

# Metabolic impact of a nutrition education program for the promotion of fruit and vegetable consumption with people with severe mental disorders

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<b>Registration date</b> 11/03/2022	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 22/05/2023	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Growing evidence suggests that diet combined with a healthy lifestyle has potential for the prevention and treatment of mental illness and may modify the effects of treatments. The introduction of a diet rich in fruit and vegetables is very beneficial for health, prevents heart disease and some types of cancer, and in general is associated with a higher quality of life and good mental health. The aim of this study is to determine the metabolic impact of a nutrition education program (Dietment) on metabolic parameters and the presence of metabolic syndrome. Metabolic syndrome is the medical term for a combination of diabetes, high blood pressure and obesity that increases the risk of heart disease, stroke and other conditions that affect the blood vessels.

### Who can participate?

Patients over the age of 18 years with a severe mental disorder who participate actively in a community rehabilitation program

### What does the study involve?

Participants are randomly allocated to the Dietment program or a control group. The Dietment program lasts 4 months (April to July 2019). It consists of a food education strategy aimed at promoting the consumption of food and vegetables and comprises 15 weekly group sessions (of 5–10 people) lasting 90 minutes each session. All sessions are conducted by the same dietitian-nutritionist. In the control group, three voluntary group sessions are offered to the participants' relatives as support agents to facilitate the change of habits (60 minutes).

### What are the possible benefits and risks of participating?

The international recommendation of five portions of food and vegetables a day has been shown to be beneficial for mental health and may offer benefits in reducing heart disease risk factors. There are no potential risks due to the intervention.

Where is the study run from?

Osona Psychopedagogical Medical Center, with the collaboration of the Vic University Hospital (Spain)

When is the study starting and how long is it expected to run for?

September 2018 to September 2020

Who is funding the study?

Agency for Management of University and Research Grants (Spain)

Who is the main contact?

Dr Quintí Foguet Boreu

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## Contact information

### Type(s)

Scientific

### Contact name

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## Additional identifiers

### Clinical Trials Information System (CTIS)

Nil known

### Protocol serial number

AGAUR grant number 2017 DI 55

## Study information

### Scientific Title

Metabolic impact of a nutrition education program for the promotion of fruit and vegetable consumption with people with severe mental disorders (DIETMENT)

## Acronym

DIETMENT

## Study objectives

A food education program based on the stages of change model for severe mental disorders reduces the development of metabolic syndrome.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Approved 27/09/2018, the Clinical Research Ethics Committee of the Osona Foundation for Health Research and Education (FORES) (C. Francesc Pla "El Vigatà", 1, 08500 Vic, Barcelona; +34 (0)937027710; fores@chv.cat, lsolerdelcoll@chv.cat), ref: 2018974

## Study design

Randomized community-based clinical trial

## Primary study design

Interventional

## Study type(s)

Prevention

## Health condition(s) or problem(s) studied

Metabolic syndrome

## Interventions

For randomization the Zenon algorithm (equiprobable randomization 1:1 through R Software) is used, considering the variables of age, gender, functionality, and primary mental health diagnosis.

The Dietment intervention program lasts 4 months (April to July 2019). It consists of a food education strategy aimed at promoting the consumption of food and vegetables and comprises 15 weekly group sessions (of 5–10 people) lasting 90 minutes each session. All sessions are conducted by the same dietitian-nutritionist.

In the control group, three voluntary group sessions are offered to the participants' relatives as support agents to facilitate the change of habits (60 minutes).

## Intervention Type

Behavioural

## Primary outcome(s)

Metabolic syndrome, defined using the following criteria:

1. Abdominal perimeter measurement of the Spanish population (94.5 cm in men and 89.5 cm for women)
2. Blood pressure (BP) >130/85 mmHg, triglyceride (TG) >150 mg/dl; glycaemia >100 mg/dl
3. HDL-cholesterol (<40 mg/dl for men and 50 mg/dl for women)

Subjects prescribed medication for hypertension, dyslipidemia or impaired glucose tolerance /diabetes are considered as having the respective risk factors. For a diagnosis of MetS, at least

three abnormal components are required. Measured at baseline and after a mean of 5 months post-intervention.

### **Key secondary outcome(s)**

Measured at baseline and after a mean of 5 months post-intervention:

1. Glycated haemoglobin (%), total cholesterol (mg/dl), LDL cholesterol (mg/dl), HDL cholesterol (mg/dl) and triglycerides (mg/dl) measured using blood samples
2. Body mass index (BMI) [weight (kg)/size (m<sup>2</sup>)]

### **Completion date**

30/09/2020

## **Eligibility**

### **Key inclusion criteria**

Individuals over the age of 18 years with a clinical diagnosis of a severe mental disorder (SMD) who participated actively in a community rehabilitation program

### **Participant type(s)**

Patient

### **Healthy volunteers allowed**

No

### **Age group**

Adult

### **Lower age limit**

18 years

### **Sex**

All

### **Total final enrolment**

74

### **Key exclusion criteria**

1. Users of the residential services
2. Substance use disorder
3. Dementia
4. Relapse of mental disorder
5. Moderate to severe intellectual development disorder
6. Individuals with a diet that contraindicates the consumption of foods and vegetables

### **Date of first enrolment**

08/09/2019

### **Date of final enrolment**

30/01/2020

# Locations

## Countries of recruitment

Spain

## Study participating centre

**Osona Psychopedagogical Medical Center**

C. Josep Maria Selva 2

Vic

Spain

08500

# Sponsor information

## Organisation

Agency for Management of University and Research Grants

# Funder(s)

## Funder type

Government

## Funder Name

Agència de Gestió d'Ajuts Universitaris i de Recerca

## Alternative Name(s)

Agency for Management of University and Research Grants, Agencia de Gestión de Ayudas Universitarias y de Investigación, Agència de Gestió d'Ajuts Universitaris i de Recerca (AGAUR), AGAUR

## Funding Body Type

Government organisation

## Funding Body Subtype

Local government

## Location

Spain

# Results and Publications

## Individual participant data (IPD) sharing plan

The data-sharing plans for the current study are unknown and will be made available at a later date

## IPD sharing plan summary

Data sharing statement to be made available at a later date

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		19/06/2021	10/03/2022	Yes	No
<a href="#">Results article</a>		29/03/2022	22/05/2023	Yes	No
<a href="#">Thesis results</a>		29/11/2022	10/03/2022	No	No