KERRY

Retaining essential flavour properties and replicating salty impact, body, and linger when reducing sodium in processed foods



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Sodium Reduction is Society's Urgent Imperative

The global mean sodium intake of adults is 4310mg. This is more than double the World Health Organization's (WHO) recommendation for adults of less than 2000mg per day of sodium.

High-sodium foods
pose a threat to public
health, and the WHO
has called for the food
industry to address
excessive sodium
content in popular
processed foods.

Reducing sodium content in processed foods while maintaining taste and quality presents a significant challenge for manufactures.

Sodium Reduction is **Society's Urgent Imperative**

64%

of consumers know that **eating too much sodium** is **unhealthy**¹

3 million

people around the world are dying every year from the consequences of excessive salt consumption²

37%

of consumers **pay attention** to how much sodium they consume¹

18%

of consumers globally lowered the salt / sodium in their diet in the past 12 months³

European Consumers declare their intention to reduce their salt intake





Salt

remains in the top 5 ingredients that consumers are conscious of reducing / limiting in their diets



European consumers are actively looking at reducing their salt intake

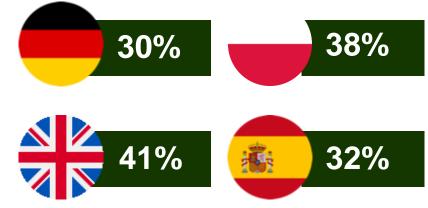


>3 Million

Lives lost each year due to high salt intake in diets

*Kerry Proprietary Research : Sustainability in Motion, Innova Health & Nutrition Survey, Global Nutrition Report - Global Nutrition Report







Governments across Europe respond with many countries implementing voluntary or mandatory nutrition policies

Irish Reformulation Roadmap | 2025



NUTRI-SCORE | 2017 & revised 2024



Adopted in France, Spain, Belgium, Germany, Switzerland, Luxembourg & The Netherlands

EU Farm to Fork | 2025/6

Restrictions on the promotion (via nutrition or health claims) of foods high in salt, sugars and/or fat.

Proposing mandatory Front-of-Pack Labelling





DHSC Targets

Salt, Calorie and Sugar reduction

HFSS UK | 2023 & 2025

Restricting marketing & advertising of food High in Fat, Salt and/or Sugar.

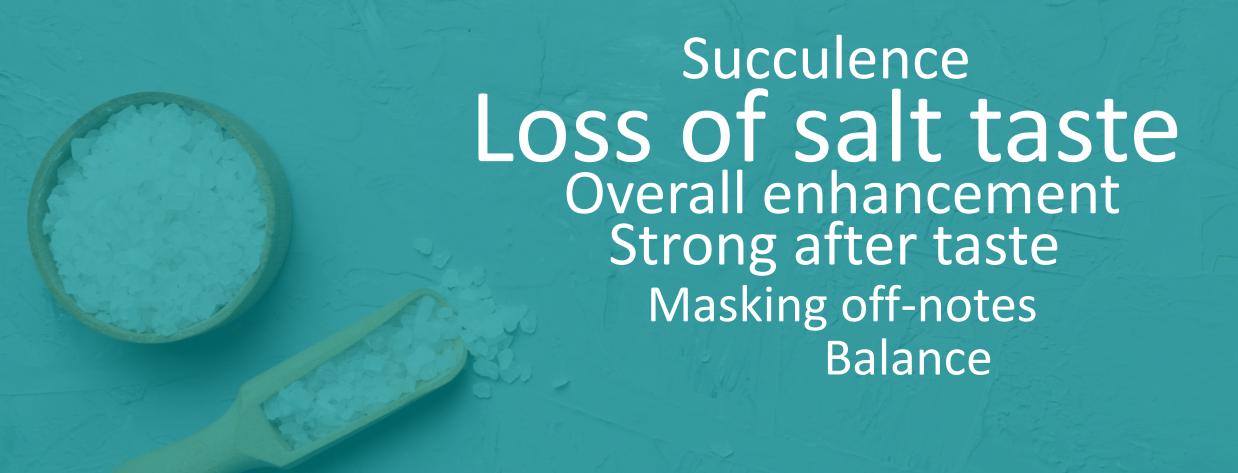


Strategies for Saltiness Perception

Saltiness Modulation **KCL-Based** Neuroscience Umami Substitute Perceptual Tomato & High KCL Sea Salt Small Structure Mushroom Constancy Crossmodal Yeast Extract & Porous Structure Potassium Salt Correspondence **HVP** Umami Peptides



But there are taste challenges when reducing salt/sodium...

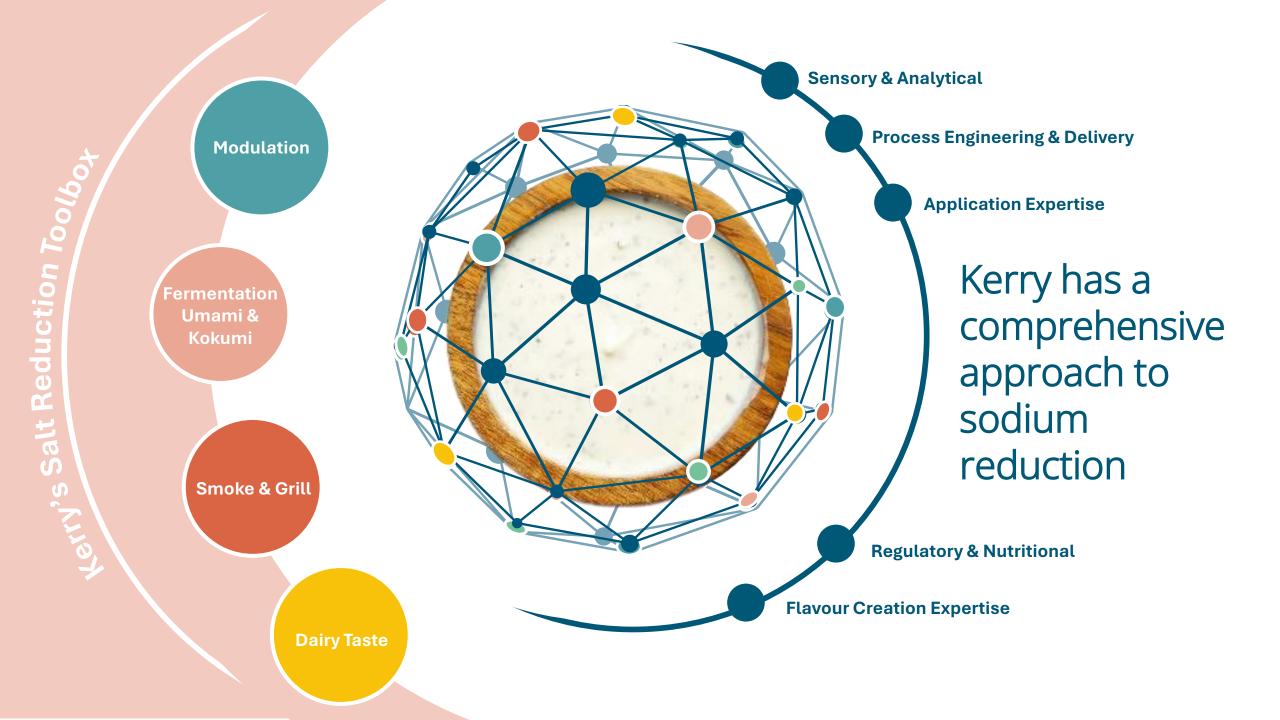


Taste Challenges of Reducing Salt

What needs to be solved? Challenge **Physiological Response** Particle size (Micronised salts/KCL activation of the Na ion channel Sandwich), Mineral salts **Upfront Balance Flavour** Acid profile *Impact* **Saltiness (Flavour)** Upfront taste of salt Middle Build up of the flavor profile such as **Enhancement** depth, intensity, dimensional Body & Depth Succulence Salivation, juiciness, body, & depth Late Lingering & **Bitterness masking** Aftertaste



