

Treatment of obesity: effects of micronutrient supplementations and variations of plasma organochlorine concentration on daily energy expenditure and feeding behaviour in obese individuals

Submission date

09/09/2005

Recruitment status

No longer recruiting

☐ Prospectively registered

☐ Protocol

Registration date

09/09/2005

Overall study status

Completed

☐ Statistical analysis plan

☐ Results

Last Edited

18/04/2008

Condition category

Nutritional, Metabolic, Endocrine

☐ Individual participant data

☐ Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

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Additional identifiers

Protocol serial number

MOP-44151

Study information

Scientific Title

Study objectives

Obesity treatment - A multi-vitamin supplement attenuates the reduction in energy metabolism-related variables and attenuates the increase in appetite following an energy deficit and a body weight loss

1. Determine the impact of a weight-reducing program on daily energy needs of obese individuals
2. Evaluate the effects of micronutrient supplementation on changes in energy expenditure and feeding behavior that occur in response to weight loss
3. Investigate the relationship between changes in energy expenditure and those in plasma thyroid hormones and organochlorines

Ethics approval required

Old ethics approval format

Ethics approval(s)

Comité d'éthique de la recherche, Université Laval, 21 August 2001

Primary study design

Interventional

Study design

Randomised controlled trial

Study type(s)

Not Specified

Health condition(s) or problem(s) studied

Overweight and obese individuals.

Interventions

Experimental group: Energy restriction of approximately -700 kcal/day during 15 weeks. Daily consumption of a multi-vitamin supplement during 15 weeks.

Control group: Energy restriction of approximately -700 kcal/day during 15 weeks plus placebo

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Mmicronutrients

Primary outcome(s)

Accentuated body weight and fat mass loss in multivitamin and mineral supplemented group.

Key secondary outcome(s)

1. Attenuation of the reduction in daily and resting energy expenditure following body weight loss in the multi-vitamin supplemented group
2. Attenuation of the decrease in fat oxidation following body weight loss in the multi-vitamin supplemented group
3. Attenuation of the increase in appetite-related variables and energy intake following energy deficit and body weight loss in the multi-vitamin supplemented group
4. Decrease in energy expenditure following body weight loss, which will be accompanied by an increase in organochlorine plasma concentration

Completion date

31/01/2004

Eligibility

Key inclusion criteria

1. Body Mass Index (BMI) between 30 kg/m² and 40 kg/m²
2. Aged 23 - 47 years old, non-menopausal women
3. Weight circumference of 90
4. Stable body weight during 6 months prior to study
5. Non-smoking
6. Sedentary (less than 1 hour/week of continuous physical activity)

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

Female

Key exclusion criteria

1. Abnormal blood pressure values
2. Use of medication that could potentially interfere with the study's objectives
3. Consumption of vitamin and mineral supplements 6 months prior the beginning of the study

Date of first enrolment

01/11/2001

Date of final enrolment

31/01/2004

Locations

Countries of recruitment

Canada

Study participating centre

Division of Kinesiology

Ste-Foy

Canada

G1K 7P4

Sponsor information

Organisation

Laval University, Quebec (Canada)

ROR

<https://ror.org/04sjchr03>

Funder(s)

Funder type

Research organisation

Funder Name

Canadian Institutes of Health Research (CIHR) (Canada) - <http://www.cihr-irsc.gc.ca> (ref: MOP-44151)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration