

# Can we reduce salt levels in bread without affecting taste?

<b>Submission date</b> 11/07/2012	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 04/09/2012	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 15/10/2018	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

Background and study aims:

The aim of this study is to establish whether the amount in salt can be reduced in a common everyday food item such as bread without a discernible difference in taste. Bread has been chosen because of the fact that it is consumed in large quantities in the staple diet of many people in addition to the fact that it is also a large contributor to our daily salt intake.

Who can participate?

We have asked that only people over 18 participate and exclude anyone who is known to have Coeliac disease or is gluten intolerant. Both of the criteria have been passed by our local ethics committee.

What does the study involve?

The study involves members of the public tasting 5 different types of white bread. Each bread type will be made with varying levels of salt, a salt alternative such as Lo-Salt or no salt. All breads will be made by a professional local baker who adheres to local food standards for handling and preparation. The members of the public will then be asked to comment on the taste of the bread and record their views on a data sheet.

What are the possible benefits and risks of participating?

The benefits of reducing salt in bread are potentially huge. We generally consume far excess the amount of salt we actually need. High salt consumption has been linked to poor health outcomes such as stroke and cancer. By reducing salt in an everyday item such as bread, a significant knock on reduction on the overall amount of public salt consumption could be gained. There are very few risks.

Where is the study run from?

University of Oxford

When is study starting and how long is it expected to run for?

The study will run from August 2012 until December 2012. After this all the results collected will be subject to data analysis.

Who is funding the study?  
National Institute of Health Research, National School of Primary Care Research.

Who is the main contact?  
Dr Kamal R. Mahtani

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Kamal Ram Mahtani

**Contact details**  
University of Oxford  
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United Kingdom  
OX2 6NW

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
151

## Study information

**Scientific Title**  
Can we reduce salt levels in bread without a discernable difference in taste

**Study objectives**  
Is there a difference in taste preference for bread made with half levels of salt or a salt alternative compared to standard levels of salt?

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**  
Medical Sciences Interdisciplinary Research Ethics Committee, University of Oxford, 17/06/2012

**Study design**

Randomised controlled crossover trial

**Primary study design**

Interventional

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Other

**Study type(s)**

Prevention

**Participant information sheet**

Not available in web format, please use the contact details to request a patient information sheet

**Health condition(s) or problem(s) studied**

Cardiovascular disease

**Interventions**

This is a double blinded randomised control cross over trial. Participants will be asked if they would like to taste some white bread then comment on it.

Participants will be recruited from the Oxfordshire general public.

Participants will be informed that this is a bread tasting experiment. Informed consent will be taken as the patient wishing to become enrolled and signing their participation sheet. They will be asked to taste 5 different types of white bread will be blinded to the salt content of the bread they will be tasting.

Their taste preference will be recorded on a Visual Analogue Scale which will be used for the analysis.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome measure**

Overall taste score

**Secondary outcome measures**

Correlation between taste preference and:

1. Gender
2. Age
3. Smoking status

**Overall study start date**

01/05/2012

**Completion date**

01/03/2013

## Eligibility

**Key inclusion criteria**

Adults (over 18 years of age) who regularly eat white bread

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

350

**Key exclusion criteria**

Anyone under the age of 18 years old or has a gluten intolerance or Coeliac disease

**Date of first enrolment**

01/05/2012

**Date of final enrolment**

01/03/2013

## Locations

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

University of Oxford

Oxford

United Kingdom

OX2 6NW

## Sponsor information

**Organisation**

University of Birmingham

**Sponsor details**

NIHR School for Primary Care Research  
Primary Care Clinical Sciences  
Edgbaston  
Birmingham  
United Kingdom  
B15 2TT

**Sponsor type**

Government

**Website**

<http://www.birmingham.ac.uk/schools/haps/departments/primarycare/index.aspx>

**ROR**

<https://ror.org/03angcq70>

**Funder(s)****Funder type**

Government

**Funder Name**

National Institute for Health Research - School for Primary Care Research (NSPCR) (UK)

**Results and Publications****Publication and dissemination plan**

2018 pre-print paper in [https://figshare.com/articles/Effects\\_on\\_taste\\_of\\_salt\\_reduction\\_in\\_bread/7087670/1](https://figshare.com/articles/Effects_on_taste_of_salt_reduction_in_bread/7087670/1)

**Intention to publish date****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration