





Table 2. Complementary therapies evaluated in chronic pain management

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Legend

	Supported by some evidence for benefit
	Limited or weak evidence of benefit
	Insufficient evidence to assess presence or absence of benefit
	Evidence of absence of benefit

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[C!] Caution

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Chronic pain (general)		
Therapy	Evidence	Prescribing notes
General strengthening and aerobic exercise	Systematic review evidence (overview of multiple systematic reviews of low- to medium-quality studies with inconsistent results) for benefits on range of chronic pain conditions, physical function and quality of life[1]	Particularly beneficial when combined with CBT or other mind-based therapy[2] [S!] Can increase pain if pain system sensitised[2]
CBT	Systematic review evidence for overall small–moderate improvement in pain, disability, mood and catastrophising, immediately post treatment, compared with treatment as usual[46] Strong evidence for the effectiveness of CBT in chronic pain in selected patients for changing perception of pain and reaction to pain and other stressors[2] Combination of CBT and other therapies may be more effective than CBT alone for managing chronic pain[2]	[C!] The quality of CBT programs varies[2]
Vitamin D	Systemic review evidence of benefit in range of painful conditions (pooled data) versus placebo, including conditions characterised by widespread non-specific pain (eg musculoskeletal pain, fibromyalgia) localised pain (eg low back pain, dysmenorrhea, arthritis, migraine)[3]	
Community support groups	Qualitative and quantitative evidence for benefits on function and adapting to life with chronic pain, but not on pain[4,5]	
Medicinal cannabis	Systematic review evidence (poor-quality studies) for possible modest, short-term effect with nabiximol[6]	[C!] Tolerance and risks inadequately studied[6]
Massage	Evidence for massage therapy is conflicting, but overall suggests short-term benefits in a range of chronic pain conditions[7]	Because effects are short-term, frequent repetition is necessary[8]

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Hypnosis	Weak evidence for use in chronic pain[2]	
Herbs/spices	Inadequate evidence to support the use of curcumin (turmeric) in chronic pain management[2]	
Neurofacilitation (Bobath, proprioceptive neuromuscular facilitation)	Few studies in chronic pain[2] Insufficient evidence from RCTs with inactive controls or usual care to ascertain effects on pain	
Feldenkrais	Few studies in chronic pain[2]	

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Fibromyalgia		
Therapy	Evidence	Prescribing notes
General strengthening and aerobic exercise	Aerobic training improves function and might reduce pain and tender points[2] Strength training may improve function and reduce pain and depression[2]	
Hydrotherapy	Moderate-to-strong evidence for short-term improvements in pain, health status and quality of life with exercise in water for fibromyalgia[2]	
Acupuncture	Systematic review evidence (low-to-moderate quality RCTs) for benefit on pain compared with compared with no treatment or standard therapy, and (moderate-quality RCTs) for comparable pain reduction with medical acupuncture and sham acupuncture[9]	[C!] Long-term use should be avoided in favour of active approaches[2]
Tai Chi	Low-quality evidence for benefit in fibromyalgia pain, compared with usual care[10]	
Qi-gong	Low-quality evidence for benefit in fibromyalgia pain, compared with usual care[10]	
Yoga	Low-quality evidence for benefit in fibromyalgia pain[10]	
Medicinal cannabis	Insufficient evidence to ascertain effects on fibromyalgia pain[6]	
Electromyography biofeedback	RCT evidence showing no benefit on pain[10]	

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Low-back pain (chronic)		
Therapy	Evidence	Prescribing notes
General strengthening and aerobic exercise	Small reduction in pain and small improvement in function[2]	Benefits in low-back pain increased when exercise combined with CBT or other reinforcement[2] Exercise programs more likely to be effective if supervised, individually designed and include strengthening and stretching components[1] Patient preference is important to encourage adherence[1] [✓] Recommended as a first-line option by some clinical practice guidelines[14]
Pilates	Systematic review (low- to moderate-quality evidence) evidence for benefit[12]	
Tai chi	Systematic review evidence for pain relief[13]	[✓] Recommended as a first-line option by some clinical practice guidelines[14] At least 6 weeks of tai chi may be needed for pain relief effects[13]
Yoga	Short- and long-term benefits reported[8] Systematic review evidence for slight, clinically non-significant improvement in pain and improvement in function after 3–6 months[52]	[✓] Recommended as a first-line option by some clinical practice guidelines[14]
CBT	Enhances benefits of exercise[2]	[✓] Recommended by some clinical practice guidelines as an option to consider as part of a multifaceted treatment plan[14-16] CBT could be considered for people who avoid normal activities due to false beliefs about back pain[16]
Occupational therapy	Systematic review evidence that multifaceted 'back school' interventions (workplace ergonomics, education) in occupational setting are	

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	more effective than exercises, manipulation, myofascial therapy, advice, placebo or waiting list controls on pain, functional status and return to work during short and intermediate-term follow-up[17]	
Manipulation	Systematic review of high-quality evidence found spinal manipulation can provide short-term relief of mild to moderate pain some patients with chronic nonspecific low-back pain, but is no more effective than other interventions[2-18]	<p>[S!] May exacerbate low-back pain[2]</p> <p>[C!] Can lead to dependency on therapist for repeated short-term pain relief[2]</p> <p>Main role is as part of multimodal approach to restore activity; not an appropriate long-term solution[2]</p> <p>[✓] Recommended by some clinical practice guidelines as a component of multifaceted treatment plan that includes exercise, with or without psychological therapy[16]</p>
Physiotherapy	Benefits for low-back pain reported in RCTs combining physiotherapy with other restorative modalities, eg fitness classes, and exercise therapy[15]	[✓] Recommended as part of a multimodal approach to pain management by mainstream clinical practice guidelines[15]
TENS	Benefits in back pain reported in meta-analysis of RCTs versus sham treatment[15]	<p>[✓] Recommended as part of a multimodal approach to pain management by mainstream clinical practice guidelines[15]</p> <p>Other clinical practice guidelines recommend against TENS[16]</p>
Topical herbal preparations	<p>Systematic review evidence that topical <i>Capsicum frutescens</i> (Cayenne) reduces pain more than placebo[19]</p> <p>Evidence from low- to moderate-quality studies for benefits of topical <i>Symphytum officinale</i> L (comfrey root extract), topical <i>Solidago chilensis</i> (Brazilian arnica), and topical lavender essential oil versus placebo[19]</p>	
Herbs/spices	Systematic review evidence (low- to moderate-quality studies) for benefits	[C!] Willow bark contains salicylates

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	of oral <i>Harpagophytum procumbens</i> (devil's claw) and oral <i>Salix alba</i> (white willow bark)[20]	
Operant conditioning therapy	Systematic review evidence (moderate-quality RCTs) for benefit versus wait-list and similar effects as cognitive therapy[2]	
Hydrotherapy	Limited evidence for benefit of long-term use of hydrotherapy[2]	
Acupuncture	<p>Equivocal evidence for benefits in chronic low-back pain from meta-analysis of RCTs versus sham acupuncture and RCT versus conventional therapy, benefits reported in observational studies[15]</p> <p>Acupuncture alone is more effective in short-term improvement in pain and function, compared with no treatment, but no more effective than other conventional treatments[2]</p> <p>Combination of acupuncture and conventional therapies more effective than same therapies alone[2]</p>	<p>Acupuncture and dry needling appear to be useful adjunctive treatments for chronic low-back pain[2]</p> <p>Indirect factors (eg expectation and belief) may play contribute to benefits of acupuncture on pain.[8]</p> <p>[✓] Recommended as a first-line option or adjuvant by some clinical practice guidelines[14,15]</p> <p>Some clinical practice guidelines recommend against acupuncture[16]</p> <p>[C!] Long-term use should be avoided in favour of active approaches.[2]</p>
Massage	Systematic review of RCTs found low-quality evidence of short-term benefit[21]	<p>[C!] Can lead to dependency on therapist for repeated short-term pain relief[2]</p> <p>Main role is as part of multimodal approach to restore activity; not an appropriate long-term solution[2]</p> <p>[✓] Recommended by some clinical practice guidelines as a component of multifaceted treatment plan that includes exercise, with or without psychological therapy[16]</p>
Thermotherapy	Limited evidence to support use of superficial heat; too few RCTs to ascertain effects in chronic low-back pain[22]	
Feldenkrais	[Insufficient evidence from RCTs with inactive controls or usual care to ascertain effects on pain]	

