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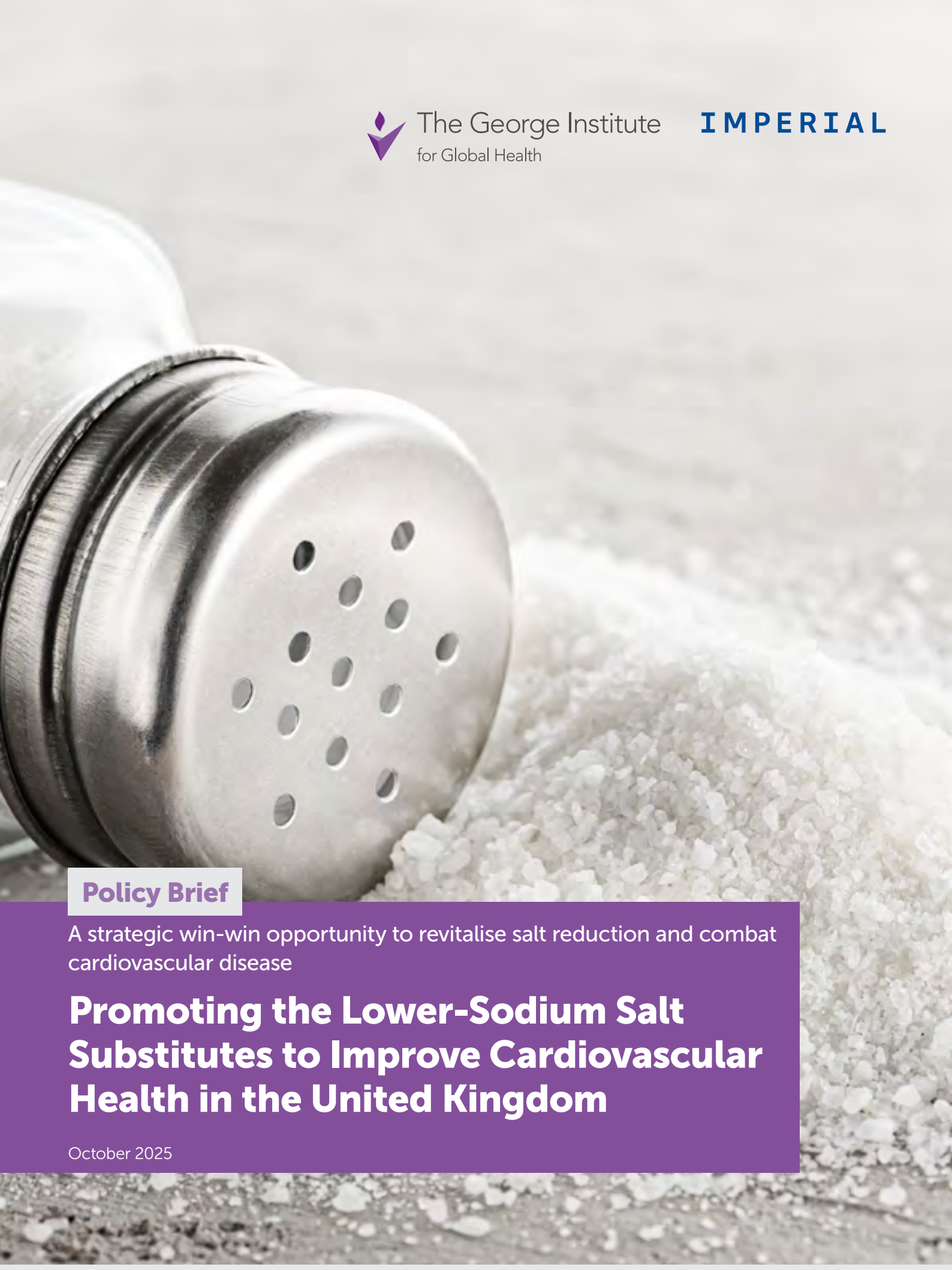
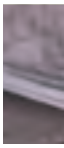


Policy Brief

A strategic win-win opportunity to revitalise salt reduction and combat cardiovascular disease

Promoting the Lower-Sodium Salt Substitutes to Improve Cardiovascular Health in the United Kingdom

October 2025



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How to Cite this Policy Brief:

Pineda E, Beaney T, Land M-A, Batz C, Kissock K, Trieu K. Promoting the Use of Low Sodium Salt Substitutes to Improve Cardiovascular Health in the UK: Policy Brief for the National Institute for Health and Care Excellence. London, UK: The George Institute for Global Health UK; 2025.

Available at: *www.georgeinstitute.org/why-do-we-need-to-switchthesalt*

Executive Summary

Promoting Lower-Sodium Salt Substitutes (LSSS) for Cardiovascular Health in the United Kingdom (UK) A strategic win-win opportunity to revitalise salt reduction and combat cardiovascular disease?

Cardiovascular disease (CVD) is the leading cause of mortality in the UK, responsible for approximately one in every four premature deaths. High blood pressure (hypertension), often driven by excessive sodium intake, affects around 14.4 million people in the UK and more than one in four adults and is a primary risk factor for heart attack, stroke, and kidney disease. Despite early progress, the UK's salt reduction efforts have plateaued, with average daily salt intake of 8.4g in men and 6.8g in women–well above the recommended 6g/day.

What are Lower-Sodium Salt Substitutes?

Lower-Sodium Salt Substitutes, also known as low sodium salt substitutes (LSSS), are modified salts that replace a portion of sodium chloride with potassium chloride. This simple substitution preserves the familiar taste of salt while reducing harmful sodium intake and increasing potassium intake, both of which contribute to lower blood pressure. Several LSSS products are already available on the UK market, making this an accessible and practical option for improving heart health.

Proven Benefits and Growing Global Support

There is now strong international evidence supporting the switch from regular salt to LSSS:

- 2021 – The Salt Substitute and Stroke Study (SSaSS) in China found a 12% reduction in all-cause mortality, 13% reduction in cardiovascular events, and a 14% reduction in stroke with LSSS use.
- 2022 – A Cochrane Review concluded that LSSS reduced blood pressure and cardiovascular risk in adults, with no evidence of serious harm.
- 2025 – The World Health Organization (WHO) recommends the use of lower-sodium salt substitutes (LSSS) as a feasible, affordable, and scalable strategy to reduce hypertension and cardiovascular risk globally.
- 2024 – The European Society of Cardiology (ESC) recommends reducing salt intake and increasing potassium through diet to help lower blood pressure, but does not currently make specific recommendations on the use of potassium-enriched salt substitutes.
- 2025 – The AHA/ACC guideline recommends potassium-enriched salt substitutes as a first-line lifestyle intervention to reduce blood pressure, except for individuals with serious kidney disease.

Potential Risk of Hyperkalaemia: Limited and Manageable

Clinical trial data show that Lower-Sodium Salts Substitutes modestly increase serum potassium levels, but do not cause clinical harm in the general population. The potential risk of high potassium (hyperkalaemia) is limited to a small group of individuals with advanced chronic kidney disease (CKD) or those on potassium-sparing medications, which is manageable through:

- Appropriate labelling and public health messaging
- Education of consumers and healthcare professionals
- Targeted advice for individuals at risk

NICE Position Statement and UK Scientific Guidance

The UK's Scientific Advisory Committee on Nutrition (SACN) and the Committee on Toxicity (COT) jointly concluded in their *2013 report* that Lower Sodium Salt Substitutes replacers offer public health benefits and are safe for most of the population.

Building on this, *the NICE hypertension guidelines from 2019* recommend that clinicians encourage most people with hypertension to reduce salt intake or switch to salt substitutes as part of a broader strategy to reduce blood pressure.

Policy Recommendations

The UK has a renewed opportunity to lead in global salt reduction efforts by supporting the wider adoption of LSSS. As a national leader in setting clinical standards and guiding public health practice, NICE is well placed to help advance this evidence-based intervention. To support safe and effective use of LSSS, we recommend the following actions:

1. Review and Integration into Guidelines

NICE should review and incorporate emerging evidence on LSSS into relevant clinical guidelines and quality standards, including:

- Hypertension (NG136)
- Cardiovascular disease: risk assessment and reduction (CG181)
- Stroke and transient ischaemic attack in over 16s: diagnosis and initial management (NG128)
- Endorsing LSSS for routine prevention in appropriate populations would send a strong signal to healthcare professionals, commissioners, and the wider food system.

2. Public Health Messaging

NICE should support the inclusion of LSSS in NHS dietary advice and public health communications. This includes:

- Encouraging health professionals to recommend LSSS to suitable patients, such as those with high blood pressure or at risk of cardiovascular disease. Example statement for consumer-facing messaging: '*Lower-Sodium Salt Substitutes are safe for most people but should not be used by individuals with serious kidney problems or those on certain medications without consulting a doctor.*'
- Aligning messaging with WHO recommendations on sodium and potassium intake and safe LSSS use

3. Evidence Generation and Evaluation Priorities

NICE can help strengthen the UK evidence base by identifying research gaps and supporting evaluation priorities, such as:

- UK-specific data on feasibility, acceptability, and equity
- Guidance on LSSS use in high-risk subgroups, including those with chronic kidney disease or on potassium-retaining medications

4. Cross-System Collaboration

- NICE should work with partners including the Office for Health Improvement and Disparities, NHS England, and the Food Standards Agency to ensure that any position it adopts informs wider implementation and policy efforts.
- By promoting the safe use of LSSS and coordinating across sectors, NICE can reinforce the UK's leadership in salt reduction and cardiovascular prevention. This shift from solely reducing salt intake to also replacing it offers a low-cost, population-level intervention with the potential to save thousands of lives.

Reversing Stalled Progress to Reduce Salt Intake in the UK

The UK has historically been a global leader in salt reduction, achieving significant early successes, primarily through food reformulation. However, over the past decade, progress has stalled. Reducing salt intake remains challenging for consumers, food manufacturers, and restaurants, and this difficulty is shared across many countries.

A promising and more feasible solution is to shift the focus from simply 'cutting' salt to 'switching' to low sodium salt substitutes (LSSS). These products reduce sodium (Na) intake while increasing potassium (K) intake, offering dual cardiovascular health benefits, as demonstrated by robust randomized controlled trial (RCT) evidence.

However, scaling up the use of LSSS will require coordinated, multisectoral action. Governments must lead by creating enabling environments, using policy levers, public procurement policies, fiscal incentives, and potentially mandating LSSS use in specific settings.

The food industry must be engaged to reformulate products and actively promote LSSS. Meanwhile, consumer uptake hinges on awareness, affordability, and cultural acceptance, which can be hindered by established cooking practices and taste preferences. Without alignment across government, industry, and consumers, adoption is likely to remain slow and uneven.

While the health benefits of Lower-Sodium Salt Substitutes (LSSS) are substantial, including reductions in blood pressure and cardiovascular risk, the strategy also raises concerns around cost and the potential risk of hyperkalaemia. Hyperkalaemia is a condition where potassium levels in the blood become too high, which can affect heart rhythm and, in severe cases, be life-threatening. A recent commentary by Trieu et al. (2025) reinforces that potassium-enriched salt substitutes can safely support both cardiovascular and kidney health when used appropriately, even in populations with elevated baseline risk (The Lancet Global Health, 2025)

This risk is primarily relevant for individuals with impaired potassium excretion, such as those with advanced chronic kidney disease (CKD stages 4–5), or individuals taking potassium-sparing diuretics or potassium supplements.

Around 10% of the global population has chronic kidney disease, only about 2% progress to late-stage disease. Indeed, modelling studies show a favourable benefit-risk profile even among high-risk groups. *www.ahajournals.org/doi/10.1161/HYPERTENSIONAHA.123.21343*

Trieu K, de Borst M, Brady M, et al. 2025 Potassium-enriched salt substitutes: supporting global cardiovascular and kidney health. The Lancet Global Health. *doi.org/10.1016/S2214-109X(25)00235-9*

Reflecting this evidence, the WHO now recommends replacing regular table salt with lower-sodium, potassium-enriched substitutes for the general population. This guidance is supported by strong trial evidence showing that salts replacing 15–50% of sodium chloride with potassium chloride reduce blood pressure and lower cardiovascular events. Currently, individuals with chronic kidney disease (CKD) are excluded due to concerns about hyperkalaemia, despite CKD affecting one in ten adults globally and hyperkalaemia typically becoming a concern only in advanced disease.

