

Eating away at productivity: The toll of diet-related ill health

With thanks to: Charlie Ashbaugh, Research Manager, and the Environmental Occupational and Dietary Risk Factors Team, IHME

By: Dr Hannah Brinsden

Introduction

The start of a new parliamentary term presents an opportunity to reset our country's approach to nourishing the nation, ensuring healthy and sustainable diets are accessible and affordable for all, and in turn reducing the risk of preventable disease and disability. To date, policies have been, at best inadequate and at worst, absent.

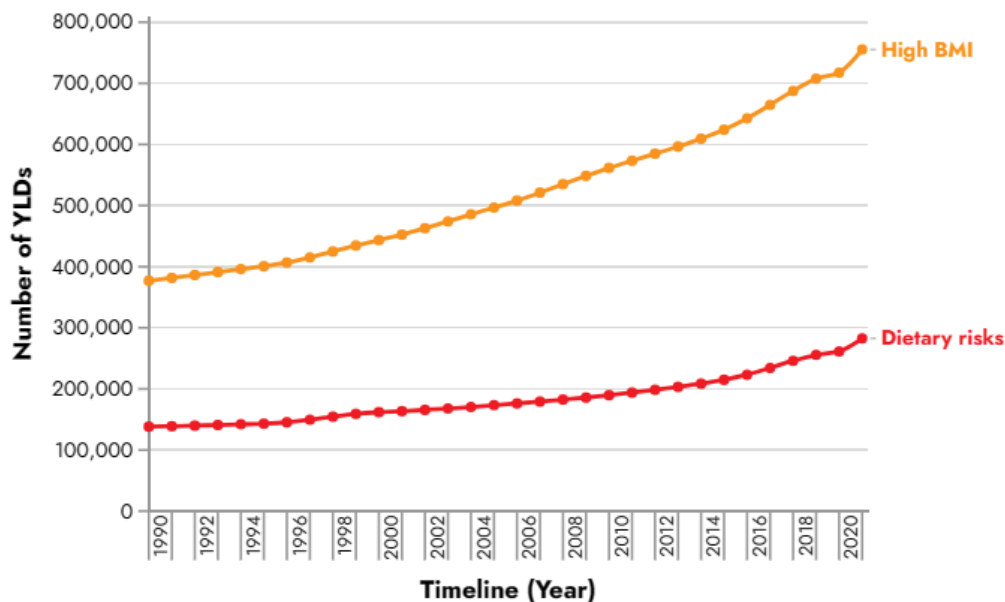
The new government's health mission and attention on prevention provides some optimism. If the government successfully prioritises actions which can improve diets, we will start the much-needed progress towards preventing poor health outcomes, which can in turn boost our children's health, our economy, and our NHS. However, failure to take this opportunity and act in a decisive way on food and health in this parliamentary term risks worsening outcomes, a stagnated economy, and further pressure on the NHS.

By recognising the importance of the food system in fuelling disease and its unlocked power to improve our population's health, the government will be able to kick start progress towards many of its ambitions on health and the economy.

Using data from the recently published Global Burden of Disease 2021 published by the Institute for Health Metrics and Evaluation, this report describes the years living with disability as well as deaths that result from high body mass index (overweight and obesity) and low or high consumption of specific foods. It also projects how these could be impacted if diets were to shift towards diets containing fewer foods high in fat, sugar and salt, less red/processed meat, and more fibre, fruit and vegetables. Such shifts, however, would be challenging without government action to shape business incentives, and that is why leadership is so vital.

Current trends

High BMI and diet as risk factors for years living with disability (YLDs) amongst UK adults 20+ 1990-2021



