

**SCOTTISH FOOD ENFORCEMENT LIASON COMMITTEE
FOOD STANDARDS SUB-COMMITTEE
SURVEY NO: SF23**

Salt levels of craft baked bread products in Scotland

**REPORT
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Survey SF23: Salt levels of craft baked bread products in Scotland

The Scottish Food Enforcement Liaison Committee (SFELC) co-ordinates the food law enforcement, sampling and surveillance activities of Scottish local authorities and comprises representatives of central and local government, consumers and industry.

The committee provides a forum for the discussion of topics relevant to any current problems and may initiate surveys or projects or co-ordinate specific investigations initiated by the local Food Liaison Groups that have been set up in four geographical areas.

Food Liaison Groups consist of representatives from Scottish local authorities and are concerned with consistency of food law enforcement activities in their area.

The remit of the Food Standards Sub Committee (FSSC) is to act as a focus group for delivering the Scottish Food Enforcement Liaison Committee's strategic aims by considering and recommending appropriate measures for the practical implementation of any food standards initiatives remitted to them from the Committee.

Summary

In 2009, 72 samples of craft-baked bread and rolls were collected from bakeries and supermarkets in Scotland for analysis of salt content. The Food Standards Agency 2010 target for salt in bread is 1.1 g per 100 g and this target has been lowered to 1.0 g per 100 g by 2012.

When compared with FSA traffic light labelling guidelines for salt, 28 samples (39%) contained salt at >1.5 g per 100 g and would be classed as red or high for salt content. The remaining 44 samples (64%) contained salt at levels between 0.3 -1.5 g per 100g and would be classed as amber. No samples could be classed as green or low for salt (i.e. contained less than 0.3 g per 100g).

Background

Craft Bakeries bake bread and bakery products on their own premises. Many craft bakers have diversified into catering and some supply supermarkets with craft-baked bread. The nutritional profile of craft-baked products is less widely available than branded or own-brand products, but knowledge of the nutritional profile of foods is crucial to allow consumers to act on the healthy eating message promoted by the Food Standards Agency and the wider public health community. Craft-baked bread does not include bread from in-store bakeries at large multiple retailers.

The FSA Salt reduction programme is a major undertaking for the Agency and it is particularly important to be aware of the salt content of products and to consider how this will impact on total salt intake.

Sampling

72 samples of craft-baked bread were collected by local authority sampling officers from bakeries and supermarkets in Scotland between 1st August and 31st October 2009. All four Scottish Food Liaison Groups were invited to take part in this survey and 19 local authorities in total participated. Samples were analysed by the four public analyst laboratories in Scotland, using accredited methods. The salt content of the bread was calculated after determining the sodium level of the samples.

A copy of the survey protocol, outlining the sampling and parameters tested, are provided in Annex 1. The participating local authorities and public analyst laboratories are presented in Annex 2.

Results

72 samples were collected and analysed. These samples were all bread or rolls including pre-packed, freshly baked, white, brown, malted grain, granary and wholemeal bread or rolls including seeded products and baguettes, all without additions such as cheese, olives, sundried tomatoes etc. Of the samples taken, 50 were described as white bread products, 18 as brown or wholemeal products, and 4 samples were allocated in a separate 'other' category which comprised oat, cob, granary and ethnic breads. Table 1 provides the detailed sample descriptions provided by the sampling officers and the salt levels found.

Table 1 – Sample descriptions and salt analysis results.

Sample Description	Level of salt (g per 100g)
WHITE BREAD PRODUCTS	
White loaf	0.79
White loaf	0.81
White rolls	0.81
White bread rolls	0.84
White bread	0.86
Plain white bread	0.88
White bread	0.91
Bread - white loaf	1.01
Morning rolls	1.03
Butter biscuits	1.05
White rolls	1.07
White loaf	1.08
White bloomer	1.09
Softies	1.10
Softies	1.13
Bread - white baguettes	1.15
White bread loaf	1.19
Baby softies rolls	1.20
White bread	1.21
Sliced white loaf	1.23
Four fresh softies	1.25
Bread rolls	1.28
Softies	1.30
Bread - poppy seed rolls	1.30

