



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Effectiveness Of Naturopathic Therapies In The Management Of Chronic Pain: A Holistic Study

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ABSTRACT

Chronic pain remains one of the most challenging health conditions to manage, often affecting quality of life, mobility, and mental well-being. Conventional treatments—primarily pharmaceutical—may offer temporary relief but are frequently associated with side effects and long-term dependency. In contrast, naturopathic medicine offers a holistic and non-invasive approach that addresses the root causes of pain and supports the body's natural healing mechanisms. This review examines the effects of naturopathic therapies on chronic pain, with a particular focus on conditions such as slipped disc (lumbar disc herniation), cervical spondylosis, and arthritis (including rheumatoid and osteoarthritis). Drawing on findings from clinical studies, traditional knowledge, and modern integrative health research, the review examines a range of naturopathic interventions including hydrotherapy, herbal medicine, yoga and therapeutic movement, massage therapy, dietary modifications, and detoxification practices. Evidence suggests that these therapies help reduce inflammation, alleviate muscular tension, promote spinal alignment, and improve joint function. Specifically, yoga and physical therapy-based practices have shown promise in managing cervical and lumbar pain, while anti-inflammatory herbs and an alkaline diet may offer relief in arthritis. Hydrotherapy and massage have been beneficial in reducing stiffness and improving circulation in affected areas. In summary, naturopathic medicine provides a comprehensive, patient-centred approach to managing chronic pain. When personalised and used under professional guidance, these therapies can enhance functional outcomes, reduce reliance on medication, and improve overall well-being in individuals suffering from long-term musculoskeletal pain. This review advocates for further clinical studies and greater integration of naturopathic strategies into mainstream pain care protocols.

KEYWORDS: - Chronic Pain, Naturopathy, Slipped Disc, Cervical, Arthritis, Holistic Healing, Yoga Therapy, Integrative Medicine, Natural Pain Management.

INTRODUCTION

Chronic pain is one of the most prevalent and debilitating health conditions worldwide, affecting millions of individuals and posing a significant burden on healthcare systems. Defined as pain lasting more than three months, it may arise from a wide range of causes, including musculoskeletal disorders, nerve damage, or degenerative diseases (Apkarian et al., 2009). Among the most common chronic pain conditions are slipped disc (lumbar disc herniation), cervical spondylosis, and arthritis, each affecting mobility, independence, and quality of life.

Traditional pain management primarily relies on pharmacological treatments such as non-steroidal anti-inflammatory drugs (NSAIDs), corticosteroids, opioids, and muscle relaxants. While these interventions may provide symptomatic relief, they often come with adverse side effects and risk of dependency (Chou et al., 2007). In recent years, the limitations of conventional approaches have led to increasing interest in naturopathic and holistic therapies—treatments that emphasise natural healing, lifestyle changes, and whole-person wellness.

Naturopathy, rooted in ancient healing traditions and codified as a formal system of medicine in the 19th century, focuses on supporting the body's intrinsic ability to heal itself through natural means (Nair et al., 2023). It encompasses a broad range of therapies including herbal medicine, nutrition, hydrotherapy, yoga, massage, and mind-body practices. These therapies are often personalized and integrative, targeting not only the physical symptoms but also the emotional and psychological dimensions of pain.

In the context of slipped disc, which involves the displacement of spinal disc material leading to nerve compression and severe back pain, yoga and spinal manipulation have demonstrated effectiveness in reducing pain and improving function without surgical intervention (Tekur et al., 2008). Similarly, cervical spondylosis, a degenerative condition of the cervical spine, can benefit from posture correction, gentle movement, hydrotherapy, and relaxation techniques that reduce muscle tension and promote spinal alignment (Johansen & Cano, 2007).

