

Diet and risk of cancer and other diseases in the UK Biobank

Submission date 06/10/2017	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 30/11/2017	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 17/06/2019	Condition category Cancer	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

While there are many ideas about the effects of diet on the risk of developing cancer and other diseases, understanding of the health effects of diet is far from complete. The aim of this study is to examine the effects of diet on the risk of developing cancer and other diseases, including but not limited to cardiovascular (heart) diseases, metabolic disorders, bone health, and gastrointestinal (digestive system) diseases.

Who can participate?

Men and women who live within reasonable travelling distance (about 25 km) of one of the 22 assessment centres

What does the study involve?

Participants attend a clinical visit during which lifestyle and physical measurements are taken. Their health data records are used to assess the links between various dietary factors (e.g. nutrients and food intakes or habitual diet groups) and incidence or mortality (death) from cancer or other diseases, with follow-up until December 2014 in the first instance, and with additional follow-up as this information is collected.

What are the possible benefits and risks of participating?

There are no expected benefits or risks of participation except for the time required for the clinical visit (about 90 minutes).

Where is the study run from?

University of Oxford (UK)

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

September 2004 to December 2014

Who is funding the study?

1. Medical Research Council (UK)
2. Wellcome Trust (UK)

Who is the main contact?
Dr Kathryn Bradbury

Contact information

Type(s)
Scientific

Contact name
Dr Kathryn Bradbury

Contact details
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Additional identifiers

Protocol serial number
UK Biobank project number 3037

Study information

Scientific Title
Diet and risk of cancer and other diseases in the UK Biobank: a longitudinal cohort study

Study objectives
To develop a research programme on diet in UK Biobank, to study the effects of diet on the risk of cancer and other diseases.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Permission for access to patient records for recruitment was approved by the Patient Information Advisory Group (subsequently replaced by the National Information Governance Board for Health and Social Care) in England and Wales, and the Community Health Index Advisory Group in Scotland, 17/06/2011, ref: 11/NW/0382

Study design
Longitudinal cohort study

Primary study design
Observational

Study type(s)
Other

Health condition(s) or problem(s) studied

Cancer and other diseases or conditions, including but not limited to cardiovascular diseases, metabolic disorders, bone health, anaemia, gastrointestinal disease, and intermediate markers of health related to the above diseases, such as anthropometry, physical characteristics and biomarkers

Interventions

The trialists will be assessing the association between various dietary factors (e.g. nutrients and food intakes or habitual diet groups) and incidence or mortality from cancer or other diseases, including but not limited to cardiovascular diseases, metabolic disorders, bone health, and gastrointestinal diseases, and characterisation of intermediate markers, either as cross-sectional analyses or longitudinal analyses with follow-up until December 2014 in the first instance, and subsequently with additional follow-up as this information is accrued.

Intervention Type

Not Specified

Primary outcome(s)

Incidence or mortality from cancer, measured via record linkage to hospital records or death registries longitudinally for indefinite periods at whichever time point the event occurs

Key secondary outcome(s)

1. Incidence or mortality from other diseases, including but not limited to cardiovascular diseases, metabolic disorders, bone health, and gastrointestinal diseases, measured via record linkage to hospital records or death registries longitudinally for indefinite periods at whichever time point the event occurs
2. Intermediate markers: anthropometric measures (bio-impedance and DEXA scans), bone mineral density (heel bone ultrasound), blood pressure and pulse rate (blood pressure monitor), grip strength (dynamometer), and blood counts (various assays), measured at baseline

Completion date

31/12/2014

Eligibility**Key inclusion criteria**

Men and women who lived within reasonable travelling distance (~25 km) of one of the 22 assessment centres

Participant type(s)

All

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Total final enrolment

500000

Key exclusion criteria

No pre-specified exclusion criteria

Date of first enrolment

13/03/2006

Date of final enrolment

01/10/2010

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Cancer Epidemiology Unit, University of Oxford

United Kingdom

OX3 7LF

Sponsor information

Organisation

Cancer Epidemiology Unit, University of Oxford

ROR

<https://ror.org/052gg0110>

Funder(s)

Funder type

Research council

Funder Name

Medical Research Council

Alternative Name(s)

Medical Research Council (United Kingdom), UK Medical Research Council, MRC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Funder Name

Wellcome Trust

Alternative Name(s)

Funding Body Type

Private sector organisation

Funding Body Subtype

International organizations

Location

United Kingdom

Funder Name

Girdlers New Zealand Health Research Council

Results and Publications

Individual participant data (IPD) sharing plan

UK Biobank is an open access resource. Bona fide researchers can obtain further information or apply to use the UK Biobank dataset by registering and applying at <http://www.ukbiobank.ac.uk/register-apply/>.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/06/2018		Yes	No
Results article	results	01/08/2019	17/06/2019	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes

[Study website](#)

Study website

11/11/2025 11/11/2025 No

Yes