Turmeric extract helps arthritis in rats

Turmeric, one of the spices that adds punch to curry, may also help relieve arthritis pain, a study suggests.

Earlier research on rats suggested turmeric might prevent joint inflammation. Now the researchers have looked at why an extract of the spice may be therapeutic.

There are two main forms of arthritis. In osteoarthritis, bone cartilage degenerates, while rheumatoid arthritis is a painful immunological disorder in which the lining of the joints becomes inflamed.

Dr. Janet Funk, endocrinologist and an assistant professor of physiological sciences at the University of Arizona in Tucson, and her colleagues compared the chemical make-up of an experimental turmeric extract with those from commercially available turmeric supplements.

"It would appear that turmeric dietary supplements share the same mechanism of action as anti-arthritis pharmaceuticals currently under development," for arthritis, the researchers wrote in the November 2006 issue of Arthritis & Rheumatism.

Funk's team also looked at how the dose of the experimental extract helped joint inflammation in rat models.

Inflammatory path

The extract seemed to block an inflammatory path three days after signs of rheumatoid arthritis occurred in female rats, but it didn't help if given eight days before the disease began.

In the lab, it appeared the turmeric extract blocked a protein linked to the swelling and pain of inflammation.

"Just as the willow bark provided relief for arthritis patients before the advent of Aspirin, it would appear that the underground stem of a tropical plant [turmeric] may also hold promise for the treatment of joint inflammation and destruction," they concluded.

The extracts will need to be tested in clinical trials on humans before turmeric supplements could be recommended.

Since turmeric powder and root contains a very small amount of the extract, it's unlikely the products would help people. Rather, the findings suggest further research into a purified extract may offer therapeutic value in the future.

More than 100,000 women, men and children will be diagnosed with arthritis this year in Canada, according to the Arthritis Society.

That number is expected to rise by one million people within the next decade, making arthritis the leading cause of disability in Canada.