



Fit for Fibro: Does exercise help pain or function in Fibromyalgia?

CLINICAL QUESTION

Does exercise in patients with fibromyalgia improve pain, quality of life or fatigue?

BOTTOM LINE

The benefits of exercise in fibromyalgia remain unclear due to limited high-quality evidence. While improvements from baseline are seen, clinically meaningful changes versus control are rare, and responder analysis—a more reliable measure of improvement—has not been assessed. However, exercise offers several ancillary benefits.

EVIDENCE

- Systematic Reviews comparing exercise with non-active control. Statistically significant unless indicated. Patients >90% women, age ~51. Pain intensity, Fibromyalgia Impact Scale (FIQ) and Fatigue scales all 0-100, higher=worse. Minimally clinically important difference considered 15/100.¹
- Aquatic (2 Systematic Reviews, 6-16 Randomized Controlled Trials (RCTs), 271-881 patients).^{2,3}
From most comprehensive review:² 1-4 sessions/week for 4-32 weeks.
 - Pain: Baseline ~70 reduced to ~61 versus ~68 (control).
 - FIQ: Baseline ~64 reduced to 58 versus 63 (control).

- Fatigue: No difference.
 - Other systematic review similar.³
- Aerobic (3 Systematic Reviews, 4-17 RCTs, 202-1095 patients).^{1,4,5} Baseline scores not reported. Most 2-3 sessions/week for 45-60 minutes, for 6-24 weeks.
 - Pain:^{1,4,5} Aerobic ~11 points better than control.
 - FIQ:⁴ Aerobic 8 better than control.
 - Fatigue:^{4,5} Aerobic 6 better than control.
- Resistance/Strength (3 Systematic Reviews, 9-11 RCTs, 443-839 patients).⁵⁻⁷ Baseline scores not reported. ~2 sessions/week, 8-21 weeks.
 - Pain:⁶ Resistance ~10 better than control.
 - FIQ:⁶ Resistance 19 better than control.
 - Fatigue: ⁶ Standard mean difference reported, results uninterpretable.
- Combined exercise (minimum two of aerobic/aquatic/resistance/stretching) (2 Systematic Reviews^{5,8} 11-29 RCTs 523-2088 patients). Baseline not reported. 2-3 sessions/week, 45-60 minutes/session, ~12 weeks.
 - Pain: ⁸ Combined 53 versus 59.
 - FIQ:⁸ Combined 49 versus 56.
 - Fatigue:⁸ Combined 59 versus 72.
- Adverse events: Rarely reported.
- Limitations: No studies reported responder analysis (number of participants achieving clinically meaningful pain reduction), small study sizes, blinding inconsistent, varying interventions/controls.

CONTEXT

- Canadian guideline⁹ recommends patient's choice of graduated exercise programme.
- Indirectly, improvements in mean pain scores (~8%) similar for duloxetine.¹⁰
- Exercise reduces cardiovascular risk,¹¹ osteoarthritis and back pain,¹² and depression.¹³

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