

Complementary and alternative medicine update

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Objectives

- Describe updates to the complementary and alternative medicine literature
- Explain the uses and limitations of complementary and alternative for common conditions
- Employ point of care resources relevant to complementary and alternative therapies

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National Center for Complementary and Integrative Health (NCCIH)

- <https://www.nccih.nih.gov/>
- CAM health topics: both CAM therapies and conditions for which CAM could be useful
- Herb-drug interaction checker

Butterbur

Common Names: butterbur, petasites, purple butterbur

Latin Names: *Petasites hybridus* (also known as *Petasites officinalis* or *Tussilago hybridus*)

Background

- Butterbur is a shrub that grows in Europe and parts of Asia and North America. The name, butterbur, is attributed to the traditional use of its large leaves to wrap butter in warm weather. The names for this plant in some other languages translate as "rain hat" or "hat plant," reflecting another use of the large leaves.
- Butterbur has been used for health purposes for many centuries. In the Middle Ages, the odor and smoke from burning butterbur roots were thought to fight plague. Today, butterbur is promoted as a dietary supplement for migraine, allergic rhinitis (hay fever), and other conditions.

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NatMed Pro

- Search by condition or by therapy
- Searches for medication-induced nutritional deficiencies
- ~\$180/year

Search for:

Results: 20

Butterbur

PROBABLY EFFECTIVE

Butterbur

Oral preparations seem to be beneficial for the prevention of migraine attacks in children.

PROBABLY EFFECTIVE

Butterbur

Long-term treatment with products typically in the form of a daily bath seems to reduce the risk of a headache.

PROBABLY EFFECTIVE

Butterbur

Adding oral drops into the ear does not seem to reduce pain in children with acute otitis media.

PROBABLY EFFECTIVE

Butterbur

Oral use does not prevent acute otitis media in children.

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Food and Drug Administration

- Information on supplements
- Patient handouts, fact sheets and infographics
 - Available in English and Spanish
- CME for clinicians

Dietary Supplement

Dietary Supplement

Dietary Supplement

Dietary supplements can help people improve or maintain their overall health. But they may also come with health risks. Whether you're a consumer of dietary supplements or a healthcare provider, it's important to know the facts before deciding on a dietary supplement.

Below, you'll find a wide range of downloadable educational resources about dietary supplements, including information about their benefits and risks, how they are regulated by the U.S. Food and Drug Administration (FDA), and much more.

Consumers | Healthcare Professionals | Teachers | Social Media | Resources

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Cochrane CAM group

- cam.cochrane.org

Cochrane Complementary Medicine

Search:

Results: 20

Cochrane Systematic Reviews (71)

Complementary and alternative therapies for pain management in labour | 18-Oct-08

Traditional Chinese medicine for epilepsy | 15-Mar-14

Chinese herbal medicine for chronic neck pain due to cervical degenerative disc disease | 20-Jan-17

Shengmai (a traditional Chinese herbal medicinal) for heart failure | 29-Apr-16

Chinese medicinal herbs for asymptomatic carriers of hepatitis B virus infection | 23-Apr-01

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UpToDate

- UpToDate
 - Includes some chapters on CAM (eg, for cancer, anxiety, rheum disorders, etc)
 - Includes Lexicomp with a thorough supplement-drug interaction checker

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1. Yoga in colorectal cancer: a qualitative study

- 10 week yoga program
 - 90 minutes weekly
 - Only enrolled people who did not do yoga regularly
- Qualitative arm of RCT
- 9 patients interviewed before and after the program
- Exploring the expectations of patients with colorectal cancer around a yoga intervention
- Results:
 - Among other results, some participants reported skepticism but participated anyway.

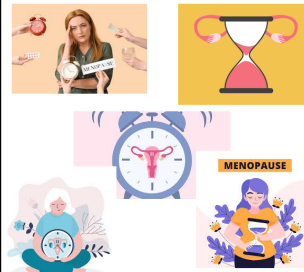


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Women's Health

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An "evidence map" for CAM therapies for menopause



- Systematic review of nonhormonal therapies for menopause symptoms
- Genitourinary, sexual, mood, QOL all considered
- English only
- Intention to describe the state of the literature and not compare treatments

