

## ProEnt2 Plus™

**Plant Extract Combination with Sweet Wormwood, Oregano & Rosemary**

**Provides potent antimicrobial herbs & phytochemicals  
which encourage healthy gut flora balance\***

Plants were the original source of all medicines available to humans. ProEnt2 Plus is a proprietary plant extract blend that provides a wide variety of powerful herbal extracts and phytochemicals to reduce the growth of pathogenic and opportunistic microbes while soothing gut discomfort.\* This potent combination of antimicrobials is formulated to help decrease the growth of pathogens and rebalance intestinal flora.\*

### Supplementation with ProEnt2 Plus:

- Reduces growth of harmful opportunistic and pathogenic organisms\*
- Imparts anti-bacterial, anti-fungal, and anti-parasitic activity\*
- Supports normal gut flora colonization\*
- Supports healthy liver function\*
- Provides valuable antioxidants\*
- Promotes healthy gut function\*
- May contribute to a healthy lipid profile\*



### What the research and clinical use shows:

#### Sweet Wormwood (*Artemisia annua*) 4:1 Herba

Sweet wormwood, a Chinese herb, has anti-inflammatory, anti-parasitic, and anti-cancer properties. The herb's main active constituent, artemisinin, has been found to be effective against parasites including malaria.<sup>1</sup> Artemisinin is also a promising anti-viral with activity against hepatitis B virus (HBV) and hepatitis C virus (HCV).<sup>2</sup> It has also been shown to be effective against the cancer-causing effects of human papillomavirus (HPV) on cells in-vitro.<sup>3</sup> *Artemisia annua* essential oil is a strong tool against pathogenic microorganisms – including several species of bacteria and yeast.<sup>4</sup>



Dairy Free



Soy Free



Egg Free



Gluten Free



Non-GMO



Vegan

\*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.

For educational purposes only. Consult your physician for any health concerns.

# ProEnt2 Plus™

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Provides potent antimicrobial herbs & phytochemicals  
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## Milk Thistle (*Silybum marianum*) Seed – 80% Silymarin

Milk thistle is an anti-inflammatory, hepatoprotective, and antioxidant herb. The first recorded use of milk thistle dates back to ancient Egypt, and it was revered, even then, for its healing properties. Silymarin is the collective name for a group of active constituents called flavonolignans and is the most studied chemical component in milk thistle extract. Silybin (silibinin) is one of the flavonoid components of silymarin and constitutes 70% to 80% of the standardized extract. Silybin has been found to be helpful in many conditions including rheumatoid arthritis, cancers, liver disease, neurological diseases, and other chronic conditions.<sup>5</sup> In the gut, silybin protects tissue through its antioxidant and anti-inflammatory properties. These functions would be particularly helpful in cases where GI infection has caused tissue damage.

## Oregano (*Origanum vulgare*) Leaf – 25% Polyphenols

Oregano is an herb with powerful antimicrobial, anti-fungal, antioxidant, and anti-cancer properties. Known mostly as a flavorful cooking herb, oregano owes much of its medicinal properties to the polyphenols carvacrol and thymol.<sup>6</sup> Carvacrol and thymol have been shown to have activity against pathogenic and opportunistic bacteria, including *Pseudomonas aeruginosa*, *Staphylococcus aureus*, and *Clostridium perfringens*.<sup>7,8</sup> Oregano's antibacterial activity appears to be due to carvacrol and thymol's interference with pH, bacterial membrane permeability, and the formation of bacterial flagella.<sup>6</sup> This herb has also been shown to protect cells from damage caused by hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>), a standard model used to simulate oxidative stress in the body.<sup>6</sup> Oregano essential oil has also shown promise in fighting *Candida albicans*.<sup>9</sup> Oregano has demonstrated anti-cancer effects in several studies against multiple cancer types including: colon cancer<sup>10</sup>, non-small cell lung cancer<sup>11</sup>, and osteosarcoma.<sup>12</sup> Clinically, emulsified oregano oil showed activity against *Blastocystis hominis* in one small study.<sup>13</sup>

## Rosemary (*Rosmarinus officinalis*) Leaf – 5% Carnosic acid

Rosemary is an anti-inflammatory, antioxidant, anti-cancer, and metabolically protective herb. Native to the Mediterranean, rosemary exhibits many healing properties. The polyphenols carnosic acid and rosmarinic acid are the most studied constituents found in rosemary. These constituents have shown promise in killing multiple types of cancer, including breast and colon cancers, in-vitro.<sup>14</sup> Additionally, carnosic and rosmarinic acids have shown anti-inflammatory and anti-oxidant effects.<sup>15</sup> Rosemary has been shown to improve lab indices in metabolic syndrome including increasing insulin sensitivity and improving lipid profiles.<sup>16</sup>

