

# Effect of probiotic yoghurt (L. plantarum strain TENSIA) on healthy volunteers

<b>Submission date</b>	<b>Recruitment status</b>	<input type="checkbox"/> Prospectively registered
24/01/2011	No longer recruiting	<input type="checkbox"/> Protocol
<b>Registration date</b>	<b>Overall study status</b>	<input type="checkbox"/> Statistical analysis plan
21/06/2011	Completed	<input type="checkbox"/> Results
<b>Last Edited</b>	<b>Condition category</b>	<input type="checkbox"/> Individual participant data
07/02/2022	Digestive System	<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

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### Contact details

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## Additional identifiers

### Protocol serial number

200-T4 from 17/01/2010

## Study information

### Scientific Title

Effect of probiotic yoghurt comprising L. plantarum strain TENSIA on blood indices and intestinal microflora of healthy volunteers: A randomised controlled crossover trial

### Acronym

### **Study objectives**

The consumption of yoghurt containing probiotic *L. plantarum* strain TENSIA has positive impact on blood indices of healthy volunteers.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Ethics Review Committee on Human Research of the University of Tartu approved on the 17th January 2010 (ref: 200-T4)

### **Study design**

Randomised double-blind cross-over intervention study

### **Primary study design**

Interventional

### **Study type(s)**

Treatment

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

Blood indices, intestinal microflora

### **Interventions**

The consumption once a day 150 g of probiotic yoghurt versus regular yoghurt for 3 weeks. Probiotic yoghurt containing either *Lactobacillus plantarum* strain TENSIA ( $10^9$  colony forming units [CFU]/g). After two-week washout period, volunteers are crossed over to another three weeks of probiotic yoghurt or control yoghurt administration. Fasting blood samples are collected.

### **Intervention Type**

Other

### **Phase**

Not Applicable

### **Primary outcome(s)**

1. The health indices of study participants (height, weight, body mass index, blood pressure) assessed at the recruitment, after 3 weeks of probiotic treatment, after washout and after 3-week placebo treatment
2. The self-reported questionnaire containing questions on welfare, and habitual gastrointestinal symptoms (abdominal pain, flatulence, bloating, and stool frequency), measured once a week during the trial
3. Haematological indices (haemoglobin, white blood cell count, red blood cells, platelets), plasma glucose, albumin, total cholesterol, low density lipoprotein (LDL)-cholesterol, high density lipoprotein (HDL)-cholesterol, triglycerides, high sensitivity C reactive protein (hs-CRP) and interlukin (IL)-6 measured at the recruitment, after 3 weeks of probiotic treatment, after washout and after 3-week placebo treatment

**Key secondary outcome(s)**

Circulation of polyamines in host, oxidised low density lipoprotein (oxLDL), 8-isoprostanates, adiponectine, leptin, cytokines and growth factors (IL1 alfa, IL1beta, IL2, IL4, IL6, IL8, IL10, VEGF, EDG, ITFgamma, TNFalpha, MCP-1), osteoprotegerin

**Completion date**

04/04/2011

## Eligibility

**Key inclusion criteria**

1. Wish to participate in the study
2. Aged 18 years and over, either sex
3. Healthy (i.e. no known health problems and no medical conditions that require drug therapy)
4. Signed informed consent

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

1. History of any gastrointestinal disease
2. Use of any antimicrobial drug within last month
3. Use of any regular concomitant medication, including medical preparations
4. Food allergy
5. Pregnancy or breastfeeding

**Date of first enrolment**

07/02/2011

**Date of final enrolment**

04/04/2011

## Locations

**Countries of recruitment**

Estonia

**Study participating centre**

Ravila 19  
Tartu  
Estonia  
50411

## Sponsor information

**Organisation**

BioCC OÜ

## Funder(s)

**Funder type**

Industry

**Funder Name**

Bio-Competence Centre of Healthy Dairy Products LLC (Estonia)

## Results and Publications

**Individual participant data (IPD) sharing plan**

Not provided at time of registration

**IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes