

Kefir on Bone Mineral Density and Bone Metabolism in Osteoporotic Patients

This study has been completed.

Sponsor:	Ministry of Science and Technology, Taiwan
Collaborators:	
Information provided by (Responsible Party):	Min-Yu Tu, Ministry of Science and Technology, Taiwan
ClinicalTrials.gov Identifier:	NCT02361372

Purpose

In a controlled, parallel, double-blind intervention study over 6 months, the investigators investigated the effects of kefir-fermented milk (1,600 mg/kg) supplemented with calcium bicarbonate (CaCO₃, 1,500 mg/kg) and bone metabolism in 40 osteoporosis patients, and compared them with CaCO₃ alone without kefir supplements. Bone turnover markers were measured in fasting blood samples collected before therapy and at 1, 3, and 6 months. BMD values at the spine, total hip, and hip femoral neck were assessed by dual-energy x-ray absorptiometry (DXA) at baseline and at 6 months.

Condition	Intervention	Phase
Osteoporosis	Placebo CaCO ₃ Kefir	N/A

Study Type: Interventional

Study Design: Treatment, Parallel Assignment, Double Blind (Subject, Investigator), Randomized, Efficacy Study

Official Title: Short-term Effect of Kefir-fermented Milk Consumption on Bone Mineral Density and Bone Metabolism in Osteoporotic Patients

Further study details as provided by Min-Yu Tu, Ministry of Science and Technology, Taiwan:

Primary Outcome Measure:

- bone mineral density and bone regeneration [Time Frame: 3 months] [Designated as safety issue: Yes]

Enrollment: 69

Study Start Date: May 2010

Primary Completion Date: January 2012

Study Completion Date: January 2012

Arms	Assigned Interventions
Experimental: Kefir and CaCO ₃ Kefir were administered 1,600 mg kefir-fermented milk per day and an	Kefir Kefir daily for 6 months

Arms	Assigned Interventions
accompanying supplement of 1,500 mg CaCO ₃ for 6 months	
Placebo Comparator: Placebo and CaCO ₃ Placebo and 1,500 mg of CaCO ₃ daily for 6 months	Placebo Placebo daily for 6 months CaCO ₃ CaCO ₃ daily for 6 months

Eligibility

Ages Eligible for Study: 55 Years to 70 Years

Genders Eligible for Study: Both

Accepts Healthy Volunteers: Yes

Criteria

Inclusion Criteria:

- Clinical diagnosis of osteoporosis patients

Exclusion Criteria:

- Any previous use of parathyroid hormone or sodium fluoride, use of anabolic steroids or growth hormone within 6 months before trial entry or oral or intravenous systemic corticosteroids within 12 months, and any previous use of strontium.

More Information

Responsible Party: Min-Yu Tu, Ministry of Science and Technology, Ministry of Science and Technology, Taiwan

Study ID Numbers: NSC-99-2324-B-005-017-CC1

Health Authority: Taiwan: National Science Council

U.S. National Library of Medicine | U.S. National Institutes of Health | U.S. Department of Health & Human Services