## Ginger (*Zingiber officinale*) Root – 10% Gingerols

Ginger root is a potent herb known for its anti-inflammatory, anti-parasitic, and digestion-regulating effects. An in vitro study demonstrated that ginger combats inflammation by inhibiting the formation of prostaglandins and leukotrienes, which are pro-inflammatory fatty acid derivatives.<sup>17</sup> Ginger has been shown to decrease the pain and inflammation in rheumatoid arthritis (RA), and the pain of dysmenorrhea, in a review of clinical trials.<sup>18,19</sup> In rats, ginger has been shown to have anti-parasitic effects against *Schistosoma*, *Trichinella spiralis*, and *Giardia*.<sup>20</sup> Additionally, in a randomized, controlled cross-over trial, ginger appeared to normalize digestive function by regulating muscular contractions in the intestines while reducing nausea by modulating activity in 5-HT<sub>3</sub> receptors.<sup>21</sup>

## Baical Skullcap (*Scutellaria baicalensis*) Root – 30% Baicalin

Baical or Chinese skullcap is a fundamental herb in Traditional Chinese Medicine. It exhibits anti-fungal, anti-viral, and anti-bacterial properties. One of the main active constituents in baical skullcap is the flavonoid baicalein. Baicalein has been shown to have antifungal activity against *Candida* species in vitro.<sup>22</sup> Baicalin is a flavonoid analogue of baicalein that has also demonstrated anti-viral effects in vitro and in vivo against hepatitis B virus (HBV), as well as anti-bacterial effects against the formidable methicillin-resistant *Staphylococcus aureus* (MRSA) in vitro.<sup>23</sup> In addition to killing microbes, baicalin has also been shown to protect mouse tissue from damage caused by an *E. coli* toxin.<sup>24</sup>

## Berberine HCl – 97% Berberine

Berberine, a powerful plant alkaloid found in several plants including Oregon grape and goldenseal, has anti-inflammatory, anti-microbial, and anti-cancer properties. Extensive studies on berberine have demonstrated that it is strongly anti-inflammatory and toxic to several types of cancer cells including hepatic, colorectal, and gastric cancers.<sup>25</sup> Additionally, berberine is effective against pathogenic *Candida* species, as well as several bacteria including *Staphylococcus*, *Streptococcus*, *Salmonella*, *Shigella*, and *Clostridium*.<sup>26,27</sup>

Berberine has also shown promise in preventing the recurrence of *Clostridium difficile* infection in mice.<sup>28</sup> Although it is strongly antimicrobial, berberine does not seem to harm commensal gut bacteria such as *Lactobacilli* and *Bifidobacteria*.<sup>27</sup>

## Lauric Acid (from coconut)

Lauric acid is a fatty acid derived from coconuts. It exhibits antibacterial activity against several gram positive and gram negative organisms, including *Clostridium difficile*.<sup>28,29,30</sup>

## Supplement Facts

Serving Size: 2 Capsules

Servings per Container: 45

	Amount Per Serving	% DV
<b>Proprietary Plant Extract Blend</b>	1380 mg	**
Sweet Wormwood ( <i>Artemisia annua</i> ) 4:1 herba		
Milk Thistle ( <i>Silybum marianum</i> ) seed 80% Silymarin		
Oregano ( <i>Origanum vulgare</i> ) leaf 25% Polyphenols		
Rosemary ( <i>Rosmarinus officinalis</i> ) leaf 5% Carnosic acid		
Ginger ( <i>Zingiber officinale</i> ) root 10% Gingerols		
Baical Skullcap ( <i>Scutellaria baicalensis</i> ) root 30% Baicalin		
Berberine HCl 97% Berberine		
Lauric acid (from coconut)		

\*\* Daily value (DV) not established.

**Other ingredients:** silicon dioxide, vegetarian capsule shell (hypromellose, water).

**Dairy, Soy, Egg & Gluten Free. Vegan.**

**Suggested Use:** Take 2 capsules twice a day with a meal or as directed by your physician.

**Caution:** If pregnant or nursing, consult your physician before using this or any other product. Keep out of reach of children. Do NOT chew or open capsule.

**Store in a cool, dry place.**

**Manufactured in the USA in a GMP compliant facility.**

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