Iodine status in pregnancy

Published: 17-01-2020
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Pregnant women in the Netherlands do not reach adequate iodine intake

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON22754

Source
Nationaal Trial Register

Brief title
JOZO

Health condition

None, condition: pregnant <12 weeks

Sponsors and support

Primary sponsor: Academic Hospital Maastricht
Source(s) of monetary or material Support: RIVM

Intervention

Outcome measures

Primary outcome

Median urinary iodine excretion (µg/d)

Secondary outcome

Thyroglobulin and thyroglobulin antibody concentrations in blood serum Creatinin

concentration in urine Urinary volume Smoking status (smoking is interfering with iodine metabolism) Vegan/Vegetarian y/n (soy is competitive for iodine on thyroid) Nutritional intake specifically related to iodine intake (questionnaire) Intake other relevant micronutrients for pregnant

Study description

Background summary

During pregnancy, maternal iodine needs are increased and iodine deficiency during pregnancy might lead to pregnancy complications and can affect brain and cognitive development of the foetus. Despite iodine fortification programs, it has been shown that iodine intake in the Netherlands is declining, implicating that also pregnant women are at risk for iodine deficiency. Here we propose to detemine iodine deficiency during pregnancy in the Netherlands, using the golden standard technique of a 24h urine collection combined with serum thyroglobulin concentrations. To this end, in this observational study we will measure the 24h median urinary iodine concentration corrected for urinary volume and creatinin levels in pregnant women, and compare these values with Thyroglobulin (Tg)-concentrations in serum (as measure for iodine intake over a longer period of time). To collect these data, women will visit the research center for a single blood draw (15ml), collect urine for 24h at home and fill out a food-intake questionnaire specific for iodine-rich foods/supplements.

Study objective

Pregnant women in the Netherlands do not reach adequate iodine intake

Study design

3 days during the first trimester in pregnancy. Day 1: visit 1 (30 min), Day 2: urine collection at home, Day 3: visit 2 (10 min)

Intervention

None

Contacts

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Eligibility criteria

Inclusion criteria

Female, 18-45y old, in first trimester of pregnancy, pregnant of singleton

Exclusion criteria

Thyroid-disease or any other metabolic disease, kidney disease, twin-pregnancy

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	02-03-2020
Enrollment:	71
Type:	Anticipated

IPD sharing statement

Plan to share IPD: No

Ethics review

Not applicable
Application type: Not applicable

Study registrations

Followed up by the following (possibly more current) registration

ID: 52954
Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL8297
CCMO	NL70677.068.19
OMON	NL-OMON52954

Study results