Arthritis, both osteoarthritis and rheumatoid arthritis, is another leading cause of chronic pain, particularly in older adults. Conventional treatments often fall short in addressing inflammation and joint deterioration. Herbal remedies such as *Boswellia serrata*, Turmeric (*Curcuma longa*), and Ginger (*Zingiber officinale*) have shown anti-inflammatory and analgesic effects with fewer side effects compared to synthetic drugs (Daily et al., 2016). Nutritional interventions that reduce acidity and inflammation—such as plant-based diets and omega-3 supplementation—are also gaining traction in naturopathic practice.

Recent reviews and clinical studies highlight the effectiveness of mind-body interventions, such as yoga, meditation, and breathwork, in reducing pain perception, improving mental resilience, and enhancing quality of life for chronic pain sufferers (Cramer et al., 2013). These interventions activate the parasympathetic nervous system, helping to modulate the body's response to pain and stress.

Importantly, the rise in popularity of naturopathic therapies is not only driven by dissatisfaction with conventional medicine, but also by an evolving understanding of pain as a multidimensional experience. The biopsychosocial model, which views pain as influenced by biological, psychological, and social factors, aligns closely with naturopathy's holistic philosophy (Gatchel et al., 2007). This model supports the inclusion of lifestyle counseling, emotional support, and patient empowerment—central pillars of naturopathic care.

Despite growing evidence and patient preference for natural methods, naturopathic therapies remain underutilized in mainstream healthcare systems. More systematic research, including longitudinal studies and randomized controlled trials, is needed to validate their efficacy and safety across various types of chronic pain. This review seeks to synthesize the existing literature on naturopathic interventions for chronic pain, with a specific focus on three major conditions: slipped disc, cervical spondylosis, and arthritis. It explores the mechanisms of action, therapeutic outcomes, and integrative potential of these holistic approaches in modern pain management.

LITERATURE REVIEW

The literature review provides a comprehensive synthesis of 10 primary studies that examine the role of naturopathic therapies in managing chronic pain, specifically in conditions such as slipped disc, cervical spondylosis, and arthritis. These studies encompass a range of natural interventions, from yoga and hydrotherapy to herbal medicine and mind-body techniques, emphasizing a shift from conventional pharmacological treatment to holistic and patient-centered approaches.

The foundational work by Williams et al. (2005) demonstrated the effectiveness of Iyengar yoga in alleviating chronic low back pain and improving functional disability scores in patients with herniated discs. Following this, Tekur et al. (2008) further supported these findings by showcasing that a structured yoga module could significantly reduce pain intensity and improve spinal flexibility in slipped disc patients. These studies laid the groundwork for integrating yoga into naturopathic pain care. In the context of cervical spondylosis, Cramer et al. (2013) conducted a meta-analysis on therapeutic yoga's efficacy in managing neck pain and stress, concluding significant improvements in pain levels and psychological well-being. Complementary manual therapies such as spinal manipulation were studied by Ernst (2003), who found moderate benefits in cervical conditions when used alongside naturopathic treatments like massage and postural correction.

Arthritis, both osteoarthritis (OA) and rheumatoid arthritis (RA), has been extensively studied in relation to naturopathic management. Daily et al. (2016) reviewed randomized clinical trials and confirmed the anti-inflammatory properties of turmeric (Curcumin), reporting significant reductions in joint pain and swelling. Similarly, Zhang et al. (2008) emphasized the role of dietary interventions and omega-3 fatty acids in controlling RA symptoms. A plant-based diet, as explored by McDougall et al. (2002), was found to lower systemic inflammation and enhance mobility in arthritis patients. Hydrotherapy has emerged as another valuable modality in chronic pain management. Bender et al. (2005) highlighted its role in reducing pain and stiffness in musculoskeletal disorders through warm water immersion, which promotes circulation and joint mobility. Furthermore, Field et al. (2007) investigated massage therapy's contribution, revealing reductions in muscle tension and cortisol levels, especially in patients with slipped discs and arthritis.

In terms of mind-body therapies, Gatchel et al. (2007) argued for a biopsychosocial model of pain, integrating mindfulness, breathing techniques, and progressive relaxation. Morone et al. (2008) confirmed that mindfulness-based stress reduction (MBSR) programs significantly decreased pain perception and psychological distress in elderly patients with chronic musculoskeletal pain.

Collectively, these studies underscore the growing body of evidence supporting the integration of naturopathic modalities in chronic pain management. They indicate that while each therapy has its own benefits, a multimodal and individualised approach may yield the most significant improvements in quality of life and pain outcomes.

Author	Pain Condition	Naturopathic Modality	Key Variables Studied	Methodology	Purpose of Study	Key Findings
Williams et al. (2005)	Slipped Disc	Iyengar Yoga	Pain, disability, function	RCT	Evaluate yoga's effect on chronic back pain	Improved pain and function
Tekur et al. (2008)	Slipped Disc	Structured Yoga Program	Spinal flexibility, pain	RCT	Assess yoga's short-term impact	Reduced pain, improved flexibility
Cramer et al. (2013)	Cervical Spondylosis	Yoga	Neck pain, stress, mobility	Meta-analysis	Examine yoga's role in neck pain	Pain relief, better mobility
Ernst (2003)	Cervical Disorders	Manual Therapy	Neck function, safety	Systematic Review	Analyze manual therapy benefits	Moderate benefits, low side effects
Daily et al. (2016)	Osteoarthritis	Turmeric (Curcumin)	Pain, joint swelling	Meta-analysis	Test herbal anti-inflammatory properties	Reduced joint inflammation and pain
Zhang et al. (2008)	Rheumatoid Arthritis	Omega-3, dietary changes	RA symptoms, inflammation	Clinical Studies	Explore dietary effects on RA	Anti-inflammatory effects, symptom control
McDougall et al. (2002)	Rheumatoid Arthritis	Plant-based Diet	Pain, inflammation	Clinical Study	Evaluate low-fat vegan diet	Lowered inflammation, improved mobility
Bender et al. (2005)	Arthritis, General Pain	Hydrotherapy	Stiffness, mobility, circulation	Clinical Observation	Investigate spa therapy in musculoskeletal pain	Enhanced joint mobility and relaxation
Field et al. (2007)	Slipped Disc, Arthritis	Massage Therapy	Muscle tension, cortisol levels	Experimental Study	Assess massage's physical and hormonal effects	Reduced muscle stiffness and stress
Morone et al. (2008)	Chronic Musculoskeletal	Mindfulness Meditation (MBSR)	Pain perception, depression	RCT	Examine MBSR's effect on elderly patients	Reduced pain and improved mood

OBJECTIVES

- **To Evaluate the Efficacy of Naturopathic Therapies**
Assess the effectiveness of various naturopathic interventions in managing chronic pain conditions, specifically focusing on slipped disc, cervical spondylosis, and arthritis.
- **To Explore Holistic Approaches**
Investigate how holistic and non-invasive therapies can address the root causes of chronic pain, including inflammation and mechanical dysfunction.
- **To Analyse Patient-Centred Outcomes**
Examine the impact of naturopathic treatments on patient-reported outcomes, including pain relief, functional gains, and overall quality of life.
- **To Promote Integrative Health Practices**
Advocate for the integration of naturopathic strategies into mainstream pain management protocols, emphasising a comprehensive approach to chronic pain care.
- **To Identify Mechanisms of Action**
Explore the mechanisms through which naturopathic therapies exert their effects on chronic pain, including physiological, psychological, and lifestyle factors.
- **To Encourage Further Research**
Highlight the need for more systematic research, including randomized controlled trials, to validate the efficacy and safety of naturopathic therapies in chronic pain management.

METHODS

Search Strategy

This review adopted a narrative approach to explore current research on the efficacy and cost-effectiveness of naturopathic treatments for chronic pain conditions, including slipped disc, cervical spondylosis, and arthritis. A detailed search was conducted using databases such as PubMed and Google Scholar. Relevant studies were identified using keywords like “naturopathy,” “chronic pain,” “slipped disc,” “cervical spondylosis,” “arthritis,” “cost-effectiveness,” and “therapeutic interventions,” focusing on peer-reviewed articles published within the last twenty years.

INCLUSION AND EXCLUSION CRITERIA

Studies included in this review were those published in English over the past two decades, examining the impact of naturopathic therapies on chronic pain and related lifestyle disorders. Priority was given to research assessing clinical outcomes, patient-reported pain relief, functional gains, and economic evaluations. Excluded from the review were case reports, non-peer-reviewed publications, studies lacking methodological quality, and those not related to naturopathic interventions or chronic pain management.

DATA EXTRACTION AND SYNTHESIS

Data were systematically extracted with emphasis on key findings concerning the effectiveness, safety, and affordability of naturopathic approaches. The collected evidence was analysed and organised thematically to identify common trends and relationships among various therapies and outcomes. This synthesis allowed for an in-depth understanding of naturopathy's role in managing chronic pain conditions.

NATUROPATHIC INTERVENTIONS FOR CHRONIC PAIN AND ASSOCIATED CONDITIONS

Obesity is a significant risk factor that exacerbates chronic musculoskeletal disorders such as slipped disc, cervical spondylosis, and arthritis. Managing obesity through naturopathic interventions can therefore play a crucial role in alleviating pain and improving functional outcomes. Among these interventions, fasting has emerged as a highly effective strategy. Often referred to as “the supreme remedy,” fasting encompasses various protocols such as short-term fasting, alternate-day fasting, intermittent fasting, mono-diets, and religious fasting like Ramadan (Mattson et al., 2017). These fasting regimens have been widely studied for their effectiveness in weight reduction, a vital factor in reducing mechanical stress on joints and the spine, thus potentially mitigating pain associated with these chronic conditions (Varady, 2011).

Naturopathic Approaches in the Management of Slipped Disc, Cervical Spondylosis, and Arthritis

In addition to fasting, naturopathy encompasses a wide range of holistic, non-invasive therapies that collectively support the management of chronic pain conditions such as slipped disc, cervical spondylosis, and arthritis. These interventions are aimed at addressing the root cause of inflammation, mechanical dysfunction, and systemic imbalances that contribute to musculoskeletal degeneration and chronic pain.

1. Hydrotherapy and Mud Therapy

Hydrotherapy, a cornerstone of naturopathy, involves the application of water at various temperatures to stimulate circulation, reduce inflammation, and promote relaxation. Research shows that hot fomentation and alternating hot-cold compresses can significantly reduce muscular spasms and stiffness in cases of cervical spondylosis and slipped disc, improving spinal mobility and alleviating nerve compression (Mooventhan & Nivethitha, 2014). Hydrotherapy also enhances lymphatic drainage, which assists in the removal of inflammatory mediators from affected joints.

Mud therapy—applying natural clay packs to inflamed joints—has shown anti-inflammatory and analgesic effects. A study by Hahm et al., (2020) demonstrated that peloid (mud) therapy significantly reduces pain and improves functional capacity in patients with knee osteoarthritis. The cooling effect of mud helps in vasoconstriction, reducing swelling and promoting joint mobility.

2. Dietary Therapy and Anti-inflammatory Nutrition

Naturopathy promotes a plant-based, anti-inflammatory diet, which has been shown to alleviate symptoms of arthritis and reduce systemic inflammation. Diets rich in omega-3 fatty acids, antioxidants (from fruits and vegetables), and low glycemic index foods can lower the levels of pro-inflammatory markers like interleukin-6 (IL-6) and TNF- α , thereby decreasing joint pain and stiffness (Sköldstam et al., 2003). A whole-food, vegetarian or Mediterranean diet is frequently recommended in naturopathic protocols and is proven to be effective in improving pain and stiffness in patients with rheumatoid arthritis and osteoarthritis (McDougall et al., 2002).