White bread loaf	1.33
White rolls	1.34
Small plain white loaf	1.37
Large white baps	1.40
White loaf	1.44
White bread	1.47
Softies	1.49
Large pan loaf	1.51
Rolls - white	1.53
White loaf	1.53
Morning rolls white	1.55
White bread	1.55
White bread rolls	1.64
Small white loaf	1.67
White rolls	1.68
White rolls	1.70
Small pan loaf	1.70
Loaf - white	1.76
White rolls	1.78
White farmhouse loaf	1.88
Pan loaf	1.89
White rolls	1.91
White rolls	1.96
White rolls	2.34
Butter rolls	2.40
BROWN/WHOLEMEAL BREAD PRODUCTS	
Brown loaf	0.89
Small sliced wholemeal loaf	1.09
Brown bread (not wholemeal)	1.18
Brown loaf	1.30
Brown bread loaf	1.33
Balmoral bread	1.37
Rolls - brown	1.38
Wholemeal rolls	1.44
Brown loaf	1.45
Small brown loaf	1.48
Loaf - brown	1.59
Brown loaf	1.60
Rough brown bread	1.93
Brown bread rolls	1.94
Small sliced wholemeal loaf	1.97
Brown rolls	2.03
Brown loaf	2.12
Brown loaf	2.14
OTHER	
Sliced cob loaf	1.28
Oat bread	1.45
Large turkestan loaf sliced	1.58

In total, 28 of the 72 samples (39%) were found to contain salt above 1.5 g per 100 g and were classed as 'high' salt according to the FSA traffic light labelling system. These samples included 18 out of the 50 white bread products sampled (36%), and 8 out of the 18 brown/wholemeal bread products sampled (44%). In addition, 2 of the samples in the 'other' category were found to contain salt at levels exceeding 1.5 g per 100 g. Samples classed in the 'high' salt category were spread across a range of local authority areas.

The remaining 44 out of the total 72 samples taken (64%) contained salt at levels between 0.3 -1.5 g per 100g and fell within the 'medium' salt category defined by the FSA traffic light labelling system. No samples were found to contain salt below 0.3 g per 100g and therefore could not be classed as 'LOW' according to the traffic light labelling system.

The results for all 72 samples are presented in Figure 1 according to the numbers of samples containing salt levels defined as 'low' (green), 'medium' (amber), or 'high' (red).

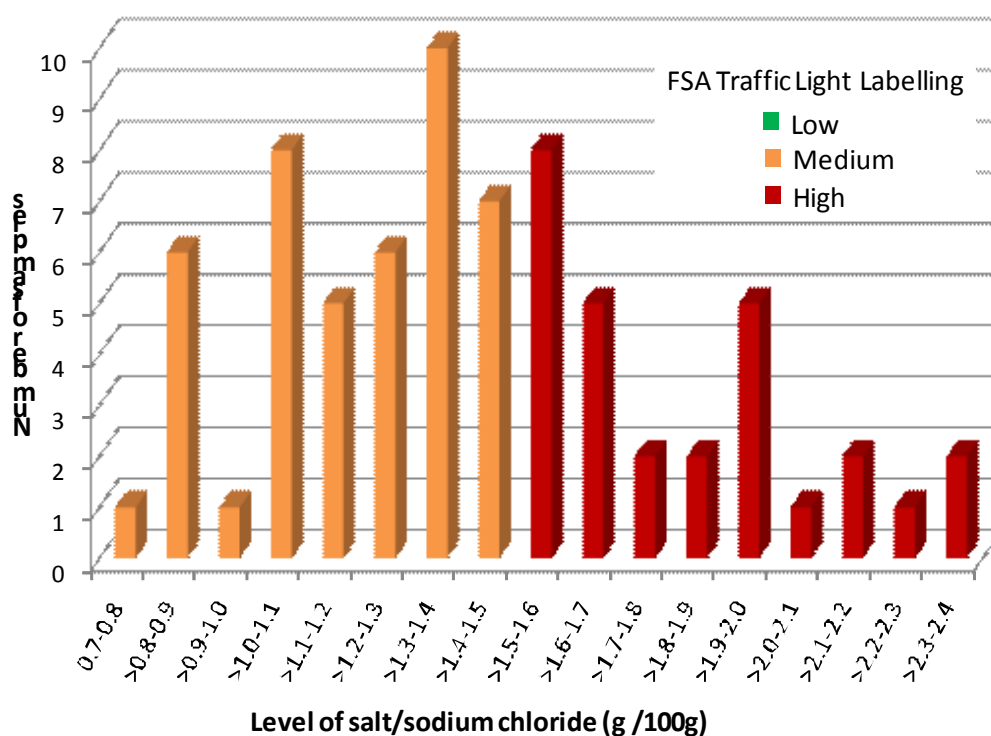


Figure 1 – A breakdown of the range of salt levels identified in craft-baked bread samples compared with the FSA traffic light labelling system.

