

How does exercise and weight loss diet improve knee pain and physical function?

What did we do?



Our trial found people with knee osteoarthritis who completed a 6-month **Exercise** or **Diet+exercise** program experienced greater improvements in symptoms than those who received education (**control**).



We conducted mediator analyses to find the mechanisms behind these improvements in symptoms

What did we find?



Improvements in symptoms in **Exercise** (vs **control**) were partly explained by an **increase in self-efficacy to manage arthritis** and **reduced fear of movement**



Improvements in symptoms in **Diet+exercise** (vs **control**) were partly explained by an **increase in self-efficacy to manage arthritis**, **reduced fear of movement**, and **weight loss**



Improvements in symptoms in **Diet+exercise** (vs **Exercise**) were partly explained by **weight loss**

What was the key take away message?

Self-efficacy to manage arthritis and **fear of movement** have important roles in the mechanisms of effect of exercise, both with and without diet. **Weight loss** also has an important role in the mechanism of effect of exercise with diet.





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