Avea

Applications

- Healthy Inflammatory Response Support
- Mood Support
- Antioxidant Support
- Cardiovascular Support
- Healthy Weight Support
- · Blood Sugar Support



Introduction

NutraMedix Avea™ is a hydro-ethanol extract made from turmeric root (*Curcuma longa*). *C. longa* belongs to the Zingiberaceae family, and synonyms include *Curcuma domestica* and *Curcuma aromatica*.¹

Turmeric root has been used for centuries in traditional Chinese and Indian health practices. In China, it is known as *jiang huang* and is traditionally used to support cardiovascular health. In India, it is known as *haridra* and is traditionally used to support a healthy inflammatory response, maintain healthy digestion, and support a healthy mood. 4.4

Turmeric root's main constituents include curcuminoids, terpenoids, phenolic compounds, carbohydrates, proteins, minerals, and resins.^{5,6} Curcuminoids include curcumin I (curcumin), curcumin II (demethoxycurcumin), and curcumin III (bis-demethoxycurcumin).^{5,6} Curcumin is considered the active constituent of turmeric root and gives the cooking spice its yellow color.

NutraMedix Avea is manufactured at our U.S. facility using a specialized proprietary extraction process that optimizes the constituents of the herbs in their original, unprocessed state to obtain broad-spectrum concentration. Because NutraMedix's extracts are made in our own facility, we control all aspects of quality, including

stringent ID testing, microbial testing, and heavymetal testing. NutraMedix rigorously follows current good manufacturing practices (cGMP), as do our suppliers.

Healthy Inflammatory Response Support

Curcumin, the active constituent in **turmeric root** (*C. longa*) may help maintain NF-kappaB, STAT3, Nrf2, ROS, and COX-2 already within the normal range, which may help support a healthy inflammatory response.⁷

In a systematic review and meta-analysis of 10 randomized, controlled trials with a total of 783 participants, the researchers found that turmeric root extract helped significantly maintain joint comfort and function already within the normal range, compared to the placebo.¹⁸

In a systematic review and meta-analysis of 66 randomized, controlled trials, the researchers found that turmeric root and/or curcumin may help maintain C-reactive protein, TNF-alpha, and interleukin-6, though not IL-1beta, already within the normal range.⁹

In a systematic review and meta-analysis of 15 randomized, controlled trials with a total of 1,621 participants, the researchers found that compared to placebo, turmeric root and/or curcumin helped

maintain VAS and WOMAC scores already within the normal range. Turmeric root and/or curcumin were also associated with fewer adverse events compared to the positive control. The authors concluded that turmeric root and/or curcumin should be used for longer than 12 weeks for optimal support."10

In a systematic review and meta-analysis of 15 randomized, controlled trials with a total of 1,670 participants, the researchers found that compared to placebo, curcuminoids helped support and maintain joint function already within the normal range as measured by VAS and WOMAC scores.¹¹

Mood Support

In a double-blind, controlled study, 90 healthy participants ages 50-69 were randomly assigned to **turmeric root** extract (*C. longa*) or a placebo, daily for 12 weeks. At the end of the study, compared to the placebo group, the turmeric root extract group maintained mental-emotional wellness, as well as body weight and body mass index (BMI), that were already within the normal range as measured by standardized scales. 12

Antioxidant Support

In a systematic review and meta-analysis of 66 randomized, controlled studies, the researchers found that **turmeric root** (*C. longa*) and/or curcumin supplementation significantly supported endogenous antioxidant activity by supporting total antioxidant capacity (TAC), malondialdehyde (MDA), and superoxide dismutase (SOD) levels already within the normal range.⁵⁹

In a meta-analysis of eight randomized, controlled trials lasting 4 weeks or longer, with a total of 626 patients, curcumin was found to support and maintain glutathione peroxidase (GPx), superoxide dismutase (SOD), and serum MDA already within the normal range. 13

Other Support

Cardiovascular Support

In a systematic review and meta-analysis of 64 randomized, controlled trials, turmeric root

(*C. longa*) and/or curcumin supplementation was found to help support and maintain total cholesterol, triglyceride, LDL cholesterol, and HDL cholesterol levels already within the normal range. However, there was no effect on apolipoprotein A or B. 14

In a systematic review and meta-analysis of randomized, controlled trials using turmeric root extract and/or curcuminoids and measuring metabolic indices, 12 studies noted maintenance of triglycerides already within the normal range. Thirteen studies showed turmeric root extract and/or curcuminoid supplementation maintained LDL cholesterol levels already within the normal range, and 16 studies reported the same for HDL cholesterol. 15

In a systematic review and meta-analysis of seven randomized, controlled trials with a total of 649 participants, when compared to placebo, turmeric root and/or curcumin showed significant support in maintaining LDL cholesterol and triglyceride levels already within the normal range, though not HDL cholesterol.¹⁶

Healthy Weight Support

In a systematic review and meta-analysis of 60 randomized, controlled trials with a total of 3,691 participants, **turmeric root** and/or curcumin supplementation was found to help maintain body weight, BMI, and waist circumference already within the normal range. It also helped maintain adipokines leptin and adiponectin already within the normal range. 17

In a double-blind, controlled study, 90 healthy participants ages 50 to 69 were randomly assigned to turmeric root extract or a placebo, daily for 12 weeks. At the end of the study, the turmeric-root group experienced support for maintenance of body weight and BMI already within the normal range when compared to the placebo group.¹²

Healthy Blood Sugar Support

In a systematic review and meta-analysis of 17 randomized, controlled trials, researchers found that **turmeric root** and/or curcuminoids may help maintain glycometabolic indices already within the normal range, including fasting blood glucose, hemoglobin A1C (HbA1c), and insulin sensitivity.¹⁸

Safety and Cautions

Turmeric root (*C. longa*) is generally well tolerated and is usually used in amounts of up to 1.5 grams daily for up to 3 months. It has been used safely in amounts of up to 8 grams daily for up to 2 months, and up to 3 grams daily for up to 3 months. The most common adverse effects have been shown to be gastrointestinal in nature, including constipation, diarrhea, acid reflux, nausea, and vomiting.

As turmeric root may help with antioxidant support, it may reduce the efficacy of free radical-generating chemotherapeutics such as alkylating agents, antitumor antibiotics, or topoisomerase I inhibitors, though research is conflicting. Turmeric root may also increase the risk of bleeding when taken with anticoagulant or antiplatelet drugs, or with warfarin, though research is conflicting.

Turmeric root may increase the risk of hypoglycemia when taken with hypoglycemic

drugs. It may increase levels of amlodipine, may increase the effects and adverse effects of sulfasalazine or tacrolimus, and may theoretically increase levels of substances metabolized by CYP3A4. It may also decrease the absorption of talinolol and may decrease the levels and effects of tamoxifen.¹

Theoretically, turmeric root may increase the risk of liver damage when taken concurrently with hepatotoxic drugs,¹ though in systematic reviews and meta-analyses of randomized, controlled trials, the researchers found that turmeric root and/or curcumin may help maintain ALT and AST levels already within the normal range.^{19,20}

Safety is not documented in breastfeeding or pregnant women, or in children under age 3, due to insufficient safety research.

*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to treat, cure, or prevent any diseases.

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