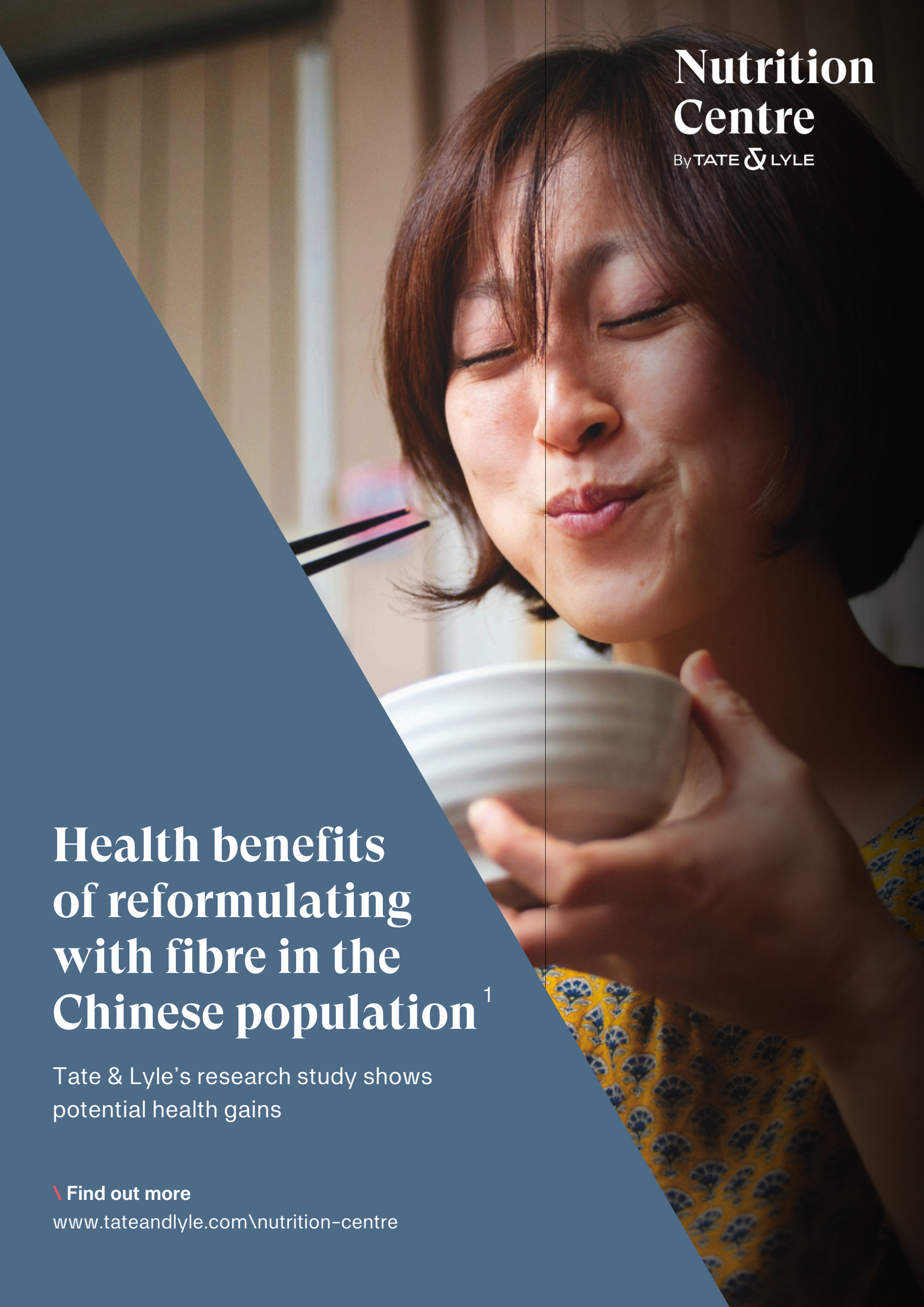

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Health benefits of reformulating with fibre in the Chinese population[1]