A new Lancet Global Health Comment by Trieu, de Borst, Brady and colleagues (2025) argues that most people with CKD, particularly those with early-stage disease, could safely benefit from potassium-enriched salt substitutes when supported by simple risk-mitigation strategies. Integrating this updated perspective into UK policy would enable broader population benefit while maintaining appropriate protections for those at genuine risk.

To mitigate these risks a tailored rollout strategy should include:

- **Clear front-of-pack labelling** with appropriate health warnings.
- **Public education campaigns** to raise awareness of who should and shouldn't use LSSS.
- **Targeted guidance for at-risk groups**, especially those with diagnosed kidney disease or on medications that influence potassium levels.

These safeguards will be developed with regulatory and clinical input during the study, helping ensure both safety and public trust in Lower-Sodium salt as a viable public health intervention.

In the UK, implementation would initially focus on discretionary use and collaboration with key stakeholders such as food manufacturers and the hospitality sector. By embracing this innovative approach, the UK can reinvigorate its salt reduction agenda and achieve significant, long-term public health gains.

Background

In the UK, high blood pressure is the single biggest risk factor for death, contributing to thousands of preventable deaths each year. Cardiovascular diseases (CVDs), including heart attacks, strokes, and heart failure remain a leading public health challenge, with hypertension as the foremost modifiable risk factor globally. Excessive sodium consumption, primarily from salt (sodium chloride), is a well-established contributor to high blood pressure and associated CVDs.

Low-sodium alternatives, commonly referred to as low-sodium salt substitutes (LSSS), low sodium salt, or mineral salt, offer a simple but powerful intervention. These products work by replacing a portion of sodium with potassium or other minerals to reduce cardiovascular risk. The World Health Organization (WHO) recognises their potential in its 2025 guideline on the use of lower-sodium salt substitutes, recommending the replacement of regular salt with LSSS alternatives as a key strategy to reduce hypertension and cardiovascular disease. The WHO also calls on member states to integrate LSSS into national salt reduction strategies, highlighting their cost-effectiveness, scalability, and public health impact.

In response to this growing body of evidence and global momentum, this evidence brief summarises key findings and resources to support UK policymakers, NGOs, and health advocates in encouraging the uptake of LSSS as a proactive, population-wide measure to improve cardiovascular health.

The George Institute has led twenty years of research into the health benefits of this approach to sodium reduction, with the completion of the *China Salt Substitute and Stroke Study (SSaSS) in 2021.* While SSaSS was conducted in a non-Western setting, its findings are supported by a growing body of international evidence, including studies in high-income and Western countries, demonstrating that switching from regular salt to LSSS is both effective and feasible across diverse populations and dietary contexts.

Critically, acceptability of LSSS are high: in the SSaSS trial, 92% of more than 10,000 participants assigned to LSSS were still using it after five years, demonstrating sustained use at scale. Collectively, the evidence shows that a widespread switch to LSSS is very likely to generate substantial health gains, is acceptable to consumers, practical for governments to support, and sustainable in the long term.

Importantly, the UK population also falls short of recommended potassium intake levels. Most people in the UK do not meet the daily recommended intake of 3,500 mg of potassium, which is essential for maintaining healthy blood pressure and reducing cardiovascular disease risk. Increasing potassium intake, alongside reducing sodium, is a well-established strategy for improving cardiovascular outcomes.

Potential Risk of Hyperkalaemia

There is no evidence from clinical trials among the general population that lower-sodium, LSSS cause clinically significant hyperkalaemia. However, high-risk groups, such as individuals with chronic kidney disease, have typically been excluded from these trials. There is a recognised rationale for increased risk in specific populations, particularly those with severe chronic kidney disease or those taking potassium supplements or potassium-sparing diuretics, if these products are consumed in excess. These risks are generally well understood by healthcare professionals and individuals managing such conditions Nonetheless, they can be further mitigated through clear labelling of potassium content on food products and salt substitutes, targeted education for vulnerable groups, and appropriate professional guidance.

