



# Achieving Salt Reduction in Bread

**Presented by Larry McDonald**

On behalf of The Irish Bread Bakers Association

# Irish Bread Bakers Association



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# Irish Bread Bakers Association

## IBBA production

Equivalent of 30,000 bread units per hour

## Market share

Volume 66%

Value 68%

The workforce: 1100 direct employees

First Association to become involved in salt reduction campaign with FSAI

Committed to continuing to play our part in salt reduction



# Salt in Bread

## Contribution to diet:

FSAI Report stats 2005

Bread contributing 26% to the daily intake

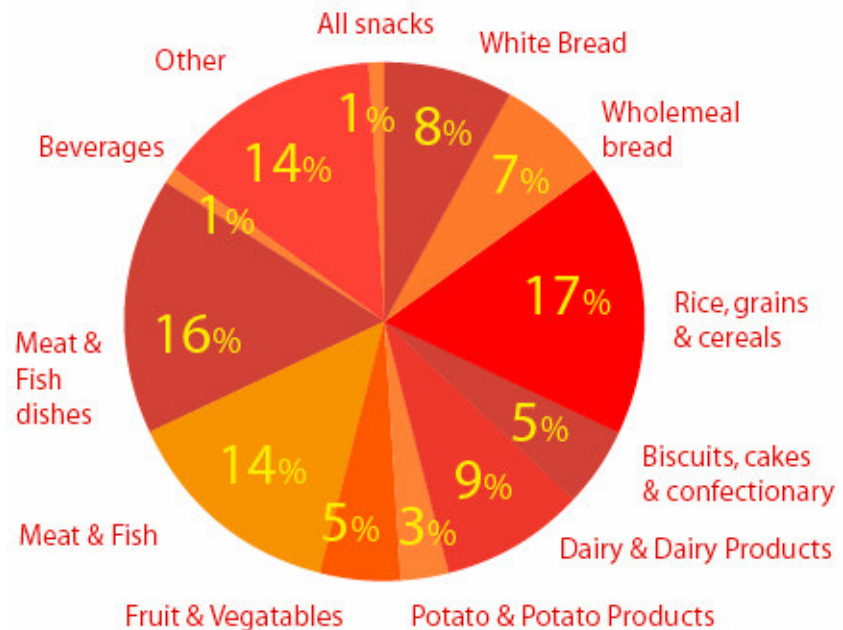
FSAI 2003 – 2005

7.4% reduction

Stats from IBBA IUNA research (October 2008)

Indicate 15% of salt contribution was from bread, does not account for rolls and other breads

Consumption rates



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# Functionality of salt in bread

Each reduction in salt levels creates a difference in

Production environment

Ingredient formulation

Finished product attributes

Finished product quality through shelflife

Taste

Bread is a relatively neutral product with a great amount of the flavour coming from salt



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# Functionality of salt in bread

## Processing:

Salt is critical in balancing yeast activity

## Fermentation

Difficult to control in the absence of salt

## Final Product Quality

Without salt, the light fluffy texture, the taste and fine slice appearance which the customer expects is difficult to maintain

## Relationship with Gluten

### Gas Retention

Is agreed salt plays a critical role in the development and maintenance of the gluten network in a dough

It is this network which determines the strength of the cell structure and the integrity of the finished product



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# Functionality of salt in bread

## Dough Rheology

Lower Salt =

Sticky Dough

Increased difficulty to process



## Results in plant stickups

Difficult for all bakeries environments however in a continuous process this is extremely difficult to manage



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# The Reduction Process

## What did we set out to achieve

Reduce salt levels gradually

Adjust consumers palates to accept less salty products

Accurately inform consumers

## Why are we doing this?

Industry Responsibility in public health matters

Respond to consumer demands for healthier foods

Co-operate with the FSAI to show that there are alternatives to Regulation



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# Managing salt reductions

Gradual reduction since 2004

Successful adjustments to manage increasing difficulties in:

Processing

Ingredients

Equipment



Product deterioration during shelf life

The IBBA are currently completing trials on staling and relationships with salt



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# Achievements to date

All breads have: maximum sodium content of 450mg per 100g. (minimum: 10% reduction)

This reduction was rolled out across several other bread products,

Wholegrains

Seeded varieties

Malt Breads

Buns, Baps and Soft Rolls



Packaging updates to include

Equivalent salt

Some instances GDA Labelling (increasing uptake)



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# Reduced salt alternatives

## Irish Pride Bakeries

2004 launched “Well & Good. Over 60% lower in sodium. Delisted 2004. no uptake



2005 launched “Healthy White” a fortified bread with 30% less salt. Delisted 2006



2006 Launched “Wonder Loaf. A high fibre white bread fortified and over 30% lower in salt. Delisted 2008



All 3 products were promoted and available nation wide and adequate resource to launch was allocated however none performed well



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# Reduced salt alternatives

Brennans, Launched  
“Low Salt” 2005

Feedback:

Customer did not like product

Delisted after 6 months

Re-launched in 2007

Failed to establish sales

Delisted shortly after



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# Considerations for further reductions

## Customer acceptance

Emergence of “Taste” as a negative customer feed back category

## Quality

Fine balance in the maintenance of quality product with lower salt level

## Consistency

Uncontrolled factors such as

weather (temp and humidity)

Protein quality and flour variation between harvests



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# Considerations for further reductions

## Consumer Expectations

Full, fluffy, fine, tasty and soft bread with good shelf life and consistency every purchase are the criteria our customers expect

The same attributes which reducing salt effects negatively without careful management



## Launching Healthy Products

Legislation considerations

Nutritional and Health Claims

Nutrient Profiles

Profile proposed @ 400mg/100g



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# What's Next?

Continue to work towards reaching the 2010 target of  
430mg / 100g = 14% Reduction

The EU 2012 target = 16% reduction

Joint research with FSAI / Dept of Health & Children

Overcoming processing and technical unknowns to aid continued movement towards  
the 2012 target of 400mg / 100g

Universal realignment in sector (The level Playing Field)

The IBBA is leading the way in the bakery sector

Lots of good work happening outside the IBBA

Still significant harmonisation required

Potential for sodium replacement

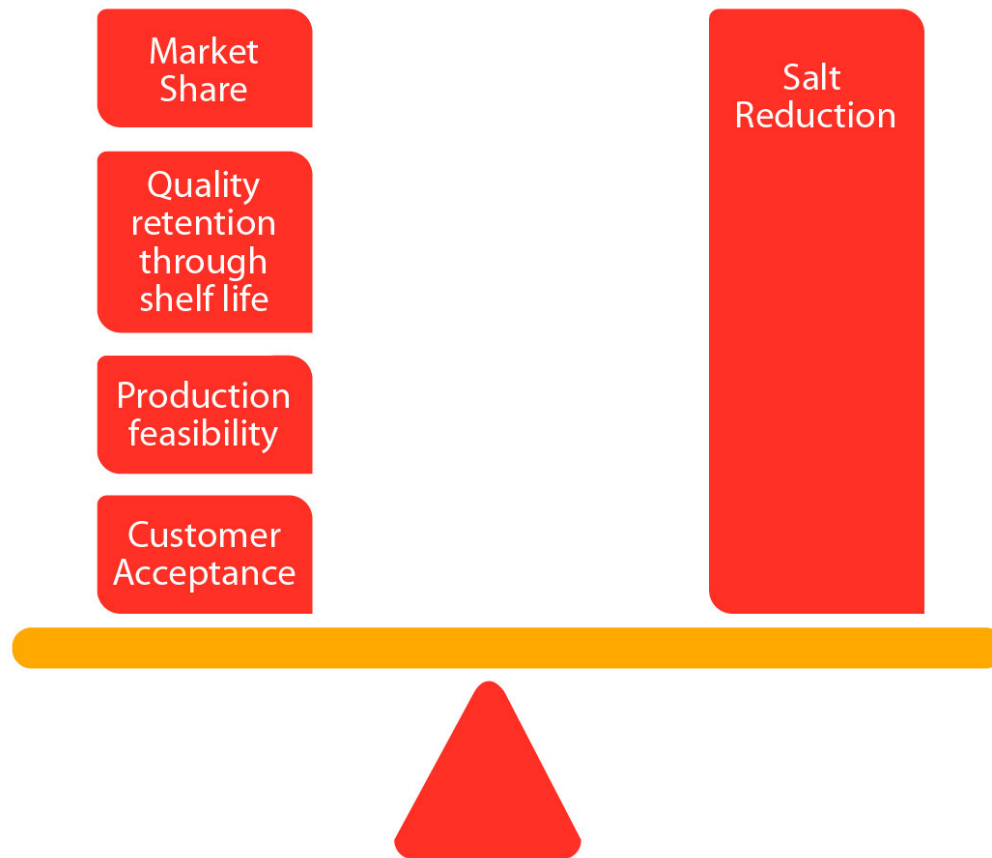
2004 FSAI advised against sodium replacement

2009, new environment, new barriers, review alternatives?



# Salt Reduction

## “Keeping the balance”



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Thank You