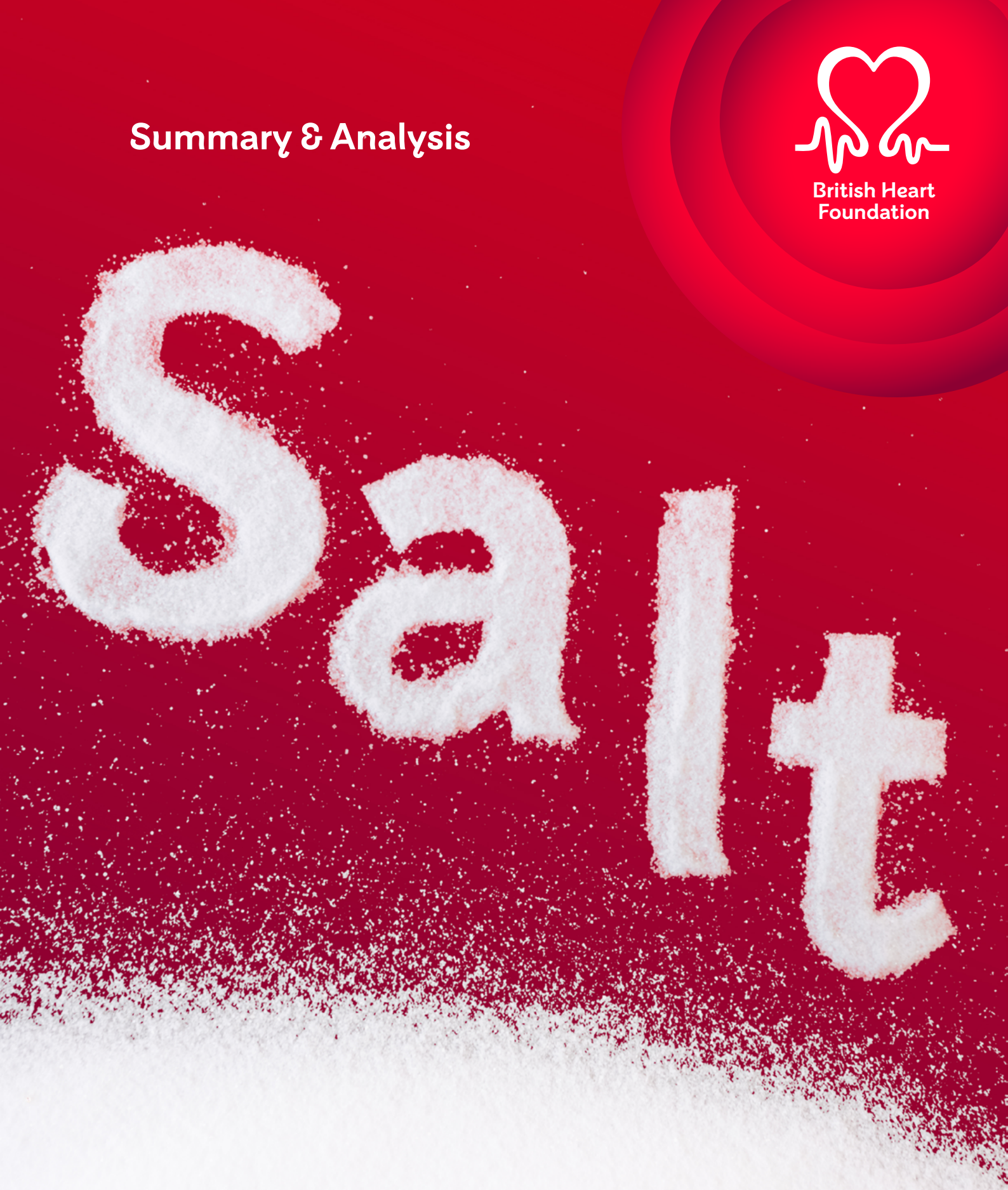
Summary & Analysis

British Heart Foundation



Modelling the potential impact of a reduction in salt consumption on hypertension, coronary heart disease and stroke in the population of the United Kingdom from 2021 to 2035

HEALTH LUMEN

Summary & Analysis

The challenge

Heart and circulatory diseases are a major health challenge in the UK, causing around a quarter of all deaths each year.[1] Around half of heart attacks and strokes are associated with high blood pressure, also known as hypertension.[2] An estimated 28% of adults in the UK have hypertension – around 15 million people – and at least half of them are not receiving effective treatment.[3] It is vital that those with hypertension are diagnosed and supported to manage their condition, so as to reduce their risk of a heart attack or stroke.

Preventing hypertension and subsequent diseases will be crucial for meeting the Government's target of an extra five years of healthy life by 2035,[4] as well as for achieving the 2019 NHS Long Term Plan target in England of preventing up to 150,000 heart attacks, strokes, and dementia cases this decade.[5]

This is even more important as we recover from the Covid-19 pandemic. The pandemic had a significant impact on NHS health checks (check-ups for people aged 40-74 to assess overall health, including cardiovascular risk factors), with delivery in England falling to nearly zero in quarter 1 of 2020/21.[6] The proportion of eligible people receiving NHS health checks is recovering slowly; the latest data (Q2 2021/22) shows delivery at half of its pre-pandemic levels.[7]

Consequently, opportunities to identify and treat people with hypertension have been significantly reduced and we can expect a long-term impact on the system as it recovers due to more people requiring support. The devastating impact of the pandemic on hypertension management could lead to thousands more heart attacks and strokes in the coming years unless bold action is taken. A joined-up approach to preventing and managing hypertension is needed to address the scale of the challenge, and reducing population salt intake will be an important element within this.

