PREVIEW Population studies (PREVention of diabetes through lifestyle Intervention and population studies in Europe and around the World; Population studies)

Submission date	Recruitment status No longer recruiting	Prospectively registered			
25/09/2017		[X] Protocol			
Registration date 28/11/2017	Overall study status Completed	Statistical analysis plan			
		[X] Results			
Last Edited 17/05/2019	Condition category Nutritional, Metabolic, Endocrine	[] Individual participant data			
11/03/2013	וזטנו ונוטוומו, ויופנמטטווכ, בווטטנו ווופ				

Plain English summary of protocol

Background and study aims

This study is part of a large multi-national diabetes prevention project which aims to identify the best lifestyle for the prevention of type 2 diabetes in a population of pre-diabetic overweight or obese individuals. The focus will be on diet (specifically protein and glycemic index) and physical activity, as well as their interaction with the lifestyle factors, habitual stress and sleeping patterns as well as behavioural, environmental, cultural, and socioeconomic factors.

Who can participate?

People of all age ranges and genders who participated in five studies: Lifelines (the Netherlands), the Nutrition Questionnaires plus (NQplus) study (the Netherlands), the Cardiovascular Risk in Young Finns Study (YFS; Finland), the New Zealand Adult Nutrition Survey 2008/09 (NZANS), and the Quebec Family Study (QFS; Canada).

What does the study involve?

Data is collected from the five studies, including dietary intake, in particular protein intake and glycemic index and load, physical activity and sleep duration, along with the prevalence and incidence of pre-diabetes, diabetes, and fasting blood sugar levels.

What are the possible benefits and risks of participating?

This study will increase knowledge on how specific lifestyle factors can help prevent type 2 diabetes. This study uses existing data from previous studies so there are no additional risks involved.

Where is the study run from? Wageningen University (Netherlands)

When is the study starting and how long is it expected to run for? January 2013 to December 2018

Who is funding the study?

- 1. 7th Framework Programme of the European Commission
- 2. Health Research Council of New Zealand
- 3. Ministry of Higher Education, Research and Science and Technology
- 4. Fonds Economische Structuurversterking
- 5. Samenwerkingsverband Noord Nederland
- 6. Ruimtelijk Economisch Programma
- 7. ZonMw
- 8. Academy of Finland
- 9. Social Insurance Institution of Finland
- 10. Turku University Foundation
- 11. Juho Vainion Säätiö
- 12. Research funds from the Turku, Tampere and Kuopio University Hospitals
- 13. Research foundation of Orion Corporation
- 14. Finnish Foundation of Cardiovascular Research
- 15. Suomen Lääketieteen Säätiö
- 16. Suomen Kulttuurirahasto
- 17. Ministry of Health, New Zealand
- 18. University of Otago
- 19. Quebec Department of Education Funds for Research and Training of Scientists
- 20. Quebec Department of Sport and Leisure
- 21. Ouebec Health Research Council
- 22. Health and Welfare Canada
- 23. Canadian Diabetes Association
- 24. Natural Sciences and Engineering Research Council of Canada
- 25. Medical Research Council Canada
- 26. Canadian Institutes of Health Research
- 27. Laval University

Who is the main contact? Dr Agnes Berendsen

Contact information

Type(s)

Scientific

Contact name

Dr Agnes Berendsen

ORCID ID

https://orcid.org/0000-0003-3459-0603

Contact details

Wageningen University & Research Division of Human Nutrition PO Box 17 Wageningen Netherlands 6708 WE

Additional identifiers

Protocol serial number

312057

Study information

Scientific Title

PREVIEW Population studies (PREVention of diabetes through lifestyle Intervention and population studies in Europe and around the World; Population studies)

Study objectives

The primary goal of PREVIEW is to identify the most efficient lifestyle pattern for the prevention of type-2 diabetes in a population of pre-diabetic overweight or obese individuals. The focus will be on diet (specifically protein and glycemic index) and intensity of physical activity, as well as their interaction with the lifestyle factors, habitual stress and sleeping pattern as well as behavioural, environmental, cultural, and socioeconomic variables.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethical approval was not necessary. The researchers did not have any access to personal information regarding the participants and all data that will be analyzed are based on harmonized variables and are completely anonymized. For the individual observational studies, all participants signed informed consent for the original study.

Study design

Observational cross-sectional and longitudinal/cohort study including 5 cohorts with a follow-up ranging from 2 up to 5 years

Primary study design

Observational

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Pre-diabetes (for the prevention of type 2 diabetes)

Interventions

'PREVIEW Population studies' describes cross-sectional and longitudinal analyses from the five population studies included in PREVIEW: Lifelines (the Netherlands), the Nutrition Questionnaires plus (NQplus) study (the Netherlands), the Cardiovascular Risk in Young Finns Study (YFS; Finland), the New Zealand Adult Nutrition Survey 2008/09 (NZANS), and the Quebec Family Study (QFS; Canada). For Lifelines and NQplus baseline data and data from the first follow-up measurement will be used. For YFS, the 27-year follow-up from 2007-2008 was used as baseline and the 30-year follow-up in 2010-2012 as follow-up. NZANS was a cross-sectional survey and thus included in the cross-sectional analyses only. For QFS, phase 2 data acted as baseline and phase 3 data as follow-up, based on the quality of the dietary and physical activity

assessment. Additionally, ca. 300 newly recruited participants in Phase 3 were included in the cross-sectional analyses.

Data in the PREVIEW study have been collected within the framework of independent population studies, with different protocols for data collection and distinct original research foci. Therefore, data harmonization was a major task of the study. Harmonized variables were created for all parameters of interest for the PREVIEW data-analysis.

Baseline dietary intake, in particular protein intake and glycemic index and glycemic load, physical activity data, and sleep duration will be related to the prevalence and incidence of prediabetes, diabetes, and levels of fasting plasma glucose or HbA1c.

Intervention Type

Mixed

Primary outcome(s)

Prevalence and incidence of prediabetes and diabetes, collected by the five population studies at baseline between 1992 and 2013 and at follow-up between 1997 and 2018

Key secondary outcome(s))

Glycemic index and food frequency questionnaire data collected by the five population studies between 1992 and 2013

Completion date

31/12/2018

Eligibility

Key inclusion criteria

All age ranges and both genders are included

Participant type(s)

Healthy volunteer

Healthy volunteers allowed

No

Age group

Αll

Sex

All

Total final enrolment

78851

Key exclusion criteria

Participants will be excluded with missing data on baseline dietary intake, physical activity, or sleep and missing data on fasting plasma glucose level or HbA1c

Date of first enrolment 01/01/2013

Date of final enrolment 31/12/2018

Locations

Countries of recruitment

Australia

Canada

Finland

Netherlands

New Zealand

Study participating centre Wageningen University Wageningen Netherlands 6700AA

Study participating centre
National Institute for Health and Welfare (Terveyden ja hyvinvoinnin laitos)
Finland
FI-00271

Study participating centre The University of Sydney Sydney Australia NSW 2006

Study participating centre The University of Auckland New Zealand 92019

Study participating centre Universite Laval Canada QC G1V 0A6

Sponsor information

Organisation

Wageningen University and Research

ROR

https://ror.org/04qw24q55

Funder(s)

Funder type

Government

Funder Name

Seventh Framework Programme

Alternative Name(s)

Seventh framework programme of the European Community for research and technological development and demonstration activities (2007-2013), FP7

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Funder Name

Health Research Council of New Zealand

Alternative Name(s)

HRCnz, Health Research Council of New Zealand (HRC), HRCNewZealand, HRC New Zealand, HRC

Funding Body Type

Government organisation

Funding Body Subtype

National government Location New Zealand

Funder Name

Ministry of Higher Education, Research and Science and Technology (MESRST, PSR-SIIRI-837)