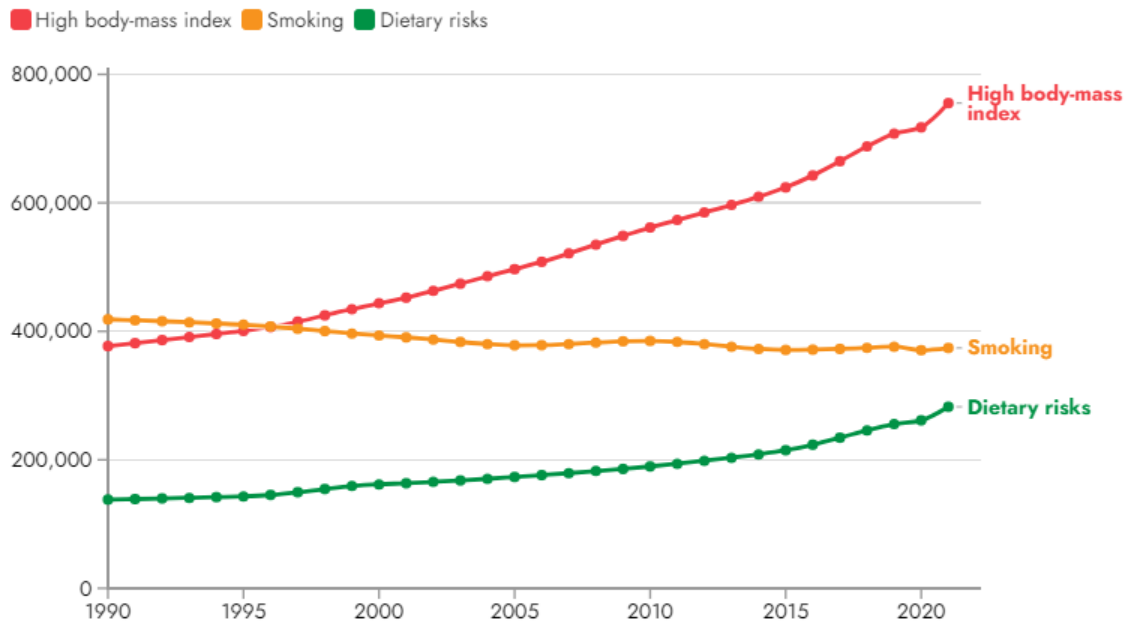
Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2021 (GBD 2021)
Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2024



- Obesity and overweight, or high Body Mass Index (BMI), is the leading risk factor for years living with disability¹ (YLD) in the UK. It is also a major contributor to deaths in the UK.
- Obesity is linked to a number of serious health conditions which lead to chronic suffering and reduced quality of life. Type 2 diabetes, for example, has numerous complications including kidney disease and visual impairments. Excess weight causes stress on joints which can lead to chronic pain, respiratory problems which disrupt sleep, and can lead to psychological problems such as low self esteem and anxiety.
- High BMI was responsible for 755,212 years lived with disability in 2021 amongst adults aged 20+ in the UK.
- The number of years living with disability due to high BMI in the UK has increased by a third (32%) in the last decade, and has doubled since 1990 (see Figure 1).
- High BMI was also responsible for 39,872 deaths for adults aged 20+ in 2021, an increase of 13% in the last decade.
- In addition to BMI, other dietary risks (such as eating too little fruit and veg, and fibre, and too much processed and red meat and foods high in fat, sugar and salt) add further to years living with disability and deaths, and also feature in the top five risk factors overall. Death and disability from these other dietary risks have also risen sharply (by 46%) in the last decade.
- Furthermore, while YLDs from tobacco are declining, YLDs from high BMI now outnumber those from smoking and YLDs from dietary risks are rising fast.

¹ One YLD is the equivalent of one year of healthy life lost due to disability or ill-health. It is calculated using the prevalence of a disease or condition, and a rating of how disabling it is.

Number of years lived with disability



Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2021 (GBD 2021) Results. Seattle, United States: Institute for Health Metrics and Evaluation (HME), 2024 Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2021 (GBD 2021) Results. Seattle, United States: Institute for Health Metrics and Evaluation (HME), 2024