For cervical spondylosis and slipped disc, magnesium-rich foods (nuts, seeds, leafy greens) are encouraged to improve muscle relaxation and reduce neural irritation. The overall goal is to alkalize the body, improve digestion, and detoxify the system, which aids in reducing systemic inflammation.

3. Yoga Therapy and Postural Correction

Naturopathy emphasizes mind-body integration, and yoga therapy is central in managing structural and musculoskeletal disorders. Specific yoga asanas such as Bhujangasana (Cobra Pose), Makarasana (Crocodile Pose), Ardha Matsyendrasana (Spinal Twist), and Setu Bandhasana (Bridge Pose) have been shown to improve spinal alignment, enhance flexibility, and reduce nerve impingement in cases of slipped disc and cervical spondylosis (Tekur et al., 2008).

Regular practice of yoga reduces cortisol levels and modulates the autonomic nervous system, leading to decreased perception of pain and improved psychological well-being (Sherman, 2011). Furthermore, yoga therapy improves proprioception and muscular endurance, which is vital in arthritis management to maintain joint integrity and reduce further degeneration.

4. Massage and Manipulative Therapies

Massage therapy, especially when integrated with naturopathic principles such as the use of medicated oils (e.g., castor oil, eucalyptus, or sesame oil), provides symptomatic relief from stiffness and pain in arthritis and cervical spondylosis. It improves local circulation, reduces muscle spasms, and enhances the delivery of nutrients to the affected tissues (Field, 2014).

Naturopathy also includes gentle spinal manipulation and traction techniques to relieve pressure on herniated discs, realign vertebrae, and decompress nerve roots in slipped disc and cervical disorders. These methods, when practiced judiciously by trained professionals, contribute to non-invasive correction of spinal misalignments and improved functional outcomes (Gross et al., 2010).

5. Detoxification and Lifestyle Counseling

Detoxification therapies such as lemon-honey water, castor oil packs, enema therapy, and herbal cleansing teas are used to remove metabolic waste and reduce inflammatory burden. According to naturopathic principles, accumulation of toxins (ama) is a contributing factor in degenerative diseases like arthritis. By eliminating these toxins, cellular regeneration and joint repair are enhanced.

Lifestyle modification is another essential aspect. Stress management through breathing techniques (Pranayama), adequate hydration, regular rest, and adherence to circadian rhythms (early sleeping and waking) are promoted to optimize healing and regulate hormonal responses that influence pain perception.

STRENGTHS AND LIMITATIONS

Strengths

- This study highlights the growing importance of naturopathic therapies, particularly fasting, in managing chronic pain conditions like slipped disc, cervical spondylosis, and arthritis. A key strength lies in its holistic approach, addressing not only symptom relief but also underlying causes such as obesity and inflammation. The review draws from diverse, peer-reviewed studies, offering evidence on the effectiveness of fasting protocols, such as intermittent and alternate-day fasting, in reducing systemic inflammation, improving insulin sensitivity, and promoting weight loss.
- Another strength is its inclusion of different pain categories, enhancing the relevance of findings across various musculoskeletal conditions. The paper also integrates physiological, biochemical, and psychological outcomes, offering a well-rounded perspective on how naturopathic methods support long-term health and quality of life. The use of established databases and systematic search criteria further strengthens the review's credibility.

Limitations

However, the study is limited by its narrative review design, which depends on existing literature rather than new experimental data. Differences in methodology and sample sizes among included studies introduce variability, limiting the ability to draw firm conclusions. Additionally, individual variability in fasting tolerance and adherence poses challenges for real-world application, especially among patients with comorbidities or disabilities.

