

# Effectiveness of the enzyme linked immuno-sorbent assay (ELISA) test for the prevention of migraine

<b>Submission date</b> 04/02/2009	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 13/03/2009	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 29/01/2016	<b>Condition category</b> Nervous System Diseases	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

A migraine is a severe headache felt as a throbbing pain at the front or side of the head. The cause of migraine is still not completely understood and treatment is complicated by the differing symptoms experienced. The most common treatments are drugs, either over the counter or those prescribed by a GP or specialist. Some people find that avoiding certain foods and drinks can reduce the number and/or severity of their migraines. The aim of this study is to find out whether a simple blood test is able to identify foods to which people with migraine may be sensitive, and to test whether eliminating these foods from the diet reduces their migraine symptoms.

### Who can participate?

Patients aged 18 to 65 who have migraines

### What does the study involve?

Participants undergo a pin prick blood test to detect food intolerances. Participants with a positive test result (that is, they are found to have at least one food intolerance) are randomly allocated to one of two groups, either the True Diet (treatment) or Sham Diet (control) group. Both groups are given a diet sheet and are asked to eliminate all foods on their diet sheet for a period of 12 weeks. The True Diet group are sent a diet sheet with the results of their food intolerance test, while the Sham Diet group are sent a diet sheet of equal difficulty but the foods listed are not the true results of their test. Both groups are asked to follow the diet for 12 weeks, completing a daily diary and questionnaires at various time points. At the end of 12 weeks they are asked to reintroduce in a stepwise fashion the foods which they have been asked to eliminate. They are asked to reintroduce one food at a time on a weekly basis and continue with the food if no migraine occurs. This occurs over a 4-week period with all eliminated foods (if no migraine has occurred) being introduced in the final week. At the end of the study all participants are told which diet group they were allocated to and those in the Sham Diet group are provided with their true diet sheet.

What are the possible benefits and risks of participating?  
Not provided at time of registration

Where is the study run from?  
York Trials Unit, Department of Health Sciences, University of York (UK)

When is the study starting and how long is it expected to run for?  
March 2008 to February 2009

Who is funding the study?  
University of York (UK)

Who is the main contact?  
Prof David Torgerson

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Prof David Torgerson

**Contact details**  
York Trials Unit  
Department of Health Sciences  
Area 4, Seebohm Rowntree Building  
University of York  
Heslington  
York  
United Kingdom  
YO10 5DD

## Additional identifiers

### Study information

**Scientific Title**  
A randomised controlled trial of food elimination diet based on the enzyme linked immuno-sorbent assay (ELISA) test for food sensitivity for the prevention of migraine

**Study objectives**  
To assess whether the use of a simple linked immuno-sorbent assay (ELISA) test followed by dietary elimination will reduce migraine symptoms.

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**

## **Study design**

Pragmatic double-blind two-arm randomised controlled single-centre trial

## **Primary study design**

Interventional

## **Study type(s)**

Treatment

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

Migraine

## **Interventions**

Participants with a positive ELISA test (that is they have at least one food intolerance) will be randomised to one of two groups, either the True Diet (treatment) or Sham Diet (control) group. The True Diet group will be sent the results of their test while the Sham Diet group will be sent a diet sheet of equal difficulty but the foods listed will not be the true results of their test. Both dietary change groups are asked to follow the diet for a period of 12 weeks. At the end of 12 weeks they are asked to reintroduce, in a stepwise fashion the foods which they have been asked to eliminate. They will be asked to reintroduce one food at a time on a weekly basis and continue with the food if no migraine occurs. This will occur over a 4-week period with all eliminated foods (if no migraine has occurred) being introduced in the final week. All participants will be given the result of their ELISA test at the end of the study.

## **Intervention Type**

Behavioural

## **Primary outcome(s)**

Change in number of headache days over the 12 week period. The Migraine Disability Assessment (MIDAS) Questionnaire will be used for this outcome - "On how many days in the last four weeks did you have a headache? (If a headache lasted more than 1 day, count each day)" at baseline, 4 weeks, 12 weeks and 16 weeks.

## **Key secondary outcome(s)**

Measured at baseline, 4 weeks, 12 weeks and 16 weeks:

1. Total MIDAS score
2. Six-item Total Headache Impact Test (HIT-6) score
3. Number of migraine days

## **Completion date**

14/02/2009

## **Eligibility**

### **Key inclusion criteria**

1. Between the ages of 18 - 65 years, either sex
2. Have had two or more migraine attacks (or four or more headache days) in the previous 4 week period
3. Have no other significant co-existing pathology, e.g. have had or currently suffering from an eating disorder (anorexia nervosa/bulimia nervosa)

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

Does not meet inclusion criteria

**Date of first enrolment**

25/03/2008

**Date of final enrolment**

14/02/2009

**Locations****Countries of recruitment**

United Kingdom

England

**Study participating centre**

University of York - York Trials Unit

York

United Kingdom

YO10 5DD

**Sponsor information**

## Organisation

University of York (UK) - York Trials Unit

## ROR

<https://ror.org/04m01e293>

## Funder(s)

### Funder type

University/education

### Funder Name

University of York

### Alternative Name(s)

The University of York, York, Ebor, Universitas Eboracensis

### Funding Body Type

Government organisation

### Funding Body Subtype

Universities (academic only)

### Location

United Kingdom

## Results and Publications

### Individual participant data (IPD) sharing plan

#### IPD sharing plan summary

Not provided at time of registration

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	11/08/2011		Yes	No