



Effectiveness of a physiotherapist-delivered diet program for knee osteoarthritis

The POWER Study



THE UNIVERSITY OF MELBOURNE

STUDY DESIGN

A randomised controlled trial



88 participants

> 45 years old
Body Mass Index (BMI) > 27
Knee pain > 3 months

Randomised

Exercise only

Control group

- ✓ Exercise program
- ✗ Diet program



The exercises were lower-limb strengthening exercises

Diet & Exercise

- ✓ Exercise program
- ✓ Diet program



The diet was a very low calorie diet with meal replacements, transitioned to healthy eating

6 telehealth sessions with a physiotherapist over 6 months

Exercise only

46

91% (42/46)

1% decrease

0.7cm increase

12%

0%

48%

Nil

KEY FINDINGS AT 6-MONTHS

Completed Primary Outcome

Change in **Body Weight**

PRIMARY OUTCOME

Change in **Waist Circumference**

Lost > 5% of Body Weight

Lost > 10% of Body Weight

Global Knee Improvement

Serious Adverse Events

Diet & Exercise

42

90% (38/42)

8% decrease

5.4cm decrease

76%

37%

71%

Nil

CONCLUSION

Physiotherapists were able to deliver a very low calorie diet that was safe and led to clinically relevant weight loss in people with knee osteoarthritis.



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Link to POWER Study publication: <https://pubmed.ncbi.nlm.nih.gov/38637135/>



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