

# Osteoporosis

## The silent disease

### *Reducing the risk of fractures in older Australians*

Within 10 years, an estimated 6.2 million Australians over the age of 50 will suffer from osteoporosis or osteopenia (weak bones), with a new fracture occurring every 2.9 minutes.

As well as the estimated cost of care soaring to \$33.6 billion, around 25 per cent of people sustaining an osteoporotic hip fracture will die within a year and the remainder will suffer markedly reduced quality of life, often due to a loss of independence.

At this stage drugs are the only recognised form of therapy to treat osteoporosis and many of these come with unpleasant side effects.

Reducing osteoporotic fractures in older Australians is the aim of Professor Belinda Beck's research at the Menzies Health Institute Queensland, Griffith University.

Professor Beck is undertaking research into high-load resistance training—not previously recommended for people with low bone mass—for improving bone and muscle strength in men over 50 with lower than average bone mass. This research follows a similar highly successful study in post-menopausal women.

Your generosity can support this important work, potentially making a huge difference to both the health outcomes of older Australians, and the overall cost of health care.



Professor Belinda Beck is the supervisor of the LIFTMOR (Lifting Intervention For Training Muscle and Osteoporosis Rehabilitation) and LIFTMOR-M (Lifting Intervention for Training Muscle and Osteoporosis Rehabilitation-for Men) programs.

Participants are randomly assigned to either a high-load resistance training program or a high-load isometric training program on a novel device designed to enhance bone health.

For only 30 minutes twice a week for eight months, participants undertake a small number of exercises of gradually increasing intensity. Testing is conducted at the beginning and end of the study to assess changes in bone mass, muscle strength, physical function and quality of life.

Having seen big improvements in the women's trial, Professor Beck expects to see the same effects for men, without the need for drugs.

***'Exercise is the only therapy that simultaneously improves the two biggest risks for osteoporotic fracture—low bone mass and falls.'***

– Professor Belinda Beck

“One in three women will experience a fracture after the age of 60 due to a gradual decline in bone health and physical function,” she says. “Some are fatal and most others result in significant loss of independence.”

“Many people think osteoporosis only affects women, but one in five men will also suffer an osteoporotic fracture over the age of 60.”

“Unfortunately, men are diagnosed much less frequently, and are treated even more rarely.”

In addressing this important health and social issue, your generosity can help Professor Beck and her team to continue their research to develop effective, evidence-based therapies for older Australians at risk of osteoporosis.

**For more information on supporting research into improvements in bone and muscle strength without the need for drugs, contact:**

**Mr David Hoskot**

Acting Development Manager (Health)  
Griffith University

**Phone:** (07) 5552 8233

**Mobile:** 0466 486 393

**Email:** [d.hoskot@griffith.edu.au](mailto:d.hoskot@griffith.edu.au)

