Effect of combined exercise therapy and isoflavone supplementation on prevention of osteoporosis

Recruitment status No longer recruiting	Prospectively registered	
	☐ Protocol	
Overall study status	Statistical analysis plan	
Completed	[X] Results	
Condition category Musculoskeletal Diseases	[] Individual participant data	
	Overall study status Completed	

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

ClinicalTrials.gov (NCT)

NCT00204425

Protocol serial number

MCT-68095

Study information

Scientific Title

Effect of combined exercise therapy and isoflavone supplementation on prevention of osteoporosis: a randomised controlled trial

Study objectives

Exercise training and isoflavone supplementation will be additive for increasing bone mineral density.

Please note that as of 06/03/2009 the anticipated end date in this record was amended; the initial end date at the time of registration was 01/12/2007.

Ethics approval required

Old ethics approval format

Ethics approval(s)

University of Saskatchewan Biomedical Research Ethics Board (Bio-REB) gave approval on the 1st August 2003

Study design

Randomised controlled trial

Primary study design

Interventional

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Osteoporosis

Interventions

Group 1: exercise training plus isoflavone placebo

Group 2: exercise training placebo (flexibility program) plus isoflavone therapy

Group 3: exercise training plus isoflavone therapy

Group 4: exercise training placebo plus isoflavone placebo

The exercise training intervention will consist of weight training combined with walking. The exercise training placebo will consist of home-based flexibility program (a type of training that has no effect on bone mineral). All participants will be required to fill out and return to the study staff daily activity logs throughout the study.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Isoflavone

Primary outcome(s)

Lumbar spine bone mineral density

Key secondary outcome(s))

- 1. Bone mineral density of the proximal femur and whole body
- 2. Bone quality of the calcaneus
- 3. Geometry the proximal femur
- 4. Lean tissue mass
- 5. Fat mass
- 6. Body mass index
- 7. Waist girth
- 8. Skinfolds
- 9. Blood lipids
- 10. Breast density
- 11. Endometrial thickness
- 12. Menopausal symptoms
- 13. Physical activity levels
- 14. Muscular strength
- 15. Self-paced walking ability
- 16. Balance and flexibility

Completion date

30/05/2008

Eligibility

Key inclusion criteria

Post-menopausal women (age range of approximately 45 to 70 years)

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

Female

Key exclusion criteria

- 1. Diagnosed osteoporosis
- 2. Previous fragility fractures
- 3. Above normal bone mineral density (equal to or above the young adult mean)
- 4. Breast or endometrial cancers
- 5. Women taking bisphosphonates, hormone replacement therapy, selective estrogen receptor modulators, parathyroid hormone (PTH), or calcitonin in the past 12 months

- 6. Taking corticosteroids or diuretics
- 7. Diagnosed Crohns Disease and Cushing Disease
- 8. Women with allergies to soy
- 9. Severe osteoporosis
- 10. Smokers
- 11. Currently participating in vigorous exercise programs

Date of first enrolment

14/09/2004

Date of final enrolment

30/05/2008

Locations

Countries of recruitment

Canada

Study participating centre University of Saskatchewan

Saskatoon Canada S7N 5B3

Sponsor information

Organisation

University of Saskatchewan (Canada)

ROR

https://ror.org/010x8gc63

Funder(s)

Funder type

Research organisation

Funder Name

Canadian Institutes of Health Research (CIHR) (Canada) - http://www.cihr-irsc.gc.ca (ref: MCT-68095)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/04/2013	01/02/2019	Yes	No