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Intervention Category	Number of Trials*	Intervention of Interest	Interventions	Signs/Symptoms	Urinary	Sexual	Psychological	Quality of Life	Adverse Events
Educational programs (k = 3)	1	Sexual education (34-36)	1	1	2	2	1	1	1
Lifestyle interventions (37, 38)	2	1	2	1	2	1	2	1	1
Mind and body practices (k = 4)	1	Acupuncture (39)	1	1	1	1	1	1	1
Physical (k = 4)	1	Gua sha therapy (40)	1	1	1	1	1	1	1
Neurostimulation (41)	1	1	1	1	1	1	1	1	1
Yoga/pelvic floor muscle training (42)	1	1	1	1	1	1	1	1	1
Psychological (k = 4)	1	Cognitive behavioral therapy (331, 43)	1	1	2	2	2	1	1
Mindfulness-based stress reduction (44)	1	1	1	1	1	1	1	1	1
Mindfulness/attention therapy (45)	1	1	1	1	1	1	1	1	1
Natural products (k = 44)	1	Aloe (vaginal) (46)	1	1	1	1	1	1	1
Black seed oil (vaginal) (47)	1	1	1	1	1	1	1	1	1
Chamomile (vaginal) (48, 49)	1	1	1	1	1	1	1	1	1
Curcumin (oral) (50)	1	1	1	1	1	1	1	1	1
Fennel (vaginal) (51, 52)	1	1	1	1	1	1	1	1	1
Peppermint (vaginal) (53, 54)	2	2	2	2	2	2	2	2	2
Gentiana (vaginal) (55)	1	1	1	1	1	1	1	1	1
Ginseng (oral) (24)	1	1	1	1	1	1	1	1	1
Hot extract (vaginal) (56)	1	1	1	1	1	1	1	1	1
Licorice (vaginal) (57, 58)	2	2	2	2	2	2	2	2	2
Mixed herbal (oral) (59, 60)	1	1	1	1	1	1	1	1	1
Nettle (vaginal) (61)	1	1	1	1	1	1	1	1	1
Palm pollen (oral) (62)	1	1	1	1	1	1	1	1	1
Pueraria mirifica (3 vaginal/1 oral) (28-30, 63)	4	4	4	4	4	4	4	4	4
Red clover (1 vaginal/1 oral) (64, 65)	1	1	1	1	1	1	1	1	1
Sea buckthorn (oral) (66)	1	1	1	1	1	1	1	1	1
Soy (3 oral/2 vaginal) (15, 25, 26, 67, 68)	5	5	5	5	5	5	5	5	5
Squalid oil (vaginal) (69)	1	1	1	1	1	1	1	1	1
Tribulus terrestris (oral) (70, 71)	1	1	1	1	1	1	1	1	1
Others (k = 4)	1	1	1	1	1	1	1	1	1
EstroG-100 (oral) (72)	1	1	1	1	1	1	1	1	1
Lactobacillus (3 oral/1 vaginal) (321, 73)	1	1	1	1	1	1	1	1	1
Mixed herbal (oral) (311, 74, 75)	1	1	1	1	1	1	1	1	1
Vitamins (k = 7)	1	1	1	1	1	1	1	1	1
Vitamin D (oral) (76-78)	1	1	1	1	1	1	1	1	1
Vitamin E (vaginal) (79, 80)	1	1	1	1	1	1	1	1	1
Vitamin D/E (vaginal) (27, 81)	2	2	2	2	2	2	2	2	2

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3. Yoga for premenstrual syndrome

- Systematic review and meta-analysis
- 14 studies identified but on 7 included in MA
- Study protocols and follow up varied
 - Type of yoga, intervention intensity, typical f/u 8-12 weeks
- Big range of outcome measures included
 - SBP, DBP, HR, and a menstrual distress questionnaire
 - Moos Menstrual Distress Questionnaire: 47 items, 8 domains
 - 4 point Likert scale, 188 total possible



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3. Yoga for premenstrual syndrome

Outcome	Result (MD)
SBP	-0.30 (-2.29-1.69)
DBP	-0.25 (-0.99 – 0.49)
HR	-1.09 (-0.83 – 0.99)
Score on Moos Menstrual Distress Questionnaire	1.50 (0.91, 2.10)

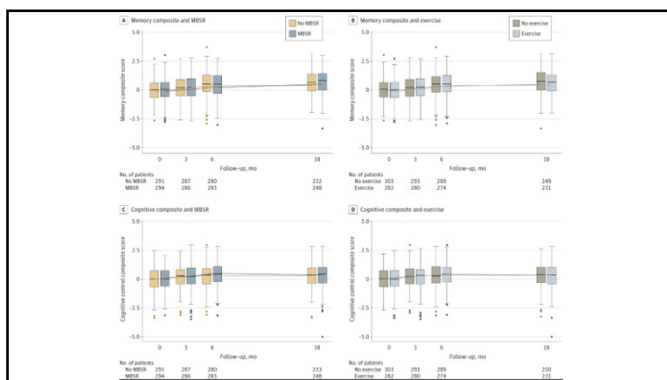
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4. Mindfulness for executive functioning in older adults



- RCT
- 585 community-dwelling adults with memory concerns but no cognitive impairments
- Randomized to 4 arms:
 - Mindfulness-based stress reduction
 - Exercise
 - Both
 - Health education (Control)
- 18 month intervention
- Primary outcome: memory and executive function on validated scores at 18 months

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5. Meds, music, and massage to treat anxiety in residents of long-term care facilities

- Systematic review and meta-analysis of RCTs
- 10 trials, all at moderate or high risk of bias
- Residents of LTC facilities
- Most did not have anxiety symptoms at baseline
 - 50%+ of adults in LTC facilities will experience
- 63% age > 80; 41% had comorbid dementia

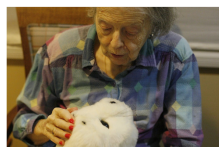


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5. Meds, music, and massage to treat anxiety in residents of long-term care facilities

- No evidence of benefit:
 - Beta-blockers
 - Pain management
 - Antidepressants
 - Exercise
 - Movement
 - Reminiscing
 - "Thinking about nostalgic smells"
 - Robotic animals
 - "Push robotic toy seal"
 - Therapy dolls
 - Multicomponent interventions

- Possible benefit:
 - CBT
 - Psychotherapy
 - Therapeutic touch
 - Music therapy



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6. Oral Chinese herbs + donepezil for adults with mild cognitive impairment

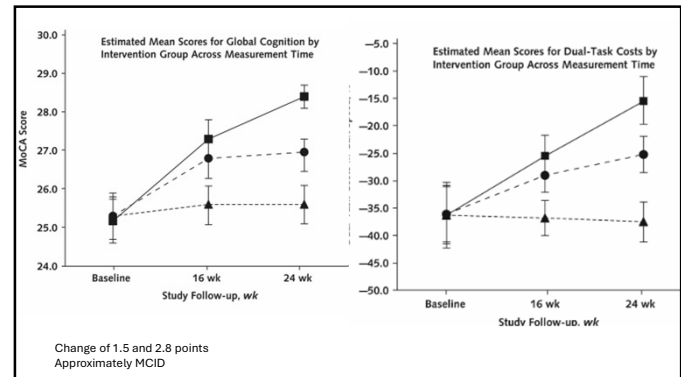
- Systematic review and meta-analysis of RCTs
- 20 studies, 1600 participants with MCI
- Evaluated oral Chinese herbs added to donepezil
 - 81 different herbs in 16 different formulations
 - Follow up varied from 1-6 months
- Outcomes were change in cognitive scores
- Chinese herb group:
 - 1.88 point improvement in MMSE
 - 2.01 point improvement in MOCA
- AEs were GI related and similar in herb and placebo groups

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7. Cognitively enhanced tai chi for adults with MCI

- Randomized controlled trial
- 320 community-dwelling adults >65 with memory concerns, but without dementia
 - Average age 76; 96% White, most college degree or more
- Randomized to intervention via Zoom 2x week for 24 weeks
 - Standard tai chi
 - Cognitively enhanced tai chi
 - Tai chi form + cognitive tasks like simple math, repeating numbers
 - Stretching
- Primary outcome was score on the MOCA at 48 weeks

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Musculoskeletal care

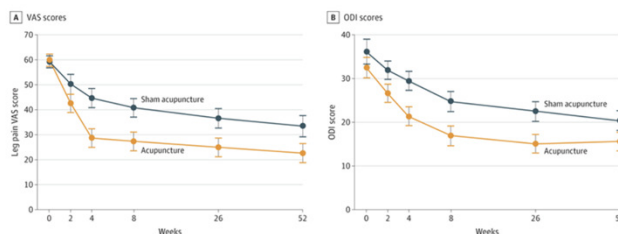
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8. Acupuncture in chronic sciatica due to disk herniation

- RCT
- 216 patients with unilateral sciatica due to herniated disc
 - Sx x at least 3 months
 - At least moderate-severe pain
 - Average age 51; 68% female; ~1/3 with previous acupuncture
- Randomized to
 - Acupuncture
 - Sham acupuncture
 - 30 minute treatment for 10 sessions over 4 weeks
- Primary outcome was score on the Oswestry Disability Index and visual analog scale

