

# The Alliance Update

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Summer 2023 Edition

Alliance Chiropractic &  
Wellness Clinic  
Chiropractic-Massage-  
Naturopathic Medicine

**Health  
Newsletter**

## Turmeric for Knee Osteoarthritis

Source: Adrian Isaza, PhD, DC, DABCI, DACBN, CCAP; <https://dynamicchiropractic.com/article/59338-turmeric-for-knee-osteoarthritis>



### WHAT YOU NEED TO KNOW

- Osteoarthritis of the knee should be prevented and treated innovatively, especially among young people.
- A Non-Steroidal Anti Inflammatory Drug (NSAID) is often applied topically or orally as a first line of treatment, but adverse effects should be monitored.
- Based on numerous studies, it seems feasible to treat knee osteoarthritis with curcuminoids due to its efficacy and safety compared to NSAIDs.

In osteoarthritis (OA), chronic wear and tear leads to degeneration of articular cartilage and underlying bone. This condition usually affects elderly individuals, but can be accelerated by joint pathologies and abnormal biomechanics, including an elevated body-mass index (too much weight) on joints.

Over half of the people with symptomatic knee OA have advanced OA: approximately 14 million people worldwide. OA of the knee should be prevented and treated innovatively, especially among young people, OA should be managed non-pharmacologically first, and then pharmacologically or surgically only if necessary.

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### Turmeric vs. NSAIDs: Head to Head

- An analysis of 11 randomized, controlled trials with 1,000-plus participants was conducted in 2018 by Bannuru, et al. Patients receiving curcuminoids were significantly less likely to experience gastrointestinal adverse events than those taking NSAIDs; efficacy outcomes showed no statistically significant differences between the two.
- An analysis of 11 randomized, controlled trials involving more than 1,200 participants was conducted in 2021 by Hsiao, et al. Curcuminoids were found to have a significant difference in visual analog scale (VAS) pain scores when compared to NSAIDs. The included studies all reported higher adverse events rates when NSAIDs were used.
- A systematic review of 10 studies was published by Paultre, et al., in 2021. From baseline, turmeric therapy improved pain and function in all 10 studies. There were no differences in outcome scores between turmeric and NSAIDs in three studies. Studies in which turmeric therapy was used did not show any negative side effects.
- An analysis involving more than 1,800 participants in 16 randomized, controlled trials was conducted by Wang, et al., in 2021. Turmeric extracts significantly reduced knee pain and improved physical function compared to placebo, and had similar effects compared to NSAIDs. Turmeric extracts had 12% fewer adverse events than NSAIDs and similar rates to placebo.
- A systematic review of 15 randomized, controlled trials was completed in 2022 by Feng, et al., with over 1,600 patients involved overall. The VAS score for pain was significantly improved by curcuminoids when compared to placebo. Curcuminoids also improved function as well as pain in comparison with NSAIDs. The incidence of adverse events (AEs) was not significantly increased by curcuminoids compared with placebo.

### Clinical Takeaway

Based on these studies, it seems feasible to treat knee osteoarthritis with curcuminoids due to its efficacy and safety compared to NSAIDs. Further studies are warranted to support these findings.

## A Valuable New Resource: The Benefit-Harm Scale

Source: Ronald Feise, DC; <https://dynamicchiropractic.com/article/59341-a-valuable-new-resource-the-benefit-harm-scale>

### WHAT YOU NEED TO KNOW

- The Benefit-Harm Scale is a newly developed scale that summarizes benefits and harms of specified treatments in a simple format that is easy for doctors to understand.
- The chiropractic profession has published numerous quality studies in prestigious medical journals that support the effectiveness and safety of chiropractic care for chronic low back pain.
- In contrast, there is an absence of quality research to support the use of pharmaceuticals and spinal surgery for patients with chronic low back pain.