Tate & Lyle's research study shows potential health gains

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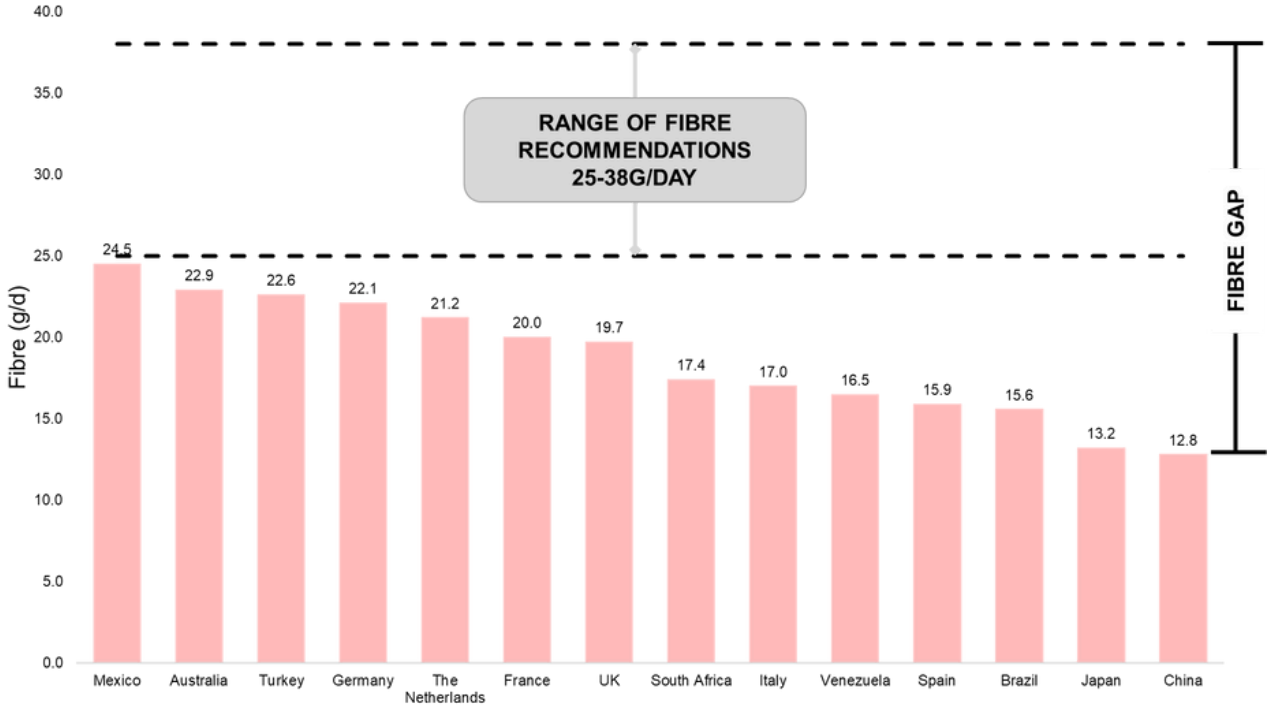
Global shortfall in fibre intake

Dietary fibre provides a host of health benefits beyond supporting digestive health. Some fibres help to keep blood glucose levels healthy, support weight management, prevent cardiovascular disease (CVD) and enhance calcium absorption, which is essential for bone health[2]. Recognising these benefits, the World Health Organisation (WHO) recommends that adults consume 25–35g of fibre daily. However, fibre intake in most countries is well below these guidelines.[3,4]

Meanwhile, China faces a growing obesity crisis, with more than half of its adult population being overweight.[5] Projections suggest that by 2030, nearly two out of three adults and one in three school-age children and adolescents in China could be overweight. [5]

Average daily fibre intakes by country in grams[1, 7–18]



Food reformulation presents a promising strategy for improving public health by allowing people to enjoy their preferred products while reducing intake of less desirable nutrients, such as sugars and fats, and potentially increasing intake of beneficial nutrients such as dietary fibre[6].

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Purpose of the study

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

Why we did it

While traditional sources of fibre, such as whole grains, fruits, and vegetables, should be encouraged, added fibres in foods also significantly boost dietary fibre intake and promote positive health outcomes[6].
The average daily fibre intake of most countries is well below recommended amounts.

How we did it

Tate & Lyle looked at what Chinese consumers currently eat and drink using the China Health and Nutrition Survey, which included nine provinces in China.
A statistical modelling scenario was applied to see how food and drinks reformulated with additional fibre would[1] affect consumers' diets and health.

