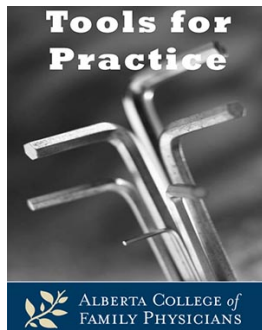


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Back to activity: When is exercise effective for back pain?

Clinical Question: Is exercise effective for non-specific lower back pain and, if so, when and which exercises?

Bottom-line: For acute back pain, exercise does not improve pain, but giving advice to stay active (versus rest) will improve function slightly and reduce sick days (by ~3 days). For chronic back pain, exercise is effective, reducing pain 10-13 points (out of 100), and preventing pain recurrence for one in four patients/year. Exercise (probably strength and stability with physiotherapy) is likely better than medicines and should be recommended to all patients.

Evidence:

- Systematic reviews of randomized controlled trials (RCTs). All scales out of 100.
- Acute back pain (<6 weeks):
 - Advice to stay active versus bed-rest (four RCTs) improved function six points and reduced sick leave (mean 3.4 days).¹
 - Adding exercise to advice to stay active gave no benefit.²
 - Exercise not effective for pain or function.³
 - Others report similar findings.⁴⁻⁶
- Chronic back pain (>12 weeks): Exercise effective.^{3,5,7-9}
 - Motor control exercises (strength and stability, often via physiotherapy)⁹ versus no intervention reduces pain 10-13 points.
 - Others report similar findings.^{3,5,7}
 - Exercise also reduces:
 - Recurrent back pain episodes by about 50%, with Number Needed to Treat (NNT)=4 over ½-2 years.¹⁰
 - Others¹¹ report NNT=8.
 - Use of sick-leave, NNT=6 over one year.¹¹
 - Others find similar.^{12,13}
- Types of exercise:
 - Some report that motor control exercises are better than other exercises,⁷⁻⁹ but the differences are likely clinically irrelevant or small (pain ~4-8 points).^{7,9}
 - Others report:

- Aerobic activity (like running or walking) effective.¹⁴
 - Other studies similar but strength of evidence for walking is low.^{15,16}
- Pilates reduces chronic pain ~14 points versus advice to do normal activities or similar but is not better than other activity.¹⁷
 - Others studies inconsistent.¹⁸

Context:

- Limits: Studies were often inconsistent, making pooling and definitive conclusions difficult.^{2,4} Some studies use reporting methods that have little clinical relevance.^{8,13,14}
- NSAIDs¹⁹ and strong opioids²⁰ reduce chronic back pain ~3-9 points, which is typically less than that seen with exercise.
- Guidelines for both acute and chronic back pain recommend remaining active and exercise.²¹
- Some research suggested supervisor programs or self-management programs may improve adherence.²²
- More exercise sessions improves the effect.²³

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Disclosure:

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