LSSS guideline launch event
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The road to finalizing the LSSS guideline

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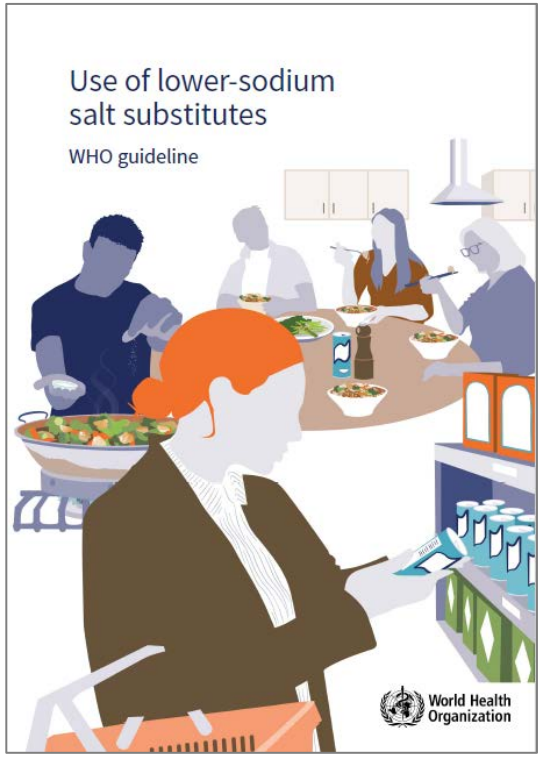

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Public consultation on draft guideline

- 31 March and 30 April 2023.
- Stakeholders and others were invited to provide feedback on:
  - clarity
  - potential missing information
  - setting-specific or contextual issues
  - implications for implementation
  - evidence needs for future research

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Public consultation process (cont'd)

- Open to everyone.
  - 13 sets of comments received from individuals and organizations [11 with Declaration of Interest forms were assessed]
- Comments summarized and posted on WHO website with WHO responses to **all comments**
- Several comments influenced the final guideline document
- NUGAG members involved in/kept informed during process

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The guideline itself has not changed

- Systematic review evidence
- Contextual factors review evidence
- Judgement of the certainty of evidence
- Judgement of the strength of recommendation

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Main changes based on comments received

- Fleshed out the introductory sections
  - Put further emphasis on the primary importance of sodium reduction and how LSSS is positioned as part of the overall sodium reduction strategy
  - Elaborated on the explanation on the process and GRADE approach.
- Added the summary of the results of the contextual factor review in addition to those of the systematic review
- Updated the section “Interpreting evidence”
  - Added a subsection “#3 Interpretation of the increase in blood potassium”
  - Added a subsection “#8 Additional analyses of studies published after the systematic review search date”

continued

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Main changes based on comments received (cont'd)

- Improved the section on "Evidence to recommendations" for clarity
  - Elaborated on how certainty of evidence and strength of recommendation were determined
- Expanded the section on "Translation and Implementation"
- Added Annex 8 to illustrate examples of country approaches with LSSS use
- **Revised the wording of the recommendation and supporting information** (*next slides*)!!

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WHO recommendation (2023 public consultation version)

WHO suggests the limited use of low-sodium salt substitutes as a replacement for discretionary salt use when it contributes to reducing sodium intake to below 2 g/day in adults (*conditional* recommendation, based on *low* certainty evidence).

WHO recommendation (2025 final version)

To reduce blood pressure and risk of cardiovascular diseases, WHO has recommended reducing sodium intake to less than 2 g/day (*strong* recommendation). In this context, using less regular table salt is an important part of an overall sodium reduction strategy.
If choosing to use table salt, WHO suggests replacing regular table salt with lower-sodium salt substitutes that contain potassium (*conditional* recommendation).
This recommendation is intended for adults (not pregnant women or children) in general populations, excluding individuals with kidney impairments or with other circumstances or conditions that might compromise potassium excretion.

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1. Setting context of the recommendation

WHO recommendation (2023 public consultation version)
WHO suggests the limited use of low-sodium salt substitutes as a replacement for discretionary salt use when it contributes to reducing sodium intake to below 2 g/day in adults (*conditional* recommendation, based on *low* certainty evidence).