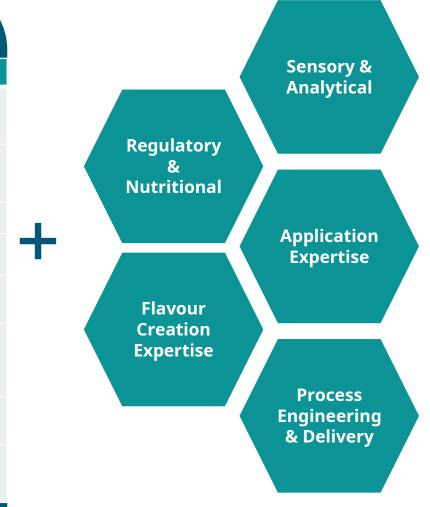




Kerry has a comprehensive approach to create tasty and consumer preferred **sodium reduced foods**



Sodium Reduction Toolbox	
Technology	Sensory Characteristics
Tastesense™ Masking	Masking of off-notes, bitterness & metallic notes (KCl)
Tastesense™ Mouthfeel	Brings back or improves mouthfeel / mouthcoating / full-bodiness
Tastesense™ Salt	Clean label salt substitute
Umamex™	Clean label savory enhancement
Natural Flavour Enhancer	Characteristics of MSG
Savoury Taste Portfolio	Savory inspired profiles: meat & seafood, vegetable & herb, smoke, cooking method, stocks & broths, yeast extracts
Dairy Taste Portfolio	Dairy inspired profiles
Preservation Systems	Alternative preservation solutions without sodium base





Tastesense[™] Salt

Kerry answers your sodium reduction challenges by tackling the Taste, Texture and Preservation dimensions holistically.

Our Tastesense™ Salt tools are enabled by proprietary fermentation and peptide metabolism technology, combined with our expertise in Dairy, Smoke, Umami & Kokumi to deliver great Taste.

We integrate our **Taste solutions synergistically** with our leading portfolio in **Food preservation** and our **application expertise** to holistically solve Sodium reduction challenges.

Sodium Expertise

- Tastesense™ Salt
- Tastesense™ Masking
- Umamex™

Benefits

- Build back salt perception
- Rebalance overall taste experience
- Adds intensity and taste dimensions
- Covers bitter aftertaste
- Globally suitable
- Clean Label: Natural Flavor and Yeast Extracts

Potential Claims

- Low/ reduced sodium
- Clean label
- Kosher
- Halal

Applications

- Prepared Meals
- Sides
- Soups
- Sauces
- Dressings
- Potato Dishes



Sustainable Nutrition Moment: Tastesense™ Salt



The Challenge

Customers were battling high sodium rates which can bring a greater risk of heart disease and stroke for the consumer. But to reduce global salt consumption, customers were searching for a solution to allow the tatse of salt in their products to remain unchanged, while cutting the sodium from their products.



The Impact

Our technology aids people to remain in line with the **salt intake recommended** by the World Health Organisation. By **reducing 1.000 tons** of salt, we are saving 333 human lives from the high risks of a diet high in sodium.





The Solution

Kerry introduces **Tastesense Salt**, an innovative technology that **replaces** and **replicates** the salt and umami taste. With Tastesense's flavour enhancing and preservation properties, Kerry is prepared to solve the sodium reduction challenge across a range of applications; from meat to snacks, sauces and bakery alike.



So What?

Kerry's Tastesense Salt reduces the amount of sodium without compromising the shelf-life, cost, texture or taste. It also improves the nutritional scoring of the product which helps draw consumers.

THANK YOU

Any questions?



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