

# MOTILITY PRO®



## CLINICAL APPLICATIONS

- Stimulates Gastric Motility and Emptying
- Promotes Cleansing of the Gut
- Supports Microbial Balance in the GI Tract



## GASTROINTESTINAL SUPPORT

Motility PRO® is a combination of ginger (*Zingiber officinale*) and artichoke leaf extract (*Cynara cardunculus* L.) delivered at a clinically proven dose to restore gastric motility. This distinctive blend of bioactives promotes contractions in the migrating motor complex, helping to restore proper motility, which ensures the steady flow of food particles and bacteria through the small intestine. In addition, it provides support for improved digestion and relief from gas, bloating and associated GI discomfort.

### Overview

Motility in the GI tract describes the movement of food and other substances through the stomach, small intestine, large intestine and eventually out of the body. In between meals, the migrating motor complex (MMC) is a cycle of peristaltic movement that acts as an inter-digestive housekeeper of the GI tract. The MMC facilitates transport of indigestible substances and bacteria from the stomach and small intestine into the colon, inhibiting the backward migration of colonic bacteria and an overgrowth of bacteria in the small intestine. It has been shown that motility impairment typically results in small intestinal bacterial overgrowth (SIBO).<sup>1</sup> MMC activity varies widely across individuals, and can become impaired for several reasons, including stress,<sup>2</sup> medications,<sup>3</sup> sluggish thyroid function<sup>4</sup> and even autoimmunity associated with cytotoxic distending toxins.<sup>5</sup>

When it comes to the most sensitive patients with SIBO or multiple symptoms of GI discomfort, it is important to choose a proven solution that stimulates motility yet is gentle and effective. Clinical studies on the standardized combination

of ginger and artichoke extracts in Motility PRO® have demonstrated a unique ability to stimulate gastric motility and relieve temporary GI discomfort.

### Artichoke Leaf Extract (*Cynara cardunculus* L.)

Artichoke leaf (*Cynara cardunculus* L.) has been used for centuries to stimulate bile secretion and enhance overall liver function which help to restore gut motility and improve digestion.<sup>6,7</sup> Cynaropicrin, the bitter compound found in artichoke leaf extract, along with other polyphenols, such as caffeoylquinic acids and flavonoids, have antioxidant and hepatoprotective potential and contribute to the alleviation of an impressive range of GI symptoms.<sup>8,9</sup> In fact, in a randomized, double-blind, placebo-controlled trial, the combined supplementation with artichoke (100 mg) and ginger extract (20 mg), twice per day before lunch and dinner for 14 days, was shown to improve occasional acid indigestion.<sup>10</sup> Artichoke has been said to complement the therapeutic effects of ginger as the former acts on the small intestine while the latter act, on the stomach.

### Ginger Root Extract (*Zingiber officinale* Roscoe)

The therapeutic applications of ginger root (*Zingiber officinale* Roscoe) are vast and well-documented by both human and animal data.<sup>11</sup> The therapeutic effects of ginger root reach far beyond its well-recognized role in alleviating nausea and vomiting and include its role as a carminative, spasmolytic, and digestive stimulatory agent. For example, compared with placebo, supplementation with a combination of ginger root extract (20 mg) and artichoke leaf extract (100 mg) resulted in a -24% difference in the after-meal gastric area, indicating improved gastric emptying.<sup>12</sup> Additional human studies

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

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corroborate this finding showing ginger supplementation stimulates antral contractions in the stomach and consequently accelerates gastric emptying compared to placebo.<sup>13,14</sup> Preclinical studies suggest the active components in ginger, namely [6]-gingerol, [8]-gingerol, [10]-gingerol and [6]-shogaol, may affect gastrointestinal motility through interaction with serotonergic receptors.<sup>15,16,17</sup> Additional human data (using the same 120 mg extract described above) suggest additional gastrointestinal benefits for the combination including improved nausea, epigastric fullness and bloating after four weeks of daily supplementation before lunch and dinner.<sup>10</sup> Ginger has also shown to help maintain microbial balance. Supplementation with 3 g/day of ginger for four weeks has been shown to remove unwanted organisms in gastric area and improve occasional acid indigestion with symptoms of gastric fullness, early satiety, nausea, belching, and gastric discomfort.<sup>18</sup>

## Directions

1 capsule per day on an empty stomach, or as recommended by your health care professional.

## Does Not Contain

Gluten, corn, yeast, artificial colors or flavors.

## Cautions

If you are pregnant or nursing, consult your physician before taking this product.

<b>Supplement Facts</b> <sup>v1</sup>		
Serving Size 1 Capsule		
Servings Per Container 60		
	<b>Amount Per Serving</b>	<b>%Daily Value</b>
Calcium	30 mg	2%
Motility Blend (Prodigest®)	320 mg	
Artichoke Leaf Extract ( <i>Cynara cardunculus</i> L.)	100 mg	*
Ginger Root Extract ( <i>Zingiber officinale</i> Roscoe)	20 mg	*

\* Daily Value not established.

Other Ingredients: Microcrystalline Cellulose, Dicalcium Phosphate, Hypromellose (Natural Vegetable Capsule), Magnesium Stearate, Croscarmellose Sodium and Silicon Dioxide.

**ID# 481060 60 Capsules**

## References

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