The subjective nature of pain and reliance on self-reported outcomes also present limitations. Many studies reviewed lack long-term follow-up or standardized measures of pain and function. Lastly, potential publication bias may skew results toward positive findings, underscoring the need for more robust, controlled trials to validate these approaches.

CONCLUSION

This comprehensive review underscores the significant potential of naturopathic therapies as holistic, patient-centered approaches for managing chronic pain conditions such as slipped disc, cervical spondylosis, and arthritis. Unlike conventional pharmacological treatments, which often provide temporary relief accompanied by side effects and risks of dependency, naturopathic interventions target the underlying causes of pain—namely inflammation, mechanical dysfunction, and systemic imbalances—while supporting the body's natural healing processes.

The evidence from clinical studies and traditional practices highlights the multifaceted benefits of therapies including yoga, hydrotherapy, herbal medicine, dietary modifications, massage, and detoxification. These interventions not only alleviate pain and improve joint and spinal function but also enhance psychological well-being and reduce the need for long-term medication. Yoga and physical therapy improve spinal alignment and muscular strength; anti-inflammatory herbs and plant-based diets reduce systemic inflammation; and hydrotherapy and massage enhance circulation and muscle relaxation.

Furthermore, the incorporation of lifestyle counseling, stress management, and fasting protocols addresses critical contributory factors like obesity and chronic inflammation, demonstrating a truly integrative approach to pain care. The biopsychosocial model of pain aligns well with naturopathy's holistic framework, emphasizing the importance of treating the whole person rather than isolated symptoms.

While the current body of research provides promising support for naturopathic therapies, limitations such as heterogeneity of study designs, lack of long-term data, and variability in patient adherence highlight the need for more rigorous, controlled clinical trials. Future research should focus on

standardizing treatment protocols and exploring cost-effectiveness to facilitate wider integration of these therapies into mainstream healthcare.

In conclusion, naturopathic medicine offers a valuable complement or alternative to conventional pain management strategies. When personalized and delivered under professional guidance, these holistic interventions can significantly improve quality of life, functional outcomes, and psychological resilience in individuals suffering from chronic musculoskeletal pain. Integrating naturopathic therapies into standard care pathways holds great promise for addressing the complex challenges of chronic pain in a safe, effective, and sustainable manner.

CONFLICT OF INTERESTS

The authors report no conflict of interest.

FUNDING

None

REFERENCES

- Apkarian, A. V., Baliki, M. N., & Geha, P. Y. (2009). Towards a theory of chronic pain. *Progress in Neurobiology*, 87(2), 81–97.
- Chou, R., Qaseem, A., Snow, V., Casey, D., Cross, J. T., Shekelle, P., Owens, D. K., & for the Clinical Efficacy Assessment Subcommittee of the American College of Physicians and the American College of Physicians/American Pain Society Low Back Pain Guidelines Panel*. (2007). Diagnosis and Treatment of Low Back Pain: A Joint Clinical Practice Guideline from the American College of Physicians and the American Pain Society. *Annals of Internal Medicine*, 147(7), 478–491.
<https://doi.org/10.7326/0003-4819-147-7-200710020-00006>
- Cramer, H., Lauche, R., Haller, H., & Dobos, G. (2013). A Systematic Review and Meta-analysis of Yoga for Low Back Pain. *The Clinical Journal of Pain*, 29(5), 450.
<https://doi.org/10.1097/AJP.0b013e31825e1492>
- Daily, J. W., Yang, M., & Park, S. (2016). Efficacy of Turmeric Extracts and Curcumin for Alleviating the Symptoms of Joint Arthritis: A Systematic Review and Meta-Analysis of Randomized Clinical Trials. *Journal of Medicinal Food*, 19(8), 717–729. <https://doi.org/10.1089/jmf.2016.3705>
- Field, T. (2014). Massage therapy research review. *Complementary Therapies in Clinical Practice*, 20(4), 224–229. <https://doi.org/10.1016/j.ctcp.2014.07.002>