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8. Acupuncture of chronic sciatica due to disk herniation



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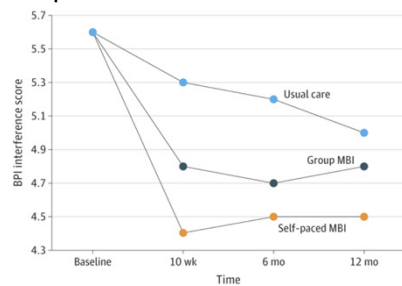
9. Virtual mindfulness-based intervention effective for chronic pain

- Randomized controlled trial
- 800 veterans with chronic pain
 - 4/10 on VAS for at least 6 months; most with arthritis or back pain
- 60%+ had at least one mental health diagnosis
 - Excluded severe depression, psychosis, uncontrolled bipolar disorder
- Randomized to
 - Mindfulness based intervention in group sessions, via video, 8 sessions, 90 minutes each + workbook reflections + videos
 - Self-paced session: same content but in asynchronous modules + 3 phone calls
 - Usual care

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9. Virtual mindfulness-based intervention effective for chronic pain

- Primary outcome was pain-related functional interference at 10 weeks, 6 months, and 1 year



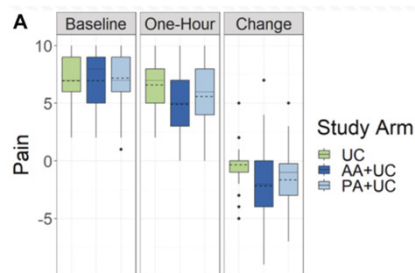
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10. ED acupuncture for MSK conditions

- Randomized controlled trial
- 230 adults with acute MSK pain of the neck, back, arms, or legs
- Randomized to
 - Auricular acupuncture
 - Peripheral acupuncture
 - Evaluation without acupuncture
- All patients received usual care including oral analgesia + ice/heat
- Primary outcome was 10-point VAS 1 hour after intervention

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10. ED acupuncture for MSK conditions



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Mental health

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11. Acupuncture for patients with OUD

- Randomized controlled trial
- 118 patients using methadone for OUD
 - Average age 48; average time using opioids 14 years; methadone use x at least 6 weeks; average baseline methadone dose 42mg
- Randomized to 30 minute sessions, 3x week for 8 weeks
 - Acupuncture
 - Sham acupuncture
- Primary outcome was 20% reduction in methadone dose
 - 62% of acupuncture
 - 29% of sham

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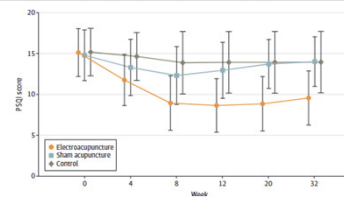
12. Electroacupuncture for insomnia treatment in adults with depression

- Randomized controlled trial
- 270 adults with depression and insomnia
- Randomized to 30 minute sessions, 3x week for 8 weeks
 - Electroacupuncture
 - Sham acupuncture
 - Usual care (eat right, exercise, and manage stress)
- Followed for 32 weeks
- Primary outcome was score on insomnia scale at week 8
 - Secondary outcome: depression scales; both scales at additional timepoints

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12. Electroacupuncture for insomnia treatment in adults with depression

Figure 2. Changes in Pittsburgh Sleep Quality Index (PSQI) Scores Among Groups Over Time



Similar results seen for the HAM-D and anxiety scores



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13. Music therapy for autistic people

- Systematic review and meta-analysis
- 26 RCTs, 1100 participants
 - 3 days-8 months; 21 studies involved children; degree of disability and interventions varied; individual and group settings; controls varied
- Short term benefit:
 - Global improvement (RR 1.22; 95% CI 1.06-1.40)
 - Quality of life (SMD 0.28; 95% CI 0.06-0.49)
 - Total autism severity score (SMD -0.83; 95% CI -1.41 - -0.24)
- No apparent change:
 - Social interaction, verbal and non-verbal communication

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Bottom lines

- Patients may not be expecting the moon, but are often open to improvement with CAM.
- Exercise is good for many things but does not improve cognition in older adults with mild cognitive impairment. Maybe try Chinese herbs or tai chi.
- Acupuncture should be done well by someone trained to do it; it can be useful for some MSK and mental health conditions
- Music may be good for anxiety among older adults and symptoms in people with autism

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