

# RelaxMedix®



## Applications

- Relax/Sleep Support
- Stress Management
- Immune Support
- Healthy Inflammatory Response Support
- Neurological Support

## Introduction

**NutraMedix RelaxMedix®** is a proprietary blend of hydro-ethanol extracts from **valerian root** (*Valeriana officinalis*) and TOA-free **Samento® cat's claw bark** (*Uncaria tomentosa*).

**Valerian root** (*V. officinalis*) belongs to the Caprifoliaceae family. Constituents of valerian root include, among others, the sesquiterpene valerenic acid and iridoid valepotriates.<sup>1</sup> The constituent valerenic acid may act as a GABA agonist as well as a partial HT agonist.<sup>2-5</sup> Valerian root may also act as an A<sub>1</sub> receptor agonist.<sup>6</sup> Activity at these receptors may account for valerian's role in the support of relaxation, sleep, and a healthy stress response.<sup>7</sup>

**Cat's claw bark** (*U. tomentosa*) belongs to the Rubiaceae family. **Samento cat's claw bark** is extracted from a rare pentacyclic chemotype of TOA-free *U. tomentosa*, verified by independent 3<sup>rd</sup> party HPLC testing to be free of TOAs, with levels in trace amounts or undetectable. This pentacyclic oxindole alkaloid (POA)-predominant, tetracyclic oxindole alkaloid (TOA)-free form of cat's claw bark may help with immune system support and inflammatory response support.<sup>7,8</sup>

**NutraMedix RelaxMedix** is made at our 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 our 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.

## Relaxation/Sleep Support

**Valerian root** (*V. officinalis*), according to a recent systematic review and meta-analysis of human trials, may support relaxation and healthy sleep in occasional sleeplessness.<sup>6</sup> It may help support both quality and quantity of sleep, as well as uninterrupted sleep.<sup>9</sup> Valerian root may also support sleep through skeletal muscle relaxation, as seen in a mouse study.<sup>4</sup>

## Stress Management Support

**Valerian root** (*V. officinalis*) may help with stress management support during occasional stress.<sup>10</sup> A human trial with healthy individuals compared the effects of valerian alone, kava alone, and no treatment on mental stress during cognitive testing. All three groups underwent initial cognitive testing, then were given either

valerian, kava, or nothing for 7 days. All three groups then underwent a subsequent session of cognitive testing. While both the valerian and kava groups experienced a decrease in systolic blood pressure after the intervention, only the valerian group experienced a lower heart rate during mental stress. While neither intervention affected performance, it appeared to mitigate the perception of mental stress by decreasing physiological reactivity.<sup>10</sup> A similar decrease in physiological reactivity was seen in a separate randomized, controlled trial.<sup>11</sup> In mice, one study found that constituent valepotriates may help support healthy stress management,<sup>12</sup> which a rat study attributed to modulation of the HPA axis.<sup>11</sup> **Cat's claw bark** (*U. tomentosa*) may also help support stress management.<sup>13</sup>

## Other Support

### Immune System Support

Cat's claw bark (*U. tomentosa*) may help maintain a healthy immune response and support immune system homeostasis.<sup>7</sup> It may also help maintain neutrophil, Th1, and Th2 levels already within the normal range.<sup>13-15</sup> It should be noted that only TOA-free cat's claw bark (such as Samento) helps with immune support.<sup>7</sup>

Together, **valerian root** (*V. officinalis*) and **cat's claw bark** (*U. tomentosa*) have synergistic effects.<sup>7</sup> It is known that both stress and insufficient sleep have depressant effects on the immune system.<sup>16</sup> **Valerian root** may help maintain immune system health through the support of relaxation and sleep,<sup>6</sup> while **cat's claw bark** (pentacyclic chemotype) may support immune system health more directly.<sup>7</sup>

### Inflammatory Response Support

**Cat's claw bark** (*U. tomentosa*) may help support a healthy inflammatory response.<sup>8,17</sup> It may help maintain NF-kappa B levels already within the normal range in a dose-dependent manner,<sup>18,19</sup> supporting both TNF-alpha and IL-1-beta within the normal ranges.<sup>18</sup>

### Neurological Support

**Cat's claw bark** (*U. tomentosa*) may help maintain neurological health and support healthy neurocognitive function.<sup>20,21</sup>

## Safety and Cautions

**Valerian root** (*V. officinalis*) is generally well tolerated. Common side effects include drowsiness, dizziness, and occasional gastrointestinal effects. As valerian root supports relaxation,<sup>22</sup> it may have additive effects when taken with sedative substances such as alcohol, benzodiazepines, or CNS depressants.<sup>22</sup> Because valerian root mildly inhibits glucuronidation, it is possible that it may increase levels of drugs metabolized by UGT1A1 and UGT2B7.<sup>22</sup> While rare, there have been isolated case reports of hepatotoxicity, particularly in higher doses, with multi-ingredient formulas, or concurrent with alcohol abuse.<sup>22</sup> Valerian root is considered safe at recommended doses for shorter periods.<sup>22</sup> To avoid rebound effects in extended use, it should be tapered rather than stopped abruptly.<sup>22</sup>

**Cat's claw bark** (*U. tomentosa*) is generally well tolerated. Gastrointestinal effects such as nausea, vomiting, constipation or diarrhea have been reported.<sup>23</sup> Cat's claw should be avoided in those taking immunosuppressants, as it may interfere with immunosuppressant therapy.<sup>23</sup> Cat's claw bark may inhibit P450 CYP3A4 enzymes and, therefore, may slow the metabolism of drugs metabolized by CYP3A4.<sup>23</sup> Cat's claw bark may have additive effects with anticoagulants or hypotensive drugs, generally attributed to the TOAs rhynchophylline and isorhynchophylline.<sup>25,26</sup> **As a reminder, Samento cat's claw is TOA-free, with levels in trace amounts or undetectable.**

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.**  
For occasional stress support, take 10-15 drops 2-4 times per day, or for occasional sleep support, take 20-30 drops at bedtime, or as directed by your physician. Put drops in 4oz (120mL) of water and wait one minute before drinking. Do not use if pregnant or nursing. Stop use if adverse reactions develop. Keep out of reach of children.

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## RELAXMEDIX®

RELAXATION / SLEEP  
SUPPORT †

Dietary Supplement

1 fl oz. (30mL)

**Supplement Facts**

Serving Size 30 drops  
Servings Per Container 20

Amount Per Serving	1.5 mL*
Proprietary Blend	1.5 mL*
Valerian root extract and <i>Uncaria tomentosa</i> bark extract (Pentacyclic chemotype)	
*Daily Value not established	
Other ingredients: mineral water, ethanol (20-24%)	

**NutraMedix**

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