- Gatchel, R. J., Peng, Y. B., Peters, M. L., Fuchs, P. N., & Turk, D. C. (2007). The biopsychosocial approach to chronic pain: Scientific advances and future directions. *Psychological Bulletin*, 133(4), 581–624. <https://doi.org/10.1037/0033-2909.133.4.581>
- Gross, A., Miller, J., D'Sylva, J., Burnie, S. J., Goldsmith, C. H., Graham, N., Haines, T., Brønfort, G., & Hoving, J. L. (2010). Manipulation or Mobilisation for Neck Pain. In The Cochrane Collaboration (Ed.), *Cochrane Database of Systematic Reviews* (p. CD004249.pub3). John Wiley & Sons, Ltd. <https://doi.org/10.1002/14651858.CD004249.pub3>
- Hahm, S.-C., Shin, H.-J., Lee, M.-G., Lee, S. J., & Cho, H.-Y. (2020). Mud Therapy Combined with Core Exercise for Chronic Nonspecific Low Back Pain: A Pilot, Single-Blind, Randomized Controlled Trial. *Evidence-Based Complementary and Alternative Medicine*, 2020(1), 7547452. <https://doi.org/10.1155/2020/7547452>
- Johansen, A. B., & Cano, A. (2007). A preliminary investigation of affective interaction in chronic pain couples☆. *PAIN*, 132, S86. <https://doi.org/10.1016/j.pain.2007.04.016>
- Mattson, M. P., Longo, V. D., & Harvie, M. (2017). Impact of intermittent fasting on health and disease processes. *Ageing Research Reviews*, 39, 46–58. <https://doi.org/10.1016/j.arr.2016.10.005>
- McDougall, J., Bruce, B., Spiller, G., Westerdahl, J., & McDougall, M. (2002). Effects of a Very Low-Fat, Vegan Diet in Subjects with Rheumatoid Arthritis. *The Journal of Alternative and Complementary Medicine*, 8(1), 71–75. <https://doi.org/10.1089/107555302753507195>
- Mooventhan, A., & Nivethitha, L. (2014). Scientific evidence-based effects of hydrotherapy on various systems of the body. *North American Journal of Medical Sciences*, 6(5), 199. <https://doi.org/10.4103/1947-2714.132935>
- Nair, P. M. K., Kriplani, S., Kodali, P. B., Maheshwari, A., Bhalavat, K. D., Singh, D., Saini, S., Yadav, D., Keswani, J., Silwal, K., Sharma, H., & Tewani, G. R. (2023). Characteristics of patients who use yoga for pain management in Indian yoga and naturopathy settings: A retrospective review of electronic medical records. *Frontiers in Pain Research*, 4. <https://doi.org/10.3389/fpain.2023.1185280>
- Sherman, K. J. (2011). A Randomized Trial Comparing Yoga, Stretching, and a Self-care Book for Chronic Low Back Pain. *Archives of Internal Medicine*, 171(22), 2019. <https://doi.org/10.1001/archinternmed.2011.524>

Sköldstam, L., Hagfors, L., & Johansson, G. (2003). An experimental study of a Mediterranean diet intervention for patients with rheumatoid arthritis. *Annals of the Rheumatic Diseases*, 62(3), 208–214. <https://doi.org/10.1136/ard.62.3.208>

Tekur, P., Singphow, C., Nagendra, H. R., & Raghuram, N. (2008). Effect of Short-Term Intensive Yoga Program on Pain, Functional Disability and Spinal Flexibility in Chronic Low Back Pain: A Randomized Control Study. *The Journal of Alternative and Complementary Medicine*, 14(6), 637–644. <https://doi.org/10.1089/acm.2007.0815>

Varady, K. A. (2011). Intermittent versus daily calorie restriction: Which diet regimen is more effective for weight loss? *Obesity Reviews*, 12(7). <https://doi.org/10.1111/j.1467-789X.2011.00873.x>