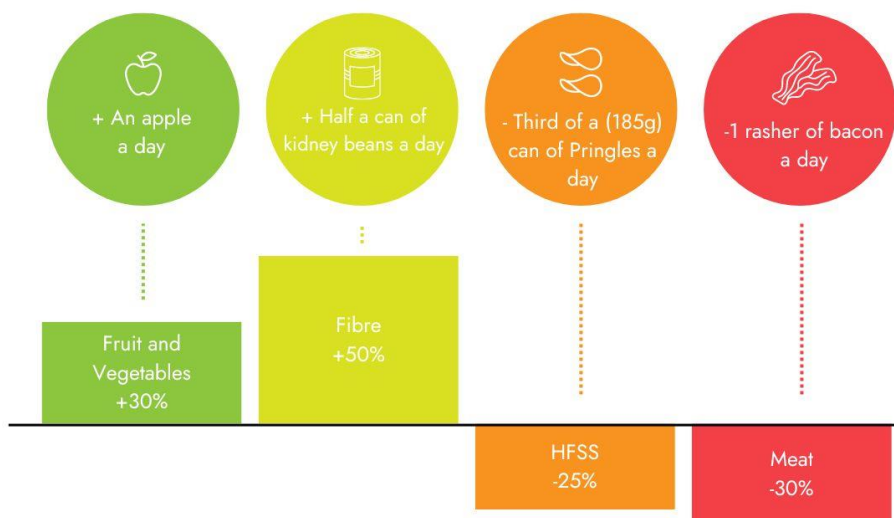


The data illustrates how serious the impact of poor diet on the nation's health has become, with overweight and obesity, as well as dietary risks, driving a large number of deaths and disability in the UK. This data comes amid concerns about pressures on the NHS and economic inactivity in the workforce. Recent figures from ONS estimate that as many as 2.8 million people aged 16-64 years are economically inactive because of long-term sickness. This is clearly not sustainable.

Shifting the trajectory

Four dietary shifts were recommended as part of the National Food Strategy, published in 2021. These were a 30% increase in fruit and vegetables, 50% increase in fibre, a 25% reduction in high fat sugar and/or salt (HFSS) foods and 30% reduction in meat. At population level these shifts require small but significant changes in food options. The increase in fruit and veg, in volume terms, is equivalent to an apple a day, the increase in fibre to half a can of kidney beans, the decrease in HFSS food is equivalent to a third of a can of pringles and meat reduction equivalent to less than a single rasher of bacon.

Targets set for 2032 by The National Food Strategy



Using the 2021 Global Burden of Disease data, we modelled the potential reduction in deaths and years living in poor health that could result from achieving these dietary shifts immediately, drawing on the relevant dietary risk factors reported on in GBD, as described below².

The available data does not allow a fully comprehensive account of the impact of these dietary shifts (see table). It is important to note that the dietary shift on meat was only applied to red and processed meat consumption and the reduction in foods high in fat, sugar and or salt (HFSS) could only be applied to salt, sugary drinks and trans fatty acids. The model is likely to underestimate the true effects of the diet shifts for fibre and HFSS.

Scenario dietary shifts	GBD dietary risk factors
Increase fibre intake by 50%	<ul style="list-style-type: none"> • Fibre
Increase fruit & vegetable intake by 30%	<ul style="list-style-type: none"> • Vegetables • Fruit
Decrease meat consumption by 30%	<ul style="list-style-type: none"> • Unprocessed red meat • Processed meat
Decrease high fat, sugar, and salt foods by 25%	<ul style="list-style-type: none"> • Trans fatty acids • Sugar-sweetened beverages • Sodium

Based on this analysis, achieving these shifts could save approximately 6000 lives every year and reduce the total years living with disability by 28,857 every year. This represents a 10% reduction in both deaths and YLDs from dietary risk factors.

² The detailed description of GBD's methods on modelling the impacts of dietary risks are described here: <https://www.healthdata.org/gbd/methods-appendices-2021/dietary-risks>.

The top contributor to the reduction in YLDs seen was due to the shift away from red meat, along with reductions in processed meat, and increase in fruit and fibre. In the case of deaths, the top beneficial shift was that of fibre, along with a reduction in salt and increase in fruit.

Such gains could have important implications for boosting our economy by reducing economic inactivity caused by poor health, while also reducing pressures on the NHS and supporting interventions to rebuild it. To make this a reality however, government leadership and commitment will be vital.

What needs to be done

Policies need to focus on improving access, availability and affordability of healthy foods, while reducing the heavy promotion, advertising and widespread availability of highly processed and calorific foods with little nutritional value.

Example policies which could directly support the recommended dietary shifts include:

1. Build on the soft drinks industry levy (SDIL) to introduce new levies on foods which contribute a large amount of salt and sugar to our diet
2. Introduce a mandatory requirement that all food businesses report on the proportion of their sales which are unhealthy foods and their scope 3 emissions
3. Strengthen nutritional safety nets such as Free School meals and Healthy Start to ensure more children can access more fruit vegetables as they grow up.
4. Ensure that living wage and benefits levels allow people to afford a healthy and sustainable diet

Find out more about how to improve diets: visit [Election 2024: Nourishing the Nation](#)