Treatment	Benefit Rating	Serious Harms
Spinal manipulation versus sham	★★★★★	●
Needle acupuncture versus sham	★★★	●
Acetaminophen versus placebo	∅	∅
NSAIDs versus placebo	∅	●
Muscle relaxants versus placebo	∅	∅
Gabapentinoids versus placebo	∅	∅
Opioids (single ingredient) versus placebo	∅	●●●●
Opioids (combination ingredient) versus placebo	∅	●
Systemic corticosteroids versus placebo	∅	∅
Spinal corticosteroid injections versus sham	∅	●
Spinal surgery versus sham	∅	●●●●●●

#### Benefits Scale

- 7 stars ★★★★★★ = multiple placebo RCTs with overall effect size > 0.80  
 6 stars ★★★★★ = multiple placebo RCTs with overall effect size 0.80 - 0.50  
 5 stars ★★★★★ = multiple placebo RCTs with overall effect size 0.49 - 0.20  
 4 stars ★★★★ = one placebo RCT with effect size > 0.80  
 3 stars ★★★ = one placebo RCT with effect size 0.80 - 0.50  
 2 stars ★★ = one placebo RCT with effect size 0.49 - 0.20  
 1 star ★ = one placebo RCT, effect size < 0.20, or effect size not statistically significant  
 ∅ = no relevant studies/data or uncertainty {heterogeneity prevented pooling}

#### Harms scale

- Level 7 warning ●●●●●●● = Extremely high risk (≥ 1 in 4 patients)  
 Level 6 warning ●●●●●● = Very high risk (≥ 1 in 20 to < 1 in 4 patients)  
 Level 5 warning ●●●●● = High risk (≥ 1 in 100 to < 1 in 20 patients)  
 Level 4 warning ●●●● = Moderate risk (≥ 1 in 1,000 to < 1 in 100 patients)  
 Level 3 warning ●●● = Low risk (≥ 1 in 10,000 to < 1 in 100 patients)  
 Level 2 warning ●● = Very low risk (≥ 1 in 100,000 to < 1 in 10,000 patients)  
 Level 1 warning ● = Rare risk (< 1 in 100,000 patients)  
 ∅ = no relevant studies/data or uncertainty (heterogeneity prevented pooling)

Source: Feise et al Spine J. 2023

### Chiropractic Answers the Call

The chiropractic profession has long been criticized for lacking quality clinical research. But over the past two decades, the profession has published numerous quality studies in prestigious medical journals. The vast majority of these studies support the effectiveness and safety of chiropractic care.

In contrast, there is an absence of quality research to support the use of pharmaceuticals and spinal surgery for patients with chronic low back pain. Do those treatments have any value? Are they more harmful than beneficial? Right now, we cannot be certain, because pharma companies and surgeons have failed to provide quality research.

Until and unless we have convincing research to support the use of drugs and surgery for low back pain, doctors, patients, insurance companies and regulators need to use the utmost care in assessing treatment options, based on the best available evidence regarding safety and effectiveness.

## The Link Between Anemia and Alzheimer's: What to Know

Source: Web MD; Lisa Mulcahy July 11, 2023

Around 10% of people over 65 in the United States have anemia, or a shortage of iron in their blood. This is an important statistic, because researchers now believe that anemia may have a significant connection to Alzheimer's disease.

A new Chinese study of over 300,000 people found that anemia was linked to a 56% higher risk of dementia. What's more, a new study from the University of Kansas found that iron can become "sequestered" in the brains of Alzheimer's patients, creating a deficiency that could then make the disease get worse faster.

According to the Cleveland Clinic, having iron-deficiency anemia means that your body doesn't have enough iron to make hemoglobin, a substance in your red blood cells to send oxygen through your system. It develops when your body uses up iron faster than it can be made, or when iron flow starts to slow down. Losing blood through internal bleeding, heavy menstruation, or frequent blood tests can cause iron-deficiency anemia. Pregnancy, breastfeeding, bone marrow diseases, autoimmune conditions, and not getting proper nutrition can all contribute as well. In fact, not eating enough is often how older people develop the condition.

## Muscular strength in male adolescents and premature death

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3502746/>

In this study over one million Swedish male adolescents aged 16-19 years were followed over a period of 24 years. Baseline examinations included knee extension, handgrip, and elbow flexion strength tests, as well as measures of diastolic blood pressure and body mass index.



**What they found:** The men with the weakest grip strength in their late teens were 20% more likely to have died by their mid-50s, compared with those with moderate to high grip strength. Even suicide rates were 20%–30% higher for the weakest recruits.

The study concluded that low muscular strength in adolescents is an emerging risk factor for major causes of death in young adulthood, such as suicide and cardiovascular diseases. The effect size observed for all cause mortality was equivalent to that for well established risk factors such as elevated body mass index or

high blood pressure.

## Pack It Light – Wear It Right

Source: <https://chiropractic.on.ca/self-management/pack-light-wear-right-blog-post-backpack-safety/>



Carrying a heavy load that is unevenly or improperly distributed can result in poor posture and even distort your spinal column. This impact can throw your spine out of alignment, causing muscle strain, headaches, back, neck, arm pain, and even nerve damage. Prevention is key – Teach your child how to properly use their backpacks and help them avoid an injury.

### Choose the right backpack

Go for lightweight vinyl or canvas material. Pick a pack that has two wide, adjustable, padded shoulder straps along with a padded back. The pack should also have a hip or waist strap.

### Pack it properly

Make sure your child's pack contains only what they need for that day and that the weight is evenly distributed. The total weight of the filled pack should not be more than 10 to 15 per cent of your child's body weight.

### Put it on safely

Put the pack on a flat surface, at waist height. Have your child slip on the pack one shoulder at a time and then adjust the straps to fit comfortably. Make sure your child uses both shoulder straps and ensure the pack is adjusted to fit snugly to their body, without dangling to the side. You should be able to slide your hand between the backpack and your child's back.

More than 50 per cent of young people experience at least one episode of low back pain by their teenage years. Research indicates one cause is improper use of backpacks. So, pack it light and wear it right. If your child is experiencing back pain, consult a chiropractor or other health care professional. They will help assess your child's specific needs and identify a care plan that's right for them.

## How Soybean Oil Could Lead to Gut Inflammation

Source: Medscape; Sarah Amandolare, August 02, 2023

A popular ingredient in the American diet has been linked to ulcerative colitis. The ingredient is soybean oil, which is very common in processed foods. In fact, U.S. per capita consumption of soybean oil increased more than 1,000-fold during the 20th century.

In a study from the University of California Riverside and UC Davis, mice fed a diet high in soybean oil were more at risk of developing colitis. The likely culprit? Linoleic acid, an omega-6 fatty acid that comprises up to 60% of soybean oil. Small amounts of linoleic acid help maintain the body's water balance. But Americans derive as much as 10% of their daily energy from linoleic acid, when they need only 1% to 2%, the researchers say.

The findings build on earlier research linking a high-linoleic acid diet with inflammatory bowel disease, or IBD, in humans. (Previous research in mice has also linked high consumption of the oil with obesity and diabetes in rodents.)

For the new study, the researchers wanted to drill down into how linoleic acid affects the gut. In mice, the soybean oil diet upset the ratio of omega-3 to omega-6 fatty acids in the gut. This led to a decrease in endocannabinoids, lipid-based molecules that help block inflammation. The gut microbiome of the mice also showed increased amounts of adherent invasive *E. coli*, a type of bacteria that grows by using linoleic acid as a carbon source. A "very close relative" of this bacteria has been linked to IBD in humans.

Cooking with olive oil can help increase omega-3: omega-6 ratios. Eating a varied diet that includes omega-3 fats, such as flaxseed and walnuts, and minimal amounts of processed foods is a recommended strategy to reduce soybean oil and replace it with healthier fats.

### Clinic Services

1. Chiropractic Care
2. Laser Therapy
3. Electrical Therapy
4. Sports Injury Care
5. Custom Foot Orthotics
6. Massage Therapy<sup>1</sup>
7. Naturopathic Medicine
8. Acupuncture
9. Kinesiology Services

#### Clinic Hours

Please note:

Monday	8:00am— 12:00pm	3:30pm - 7:30pm
Tuesday	8:00am— 12:00pm	
Wednesday	8:00am— 12:00pm	3:30pm –7:30pm
Thursday		3:30pm –7:30pm
Friday	8:00am – 12:00pm	

1. Massage therapy is available outside core office hours.

### Announcements

- Check out our WEBSITE at [www.alliancechiroandwellness.com](http://www.alliancechiroandwellness.com). You can find archived issues of our newsletter as well as other clinic information. Please note appointment requests should be made by calling the office at 905-648-0661. We do not accept appointment cancellations, bookings, or reschedules via our web site. These should be done by calling the office directly.
- Dr. Morphet will be away from the office from August 18 to August 25th.
- Like us on Facebook! To see the latest in health news, research, updates, and announcements, check us out at [www.facebook.com/AllianceChiropracticandWellnessClinic](https://www.facebook.com/AllianceChiropracticandWellnessClinic)

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