



LOW SODIUM SALT: GOVERNANCE

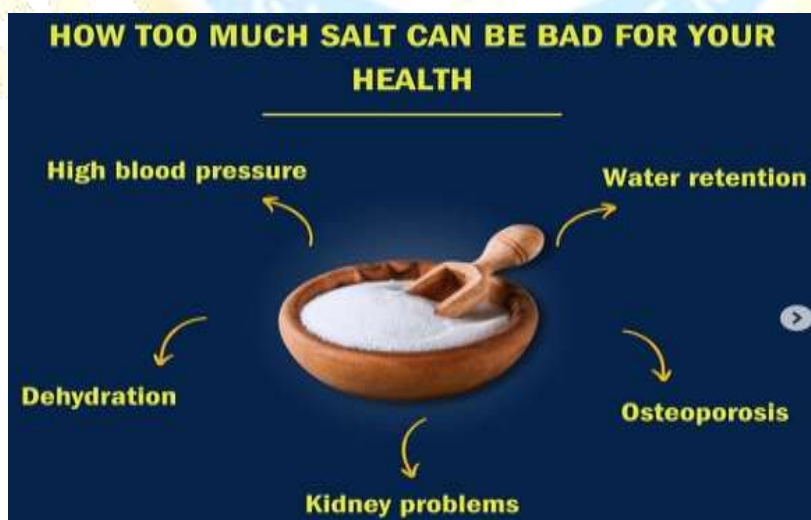
NEWS: A little less sodium, a little more potassium – What WHO's recommendation for low sodium salt alternatives means for India

WHAT'S IN THE NEWS?

The WHO has recommended Low-Sodium Salt Substitutes (LSSS) to reduce sodium intake and curb hypertension and cardiovascular diseases, particularly in countries like India, where salt consumption is high. However, concerns regarding affordability, accessibility, and health risks for individuals with kidney diseases pose significant challenges.

1. WHO's Recommendation on Low-Sodium Salt Substitutes (LSSS)

- The WHO suggests replacing **sodium chloride (NaCl)** with **potassium chloride (KCl)** in table salt to reduce sodium intake.
- The goal is to bring **daily sodium consumption below 2g per person** to lower the risks of hypertension, strokes, and cardiovascular diseases (CVDs).
- The guidelines specifically target **household salt usage** and do **not** apply to packaged foods or restaurant meals.
- Exemptions:
 - **Pregnant women**
 - **Children**
 - **Individuals with kidney diseases** (due to the risk of hyperkalemia caused by excess potassium).





2. Historical Role of Salt in Public Health: India's Experience

a) Success of Iodized Salt in India

- In the **1950s**, India introduced **iodized salt** as a public health measure to eliminate **iodine deficiency disorders**.
- This intervention significantly **reduced cases of goiter, hypothyroidism, and cognitive impairments** across the country.

b) Current Challenge: High Salt Consumption and Health Risks

- Unlike iodine fortification, **excessive sodium consumption** in India is now a **major public health crisis**, linked to hypertension and cardiovascular diseases.
- Cultural dietary habits, including the widespread use of **pickles, processed snacks, and added salt in cooking**, contribute to excessive sodium intake.

3. Health Impacts of Excess Sodium Consumption

Hypertension & Cardiovascular Diseases (CVDs)

- High sodium intake **increases water retention**, raising **blood volume and pressure**.
- Leads to **atherosclerosis** (narrowing of arteries), increasing the risks of:
 - **Heart attacks**
 - **Strokes**
 - **Heart failure**

Vascular Stiffness

- Excess sodium **reduces blood vessel flexibility**, forcing the heart to pump harder, contributing to **hypertension and organ damage**.

Impact on Kidney Health

- **High sodium levels overwork the kidneys**, leading to:
 - Increased **protein leakage in urine** (a marker of kidney damage).
 - **Chronic Kidney Disease (CKD)** progression.
- Individuals with kidney issues **cannot excrete potassium efficiently**, making **potassium-based salt substitutes dangerous** due to the risk of **hyperkalemia (high potassium levels)**.

Other Health Risks of Excess Sodium



- **Increased risk of gastric cancer** due to inflammation and cellular damage in the stomach lining.
- **Calcium loss from bones**, contributing to **osteoporosis and fractures**.
- **WHO estimates that 1.9 million deaths annually** are attributed to high sodium consumption.

4. India's High Salt Consumption: Public Health Concerns

- Studies show **Indians consume more sodium** than WHO's recommended 2g/day limit.
- **2013 British Medical Journal (BMJ) study findings:**
 - Reducing sodium intake by **4.4g/day for 4 weeks** resulted in:
 - **Systolic blood pressure reduction by 4mmHg**
 - **Diastolic blood pressure reduction by 2mmHg**

5. Challenges in Implementing Low-Sodium Salt Substitutes (LSSS) in India

Affordability & Market Access

- **LSSS is significantly costlier than regular salt**, making it inaccessible to low-income households.
- Experts recommend **government intervention to regulate pricing and improve availability**.

Lack of Consumer Awareness

- Majority of Indian households **are unaware of salt-related health risks** and the benefits of LSSS.
- **The Sapiens Health Foundation** has launched initiatives to train **300 physicians nationwide** to promote awareness.

Policy & Regulatory Issues

- **No mandatory labeling for high-sodium foods** in India.
- WHO suggests **stronger government policies**, including:
 - **Clear labeling** on packaged foods to indicate sodium content.
 - **Public awareness campaigns** similar to iodized salt initiatives.

Health Risks of Potassium-Based Substitutes



- **Potassium chloride (KCl) in LSSS can be dangerous** for individuals with kidney diseases, as it **raises potassium levels (hyperkalemia), leading to cardiac complications.**
- Large sections of India's population are **undiagnosed for kidney ailments**, increasing the risk.

6. Potential Solutions & Policy Recommendations

- **Promoting Natural Salt Alternatives :** Encouraging the use of **herbs and spices** instead of salt to enhance flavor.
- **Subsidizing Low-Sodium Salt :** Government **subsidies** can lower costs and **increase adoption rates** among the general public.
- **Public Awareness Campaigns :** Educational programs similar to iodized salt campaigns can help inform consumers about **sodium-related health risks.**
- **Stronger Food Labeling Laws :** Mandatory "**high sodium**" warning labels on packaged foods to help consumers make healthier choices.
- **Encouraging Home-Based Salt Reduction :** Advocating for **gradual reduction in table salt usage** in daily cooking.

Source: <https://www.thehindu.com/sci-tech/health/sodium/article69158576.ece>