Why salt intake matters

There is an established relationship between salt intake and risk of high blood pressure.[8] Higher intakes of salt are associated with a 23% increase in the risk of stroke and a 14% increase in the risk of cardiovascular disease.[9]

Working-age adults in England consume an average of 8.4g of salt per day,[10] which is 40% above the UK's recommended maximum intake of 6g per day, and almost 70% over the World Health Organization's (WHO) 5g per day recommendation. Reducing salt consumption, as part of an overall focus on improving diets, is therefore critical for improving health outcomes.

Working-age adults in England consume an average of **8.4g** of salt per day, almost **70%** above the WHO's **5g** recommendation

If every adult in the UK met World Health Organization salt consumption guidelines by 2030 we could avoid ...

... up to
1.4 million
new cases of
high blood pressure

... up to **135,000**
new cases of
coronary heart disease

... up to **49,000**
new cases of stroke

... and save the
UK economy up to
£11.4 billion

... by 2035

How could salt reduction benefit health?

The British Heart Foundation commissioned consultancy HealthLumen to model how reducing average daily salt intake to UK and WHO guideline levels could contribute towards a much-needed reduction in hypertension across the UK population.

The modelling focused on an ambitious intervention scenario in which everyone's salt consumption was reduced to 6g per day by 2024, and 5g per day by 2030. The model assumed that this 5g per day intake was maintained until 2035, the Government's target for achieving 5 extra healthy years of life across the population. This was compared to a baseline scenario in which current salt consumption remains stable from 2021 to 2035.

Reducing salt in line with the intervention scenario could, according to the model, result in the following between 2021 and 2035:

- up to **1.4 million** fewer new cases of hypertension;
- up to **135,000** fewer new cases of coronary heart disease (CHD);
- up to **49,000** fewer new cases of stroke;
- more than **450,000** additional quality-adjusted life years (QALYs), that is, time living in perfect health.

What about the economic impact?

Achieving these international guidelines would generate savings of up to £11.4 billion between 2021 and 2035, due to reduced use of the NHS and increased productivity from both patients and informal carers.
This can be broken down into:

- **£6.7 billion** of direct cost savings, 70.3% of which are derived from hypertension-related savings;
- **£4.7 billion** of indirect cost saved due to reduced stroke incidence and CHD prevalence. This includes costs not related to healthcare such as the cost to business of lost productivity, and the cost of unpaid care provided by friends and family.

Putting salt high on the agenda

While our scenario reflects dietary guidelines, we are a long way off reaching them. However, these results highlight the potential for enormous health and economic benefits if we reset our ambition on reducing salt intake in the UK.

The Covid-19 pandemic has underlined that we need to build a more resilient nation and Government has rightly recognised the important role that public health interventions can play in this. We applaud recent commitments to obesity interventions, especially around the promotion and advertising of less healthy foods[11] and we need to see these fully implemented to have the best possible impact. But given the links between salt intake and hypertension, stroke, and CHD, it is crucial that salt is also firmly integrated in policies

to improve diet and health. Historically, the UK has made great progress reducing salt intake, but we've not seen the same momentum in recent years.

So, how can more progress be achieved? Unfortunately, there's no silver bullet. Instead, we need an ambitious, comprehensive national strategy consisting of a series of coherent measures, both industry-focused and through raising public awareness.

Reformulation: a key step to reducing our salt intake

It's estimated that as much as 85% of the salt we eat is already in our food at the point of purchase,[12] rather than being added during cooking or at the table. Therefore, a significant tool to reduce the UK's salt consumption will be reformulation by food manufacturers to reduce the levels of salt in the food on supermarket shelves and in restaurants.

Despite success in the early 2000s, industry progress towards more recent voluntary salt reduction targets has stalled, with only around half of all the average in-home salt reduction targets set in 2014 being met by 2017 and no change reported in 2018, which is the latest data available.[13] By comparison, mandatory measures to reformulate other nutrients have been more fruitful. Just a year after the Soft Drinks Industry Levy (also known as the "sugary drinks tax") was introduced, the average amount of sugar a UK household consumed via soft drinks dropped by 30g per week.[14]

The current voluntary salt reduction programme, launched in 2020, runs until 2024.[15] While we are yet to see data on progress, planning must start now for what comes next. Reformulation benefits everyone, without requiring major changes to how individuals live. To build on and accelerate progress made through voluntary programmes, the Government should consider a mandatory measure, like the industry levy on salt proposed in National Food Strategy, as it thinks through the next steps on reformulation and wider salt reduction policies. Bold action in this area will be critical for addressing hypertension, boosting the nation's heart health and, ultimately, saving lives.

It is estimated that as much as **85%** of the salt we eat is already in our food at the point of purchase

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