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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

Registration date
09/09/2005

Overall study status
Completed

Last Edited
18/04/2008

Condition category
Nutritional, Metabolic, Endocrine

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] 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

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
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

Study design
Randomised controlled trial

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Not specified

Study type(s)
Not Specified

Participant information sheet

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

Secondary outcome measures
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

Overall study start date
01/11/2001

Completion date
31/01/2004

Eligibility

Key inclusion criteria
1. Body Mass Index (BMI) between 30 kg/m^2 and 40 kg/m^2
2. Aged 23 - 47 years old, non-menopaused 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

Age group
Adult

Sex
Female

Target number of participants
80

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)

Sponsor details
Vice rectorat a la recherche
Pavillion des science et de leducation
Cité Universitaire
C.P. 2208
Québec
Canada
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Sponsor type
Not defined

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

Publication and dissemination plan
Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration