Glycometabolism and lipid metabolism in obese people by metabolomics technique

Submission date	Recruitment status	Prospectively registered
24/04/2010	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
24/05/2010	Completed	☐ Results
Last Edited	Condition category	Individual participant data
24/05/2010	Nutritional, Metabolic, Endocrine	Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Prof Sun Changhao

Contact details

157 Baojian Road Nangang District Harbin China 150081 +86 (0)451 87502801 sun2002changhao@yahoo.com

Additional identifiers

Protocol serial number 30872104

Study information

Scientific Title

A study of supplementation with multivitamins and minerals on glycometabolism and lipid metabolism in obese people by metabolomics technique: a randomised cross-over design trial

Acronym

SMUMGLMT

Study objectives

The effects of supplementation with multivitamin and mineral on the biomarkers of glycometabolic and lipid metabolic disorders and correlated basic metabolic rate (BMR), and the effects of the metabolic fingerprints in obese people.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Medical Ethics Committee of Public Health College, Harbin Medical University approved ethical review (001) on the 25th February 2010

Study design

Randomised cross-over trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Disorders of glycometabolism and lipid metabolism

Interventions

- 1. Experimental group: 2 months multivitamin and mineral intervention
- 2. Control group: no intervention

After 2 months, interchange the two groups.

Intervention Type

Supplement

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Multivitamin and mineral supplementation

Primary outcome(s)

Metabolic fingerprints

Key secondary outcome(s))

- 1. Body height
- 2. Body weight
- 3. Waist circumference
- 4. Hip circumference

- 5. Basal metabolic rate (BMR)
- 6. Blood pressure
- 7. Body fat
- 8. Blood glucose
- 9. Blood fat
- 10. Endogenous creatinine clearance rate

Completion date

30/04/2010

Eligibility

Key inclusion criteria

- 1. Normal weight group: body mass index between 18.5 kg/m^2 24 kg/m^2
- 2. Obese group:
- 2.1. Body mass index (BMI) greater than or equal to 28 kg/m^2
- 2.2. Waist circumference greater than or equal to 90 cm
- 2.3. Stable body weight during the past 6 months (change of BMI less than 0.5 kg/m^2)
- 3. Aged between 18 25 years, male only

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Male

Key exclusion criteria

- 1. Have history of liver, kidney, hypertension, genetic disease, diabetes and coronary heart disease
- 2. Smoker
- 3. Taking correlated medications which could potentially influence the purpose of this study
- 4. Not taking vitamin and mineral supplements in the past 6 months

Date of first enrolment

01/02/2010

Date of final enrolment

30/04/2010

Locations

Countries of recruitment

China

Study participating centre 157 Baojian Road

Harbin China 150081

Sponsor information

Organisation

Health College - Harbin Medical University (China)

ROR

https://ror.org/05jscf583

Funder(s)

Funder type

Government

Funder Name

National Natural Science Foundation of China (China)

Alternative Name(s)

Chinese National Science Foundation, Natural Science Foundation of China, National Science Foundation of China, NNSF of China, NSF of China, National Nature Science Foundation of China, Guójiā Zìrán Kēxué Jījīn Wěiyuánhuì, , NSFC, NNSF, NNSFC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

China

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet
Participant information sheet
11/11/2025 No Yes