Importantly, risk–benefit modelling studies conducted in both China and *India* reinforce the conclusion that the population-level benefits of switching to LSSS significantly outweigh the potential risks. For example, modelling from China estimated that replacing regular salt with LSSS could prevent approximately 462,000

cardiovascular deaths annually—a benefit-to-risk ratio of more than 45 to 1 (*BMJ, 2020*). Similarly, modelling in India projected that 214,000 (95% uncertainty interval, 92,764-353,054) deaths could be averted each year through nationwide implementation of LSSS, again with a substantial net health benefit, even under conservative assumptions regarding hyperkalaemia risk (*Hypertension, 2023*).

Taken together, the evidence strongly supports the conclusion that while vigilance is warranted for certain at-risk groups, the overall use of lower-sodium salt substitutes remains a safe and highly effective public health strategy to reduce cardiovascular disease at the population level.

The evidence presented here strongly supports the widespread switch of regular salt to LSSS as a pragmatic and effective strategy to enhance cardiovascular health. LSSS have consistently demonstrated substantial reductions in stroke, major cardiovascular events, and overall mortality, with no significant safety concerns. Switching from regular salt to LSSS is a low-cost, life-saving intervention and should be promoted by governments and used by the food industry, salt manufacturers, and consumers.

Switching from regular salt to LSSS is recommended for the general population. Caution remains appropriate for individuals with advanced kidney disease due to the potential risk of hyperkalaemia, although emerging evidence, indicates that many people with earlier-stage CKD may also be able to benefit safely with appropriate clinical guidance.

The findings presented in this brief underscore the potential of salt substitutes to significantly improve public health outcomes in the UK by addressing the prevailing issue of sodium-potassium imbalance in contemporary diets. Promoting the use of LSSS should be prioritized as a public health priority for reducing hypertension and its associated cardiovascular risks.

Overall Conclusion

The evidence presented here strongly supports the widespread switch of regular salt to LSSS as a pragmatic and effective strategy to enhance cardiovascular health. LSSS have consistently demonstrated substantial reductions in stroke, major cardiovascular events, and overall mortality, with no significant safety concerns. Switching from regular salt to LSSS is a low-cost, life-saving intervention and should be promoted by governments and made by the food industry, salt manufacturers, and consumers. Switching from regular salt to LSSS is recommended for the general population. Caution is advised for individuals with serious or advanced kidney disease, for whom the potential risk of hyperkalaemia remains important. Emerging evidence, however, suggests that many people with earlier-stage CKD may also be able to use LSSS safely with appropriate clinical guidance.

The findings presented in this brief underscore the potential of salt substitutes to significantly improve public health outcomes in the UK by addressing the prevailing issue of sodium-potassium imbalance in contemporary diets. Promoting the use of LSSS should be prioritised as an effective and scalable strategy to reduce hypertension and related cardiovascular risks.

A Call to Action for a National Shift to Lower-Sodium Salt Substitutes

The collective evidence from high-quality trials, systematic reviews, and modelling studies across diverse populations and geographies strongly supports a population-wide shift from regular salt to Lower-Sodium Salt Substitutes as a highly effective, feasible, and scalable strategy to reduce the global cardiovascular disease burden.

The Salt Substitute and Stroke Study, alongside multiple corroborating studies, including those conducted in Western, low- and middle-income, and elderly care populations, has demonstrated that switching to LSSS can lead to meaningful reductions in blood pressure, stroke, major cardiovascular events, and all-cause mortality.

These benefits are not only clinically significant but also offer strong economic value, with large-scale impelling in China and India projecting that widespread adoption of LSSS could prevent hundreds of thousands of deaths annually, reducing long-term healthcare costs and easing the burden on health systems. Given the growing and robust body of international evidence, we urge NICE to consider how the promotion and appropriate use of low sodium salt substitutes LSSS can be better reflected in national clinical guidance, particularly in relation to the prevention and management of hypertension, cardiovascular disease (CVD), and stroke.

NICE has a crucial role in improving cardiovascular health by evaluating public
health and clinical evidence, setting standards of care, and guiding NHS service delivery.
Based on these responsibilities, we recommend the following actions:

1. **Consider reviewing and incorporating evidence on LSSS into relevant clinical guidelines and quality standards, particularly:**
   - Hypertension (NG136)
   - Cardiovascular disease: risk assessment and reduction (CG181)
   - Stroke and transient ischaemic attack in over 16s: diagnosis and initial management (NG128)

Endorsing LSSS as a safe and effective sodium-reduction strategy, while recognising populations for whom it may not be suitable, would send a strong signal to clinicians, commissioners, and the food system that LSSS has a role in routine prevention strategies.

2. **Support the inclusion of LSSS-related advice in NHS public health and dietary messaging, by:**
   - Identifying opportunities for health professionals to recommend LSSS to appropriate patients (e.g. those with hypertension or at risk of CVD), as part of dietary advice;
   - Aligning dietary messaging with WHO guidance on sodium and potassium intake, including the safe use of LSSS.
3. **Contribute to the evidence base by identifying key gaps and supporting evaluation priorities, particularly regarding:**
   - UK-specific data on effectiveness, feasibility, and equity impacts;
   - Guidance on safe use in specific subgroups (e.g. people with chronic kidney disease or those on potassium-retaining medications).

NICE can play a key role in identifying priority areas for further research and data synthesis to inform national decision-making.

4. **Collaborate with system partners** (such as the Office for Health Improvement and Disparities, NHS England, and the Food Standards Agency) to ensure that any guidance or position taken by NICE can inform wider salt reduction strategies and implementation plans.

Finally, by collaborating with system partners such as the Office for Health Improvement and Disparities, NHS England, and the Food Standards Agency, NICE can ensure that any recommendations it makes contribute to a coherent, system-wide salt reduction approach. In doing so, NICE would reinforce the UK's position as a global leader in cardiovascular disease prevention and help lay the foundation for a scalable, evidence-based strategy that can improve population health.

Acknowledgements

This policy brief was developed by The George Institute for Global Health UK and Imperial College London, drawing on a growing body of international and UK-focused research into the role of lower-sodium salt substitutes (LSSS) in reducing high blood pressure and preventing cardiovascular disease.

The George Institute has been at the forefront of global salt reduction efforts for over two decades. Our work includes major clinical trials, such as the Salt Substitute and Stroke Study (SSaSS), policy engagement with the World Health Organization, and ongoing support to governments, regulators, and civil society to advance sodium reduction strategies.

This brief forms part of our wider evidence and advocacy initiative, Switch the Salt, aimed at supporting the safe, equitable, and widespread adoption of lower-sodium salt substitutes in the UK and globally. The programme is working with health professionals, government agencies, retailers, and food manufacturers to explore policy pathways, consumer awareness strategies, and regulatory enablers for LSSS.

Annexure

Evidence summary

1. **Evidence for LSSS on Cardiovascular Disease and Mortality**

   New England Journal of Medicine Study (NEJM, 2021)

   Reference: *Neal B, Wu Y, Feng X, et al. N Engl J Med. 2021;385(12):1067-1077. doi:10.1056/NEJMoa2105675*

   Study Focus: Investigated the effect of LSSS on cardiovascular outcomes in a large-scale randomised trial.

   Results: LSSS use led to a 14% reduction in stroke, 13% reduction in major cardiovascular events, and 12% reduction in all-cause mortality.

   Interpretation: Substitution of regular salt with LSSS significantly reduces cardiovascular risk and mortality.

   Safety: No significant increase in serious adverse events attributed to hyperkalaemia.

   Systematic Review and Meta-analysis (Heart, 2022)

   Reference: *Yin X, Rodgers A, Perkovic A, et al. Effects of salt substitutes on clinical outcomes: a systematic review and meta-analysis. Heart. 2022;108:1608–1615. doi:10.1136/heartjnl-2022-321332.*

   Study Focus: Assessed clinical outcomes associated with salt substitute use.

   Results: Salt substitutes reduced systolic blood pressure by ~7 mmHg and lowered risks of stroke and CVD death.

   Interpretation: Confirms cardiovascular benefit of salt substitutes across diverse populations.

   Safety: Increased serum potassium levels, but no adverse clinical outcomes.

2. **Evidence for LSSS on CVD and Mortality in Subgroups**

   Cochrane Review (2022)

   References: *Brand A, Visser ME, Schoonees A, Naude CE. Replacing salt with low-sodium salt substitutes (LSSS) for cardiovascular health in adults, children, and pregnant women. Cochrane Database Syst Rev. 2022;8:CD015207. doi:10.1002/14651858.CD015207.*

   Study Focus: Evaluated LSSS in adults, children, and pregnant women.

   Results: Slight reductions in blood pressure, non-fatal stroke, and heart disease mortality in adults.

   Interpretation: Likely benefits extend to multiple subgroups.

   Safety: Potassium increase not linked to adverse effects; limited data on rare harms.

   Nature Medicine Study in Elderly Populations (2023)

   Reference: *Yuan Y, Jin A, Neal B, Feng X, Qiao Q, Wang H, Zhang R, Li J, Duan P, Cao L, Zhang H, Hu S, Li H, Gao P, Xie G, Yuan J, Cheng L, Wang S, Zhang H, Niu W, Fang H, Zhao M, Gao R, Chen J, Elliott P, Labarthe D, Wu Y. Salt substitution and salt-supply restriction for lowering blood pressure in elderly care facilities: a cluster-randomized trial. Nat Med. 2023 Apr;29(4):973-981. doi:10.1038/s41591-023-02286-8.*

   Study Focus: Assessed salt substitution in elderly care facilities.

   Results: 7.1 mmHg drop in systolic BP; reduced cardiovascular events.

   Interpretation: Demonstrates effectiveness and tolerability in elderly populations.

   Safety: Modest rise in potassium; no associated clinical harm.

3. **Evidence for No Harms Relating to LSSS**

   Modelled Risk in Chronic Kidney Disease Populations

   References: *Marklund M, Singh G, Greer RC, Cudhea F, Matsushita K, Micha R, et al. Estimated population-wide benefits and risks in China of lowering sodium through lower-sodium salt substitution: modelling study. BMJ. 2020;369:m824. doi:10.1136/bmj.m824; Marklund M, Singh G, Greer RC, et al.*

   Estimated Benefits and Risks of Using a Reduced-Sodium, Lower-Sodium Salt Substitute in India: A

Modelling Study. Hypertension. 2021;77(6):2084–2092. doi:10.1161/HYPERTENSIONAHA.120.16890.

Study Focus: Estimated population-wide risk-benefit ratios.

Results: In China, estimated 462,000 CVD deaths prevented vs 10,000 hyperkalaemia deaths. In India, similar net benefit observed.

Interpretation: Risk of hyperkalaemia is limited and outweighed by cardiovascular benefits.

Safety: Supports use with appropriate labelling and education.

SACN and COT UK Report (2013)

Reference: *Scientific Advisory Committee on Nutrition (SACN) and Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT). Potassium-based sodium replacers: assessment of the health benefits and risks of using potassium-based sodium replacers in foods in the UK. 2013.*

Study Focus: Evaluated health risks and benefits of potassium-based salt replacers.

Results: Identified modest benefits and low risk.

Interpretation: Supports cautious use, particularly in chronic kidney disease populations.

Safety: No adverse clinical outcomes found.

4. **Evidence for Scaling Up**

Implications for Scale-Up Study (Hypertension, 2023)

Reference: *Yin X, Paige E, Tian M, et al. The Proportion of Dietary Salt Replaced with Lower-Sodium Salt in the SSaSS: Implications for Scale-Up. Hypertension. 2023;80(5):956-965. doi:10.1161/HYPERTENSIONAHA.122.20115.*

Study Focus: Estimated effects of partial salt replacement.

Results: 72% substitution still delivered significant health gains.

Interpretation: Demonstrates that even partial adoption of LSSS can lead to measurable public health impact.

Safety: Mean serum potassium increased by 0.23 mmol/L in the intervention group; however, this was not associated with an increased rate of clinically significant hyperkalaemia or adverse events.

Evidence on Consumer Behaviour and Acceptability

SSaSS Adherence Data

Reference: *Neal B, Wu Y, Feng X, Zhang R, Zhang Y, Shi J, et al. Effect of Salt Substitution on Cardiovascular Events and Death. N Engl J Med. 2021 Sep 16;385(12):1067-1077. doi: 10.1056/NEJMoa2105675.*

Study Focus: Assessed long-term adherence to LSSS.

Results: 92% adherence after five years.

Interpretation: High acceptability and sustainability.

Safety: Long-term use did not result in increased adverse events; serum potassium levels were elevated slightly but remained within safe limits in the general population.

Systematic Reviews

References: *Brand A, Visser ME, Schoonees A, Naude CE. Replacing salt with low-sodium salt substitutes (LSSS) for cardiovascular health in adults, children, and pregnant women. Cochrane Database Syst Rev. 2022;8:CD015207. doi:10.1002/14651858.CD015207;*

Yin X, Rodgers A, Perkovic A, et al. Effects of salt substitutes on clinical outcomes: a systematic review and meta-analysis. Heart. 2022;108:1608–1615.

Study Focus: Reviewed the effects of salt substitutes on health outcomes, consumer acceptability, and behaviour change.

Interpretation: Behaviour change is facilitated by factors such as taste, familiarity, and ease of substitution. Interventions including public education and institutional implementation improve uptake.

Safety: Reviews noted mild elevations in potassium levels with no corresponding increase in adverse events, supporting safe implementation at population level.

5. **Evidence on Food Industry Reformulation**

SACN/COT Report (2013)

Reference: *Scientific Advisory Committee on Nutrition (SACN) and Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT). Potassium-based sodium replacers: assessment of the health benefits and risks of using potassium-based sodium replacers in foods in the UK. 2013.*

Study Focus: Evaluated feasibility of reformulation in food manufacturing.

Results: Technically viable and health-promoting.

Interpretation: Endorses reformulation as part of public health strategy.

Safety: Identified no adverse health impacts associated with food reformulation using potassium-based sodium replacers when used appropriately.

WHO Guidelines and Endorsement

Reference: *World Health Organization. Use of lower-sodium salt substitutes: WHO guideline Geneva; World Health Organization; 2025. Licence: CC BY-NC-SA 3.0 IGO.*

Interpretation: WHO recommends the use of lower-sodium salt substitutes as part of national strategies to reduce sodium intake, lower blood pressure, and prevent cardiovascular diseases. LSSS are presented as a viable strategy to complement existing salt reduction efforts and can be used at household level or incorporated into industrial food production.

Recommendation: WHO suggests replacing regular table salt with LSSS containing potassium chloride for discretionary use in the general adult population. This is a conditional recommendation, excluding children and pregnant women, and individuals with impaired chronic kidney disease function or those taking potassium-sparing medications. WHO further encourages Member States to adopt supportive policy actions, promote industry reformulation using LSSS, and improve population awareness and access.

Safety: Moderate-certainty evidence supports the safety of LSSS in the general population. Use of LSSS resulted in modest increases in serum potassium but no significant increase in risk of hyperkalaemia. WHO advises that LSSS should be clearly labelled and accompanied by public education and risk communication, especially in settings with undiagnosed chronic kidney disease.

Reference: *World Health Organization. Global report on hypertension: The race against a silent killer. 2023.*

Interpretation: Industry reformulation encouraged as critical part of salt reduction.

Recommendation: Promote LSSS use in processed foods.

Safety: WHO identifies the intervention as safe and beneficial for public health, provided that product labelling and guidance are clear and targeted for at-risk groups.

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To learn more about our campaign and access supporting resources, please visit:
Switch the Salt – The George Institute

For further discussion or collaboration opportunities, please contact:

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We are grateful to our policy and public health partners, including the NIHR ARC Northwest London, Action on Salt, and our Public and Community Advisory Panel, for their contributions and insights.