

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

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

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 interleukin (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-isoprostanes, adiponectine, leptin, cytokines and growth factors (IL1 alfa, IL1beta, IL2, IL4, IL6, IL8, IL10, VEGF, EDG, ITFgamma, TNFalfa, 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?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes