GI·Motility Matrix

A powerful blend of prokinetic ingredients to support a healthy migrating motor complex, restore peristalsis and encourage digestive regularity.

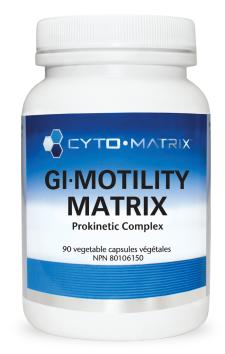
Each capsule contains:

Ginger extract (rhizome, Zingiber officinale) 17:1, DHE 226.6mg	13.33 mg
Ginger extract (rhizome, Zingiber officinale) 10:1, DHE 616.6mg	61.66 mg
Globe Artichoke extract (leaf, Cynara cardunculus) 10:1, DHE 666.6mg	66.66 mg
N-Acetyl-L-carnitine HCL	200 mg
L-5-HTP (seed, Griffonia simplicifolia)	20 mcg
Zinc (TRAACS™ zinc bis-glycinate chelate)*	5 mg
Vitamin B6 (pyridoxal-5-phosphate)	5 mg

90 vegetable capsules

Vegan. GMO, gluten, soy and dairy free.





Many people believe that the health of the gastrointestinal tract is the best indicator of an individual's overall wellbeing. Indeed, the human digestive tract is a key modulator of the immune system and it is responsible for not only absorbing nutrients from food but also eliminating hormones, food waste and other metabolic byproducts. If this system slows down, such as in cases of functional constipation, it can indirectly have a negative effect on all of these systems. In severe cases, sluggish bowels can contribute to a complicated syndrome known as Small Intestinal Bacterial Overgrowth (SIBO).

SIBO can occur as a result of many inciting factors and the healing process is complex. However, at the core of its presentation, there is decreased function of the migrating motor complex (MMC). The MMC is an entity of the enteric nervous system responsible for promoting peristalsis in the smooth muscles of the digestive tract. Proper recovery from SIBO requires repair of the MMC and not simply stimulant laxatives. Fortunately,

Key points

- A prokinetic complex designed to support a healthy migrating motor complex and promote digestive regularity
- Includes a proprietary blend of Zingiber officinalis (ginger root) and Cynara cardunculus (artichoke root) extract shown to increase gastric emptying and significantly improve symptoms of functional dyspepsia such as epigastric fullness, bloating, early satiety, nausea, vomiting and epigastric pain
- 5-hydroxytryptophan and vitamin B6, in its active pyridoxal-5-phosphate form, are included to upregulate

- the production of serotonin, a key neurotransmitter involved in regulating digestive function
- Acetyl-L-carnitine has been shown to reduce the severity of constipation in those suffering from poor gut motility
- Zinc, in its highly bioavailable bisglycinate form, supports vagus nerve function, parasympathetic tone and epithelial barrier function

various nutrients have demonstrated promising results in reactivating this connection between the nervous system and the gastrointestinal tract.

One therapy with promising clinical trials as a prokinetic agent is a proprietary blend of *Zingiber officinalis* (ginger root)

and Cynara cardunculus (artichoke root) that has two human clinical trials for improving digestive function. A double-blind placebo-controlled randomized study found that this combination therapy significantly improved symptoms of functional dyspepsia such as epigastric fullness,



bloating, early satiety, nausea, vomiting and epigastric pain after both 14 and 28 days. A second trial found that the patented blend of ginger and artichoke improved gastric emptying after a meal by 24% in healthy individuals as per endoscopic evaluation. These effects on gastric emptying seem to be mediated by gingerol's activity on cholinergic and serotonergic receptors, in combination with artichoke root's antispasmodic and choleretic action.

Considering that ginger facilitates gastric emptying and stimulates the migrating motor complex by modulating serotonin, it only stands to reason that other agents designed to increase serotonergic activity may also be useful for improving gastrointestinal motility. As a matter of fact, both 5-hydroxytryptophan (5-HTP), the key precursor molecule to endogenously build serotonin, and

vitamin B6, an essential cofactor in this same process, have been used to encourage the rebuilding of the migrating motor complex.

Zinc has been identified for its ability to support the vagus nerve function. The vagus nerve is the most potent promoter of the parasympathetic nervous system which is responsible for "rest and digest" functions such as peristalsis. Zinc also supports epithelial barrier function, gastric acid production and aids in digestive concerns such as diarrhea.

Acetyl-L-Carnitine is commonly used for boosting cognitive function through its ability to cross the blood-brain barrier and enter the central nervous system. However, carnitine is beneficial for many organ systems. Low carnitine levels in the body have actually been correlated

to increased incidence and severity of constipation. Carnitine supplementation has been studied to reduce the severity of constipation in those suffering from poor gut motility and, therefore, is a reasonable nutrient to consider in those recovering from SIBO.

GI-Motility Matrix by Cyto-Matrix provides a well-balanced blend of herbal extracts and nutrients to promote proper gastric emptying and gastrointestinal motility. GI-Motility Matrix includes the patented and researched blend of artichoke extract and ginger extract, with additional 5-HTP, zinc, vitamin B6 in its active pyridoxal-5-phosphate form and acetyl-l-carnitine. Collectively, GI-Motility Matrix is an essential formulation for any SIBO recovery protocol, constipation, dyspepsia or irritable bowel syndrome.

Related products

Acetyl-L-Carnitine

Berber

Cramp Matrix

Cyto·Fibre

Cyto·Zyme

Garlic Active Principles

GI-Soothe

GI-Matrix

Multi-Strain 11

Multi-Strain 50

 $\mathsf{Saccharo}{\cdot}\mathsf{B}$

Indications: Used in Herbal Medicine as a choleretic to help relieve digestive upset, such as indigestion, and help increase bile flow. Ginger is traditionally used in Herbal Medicine as a carminative to help relieve digestive disturbances including lack of appetite, nausea, digestive spasms, indigestion, dyspepsia and flatulent colic.

Directions: Adults - Take 1 capsule, 3 times per day with food or as directed by a healthcare professional. Take a few hours before or after taking other medications or natural health products.

Non-Medicinal Ingredients: Vegetable-grade magnesium stearate, dicalcium phosphate, silicon dioxide, crosscarmellose sodium, maltodextrin, microcrystalline cellulose, citric acid. Capsule: hypromellose.

Contradictions: Consult a healthcare professional prior to use if you are pregnant or breastfeeding. Do not use this product if you have scleroderma or a bile duct obstruction.

Warnings: Do not use if safety seal is broken. Consult a healthcare professional if you have liver disease, kidney disease and/or a seizure disorder or if you have gallstones or if you are taking carbidopa or drugs/supplements with serotonergic activity. These may include, but are not limited to, L-tryptophan, Sadenosylmethionine (SAMe), St. John's wort, antidepressants, pain killers, over the counter cough and cold medication containing dextromethorphan, anti-nausea medication and anti-migraine medication. Stop use and consult a healthcare professional if you show signs of weakness, oral ulcers, abdominal pain accompanied by severe muscle pain or if you experience skin changes. Avoid taking with alcohol or products that cause drowsiness. Consult a healthcare professional if symptoms persist or worsen.

Known Adverse Reactions: Some people may experience drowsiness. Exercise caution if operating heavy machinery, driving a motor vehicle or involved in activities requiring mental alertness. May cause digestive problems and some people may experience diarrhoea, abdominal pain, nausea, and vomiting. Hypersensitivity/allergy may occur; in which case, discontinue use.



