Turmeric is derived from Curcuma longa rhizomes. Most of the interest in turmeric has been focused on its curcuminoids, primarily curcumin, as it is the principal curcuminoid (exists in the highest concentration) and to a lesser degree bisdemethoxycurcumin and demethoxycurcumin. While curcumin is thought to be the most bioactive compound found in turmeric, turmeric actually contains/provides more than 200 compounds of nutritional interest. They include additional curcuminoids such as atlantone, diarylheptanoids and turmerone, and numerous other bioactive compounds such as monoterpenes, sesquiterpenes, diterpenes, triterpenoids, alkaloids, sterols, fatty acids, and so on.\(^1\)

Under standard circumstance, absorption of orally ingested curcuminoid extracts is poor. Therefore, companies have been working hard to develop methods to enhance their bioavailability, with some success. Even so, they limit their offerings to a limited group of curcuminoids.

Curcumin\(^\text{Rx}\) offers a truly transformational product supplying an all-natural turmeric complex, providing an unprecedented range of beneficial turmeric root nutrients, with 5 – 6 times greater bioavailability versus other professional brands.

Curcumin\(^\text{Rx}\) utilizes a specialized processing technology resulting in a dual phase polar/non-polar emulsion, concentrating turmeric’s many nutrients, and enhancing the bioavailability without the use of nanotechnology, including the use of “tweens” and other surfactants that may damage lipid membranes and result in leaky gut.
Numerous studies, including human and animal in-vivo studies, have reported on the antioxidant effects of turmeric compounds. Turmeric preparations have been found to scavenge peroxides and phenolic oxidants, and inhibit lipid peroxidation induced by chemical agents. Curcumin antioxidant properties are noted by its action as a scavenger of both reactive oxygen species and reactive nitrogen species. In-vitro research demonstrates the prevention of oxidative damage to DNA. Its use has been correlated to the protection of endothelial cells against oxidative stress. Other research suggests turmeric compounds other than curcumin contribute antioxidant activity.

Turmeric and its curcuminoid constituents have been found to inhibit lipoxygenase and cyclooxygenase in-vitro. Results of an animal study indicates that oral administration of curcumin may reduce expression of several cytokines, chemokines, and proteinases known to mediate aneurysmal degeneration, and it has been shown to be an effective inhibitor to the activation and release of NF-kB. In-vitro results suggest that curcumin most likely inhibits cell proliferation, cell mediated cytotoxicity, and cytokine production by inhibiting NF-kB target gene involved in induction of these immune responses. It was concluded that curcumin has antioxidant activity and inhibits inflammatory mediators, including NF-kB, cyclooxygenase-2 (COX-2), lipoxygenase (LOX), and inducible nitric oxide synthase (iNOS).

References

CurcumRx™ is available in 60-count bottles (#8012).