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	Limited RCT evidence for similar effect on pain as 'back school' approach[23]	
Therapeutic ultrasound	Benefit for pain or quality of life not supported by high-quality evidence[24]	
Prolotherapy	Not effective for pain reduction[25]	
Electromyography biofeedback	Effect on pain not demonstrated by robust RCT evidence but RCT evidence for reduction in paraspinal muscle tension[26]	[✓] Recommended by some clinical practice guidelines as an option to consider as part of a multifaceted treatment plan[15]

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Migraine		
<i>Therapy</i>	<i>Evidence</i>	<i>Prescribing notes</i>
Acupuncture	Systematic review of evidence from RCTs shows small benefit for acupuncture as adjunct to symptomatic treatment of episodes for reducing frequency of episodes[27]	
CoEnzyme10 (ubidecarenone)	Weak evidence for benefit in preventing migraine[2]	If patient requests, good safety profile justifies a 3-month trial despite weak supporting evidence, eg 200 mg orally, twice daily for 3 months, then review[2]
B Group vitamins	Weak evidence for benefit of riboflavin (B2) in preventing migraine[2,16]	Good safety profile justifies a 3-month trial (eg 200 mg orally, twice daily for 3 months, then review), despite weak supporting evidence, if patient requests[2]
Magnesium	Weak evidence for benefit in preventing migraine[2]	If patient requests, good safety profile justifies a 3-month trial despite weak supporting evidence, eg 400 to 650 mg orally, once daily for 3 months, then review[2]
Nutritional medicine	Anecdotal evidence for benefit in migraine prevention:[2] <ul style="list-style-type: none"> • strategies to stabilise blood glucose levels (eg regular meals, avoiding excess simple carbohydrates) • limiting caffeine • avoiding known triggers for individual (eg alcohol, monosodium glutamate, citrus fruit, chocolate, preserved meats) • adequate hydration (eg 1.5–2 litres water/day) 	
Occupational therapy	Anecdotal evidence for benefit of healthy work practice (good posture when using computer, regular short breaks to stretch and rest eyes) in migraine prevention[2]	

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Relaxation training	Anecdotal evidence for benefits of progressive muscular relaxation in preventing migraine, especially if stress is a trigger[2]	
Meditation	Anecdotal evidence for benefits in preventing migraine, especially if stress is a trigger[2]	
Environmental medicine	Anecdotal evidence for benefit of avoiding perfumes (if trigger for individual) in migraine prevention[2]	
Regular physical activity	Anecdotal evidence for benefit of regular physical activity (eg walking 30–40 minutes, 3 to 4 times a week) in migraine prevention[2]	
Regular sleep/wake cycle	Anecdotal evidence for benefit of regular sleep schedules in migraine prevention[2]	
Homeopathy	Homeopathy is not more effective than placebo for the treatment of headache and migraine[47]	
General strengthening and aerobic exercise	[Insufficient evidence from RCTs to ascertain effects on pain]	[S!] Running and jumping can trigger migraine (walking is suitable)[2]

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Multiple sclerosis (associated chronic pain)		
<i>Therapy</i>	<i>Evidence</i>	<i>Prescribing notes</i>
Medicinal cannabis: THC	Systematic review evidence for pain reduction benefit[28]	Mild to moderately severe adverse events are common[29]
Medicinal cannabis: nabiximols and THC: cannabidiol extract combinations	Inconsistent evidence for pain reduction benefit[28]	

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Neck pain (chronic)		
Therapy	Evidence	Prescribing notes
Acupuncture	Moderate evidence for short-term relief of chronic neck pain[2]	
Manipulation	<p>Systematic review reported moderate-quality evidence that thoracic manipulation may improve pain short term.[30]</p> <p>Meta-analysis of low-quality trials suggested cervical mobilisation alone may achieve pain improvement similar to that of ultrasound, TENS, acupuncture and massage.[30]</p> <p>Limited evidence from low-quality RCTs suggested mobilisation alone may be no more effective than inactive treatment,[30] but may be effective when part of multimodal approach[2]</p>	<p>[S!] Neck manipulation is associated with rare but serious adverse effects (eg dissection, stroke, death)[48]; Risk of serious adverse events (rare)[30]</p> <p>[S!] May exacerbate neck pain[2]</p> <p>[C!] Can lead to dependency on therapist for repeated short-term pain relief[2]</p> <p>Main role is as part of multimodal approach to restore activity; not an appropriate long-term solution[2]</p>
Occupational therapy	Systematic review evidence for lack of effect of workplace interventions (including ergonomic strategies) on neck pain in workers[31]	