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1. Setting context of the recommendation (cont'd)

WHO recommendation (2023 public consultation version)

WHO suggests the limited use of low-sodium salt substitutes as a replacement for discretionary salt use when it contributes to reducing sodium intake to below 2 g/day in adults (*conditional* recommendation, based on *low* certainty evidence).

WHO recommendation (2025 final version)

To reduce blood pressure and risk of cardiovascular diseases, WHO has recommended reducing sodium intake to less than 2 g/day (*strong* recommendation). In this context, using less regular table salt is an important part of an overall sodium reduction strategy.

If choosing to use table salt, WHO suggests replacing regular table salt with lower-sodium salt substitutes that contain potassium (*conditional* recommendation).

This recommendation is intended for adults (not pregnant women or children) in general populations, excluding individuals with kidney impairments or with other circumstances or conditions that might compromise potassium excretion.

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2. Updating the terminology for LSSS

WHO recommendation (2023 public consultation version)
WHO suggests the limited use of low-sodium salt substitutes as a replacement for discretionary salt use when it contributes to reducing sodium intake to below 2 g/day in adults (*conditional* recommendation, based on *low* certainty evidence).

WHO recommendation (2025 final version)
To reduce blood pressure and risk of cardiovascular diseases, WHO has recommended reducing sodium intake to less than 2 g/day (*strong* recommendation). In this context, using less regular table salt is an important part of an overall sodium reduction strategy. If choosing to use table salt, WHO suggests replacing regular table salt with lower-sodium salt substitutes **that contain potassium** (*conditional* recommendation). This recommendation is intended for adults (not pregnant women or children) in general populations, excluding individuals with kidney impairments or with other circumstances or conditions that might compromise potassium excretion.

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3. Adding the excluded populations in the recommendation

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This recommendation is intended for adults (not pregnant women or children) in general populations, **excluding individuals with kidney impairments or with other circumstances or conditions that might compromise potassium excretion**.

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Public comment: The draft guideline should state the slight increase in blood potassium seen with LSSS compared to regular salt (i.e. 0.12 mmol/L increase) is not clinically important for a normal range of blood potassium.

- A new subsection cites a systematic review and meta-analysis of RCTs that evaluated the safety of increasing potassium intake with supplements on circulating potassium and renal function (Cappuccio 2016).
- The study showed that a short-term, moderate increase in potassium intake using supplements caused an increase in circulating potassium levels of 0.14 mmol/L (95% CI 0.09 to 0.19), comparable to that observed in the LSSS trials and provides indirect evidence that the supplements did not seem to cause severe hyperkalaemia or deterioration in renal function in healthy people and patients whose kidney function is not impaired.

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Public comment: WHO should review and incorporate the latest data and evidence from a cluster RCT (Yuan 2023). The recommendations should be updated accordingly.

- As described in a new section that was added to the guideline* Yuan 2023 was published after the publication of the WHO systematic review (Brand 2022). This trial would have been eligible for inclusion in the systematic review.

- Additional analyses were conducted incorporating data for relevant primary outcomes reported on by Yuan 2023.

- These analyses did not result in consequential changes to pooled effects or certainty of evidence on which the recommendation is based.

* *Interpreting the Evidence: See paragraph # 8*

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Public comment: WHO should make a *strong* recommendation for LSSS use.

- Clarification to emphasize that a *conditional recommendation* gives each country the ability to assess their own situation, design and implement an adequate approach.
- Policy makers and programme managers must have substantial dialogue and also involve many stakeholders to discuss whether and how they would implement the LSSS recommendation.
- The guideline provides a list of key considerations by policy-makers and programme managers when discussing the implementation of the recommendation on the LSSS use at a country level.
- Significantly expanded the section on implementation to facilitate the translation and implementation.

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Public comment: The recommendation should leave open the potential for use of LSSS in manufactured food products.

- This is an area for further research. There was not enough evidence to substantiate such use of LSSS.
- It was not possible to extrapolate the findings on LSSS as table or cooking salt to LSSS already in foods as purchased by the consumer. Such *non-discretionary* use raises different effectiveness and safety issues and would involve different contextual factors.
- For reference purposes, the new Annex 8 provides examples of various approaches adopted by certain countries regarding the LSSS use in manufactured foods, foods served at restaurants and other out-of-home settings.

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Thank you

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