

## APPLICATIONS

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



## INTRODUCTION

Avea is a hydro-ethanol extract made from *Curcuma longa* root, which is commonly known as turmeric root and is used as a cooking spice. *C. longa* belongs to the Zingiberaceae family, and synonyms include *Curcuma domestica* and *Curcuma aromatica*.<sup>1</sup>

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.<sup>\*2</sup> 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.<sup>\*3,4</sup>

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

Avea is made at NutraMedix's U.S. manufacturing 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 heavy-metal testing. NutraMedix rigorously follows current good manufacturing practices (cGMP), as do our suppliers.

## HEALTHY INFLAMMATORY-RESPONSE SUPPORT

Turmeric root (*C. longa*)'s active constituent Curcumin may help maintain NF-kappaB, STAT3, Nrf2, ROS, and COX-2 already within the normal range, which may help support a healthy inflammatory response.<sup>\*7</sup>

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 normal joint function already within the normal range, compared to placebo.<sup>\*8</sup>

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.<sup>\*9</sup>

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.<sup>\*10</sup>

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.<sup>\*11</sup>

## MOOD SUPPORT

In a double-blind, controlled study, 90 healthy participants ages 50 to 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.\*<sup>12</sup>

## HEALTHY 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 and maintaining total antioxidant capacity (TAC), malondialdehyde (MDA), and superoxide dismutase (SOD) levels already within the normal range.\*<sup>9</sup>

In a meta-analysis of eight randomized, controlled trials lasting 4 weeks or longer, with a total of 626 patients, curcumin was found to help support and maintain glutathione peroxidase (GPX), superoxide dismutase (SOD), and serum MDA already within the normal range. Serum MDA became significant at or over a dose of 600 mg per day.\*<sup>13</sup>

## OTHER USES

### 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.\*<sup>14</sup>

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

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.\*<sup>16</sup>

### 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.\*<sup>17</sup>

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 significant support and maintenance of body weight and BMI already within the normal range when compared to the placebo group.\*<sup>12</sup>

### 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.\*<sup>18</sup>

## 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.<sup>1</sup> 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.<sup>1</sup> The most common adverse effects have been shown to be gastrointestinal in nature, including constipation, diarrhea, acid reflux, nausea, and vomiting.<sup>1</sup>

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.<sup>1</sup> Turmeric root may also increase the risk of bleeding when taken with

anticoagulant or antiplatelet drugs, or with warfarin, though research is conflicting.<sup>1</sup>

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.<sup>1</sup>

Theoretically, turmeric root may increase the risk of liver damage when taken concurrently with hepatotoxic drugs,<sup>1</sup> 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.<sup>\*19,20</sup>

Turmeric root's 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.**

## REFERENCES

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# NutraMedix

### SHAKE WELL BEFORE EACH USE:

Put 15 drops in 4 oz (120mL) of water and wait one minute before drinking. May be taken several times per day and at bedtime, or as directed by your physician. Do not use if pregnant or nursing. Stop use if adverse reactions develop. Keep out of reach of children.

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



**AVEA**  
FROM TURMERIC

SUPPORTS HEALTHY  
INFLAMMATORY RESPONSE †

Dietary Supplement

1 fl oz. (30mL)

### Supplement Facts

Serving Size 15 drops  
Servings Per Container 40

Amount Per Serving	
Turmeric root extract	0.75 mL*

\*Daily Value not established

**Other ingredients:** mineral water, ethanol (20-24%)

**NutraMedix**  
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V324160

Lot #  
Exp.

PROFESSIONAL USE ONLY