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Osteoarthritis		
Therapy	Evidence	Prescribing notes
General strengthening and aerobic exercise	Can reduce pain, increase wellbeing, prevent deterioration of fitness[2]	
Stretching	Stretching and strengthening exercises may be beneficial in OA of the hand[2]	
Tai chi	Systematic review evidence for benefit in OA pain,[32] including knee OA[33]	[C!] Tai chi may be associated with minor musculoskeletal pain[34]
Hydrotherapy	Exercise in water for knee or hip OA can provide short-term improvement in pain, physical function, mental health and quality of life[2]	
Chondroitin sulfate	Systematic review evidence for small benefit (alone or in combination with glucosamine) on OA pain versus placebo[49] Conflicting evidence for benefit in combination with glucosamine sulfate in painful knee OA[2] Inadequate evidence for disease-modifying effect in OA in combination with glucosamine sulfate[2]	Usual dose 800–1200 mg/day orally, eg treatment trial 3–6 months[2] [C!] Most products manufactured from animal cartilage (eg cow or shark)
Topical capsaicin	May be beneficial in OA of the hand[623]	
Herbs/spices	Systematic review evidence (moderate-quality RCTs) that oral <i>Boswellia serrata</i> (Indian frankincense) may improve pain compared with placebo[35] RCT evidence of benefits on OA pain-related symptoms with curcumin (complex extract from turmeric rhizome with turmeric volatile oil) alone or in combination with boswellic acid (extract from Indian frankincense root)[50]	Arnical gel adverse effect no better than that of topical NSAIDs[36] [C!] Willow bark contains salicylates

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	Systematic review evidence for benefits with Arnica gel, comfrey extract gel[36]	
Aids/orthotics	The use of joint protection techniques and devices (eg splints, tap turners) may be beneficial for OA of the hand[2]	
Healthy weight	Weight loss reduces pain in overweight people with knee OA[37]	
Glucosamine sulfate	Evidence from large RCTs suggests benefit no greater than placebo[2] Conflicting evidence for benefit in combination with chondroitin sulfate in painful knee OA[2]	Inadequate evidence for disease-modifying effect in OA in combination with chondroitin sulfate[2] Meta-analyses limited by heterogeneity between products[2] Usual dose 1500–2000 mg/day orally, eg treatment trial 3–6 months[2] [C!] Most formulations prepared from shellfish [C!] Quality varies between brands
Fish oil	Benefit in OA pain not supported by systematic review of RCTs (low-quality evidence)[38] Low doses may have same effect as anti-inflammatory doses in OA of knee[39]	
Medicinal cannabis	Insufficient evidence to ascertain effects on OA pain[2]	[C!] Tolerance and risks inadequately studied[6] Mild to moderately severe adverse events are common[29]

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Rheumatoid arthritis		
Therapy	Evidence	Prescribing notes
Fish oil	Systematic review evidence for benefit in RA pain[38] Mild anti-inflammatory effect in rheumatoid arthritis[2]	Low risk of harm[2] [✓] Recommended by RACGP guidelines for early RA as an adjunct for management of pain and stiffness in patients with RA[41] Recommended dose at least 2.7 g omega-3 fatty acid/day orally[2] May take up to 3 months for maximal effect[2]
Herbs/spices	Systematic review evidence that gamma linolenic acid (evening primrose oil, borage oil, or blackcurrant seed oil) benefits RA symptoms[40]	[✓] GLA suggested by RACGP guidelines for managing early RA as an option that might provide relief of pain, morning stiffness and joint tenderness in RA patients[41] Usual doses are 1400 mg/day of GLA or 3000 mg/day of evening primrose oil[41] Oral <i>Tripterygium wilfordii</i> (thunder god vine) used for RA but adverse effects reported[41] [C!] Willow bark contains salicylates
Smoking cessation	Smoking associated with poor prognosis and response to treatment[2]	All patients should be advised to quit[2]
Nutritional medicine	Clinical trial evidence for benefits of vegetarian diets and Mediterranean diets on RA pain, but findings uncertain due to few trials and generally poor quality[42]	No diet has shown consistent benefit in RA.[2] Restrictive diets can have unwanted effects on nutrition. [✓] Regardless of any possible effects on pain, Mediterranean diet can be recommended for general health benefits[2,43] [✓] A diet that includes plenty of foods rich in fish oil (omega 3 fatty acids) is recommended for people with early RA[41]

