable post-meal blood glucose and insulin responses <sup>2,4,5</sup>
- Superior tolerance compared to inulin<sup>6,7</sup>
- Gut health <sup>7,8,9,10</sup>
- Enhanced calcium absorption and retention for bone health <sup>11,12,13,14</sup>



## EMERGING BENEFIT RESEARCH



- Metabolic health <sup>15</sup>



- Potential immunity benefits <sup>16</sup>

## PROMITOR® SOLUBLE FIBRE OVERVIEW

**PROMITOR® Soluble Fibre** makes it easy to meet consumer demands for more fibre. Thanks to its superior digestive tolerance, clean taste, consumer friendly labeling and ease of use, **PROMITOR®** is the ideal ingredient for fibre fortification and/or sugar and fat reduction



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For more information please visit [tateandlyle.com/nutrition-centre](https://www.tateandlyle.com/nutrition-centre).

Claims and claim language vary by country/region. As with all issues concerning food labelling, we recommend that you consult with your internal regulatory/legal advisors prior to making labeling decisions. Users should also check applicable foreign regulations in the case of food products that may be exported.