# Glycometabolism and lipid metabolism in obese people by metabolomics technique

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
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

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# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

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

#### Secondary study design

Randomised controlled trial

# Study setting(s)

Other

# Study type(s)

Treatment

# Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

# 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 measure

Metabolic fingerprints

#### Secondary outcome measures

- 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

#### Overall study start date

01/02/2010

## 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  $28 \text{ kg/m}^2$
- 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  $0.5 \text{ kg/m}^2$ )
- 3. Aged between 18 25 years, male only

#### Participant type(s)

**Patient** 

#### Age group

Adult

#### Lower age limit

18 Years

#### Sex

Male

# Target number of participants

120

#### 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 Baoiian Road

Harbin China

150081

# Sponsor information

#### Organisation

Health College - Harbin Medical University (China)

# Sponsor details

c/o Changhao Sun 157 Baojian Road Nangang District Harbin China 150081 +86 0451 87502801

#### Sponsor type

University/education

sun2002changhao@yahoo.com

#### Website

http://yxzy.hrbmu.edu.cn/gongwei/home.asp.Public

#### **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**

# 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