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Aids/orthotics	Limited evidence for benefit on residual non-inflammatory joint pain in RA[2]	
General strengthening and aerobic exercise	Limited evidence for benefit on residual non-inflammatory joint pain in RA[2]	<p>[✓] In addition to any possible effects on pain, aerobic exercise is recommended for people with RA because it improves physical function, helps maintain healthy body weight, and has psychological and cardiovascular benefits. Strengthening exercise is recommended to prevent muscle wasting.[2]</p> <p>[C!] Exercise may cause short-term pain, but patients should be reassured that benefits outweigh risks.</p>
TENS	Limited evidence for benefit on residual non-inflammatory joint pain in RA[2]	
Thermotherapy	Limited evidence for benefit on residual non-inflammatory joint pain in RA[2]	<p>[C!] Clinical practice guidelines discourage over-reliance on thermotherapy in favour of active approaches[2]</p> <p>[S!] Prolonged use can result in thermal injury[2]</p>
CBT	Limited evidence for benefit on residual non-inflammatory joint pain in RA[2]	<p>[C!] The quality of CBT programs varies[2]</p> <p>Combination of CBT and other therapies may be more effective than CBT alone for managing chronic pain[2]</p>
Relaxation training	Limited evidence for benefit on residual non-inflammatory joint pain in RA[2]	
Meditation	Limited evidence for benefit on residual non-inflammatory joint pain in RA[2]	
Mindfulness	Limited evidence for benefit on residual non-inflammatory joint pain in RA[2]	
Medicinal cannabis	Insufficient evidence information to ascertain effects on RA pain[6]	[C!] Tolerance and risks inadequately studied[6]

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		Mild to moderately severe adverse events are common[29]
Tai chi	Systematic review evidence does not show benefit on pain[44]	Does not exacerbate RA pain[44]

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Tension-type headache (chronic)		
Therapy	Evidence	Prescribing notes
Acupuncture	Systematic review of evidence from RCTs shows benefit in reducing frequency of chronic tension-type headaches, but not superior to physiotherapy, massage or exercise[45]	[✓] Course of acupuncture recommended by some clinical practice guidelines for prevention of chronic TTH[51]

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1. Geneen LJ, Moore RA, Clarke C, Martin D, Colvin LA, Smith BH. 2017. Physical activity and exercise for chronic pain in adults: an overview of Cochrane Reviews. Cochrane Database of Systematic Reviews, Issue 4, CD011279.
2. Therapeutic Guidelines Limited. 2018. eTG March 2018 edition [accessed May 2018]. West Melbourne, Therapeutic Guidelines Limited.
3. Wu Z, Malihi Z, Stewart AW, Lawes CM, Scragg R. 2016. Effect of Vitamin D supplementation on pain: a systematic review and meta-analysis. Pain Physician, 19(7):415-27.
4. Finlay KA, Peacock S, Elander J. 2018. Developing successful social support: An interpretative phenomenological analysis of mechanisms and processes in a chronic pain support group. Psychological Health. Jan 4:1-26.
5. Subramaniam V, Stewart M, Smith J. 1999. The development and impact of a chronic pain support group. Journal of Pain and Symptom Management, 17(5), 376-383.
6. Therapeutic Goods Administration. 2017. [Guidance for the use of medicinal cannabis in the treatment of chronic non-cancer pain in Australia](#). Version 1. Australian Government Department of Health [accessed May 2018]
7. National Center for Complementary and Integrative Health. 2017. [Massage therapy](#) [accessed May 2018].
8. National Center for Complementary and Integrative Health. 2016. [Chronic pain: in depth](#) [accessed May 2018].
9. Deare JC, Zheng Z, Xue CCL, et al. Acupuncture for treating fibromyalgia. 2013. Cochrane Database of Systematic Reviews, Issue 5, CD007070.
10. Theadom A, Cropley M, Smith HE, Feigin VL, McPherson K. 2015. Mind and body therapy for fibromyalgia. Cochrane Database of Systematic Reviews, Issue 4, CD001980.
11. Maher CG, Williams C, Lin C, Latimer J. 2011. [Managing low back pain in primary care](#). Australian Prescriber 2011;34:128-32.
12. Yamato TP, Maher CG, Saragiotto BT, et al. 2015. Pilates for low back pain. Cochrane Database of Systematic Reviews, Issue 7, CD010265.
13. Kong LJ, Lauche R, Klose P, et al. 2016. Tai chi for chronic pain conditions: a systematic review and meta-analysis of randomized controlled trials. Scientific Reports, 6:25325.

