



TURMERIC & BROMELAIN

Digestive Aid

ANTI-INFLAMMATORY BENEFITS OF TURMERIC AND BROMELAIN

Turmeric and bromelain are two anti-inflammatory botanicals that are safe and effective. When combined, their synergistic power is impressive. Natural Factors Turmeric & Bromelain is the botanical complement to glucosamine sulfate providing additional support for aching muscles and joints. Both turmeric and bromelain reduce swelling and limit the inflammatory process, making them beneficial for acute and chronic inflammation. The turmeric and bromelain combination may be indicated for a variety of inflammatory conditions ranging from injuries, sprains, strains, tendonitis, and post-surgical inflammation, to arthritis and gout. While these herbs complement each other, they have been successfully used alone to heal inflammation.

HOW TURMERIC CAN HELP INFLAMMATION (CURCUMA LONGA)

Most of us know turmeric as the pumpkin-coloured spice found in curry powder. However, in Eastern cultures turmeric is also a revered medicinal herb and holds an honourable place in India's traditional Ayurvedic medicine. A perennial herb related to ginger, turmeric is extensively cultivated in India, China and Indonesia. In Ayurvedic and Traditional Chinese Medicine, turmeric is used to treat a number of conditions, ranging from toothache, flatulence, colic, jaundice, to menstrual difficulties. Turmeric poultices are applied to relieve pain and inflammation.

The primary constituents in turmeric that inhibit inflammation are curcumin and its analogs. Not only does curcumin directly check inflammation by inhibiting leukotrienes and thromboxanes, it also has an indirect anti-inflammatory effect. It seems to make the body more sensitive to its own steroids, potentiating their inflammation fighting capability, while it prevents the breakdown of cortisone, the body's anti-inflammatory hormone. As an antioxidant, curcumin also helps to stabilize membranes that are being damaged by inflammation.

While curcumin is not a direct analgesic, it compares favourably with powerful prescription anti-inflammatory drugs, such as phenylbutazone and other non-steroidal anti-inflammatory drugs (NSAIDS), but without their well-known adverse effects. In a double blind clinical trial, rheumatoid arthritis patients were given curcumin (1,200 mg per day) or phenylbutazone (300 mg per day). In both

groups, walking time, joint swelling and morning stiffness improved. (Deodhar)

TURMERIC'S SAFETY RECORD

Eastern cultures liberally use turmeric as a spice, so it has an excellent safety record. It is not coincidence that antimicrobial turmeric is generously used in cultures where lack of refrigeration and hot climates spoil food quickly. Of the two species of turmeric used medically, it is *Curcuma longa*, higher in curcumin content, that is concentrated and standardized. "The turmeric of choice is *Curcuma longa*, whose curcumin content can be concentrated, standardized and guaranteed at 95%... Some medicinal value is bound to accrue from turmeric, sprinkled liberally on all kinds of foods, and included in curry. But medicinal value is better assured when guaranteed potency extracts of turmeric are taken internally in capsules." (Mowrey) Natural Factors Turmeric & Bromelain is standardized to contain a minimum 95% curcumin. (Deodhar)

HOW DOES BROMELAIN HELP INFLAMMATION?

"Bromelain is one of the most popular natural agents in use. Because of its ability to impact many aspects of inflammation, it is used predominantly in cases of injury, sprains, strains, arthritis, and other inflammatory conditions...It is especially effective alone or in combination with curcumin in reducing the need for corticosteroids (such as prednisone) in rheumatoid arthritis." (Murray)

Bromelain, the proteolytic (protein digesting) enzyme found in pine- apple, helps sore joints, bruises and other injuries. By blocking the body's production of kinins, bromelain reduces swelling and promotes healing. "Bromelain's most common application is in the treatment of inflammation and soft tissue injuries. It has been shown to speed healing from bruises and hematomas. Treatment with bromelain following blunt injuries to the musculoskeletal system results in a clear reduction in swelling, pain at rest and during movement, and tenderness. Administration of bromelain pre-surgically can reduce the average number of days for complete disappearance of pain and inflammation." (Bromelain monograph)

Almost 40 years ago, a study was done using bromelain for 75 injured boxers. For 58 of the boxers taking bromelain, all signs of bruising had cleared up within four days. (Blonstein)



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TURMERIC AND BROMELAIN: THEY WORK BEST TOGETHER

While research and the historical use of both herbs show they exert considerable anti-inflammatory action, it is preferable to use them together for best effect. One reason is that only 60% of turmeric is actually absorbed. To improve absorption, herbalists often recommend turmeric to be taken with a proteolytic enzyme such as bromelain.

DOSAGE AND SAFETY

The dosage for Turmeric & Bromelain is one to two capsules, three times a day. To benefit from their anti-inflammatory power, it is best to take capsules between meals. To benefit from this combination as a digestive aid, take the capsules with meals.

Even very high doses of turmeric and its alcohol extracts have not produced any side effects in animals. To benefit from turmeric's medicinal effect experts recommend at least 250 to 500 mg of curcumin (the active ingredient) per day. Persons on prescription blood thinning medication may want to be cautious with turmeric because it also contains blood thinning components. Work closely with your health care practitioner. and frequently have your blood tested.

Bromelain also has very low toxicity. In tests on animals, bromelain showed no toxic effects at extremely high doses for six months. Other animal studies show no carcinogenic or teratogenic effects from bromelain. Although only 160 mg of bromelain a day can be therapeutic, it is safe and helpful to take in doses up to 1,000 mg/day.

TURMERIC & BROMELAIN DOUBLES AS A DIGESTIVE AID

Whether one suffers from aching joints or not, the Turmeric & Bromelain combination doubles as an excellent digestive aid. Historically, turmeric has been used for liver

support. It stimulates bile production from the liver, helping digestion. As a proteolytic enzyme, bromelain aids digestion and is especially helpful for pancreatic insufficiency. This combination might work well for people who often have bloating, gassiness, and indigestion after they eat. Try a capsule or two with your meals and see if it makes a difference.

NATURAL WAYS TO EASE THOSE ACHING IOINTS

Turmeric & Bromelain are superior anti-inflammatory botanicals. They work well together, have almost no side effects and are an excellent adjunct to glucosamine sulfate and chondroitin sulfate. However, these herbs and nutrients should be only one facet of a comprehensive program that includes diet, exercise, stress-management and adequate rest.

KEY REFERENCES

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