Discussion

The SF23 survey results show that salt levels continue to be high within craft-baked bread and rolls in Scotland.

The current FSA target (for 2010) for the level of salt in bread is 1.1 g per 100g and the majority of samples analysed (89%) for this survey did not meet this target. These findings suggest that further work is required to be undertaken by this sector to reduce salt content in

bread products. It is worth noting that this target will be further lowered to 1.0 g salt per 100g for bread in 2012.

It would appear that FSA needs to engage with craft bakers and support them towards these targets. Local authorities are well placed to continue to monitor and support progress in this area.

Recommendations

FSSC is aware that the FSA has been engaging with the craft bakery sector in relation to nutritional targets and aims to produce guidance leaflets to assist these businesses in reducing salt levels in bread.

The findings of this survey suggest that breads produced by craft bakers in Scotland can contain high levels of salt. Local authorities have an opportunity to work closely with the FSA in Scotland to ensure that nutritional messages are disseminated effectively to assist this sector in working towards FSA salt targets.

FSSC should consider further work monitoring the effectiveness of FSA's campaign during the 2011/2 work plan.

Salt levels of craft baked bread products in Scotland

Protocol summary

1 Background

Craft Bakeries bake bread and bakery products on their own premises. Many craft bakers have diversified into catering and some supply supermarkets with craft-baked bread. The nutritional profile of craft-baked products is less widely available than branded or own-brand products, but knowledge of the nutritional profile of foods is crucial to allow consumers to act on the healthy eating message promoted by the Food Standards Agency and the wider public health community. Craft-baked bread **does not** include bread from in-store bakeries at large multiple retailers.

The FSA Salt reduction programme is a major undertaking for the Agency and it is particularly important to be aware of the salt content of products and to consider how this will impact on total salt intake.

2 Survey Period

The survey period is August 2009 - October 2009.

3 Participation

All Food Liaison Groups and regions are invited to participate in the survey. The **minimum** number of samples allocated to each Liaison Group is as follows

Scotland

East of Scotland	20 samples
Lothian and Borders	20 samples
North of Scotland	20 samples
West of Scotland	40 samples

4 Resource Implications

It is anticipated that the cost of this survey can be accommodated within normal sampling and analysis arrangements for each local authority.

5 Sampling, Analysis and Reporting

Sample Selection

Samples should be Scottish *craft baked* bread and bread products made by Scottish *craft bakers*. Samples can be acquired from the manufacturer at the *craft bakery* premises, from a *craft bakery* shop or from other stores (e.g. supermarkets) supplied by the *craft baker*. Samples should not be taken from in-store bakeries at large multiple retailers. LAs should give particular emphasis to samples of product produced within their own areas.

Sampling should focus on standard white and brown/wholemeal breads (sliced or unsliced) and rolls.

Please do not sample products such as soda breads, rye breads, sourdough breads, or bakery products such as scones and butteries.

Sample collection and transportation

Samples should be taken and transported to the lab using normal methods and procedures.

Sample Submission

Sampling officers do not need to fill in a survey proforma.

However, **it is important that FSS is completed uniformly for this survey. The protocol summary advises on the required FSS input.**

Analysis and reporting

Samples will be analysed for:

- Sample weight (g)
- Sodium/100g
- Sodium per portion

Samples will be reported to local authorities in the normal manner. Results should be **uploaded to the FSS central database by 31 December 2009.**

SFELC Survey SF23 - Participation Annex 2

Scottish environmental health departments that participated in survey SF23

- Aberdeen City
- Aberdeenshire
- Angus
- Clackmannanshire
- Dumfries and Galloway
- Dundee City
- East Ayrshire
- East Dunbartonshire
- Edinburgh City
- Fife
- Moray
- North Ayrshire
- Orkney Islands
- Perth & Kinross
- Scottish Borders
- Shetland Islands
- South Ayrshire
- West Dunbartonshire
- West Lothian

Scottish public analyst laboratories participating in survey SF23

- Aberdeen City Council
- City of Edinburgh Council
- Glasgow Scientific Services
- Tayside Scientific Services