# The role of resistant starch in the treatment of insulin resistance

Submission date Recruitment status Prospectively registered 19/05/2010 No longer recruiting [ ] Protocol [ ] Statistical analysis plan Registration date Overall study status 19/05/2010 Completed [X] Results [ ] Individual participant data **Last Edited** Condition category 06/11/2012 Nutritional, Metabolic, Endocrine

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

**Prof David Russell-Jones** 

#### Contact details

Egerton Road Guildford United Kingdom GU2 7XX

# Additional identifiers

Protocol serial number 6301

# Study information

Scientific Title

#### **Acronym**

**Resistant Starch** 

**Study objectives** 

A randomised cross-over dietary intervention study looking at the role of an insoluble dietary fibre in the prevention of type 2 diabetes in participants with metabolic syndrome.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

MREC approved on the 2nd August 2006 (ref: 06/Q1803/57)

#### Study design

Single centre randomised interventional prevention trial

#### Primary study design

Interventional

## Study type(s)

Prevention

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

Topic: Metabolic and Endocrine; Subtopic: Metabolic and Endocrine (all Subtopics); Disease: Metabolic & Endocrine (not diabetes)

#### Interventions

Participants are supplemented with either 40 g/day resistant starch (fibre) for 8 weeks compared to a placebo supplement which is energy matched.

Study entry: single randomisation only

# Intervention Type

Drug

#### Phase

Not Applicable

# Drug/device/biological/vaccine name(s)

Resistant starch

#### Primary outcome(s)

Insulin sensitivity measured with hyperinsulinaemic euglycaemic clamp at end of each 8 week intervention.

# Key secondary outcome(s))

- 1. mRNA expression in adipose tissue biopsies taken at end of each 8 week intervention
- 2. Postprandial meal handling and arteriovenous uptake of glucose measured at end of each 8 week intervention

# Completion date

01/11/2009

# **Eligibility**

#### Key inclusion criteria

- 1. Non-diabetic
- 2. No history of cardiovascular, endocrine or gastrointestinal disease
- 3. Male and female over the age of 18 years
- 4. Fasting plasma insulin greater than 60 pmol/l

# Participant type(s)

**Patient** 

## Healthy volunteers allowed

No

## Age group

Adult

## Lower age limit

18 years

#### Sex

All

#### Key exclusion criteria

Not provided at time of registration

#### Date of first enrolment

01/11/2006

#### Date of final enrolment

01/11/2009

# Locations

#### Countries of recruitment

United Kingdom

England

#### Study participating centre

**Egerton Road** 

Guildford United Kingdom GU2 7XX

# Sponsor information

## Organisation

University of Surrey (UK)

#### **ROR**

https://ror.org/00ks66431

# Funder(s)

# Funder type

Charity

#### **Funder Name**

Diabetes UK (UK)

# Alternative Name(s)

DIABETES UK LIMITED, British Diabetic Association

## **Funding Body Type**

Private sector organisation

## **Funding Body Subtype**

Trusts, charities, foundations (both public and private)

#### 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?
Results article	results	01/09/2012		Yes	No