Funder Name

Fonds Economische Structuurversterking

Funder Name

Samenwerkingsverband Noord Nederland

Funder Name

Ruimtelijk Economisch Programma

Funder Name

ZonMw

Alternative Name(s)

Netherlands Organisation for Health Research and Development

Funding Body Type

Private sector organisation

Funding Body Subtype

Other non-profit organizations

Location

Netherlands

Funder Name

Academy of Finland

Alternative Name(s)

Academy of Finland, Suomen Akatemia, Finlands Akademi, AKA

Funding Body Type

Government organisation

Funding Body Subtype

Research institutes and centers

Location

Finland

Funder Name

Social Insurance Institution of Finland

Funder Name

Turku University Foundation

Funder Name

Juho Vainion Säätiö

Alternative Name(s)

Juho Vainio Foundation, Reppy Institute

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

Finland

Funder Name

Research funds from the Turku, Tampere and Kuopio University Hospitals

Funder Name

Research foundation of Orion Corporation

Funder Name

Finnish Foundation of Cardiovascular Research

Funder Name

Suomen Lääketieteen Säätiö

Alternative Name(s)

Finnish Medical Foundation

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

Finland

Funder Name

Suomen Kulttuurirahasto

Alternative Name(s)

Finnish Cultural Foundation, SKR

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

Finland

Funder Name

Ministry of Health, New Zealand

Alternative Name(s)

The Ministry of Health – Manatū Hauora, Manatu Hauora, Ministry of Health - Manatū Hauora, minhealthnz

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Funder Name

University of Otago

Alternative Name(s)

Te Whare Wānanga o Otāgo, Te Whare Wānanga o Ōtākou

Funding Body Type

Government organisation

Funding Body Subtype

Universities (academic only)

Location

New Zealand

Funder Name

Quebec Department of Education Funds for Research and Training of Scientists

Funder Name

Quebec Department of Sport and Leisure

Funder Name

Quebec Health Research Council

Funder Name

Health and Welfare Canada

Funder Name

Canadian Diabetes Association

Alternative Name(s)

Association Canadienne du Diabète, The Canadian Diabetes Association, CDA

Funding Body Type

Private sector organisation

Funding Body Subtype

Associations and societies (private and public)

Location

Canada

Funder Name

Natural Sciences and Engineering Research Council of Canada

Alternative Name(s)

Conseil de Recherches en Sciences Naturelles et en Génie du Canada, The Natural Sciences and Engineering Research Council of Canada, nserc crsng, NSERC, CRSNG

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Canada

Funder Name

Medical Research Council Canada

Alternative Name(s)

Medical Research Council, Canada, Medical Research Council, Medical Research Council of Canada, MRC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Canada

Funder Name

Canadian Institutes of Health Research

Alternative Name(s)

Instituts de Recherche en Santé du Canada, Canadian Institutes of Health Research (CIHR), CIHR_IRSC, Canadian Institutes of Health Research | Ottawa ON, CIHR - Welcome to the Canadian Institutes of Health Research, CIHR, IRSC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Canada

Funder Name

Universit&x00E9; Laval

Alternative Name(s)

Laval University, ULaval, Universitas Laval, UL

Funding Body Type

Government organisation

Funding Body Subtype

Universities (academic only)

Location

Canada

Results and Publications

Individual participant data (IPD) sharing plan

As the 'PREVIEW Population studies' makes use of existing data from different cohort studies the participant level data will be the property of and stored at the local study sites. Moreover, recruitment and analyses will continue for some cohort studies outside the scope of the 'PREVIEW Population studies' and so data cannot be made publicly available right now.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/05/2019	08/05/2019	Yes	No
Protocol article	protocol and baseline results	20/06/2017	17/05/2019	Yes	No
<u>Protocol article</u>	protocol and baseline results	01/05/2018	17/05/2019	Yes	No

Participant information sheetParticipant information sheet11/11/202511/11/2025NoYesStudy website11/11/202511/11/2025NoYes