

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

**Submission date**

19/05/2010

**Recruitment status**

No longer recruiting

☐ Prospectively registered

☐ Protocol

**Registration date**

19/05/2010

**Overall study status**

Completed

☐ Statistical analysis plan

☒ Results

**Last Edited**

06/11/2012

**Condition category**

Nutritional, Metabolic, Endocrine

☐ Individual participant data

**Plain English summary of protocol**

Not provided at time of registration

## Contact information

**Type(s)**

Scientific

**Contact name**

Prof David Russell-Jones

**Contact details**

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Guildford  
United Kingdom  
GU2 7XX

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

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

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Hospital

**Study type(s)**

Prevention

**Participant information sheet****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 measure**

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

**Secondary outcome measures**

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

**Overall study start date**

01/11/2006

**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

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

Planned sample size: 15

**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**

England

United Kingdom

**Study participating centre**

**Egerton Road**

Guildford

United Kingdom

GU2 7XX

## **Sponsor information**

**Organisation**

University of Surrey (UK)

**Sponsor details**

Faculty of Health and Medical Science

Guildford

England

United Kingdom

GU2 7XH

**Sponsor type**

University/education

**Website**

<http://www2.surrey.ac.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

**Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date****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	01/09/2012		Yes	No