

# METABOLIC HORMONE

Developed with Dr. Penny Kendall-Reed, N.D.\*

## Protocol Objective:

To help manage metabolic hormones and healthy body weight using symptom assessment, diet, and supplementation. Recommendations are made for genetic testing of metabolic SNPs (Single Nucleotide Polymorphisms) that are modifiable through nutrition and lifestyle.†‡

CLINICAL OBJECTIVE‡	ASSESSMENT	PRODUCT RECOMMENDATIONS*	DOSING
Support satiety	Serum leptin, adiponectin, ghrelin  Self-reported food cravings, hunger, excessive eating, especially when stressed	<b>Tri-Metabolic Control™</b> Formula: 202230	2 capsules, 30 minutes before meals (2-3 meals daily)
		<b>Whey Satisfied™</b> Formula: 57747P	1 scoop with a meal, 1-2 times daily
		<b>Sereniten Plus</b> Formula: 201348	1-2 capsules, twice daily without food. No snacking
Support adiponectin	Serum adiponectin  Lipid profile  Fasting glucose, HbA1c, and/or related metabolic testing  BMI	<b>Tri-Metabolic Control™</b> Formula: 202230	2 capsules, 30 minutes before meals (2-3 meals daily)
		<b>Whey Satisfied™</b> Formula: 57747P	1 scoop with each meal
Support leptin sensitivity	Serum leptin  Self-reported postprandial hunger and food cravings, especially in the evening  BMI	<b>Tri-Metabolic Control™</b> Formula: 202230	2 capsules, 30 minutes before meals (2-3 meals daily)
		<b>Whey Satisfied™</b> Formula: 57747P	1 scoop with dinner and 1 scoop 2 hours after dinner if needed
		<b>L-Carnosine</b> Formula: 98731	500 mg, twice daily, 30 minutes before meals
		<b>Sereniten Plus</b> Formula: 201348	1-2 capsules, twice daily without food. No snacking
Support ghrelin	Serum ghrelin, BMI and self-reported hunger, cravings and excessive eating, especially when stressed	<b>Tri-Metabolic Control™</b> Formula: 202230	2 capsules, 30 minutes before meals (2-3 meals daily)
		<b>Whey Satisfied™</b> Formula: 57747P	1 scoop with each meal, 1-2 times daily
		<b>Sereniten Plus</b> Formula: 201348	1-2 capsules, twice daily without food. No snacking
Support melanocortin 4	BMI  Fasting glucose, HbA1c, and/or related metabolic testing  Self-reported postprandial hunger and food cravings; libido	<b>Tri-Metabolic Control™, L-Carnosine, Sereniten Plus</b> Formulas: 202230, 98731, 201348	Refer to dosing recommendations above
		<b>Whey Satisfied™</b> Formula: 57747P	1-2 scoops with each meal. No snacking, higher lean protein, low sugar
		<b>Cal/Mag 2001</b> Formula: 2001	2 tablets daily with food

\*Please note that patients may not require all supplements listed.

+ Dr. Penny Kendall-Reed is a retained advisor to Douglas Laboratories.

†Provides weight management support as part of a healthy lifestyle with a reduced calorie diet and regular exercise.

‡The information contained herein is for informational purposes only and does not establish a doctor-patient relationship.

CLINICAL OBJECTIVE‡	ASSESSMENT	PRODUCT RECOMMENDATIONS*	DOSING
<b>Modulate PPAR (Peroxisome Proliferator Activated Receptor)</b>	BMI or body composition Self-reported energy level, cognitive function	<b>Tri-Metabolic Control™, L-Carnosine, Sereniten Plus</b> Formulas: 202230, 98731, 201348	Refer to dosing recommendations above
		<b>Resveratrol</b> Formula: 200244	1-2 capsules, twice daily, on an empty stomach
<b>Adrenal support for hyperadrenal states</b>	Orthostatic vital sign measurement Self-reported sleep quality Self-reported stress, irritability BMI	<b>Sereniten Plus</b> Formula: 201348	1-2 capsules, twice daily, without food
		<b>Melatonin P.R.</b> Formula: 83199	1 capsule, before bed
		<b>Rest Reset™</b> Formula: 202401	1 capsule, 30 minutes before bed, without food
		<b>GABA</b> Formula: 80611	500 mg, twice daily, without food (optional)
<b>Adrenal support for hypoadrenal states</b>	Orthostatic vital sign measurement Cortisol levels Self-reported sleep quality BMI	<b>Sereniten Plus</b> Formula: 201348	2 capsules, twice daily, with a gradual decrease to 1 capsule, twice daily, without food
		<b>Adrenplus-300</b> Formula: 7221 <b>OR</b> <b>AdrenoMend™</b> Formula: 200529	1-2 capsules daily 2-4 capsules daily
		<b>Melatonin</b> Formulas: Various	6-9 mg before bed
		<b>Sereniten Plus</b> Formula: 201348	1-2 capsules, twice daily (1 daily as maintenance)
<b>Healthy stress response</b>	Cortisol levels Monitor levels: DHEA Estradiol Progesterone Bioavailable testosterone	<b>Relora®-Plex</b> Formula: 98739 <b>OR</b> <b>GABA</b> Formula: 80611	1 capsule, twice daily 500-1,000 mg daily, without food
		<b>Sereniten Plus</b> Formula: 201348	5-50 mg if indicated

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