

## Let's get cooking with spices!



Curcumin is an important chemical and one of the most well-studied bioactive ingredients found in Turmeric. The Turmeric plant grows in India and Indonesia and is responsible for the production of the yellow-pigmented spice found in curry we know as Turmeric.

Turmeric if you've ever seen or used it fresh, looks very similar to ginger — except orange on the inside and proportionately 1/3 smaller. The flowering plant does indeed belong to the ginger family.

It also has a long history of medicinal use in traditional Chinese medicine (TCM) as well as Ayurvedic medicine. Traditional medicinal uses include the treatment of liver disease, skin problems, respiratory and gastrointestinal ailments, sprained muscles, joint pains, and general wound healing.

### Why are we talking about spices?

There is great scientific evidence to show that cooking with Turmeric or taking Curcumin in the capsule form can also have anti-inflammatory effects. Let's review what Inflammation is so we can better understand why we should choose supplements or foods that target inflammation.

**Inflammation is a local response in the body to cellular injury and is one of the ways that our body signals 'the troops' to begin healing.**

### 'The troops' (your immune system response) are responsible for:

- **Capillary Dilatation** (that means small vessels carrying blood get wider)
- **Leukocytic Infiltration** (white blood cells start moving to the area of concern)  
This process can produce redness, heat, and pain. All of this heat and pain helps to begin the healing process by removing damaged tissue and other harmful by-products.
- **Cytokines**, secreted by specific cells of the immune system, are small proteins in the body that are very important for signaling the body in what to do when it comes to inflammation.

### Acute inflammation:

The initial response to a pathogen or an injury is acutely inflammatory. In other words, it is brief, lasting several days or less. All sorts of things can cause an acute inflammatory response. Here are a few:

- Trauma (too much raking, sprained ankle, ball to the head)
- Infection by pathogens (bacterial, viral)
- Burn (sun, fire, seatbelt buckle on a summer day)
- Chemical irritants
- Frostbite
- Allergic reaction



## The Benefits of Turmeric (continued)

Sensations of **heat, redness, swelling, pain, and a loss of function** are annoying and familiar, but they are absolutely necessary for proper healing.

The problems arise when the inflammatory response is not short and to the point, as it was designed but long-term, this is when inflammation becomes **chronic**.

Chronic inflammation is at the root of all modern diseases including arthritis, heart disease, obesity, depression, type 2 diabetes, cancer and Alzheimer's disease.

**Turmeric can provide a natural anti-inflammatory** option without many of the risks associated with other medications like over-the-counter Nonsteroidal anti-inflammatory drugs (NSAIDS). This can give you a safer option while you are working on getting to the root cause of your inflammation.

### **Controllable lifestyle factors associated with inflammation include:**

- **Reviewing and reducing:** the consumption of our standard **Canadian toxic diet** of high sugar, highly processed carbohydrates, high industrial fats, high factory farmed animal meat.
- **Lack of sleep:** poor sleep is linked to elevated inflammatory markers. Modern life associates the increase in electronic devices especially if used in the evening inhibits sleep due to their melatonin-disrupting blue light.
- **Insufficient Omega-3 fats:** the precursors to reducing inflammation in the body
- **Too much Omega-6 fats:** the precursors for inflammation in the body
- **Insufficient movement:** creates a sluggish lymphatic system and is linked to systemic low-grade inflammation.
- **Insufficient lifestyle stress management:** introduce exercise, yoga, meditation, socializing, time in nature, reading, etc.

Turmeric/Curcumin can block inflammatory cytokines. If you have an area of inflammation, acute or chronic in nature, adding Turmeric to your food or Curcumin to your supplement list may be helpful.

High doses of turmeric can act as a blood thinner and cause stomach upset. Avoid turmeric/curcumin if you take blood thinners such as warfarin (*Coumadin*), are about to have surgery, are pregnant or have gallbladder disease.

*As with any changes to your diet or lifestyle, always check with your Health Care professional first, for advice on the possible contra-indications with other medications and dosage.*