

# Sodium reduction in food production

## Effective strategies and benefits

Globally, dietary sodium intake consistently exceeds recommended levels. Excessive sodium consumption is linked to hypertension and cardiovascular diseases,<sup>1</sup> making sodium reduction in food products essential.

The EU is committed to a **30%** sodium reduction in food by 2030, closely monitoring the development in every country.<sup>2</sup>



### Possible strategies of salt reduction

- 1 Gradual reduction over time of sodium**
- 2 Ingredient replacement:**
  - a with potassium chloride
  - b with magnesium chloride
- 3 Flavour modulation:**
  - a Umami flavour with yeast extracts, natural flavours, seaweed
- 4 Alternative spices**
  - a Incorporating herbs, spices, and other flavour enhancements
- 5 Fermentation**

**Potassium (K) & magnesium (Mg) also boost the nutritional value, promoting better cardiovascular health. Potassium helps counteract sodium's adverse effects; Magnesium supports e.g. muscle and nerve function.<sup>3</sup>**



**Beyond Sea Salt**  
NuTek Natural  
Ingredients

A free flowing crystalline, clean label powder. Achieve: Up to 50% sodium reduction with more potassium; No metallic taste from KCl due to patented encapsulated technology; Simple replacement; Great taste; Equivalent functionality.



**MgCl<sub>2</sub> Crystals**  
food grade  
Nedmag

MgCl<sub>2</sub> salt enhances ionic strength. Lower sodium content without loss of taste and functionalities. Nedmag's MgCl<sub>2</sub> salt is highly soluble in water, hygroscopic and helps to increase shelf life, emulsion stability and macromolecular interactions.

<sup>1</sup> Strazzullo P et al. Salt intake, stroke, and cardiovascular disease: Meta-analysis of prospective studies. *BMJ*. 2009;339:1-9.

<sup>2</sup> World Health Organization. Massive efforts needed to reduce salt intake and protect lives. 2023 Mar 9

<sup>3</sup> Codinã GG et al. Strategies for Reducing Sodium Intake in Bakery Products, a Review. *Appl Sci*. 2021;11(7):3093.