

Fatty acids from dairy and meat and risk of coronary heart disease

No registrations found.

Ethical review	Positive opinion
Status	Other
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON20577

Source

NTR

Health condition

The association between the fatty acids from dairy and meat, and risk of coronary heart disease.

Sponsors and support

Primary sponsor: n.a.

Source(s) of monetary or material Support: The EPIC-NL study was funded by “European Commission: Public Health and Consumer Protection Directorate 1993–2004; Research Directory-General 2005”; Dutch Ministry of Public Health, Welfare and Sports (WVS), Netherlands Cancer Registry (NKR), LK Research Funds, Dutch Prevention Funds, Dutch ZON (Zorg Onderzoek Nederland), and World Cancer Research Fund (WCRF) (The Netherlands). I Sluijs was supported by a personal Dr. Dekker postdoctoral grant (2015T019) from the Netherlands Heart Foundation .

Intervention

Outcome measures

Primary outcome

coronary heart disease

Secondary outcome

none

Study description

Background summary

In this study, we will examine the association with CHD of replacing total, saturated, mono-unsaturated and poly-unsaturated fatty acids from dairy with the corresponding fatty acids from meat. We will do this by modelling isocaloric substitution of these fatty acids in a multivariable cox regression among participants of the European Prospective Investigation into Cancer and Nutrition-Netherlands (EPIC-NL) cohort, with 2,374 incident CHD events during 15 years of follow-up.

Study objective

We hypothesise that the relations of total fat and fatty acid (FA) subtypes (SFA, MUFA, or PUFA) with CHD are modified by their food source. We aim to directly compare relations of FA subtype intake from dairy and meat with risk of CHD by using substitution models.

Study design

Participants of the EPIC-NL study were followed for incidence of CHD by linkage to mortality and hospital discharge registers. Data on morbidity were provided by the National Medical Registry, using the Dutch Hospital Discharge Diagnosis Database. Vital status was obtained through linkage with the municipal population registries. Mortality data was obtained from Statistics Netherlands, which provided primary and secondary causes of death.

In the Dutch Hospital Discharge Diagnosis Database, CHD was defined through International Classification of Diseases (ICD)-9 codes: 410-414, 427.5, 798.1, 798.2, 798.9. Causes of death were coded according to ICD-10: I-20-I25, I46, R96

Intervention

We will use Cox proportional regression analysis to estimate Hazard Ratios (HRs) and 95%-confidence intervals (CIs) for the association between substituting FA from dairy by FA from meat, and risk of CHD. Adjustments are made for sex, age, smoking, physical activity, educational level, alcohol intake (in categories) and energy adjusted intake of cholesterol and fibre, BMI, hyperlipidaemia, diabetes and hypertension

Contacts

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Eligibility criteria

Inclusion criteria

Participants from EPIC-NL cohort that gave permission for linkage with vital status and registries

Exclusion criteria

- Missing data on dietary intake, educational status, BMI or smoking, CHD incidence
- prevalent CVD
- Potential under- or over reported energy intake (energy intake/basal metabolic rate in lowest or upper 0.5%)
- non-consumers of meat

- non-consumers of dairy

Study design

Design

Study type: Observational non invasive

Intervention model: Other

Control: N/A , unknown

Recruitment

NL

Recruitment status: Other

Start date (anticipated): 01-01-2017

Enrollment: 35000

Type: Unknown

Ethics review

Positive opinion

Date: 21-02-2018

Application type: First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL6875
NTR-old	NTR7053
Other	: MEC-TNO 93/01 ; Prospect:

Study results