NATURAL PROKINETIC SUPPORT FOR HEALTHY GI MOTILITY

**Motility Select™**

Motility Select™ is a prokinetic formula that helps promote the normal propulsive activity of the upper GI tract. It provides a unique blend of carefully selected ingredients researched to help support healthy, robust function of the migrating motor complex (MMC). Motility Select™ is designed to help support and address motility-related digestive issues in which MMC dysfunction is a primary underlying cause, such as gastroparesis (delayed stomach emptying) and small intestine bacterial overgrowth (SIBO). Depending on individual needs, prokinetics may be indicated for use on an ongoing basis, as part of a comprehensive treatment for digestive problems, or for up to three months following treatment to help prevent relapse.

**THE MIGRATING MOTOR COMPLEX (MMC; also known as the migrating myoelectric complex) is operated by motor neurons located within intestinal smooth muscle cells. The MMC functions during interdigestive periods (i.e. between meals, in the fasted state) by producing a “cleansing wave” that sweeps food, bacteria and debris out of the stomach and small intestine in the direction of the colon. The housekeeping function of the MMC with its repeating, wave-like pattern of gastrointestinal motility, differs from the *peristalsis* contractions which take place in the large intestine for the purpose of moving stool out of the bowel.**

The migrating motor complex is controlled in large part by vagus nerve activity and is more active during the day than during sleep. When functioning properly, it completes a cleansing wave cycle approximately every 90 minutes, but only when the stomach is empty. The practice of meal spacing—allowing 4-5 hours between meals without caloric input—is helpful in supporting healthy MMC function. Stress management is also critical. Psychological stress and autonomic nervous system dysfunction are strongly associated with digestive disorders characterized by abnormal gut motility.

POTASSIUM helps to support healthy gastrointestinal hydration and electrolyte balance. Potassium deficiency has been associated with both increased intestinal gas and slow motility in the smooth muscles of the digestive tract.

GINGER ROOT (*Zingiber officinale*) has a powerful stimulating effect on gastrointestinal motility. In a randomized, double-blind, placebo controlled study of patients with functional dyspepsia without reflux, those who took 1.2 grams of encapsulated ginger

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powder one hour before a meal experienced accelerated gastric emptying and increased antral contractions compared to those taking placebo. Ginger’s prokinetic activity also has been observed in numerous animal studies. The root contains compounds—namely gingerols and [6]-shogaol—researched for their influence on serotonin signalling in the gut. Gut serotonin regulates intestinal motility, visceral sensation and appetite. The activity of ginger on motility appears to be adaptogenic or balancing in nature, as it has been shown to counteract hypomobility and enhance MMC activity on the one hand, and to help resolve loose stools associated with hypermotility on the other. (Note: Taking ginger can produce a temporary feeling of gastric warmth or “ginger burn” in some people. This sensation may be alleviated by taking Motility Select™ with food, or by taking fewer capsules at a time and gradually increasing dosage as the body adjusts to the product.)

GUTGARD™ DGL (Deglycyrrhizinated Licorice Root Extract) is a highly concentrated form of DGL researched for its beneficial effects on digestive and intestinal health. Licorice has been used for centuries in Traditional Chinese Medicine to help regulate healthy GI function. It contains the dual-acting flavonoid isoliquiritigenin, shown both to inhibit and to stimulate gut motility, depending on dose. GutGard™ DGL extract has been studied to provide prokinetic activity, enhancing gastric emptying and GI transit time at doses equivalent to those provided in Motility Select™.

5-HTP is a tryptophan derivative and the immediate precursor of serotonin, a neurotransmitter commonly known for its calming effect on mood, but which also plays a critical role in gastrointestinal function and motility. An estimated 90%-95% of the body’s serotonin is housed in the GI tract where it is produced by enterochromaffin cells in the mucosa, and by specialized immune cells and neurons. The biosynthesis of this peripheral serotonin is thought to be regulated by gut microbes. Research in animals and humans shows that serotonin increases gut motility and accelerates intestinal transit time. 5-HTP supplements help the body produce more serotonin using vitamin B6 as a cofactor. Motility Select™ contains 10 mg of activated vitamin B6 as pyridoxal-5’-phosphate (P-5-P) to support this conversion.

MERIVA® CURCUMIN PHYTOSOME Curcumin, the most active and abundant component of turmeric, has been extensively researched for its ability to help optimize the inflammation response. In animal studies, curcumin has been shown to positively influence the gut-brain axis by modulating cholinergic function and to improve gastric emptying time by decreasing oxidative stress and enhancing levels of stem cell factor protein in stomach tissues. A 2009 human study suggested that dietary turmeric may activate bowel motility and decrease small intestine transit time. The curcumin in Motility Select™ is provided as Meriva®, one of the most well-researched and bioavailable forms of curcumin available today. Meriva® phytosome technology complexes curcumin with phosphatidyl choline from sunflower lecithin to facilitate its transport across phospholipid membranes, significantly enhancing absorption.

REFERENCES

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