Legend

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14. Qaseem A, Wilt TJ, McLean RM, Clinical Guidelines Committee of the American College of Physicians. 2017. Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians. *Annals of Internal Medicine*, 166(7):514-530.
15. American Society of Anesthesiologists Task Force on Chronic Pain Management, American Society of Regional Anesthesia and Pain Medicine. 2010. Practice guidelines for chronic pain management: an updated report by the American Society of Anesthesiologists Task Force on Chronic Pain Management and the American Society of Regional Anesthesia and Pain Medicine. *Anesthesiology*, 112(4),810-33.
16. National Institute for Health and Care Excellence. 2016. [Low back pain and sciatica in over 16s: assessment and management \(NG59\)](#).
17. Heymans MW, van Tulder MW, Esmail R, Bombardier C, Koes BW. 2004. Back schools for non-specific low-back pain. *Cochrane Database of Systematic Reviews*, Issue 4, CD000261.
18. Rubinstein SM, van Middelkoop M, Assendelft WJJ, de Boer MR, van Tulder MW. 2011. Spinal manipulative therapy for chronic low-back pain. *Cochrane Database of Systematic Reviews*, Issue 2, CD008112.
19. Oltean H, Robbins C, van Tulder MW, et al. 2014. Herbal medicine for low-back pain. *Cochrane Database of Systematic Reviews* 2014, Issue 12, CD004504.
20. Henschke N, Ostelo RWJG, van Tulder MW, et al. 2010. Behavioural treatment for chronic low-back pain. *Cochrane Database of Systematic Reviews*, Issue 7, CD002014.
21. Furlan AD, Giraldo M, Baskwill A, Irvin E, Imamura M. 2015. Massage for low-back pain. *Cochrane Database of Systematic Reviews* Issue 9, CD001929.
22. French SD, Cameron M, Walker BF, Reggars JW, Esterman AJ. 2006. Superficial heat or cold for low back pain. *Cochrane Database of Systematic Reviews*, Issue 1, CD004750.
23. Paolucci T, Zangrando F, Iosa M, et al. 2017. Improved interoceptive awareness in chronic low back pain: a comparison of Back school versus Feldenkrais method. *Disability and Rehabilitation*. 39(10):994-1001.
24. Ebadi S, Henschke N, Nakhostin Ansari N, Fallah E, van Tulder MW. 2014. Therapeutic ultrasound for chronic low-back pain. *Cochrane Database of Systematic Reviews*, Issue 3, CD009169.
25. Dagenais S, Yelland MJ, Del Mar C, Schoene ML. 2007. Prolotherapy injections for chronic low-back pain. *Cochrane Database of Systematic Reviews*, Issue 2, CD004059.

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26. Vitoula K, Venneri A, Varrassi G, et al. 2018. Behavioral therapy approaches for the management of low back pain: an up-to-date systematic review. *Pain and Therapy*. May 16. doi: 10.1007/s40122-018-0099-4. [Epub ahead of print]
27. Linde K, Allais G, Brinkhaus B, et al. 2016. Acupuncture for the prevention of episodic migraine. *Cochrane Database of Systematic Reviews*, Issue 6, CD001218.
28. Therapeutic Goods Administration. 2017. [Guidance for the use of medicinal cannabis in the treatment of multiple sclerosis in Australia](#). Version 1. Australian Government Department of Health [accessed May 2018]
29. Australasian College of Nutritional and Environmental Medicine. 2017. [What is nutritional and environmental medicine?](#) [accessed may 2018]
30. Gross A, Langevin P, Burnie SJ, et al. 2015. Manipulation and mobilisation for neck pain contrasted against an inactive control or another active treatment. *Cochrane Database of Systematic Reviews*, Issue 9, CD004249.
31. Aas RW, Tuntland H, Holte KA, et al. 2011. Workplace interventions for neck pain in workers. *Cochrane Database of Systematic Reviews*, Issue 4, CD008160.
32. Yan J-H, Gu W-J, Sun J, et al. 2013. Efficacy of tai chi on pain, stiffness and function in patients with osteoarthritis: a meta-analysis. *PLoS One*, 8(4):e61672.
33. Fransen M, McConnell S, Harmer AR, et al. 2015. Exercise for osteoarthritis of the knee. *Cochrane Database of Systematic Reviews*, Issue 1, CD004376.
34. Wayne PM, Berkowitz DL, Litrownik DE, et al. 2014. What do we really know about the safety of tai chi? A systematic review of adverse event reports in randomized trials. *Archives of Physical Medicine and Rehabilitation*, 95(12):2470-2483.
35. Cameron M, Chrubasik S. Oral herbal therapies for treating osteoarthritis. 2014. *Cochrane Database of Systematic Reviews*, Issue 5, CD002947.
36. Cameron M, Chrubasik S. Topical herbal therapies for treating osteoarthritis. 2013. *Cochrane Database of Systematic Reviews*, Issue 5, CD010538.
37. Australian Commission on Safety and Quality in Health Care. 2017. [Osteoarthritis of the knee clinical care standard](#), Sydney: ACSQHC. [Accessed May 2018]
38. Senfteleber NK, Nielsen SM, Andersen JR. 2017. Marine oil supplements for arthritis pain: a systematic review and meta-analysis of randomized trials. *Nutrients* 9(1). pii: E42.
39. Hill CL, March LM, Aitken D, et al. 2016. Fish oil in knee osteoarthritis: a randomised clinical trial of low dose versus high dose. *Annals of the Rheumatic Diseases*, 75(1):23-9.

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40. Cameron M, Gagnier JJ, Chrubasik S. Herbal therapy for treating rheumatoid arthritis. 2011. Cochrane Database of Systematic Reviews, Issue 2, CD002948.
41. Royal Australian College of General Practitioners. 2009. [Clinical guideline for the diagnosis and management of early rheumatoid arthritis](#). South Melbourne, RACGP.
42. Hagen KB, Byfuglien MG, Falzon L, Olsen SU, Smedslund G. 2009. Dietary interventions for rheumatoid arthritis. Cochrane Database of Systematic Reviews Issue 1, CD006400.
43. National Institute for Health and Care Excellence. 2009 [Last updated: December 2015]. [Rheumatoid arthritis in adults: management](#). Clinical guideline [CG79]
44. Han A, Judd M, Welch V, Wu T, Tugwell P, Wells GA. 2004. Tai chi for treating rheumatoid arthritis. Cochrane Database of Systematic Reviews, Issue 3, CD004849.
45. Linde K, Allais G, Brinkhaus B et al. 2016. Acupuncture for the prevention of tension-type headache. Cochrane Database of Systematic Reviews, Issue 4, CD007587.
46. Williams ACDC, Eccleston C, Morley S. 2012. Psychological therapies for the management of chronic pain (excluding headache) in adults. Cochrane Database of Systematic Reviews, Issue 11, CD007407
47. National Health and Medical Research Council. 2015. NHMRC Information Paper: Evidence on the effectiveness of homeopathy for treating health conditions. Canberra: NHMRC.
48. Beran RG. 2014. Management of chronic headache. Australian Family Physician, 43(3):106-110.
49. Singh JA, Noorbaloochi S, MacDonald R, Maxwell LJ. 2015. Chondroitin for osteoarthritis. Cochrane Database of Systematic Reviews Issue 1, CD005614.
50. Haroyan A, Mukuchyan V, Mkrtychyan N, et al. 2018. Efficacy and safety of curcumin and its combination with boswellic acid in osteoarthritis: a comparative, randomized, double-blind, placebo-controlled study. BMC Complementary and Alternative Medicine, 18(1):7.
51. National Institute for Health and Care Excellence. 2012 [Last updated: November 2015]. [Headaches in over 12s: diagnosis and management](#). Clinical guideline [CG150]
52. Wieland LS, Skoetz N, Pilkington K, Vempati R, D'Adamo CR, Berman BM. 2017. Yoga treatment for chronic non-specific low back pain. Cochrane Database of Systematic Reviews, Issue 1, CD010671.

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