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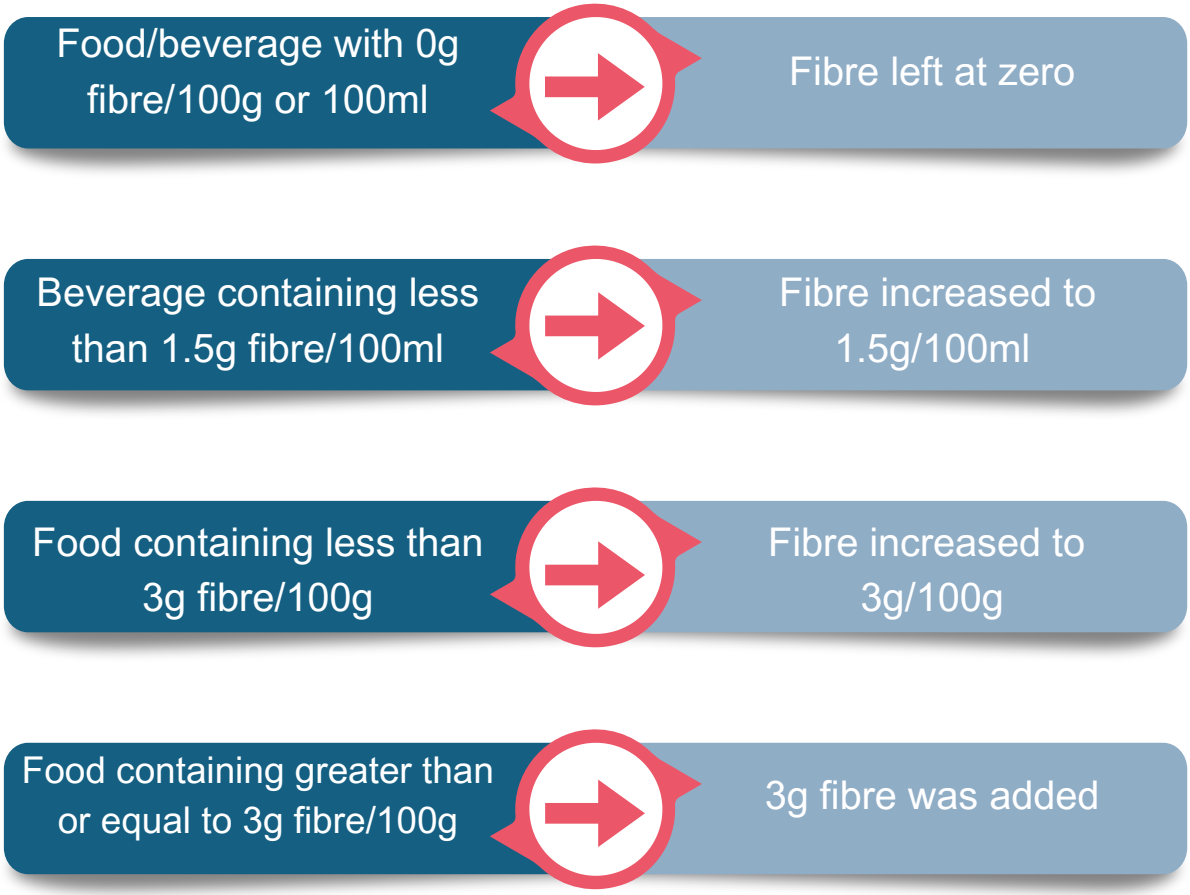
Fibre fortification levels

Foods and beverages eligible for fibre fortification and the concentrations of fibre used at intervention were identified based on Chinese legislations and regulations of nutrition label claims[19].

Food and beverage products were fortified with fibre according to the following scenarios



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Tate & Lyle's health modelling study in the Chinese population shows potential public health benefits of adding more fibre to everyday foods.

Fibre fortification would enable **48% and 54% more Chinese adults and children** to consume the recommended fibre amount.

Fibre fortification could help **avert or delay** approximately 73,065 deaths per year due to CVD in China.

Fibre fortification would **reduce the risk** of developing CVD in the next 10 years by **2.74%** in China.

Fibre fortification could potentially **prevent or delay** 234 cases of diabetes per day (85,340 cases/year) and would **reduce the risk of** developing type 2 diabetes by 1.41% over the next 10 years in China.

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KEY TAKE AWAYS

Fibre formulation in a variety of food categories in China could:

- Increase adherence to recommended fibre intake.
- Provide positive health benefits, including reducing CVD risk-related deaths and reducing type 2 diabetes risk.

WHY DOES IT MATTER?

This study could support and encourage food and beverage producers in China to consider fibre fortification through food reformulation.

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