Special Turmeric Extract Benefits Osteoarthritis Patients

A new clinical trial supports the benefits to people with osteoarthritis who used a unique extract of turmeric (*Curcuma longa*).¹ Scientists in Italy have studied the pain-relief, increased flexibility, and other effects of a special, patented extract of the roots of turmeric, the flavorful spice that has been used for centuries as a traditional remedy. Turmeric formulations have shown a wide range of safety and significant scientific and clinical benefits in recent animal research and human clinical trials.²,³

The characteristic yellow color of turmeric, which is found in many yellow mustards and yellow curry preparations, derives from compounds known collectively as curcuminoids, whose most abundant member is curcumin. Curcumin is difficult to absorb into the human bloodstream from the gastrointestinal tract when consumed orally.⁴

Researchers in Italy selected 50 patients with X-ray diagnosed osteoarthritis in either one or both knees to evaluate if the special turmeric formulation called Meriva® could provide more benefits to their standard medical therapy. In this trial, the patients were split into two groups: the first one received standard medical treatment as determined by patients’ physicians, while patients in the second group added the special curcumin extract to their standard medical treatment.

After 90 days, the following benefits were observed: Compared to the controls, patients in the Meriva group experienced a 58 percent decrease in their overall pain, stiffness and physical functionality as measured by the widely used medical scoring method developed by Western Ontario and McMaster Universities (WOMAC). In addition, the Social and Emotional Index (SEI) score resulted in a greater than 300 percent improvement in Meriva patients compared to patients not taking the curcumin extract. Blood tests indicated that in patients having elevated levels of C-reactive protein (CRP), a 16-fold decrease of this inflammation marker was observed in the Meriva group. Finally, the subjects using Meriva were able to reduce their reliance on standard painkillers (NSAIDs, non-steroidal anti-inflammatory drugs) by 63 percent compared to patients on conventional medical therapy alone.

Taken together, these data show that Meriva turmeric extract improves the clinical benefit of a standard NSAIDs-based treatment of osteoarthritis, making it possible for patients to decrease their medication load and increase its efficacy.

Consistent with data from other human studies on various types of turmeric extracts, Meriva demonstrated a high degree of safety without producing any serious adverse side effects.

“This is great news for people who suffer from osteoarthritis and the physicians who treat them,” said Mark Blumenthal, Founder and Executive Director of the nonprofit American Botanical Council, an independent herbal medicine research and education organization in Austin, Texas.

“Turmeric has long been known to have anti-inflammatory and pain-relieving properties and this trial, on this special turmeric extract, is another important step towards validating the curcumin in turmeric as an increasingly...
popular herbal dietary supplement. When one considers the overall safety of turmeric extract and curcumin, especially compared to some of the pharmaceutical drugs which have had to be removed from the market due to serious safety concerns, the growing clinical evidence for the use of turmeric extract is compelling,” he added.

The authors of this trial write that “curcumin is one of the most extensively investigated products of natural origin. Its broad spectrum of bioactivity and low oral toxicity have expanded its use to several clinical conditions. Many potential beneficial properties of the natural product [i.e. curcumin] have not produced effective clinical results because curcumin shows a poor water solubility and stability, a low and unpredictable oral absorption, and a quick metabolism.” Researchers believe that these problems have hampered the clinical development of curcumin as a pharmaceutical product and as a dietary supplement. Meriva has exhibited high levels of oral bioavailability in a previous comparative animal pharmacokinetic* study.5

The Meriva curcumin extract used in this clinical trial is a special patented combination of curcumin with soybean-derived phosphatidylcholine (1:2 ratio). Produced and distributed by Indena SpA of Milan, Italy, the world’s largest manufacturer of standardized botanical extracts for the food, dietary supplement, pharmaceutical and cosmetic industries. Meriva has recently been introduced into the market as a dietary supplement ingredient marketed in the USA and Europe. In this clinical study, Meriva capsules prepared by Thorne Research Inc. (Dover, Idaho, USA) were used at a dosage of 1 gram Meriva curcumin complex per day (standardized to contain 18-22 percent curcuminoids, and corresponding to 200 mg curcumin per day).

About Turmeric

Turmeric is a traditional spice, food and medicine, native to southeast Asia, and widely used in Ayurvedic system of traditional medicine in India. Turmeric is made from the roots and rhizomes (lateral roots) of the turmeric plant, a member of the same plant family as ginger. According to a recent review article, over 2,500 preclinical scientific investigations have supported the activity of curcumin from turmeric as a potential agent to treat directly or as an adjunct treatment for various chronic diseases such as inflammatory diseases, some forms of cancer and possibly also Alzheimer’s disease. Turmeric’s popularity has risen tremendously in the past few years as consumers learn more about its safety and wide spectrum of health benefits.2,3 Turmeric dietary supplements were ranked 5th in sales in natural food stores in 2009, up about 23 percent from the previous year, generating over $10 million in sales in that market channel alone, according to a report in the American Botanical Council’s journal HerbalGram, based on information from SPINS, a market research firm which monitors sales of dietary supplements in the natural food channel of trade.6

About the American Botanical Council

Founded in 1988, the American Botanical Council is a leading international nonprofit organization addressing research and educational issues regarding herbs and medicinal plants. ABC’s members include academic researchers and educators, universities and libraries, health professionals and medical institutions, botanical gardens and arboreta, government agencies, members of the herb, dietary supplement, cosmetic, and pharmaceutical industries, journalists, consumers and other interested parties from over 70 countries. The organization occupies a historic 2.5-acre site in Austin, Texas where it publishes the quarterly journal HerbalGram, the monthly e-publication HerbalEGram, HerbClips (summaries of scientific and clinical publications), reference books and other educational materials. ABC also hosts HerbMedPro, a powerful and time-saving herbal database covering scientific and clinical publications on 225 herbs, and co-produces “Herbal Insights” segments on the Healing Quest television program, available on more than 145 public television
stations in the United States.

ABC is tax-exempt under section 501(c)(3) of the IRS Code. Information: Contact ABC at P.O. Box 144345, Austin, TX 78714-4345, Phone: 512-926-4900. Website: http://www.herbalgram.org/.

* Pharmacokinetics is the study of the absorption, metabolism and excretion of specific nutritional or drug compounds in humans or animals.

References


American Botanical Council, 6200 Manor Rd, Austin, TX 78723
Phone: 512-926-4900 | Fax: 512-926-2345 | Email: abc@herbalgram.org

The information on this site is intended for educational purposes only and is not a substitute for the advice of a qualified healthcare professional. The American Botanical Council does not endorse or test products, nor does it verify the content or claims made, either implicit or explicit. ABC does not accept responsibility for the consequences of the use of this information or its most up-to-date accuracy. ABC is an independent, nonprofit, tax-exempt research and education organization under IRS section 501(c)(3). All text, images and content Copyright © 2009 American Botanical Council, unless otherwise noted.