



GUIDE TO  
**HEART & METABOLIC SUPPORT  
FOR HEALTHY AGING<sup>†</sup>**



 **DOUGLAS  
LABORATORIES<sup>®</sup>**

| PUSHING POTENTIAL.

<sup>†</sup>These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

**Douglas Laboratories®** researches, develops and manufactures the right suite of rigorously designed, science-based, healthy aging supplements, and provides customized practice support. With a 60-year heritage of innovating and designing products to meet the needs of healthcare professionals, we push the potential of both clinical practices and patients to continually perform at their personal best, today and in the future. Douglas Laboratories is both GMP and NSF International registered, and is approved to produce NSF Certified for Sport® products.†

## HEART & METABOLIC

Heart and metabolic health is a broad topic that touches on many areas, from vascular function to glucose and lipid metabolism to body weight. As we age, the heart and vasculature undergo decreases in blood vessel plasticity and increases in blood vessel wall thickness. The function of the heart itself also changes, resulting in a decreased efficiency in pumping blood. Normal aging also results in a loss of muscle mass and alterations in numerous metabolic pathways. Weight tends to increase while metabolic processes such as glucose metabolism decrease. The combination of these factors can be viewed together as cardiometabolic aging. Nutrition plays an intimate role in maintaining cardiovascular health.†

**HEART & METABOLIC | CARDIOMETABOLIC**

**HEART & METABOLIC | LIPID METABOLISM**

**HEART & METABOLIC | MITOCHONDRIAL SUPPORT**

**HEART & METABOLIC | WEIGHT MANAGEMENT**

**HEART & METABOLIC | CLINICAL PROTOCOLS**

Cardiometabolic and Insulin Sensitivity Support Protocol†.....8

Metabolic Hormone Support Protocol† .....9

### CLINICAL ADVISORS:



Penny Kendall-Reed, N.D.††

Dr. Kendall-Reed is a specialist in metabolic and neuro-endocrine health, and author of the best seller “The New Naturopathic Diet,” as well as several other co-authored works. She travels throughout Canada and the United States lecturing on metabolic and endocrine function, holds health retreats, and appears regularly on television, magazine and radio. Presently, Dr. Kendall-Reed is the director of natural therapies at the Urban Wellness Clinic in Toronto.



Angela Mazza, D.O.††

Dr. Mazza is board-certified in endocrinology, diabetes & metabolism, as well as internal medicine, and currently practices in the Central Florida area. She sees medicine not as a “one size fits all” but requiring an individualized approach through patient education and lifestyle management. She has a significant background in both basic and clinical research, and has been principal investigator on multiple large-scale therapy and device trials.

††Our Clinical Advisors have been retained as consultants in advising Douglas Laboratories. They are compensated for this service.

# CARDIOMETABOLIC



Pterostilbene Supreme provides pterostilbene, a methylated resveratrol that occurs naturally in berries. This formula also contains resveratrol, curcumin and vitamin D<sub>3</sub>, which compliment pterostilbene in supporting cardiometabolic health as a potent activator of PPARα, aiding mitochondrial function by way of SIRT1 activation, and contributing to overall healthy aging.<sup>†</sup>

## Pterostilbene Supreme (A Methylated Resveratrol Formula)

Formula	Size
200901	30 Vegetarian Capsules

Suggested Usage: 1 daily

### SUPPLEMENT FACTS

Serving Size 1 Vegetarian Capsule • Servings Per Container 30

Amount Per Serving	%DV
Vitamin D-3 (Cholecalciferol).....	1,000 IU 250%
MERIVA® Curcumin Phytosome ..... (Curcuma longa extract, rhizome)/Phosphatidylcholine (soy) complex	250 mg *
Resveratrol (as trans-resveratrol) (resVida™) .....	100 mg *
Pterostilbene (pTeroPure™).....	50 mg *
Proprietary Cruciferous.....	150 mg *
Vegetable and Fruit Blend	
Wasabia japonica (rhizome, providing 600 mcg total glucosinolates) (Sawa™), Broccoli powder (sprout) (BroccoPhane™) (standardized to contain 200 mcg of sulforaphane) and Organic Pomegranate powder (fruit).	

\*Daily Value (DV) not established.

Other ingredients: Cellulose (capsule), calcium citrate, microcrystalline cellulose, vegetable stearate, silica and titanium dioxide.

resVida™ is a registered trademark of DSM.

pTeroPure™ is a trademark of ChromaDex, Inc.

Meriva® is a registered trademark of Indena S.p.A, Milano.

Sawa™ is a trademark of New Zealand Wasabi, Ltd.

BroccoPhane™ is a trademark of Cyvex Nutrition.

## Berberine Balance

Formula	Size
201131	60 Vegetarian Capsules

Suggested Usage: 1, twice daily

View the [Cardiometabolic and Insulin Sensitivity Support Protocol](#)<sup>†</sup> on pg. 8

Berberine Balance supplies high potency berberine combined with alpha lipoic acid and grape seed extract for blood sugar and cardiovascular support.<sup>†</sup> Recent studies indicate that berberine, a naturally occurring alkaloid found in a number of plants, is an effective supplement for helping to maintain cardiometabolic health.<sup>†</sup> Grape seed extract is a well-known antioxidant with heart health benefits, and alpha lipoic acid helps to support proper insulin function.<sup>†</sup>

### SUPPLEMENT FACTS

Serving Size 1 Vegetarian Capsule • Servings Per Container 60

Amount Per Serving	%DV
Berberine HCl (from Berberis aristata extract, root).....	500 mg *
Alpha Lipoic Acid.....	50 mg *
Grape Seed Extract.....	50 mg *

\*Daily Value (DV) not established.

Other ingredients: Cellulose, dicalcium phosphate, vegetable stearate and silica.

## Cardio MetX™ with GlucoPhenol®

● new product

Formula	Size
202234	60 Vegetarian Capsules

Suggested Usage: 1, twice daily

View the [Cardiometabolic and Insulin Sensitivity Support Protocol](#)<sup>†</sup> on pg. 8

Cardio MetX™ is a unique blend of cranberry, strawberry and amla fruit extracts, combined with a bioavailable form of chromium to provide cardiometabolic support.<sup>†</sup> All three branded ingredients, Capros®, GlucoPhenol®, and Zychrome® show clinical support for healthy blood lipid, blood glucose, and insulin levels.<sup>†</sup>

### SUPPLEMENT FACTS

Serving Size 1 Vegetarian Capsule • Servings Per Container 60

Amount Per Serving	%DV
Chromium (as Chromium Dinicocysteinate) <sup>A</sup> .....	200 mcg 167%
Capros® Amla Fruit Extract..... (Phyllanthus emblica) (Standardized to 60% low molecular weight hydrolysable tannins)	250 mg *
GlucoPhenol® proprietary blend .....	150 mg *
(Providing 25 mg of polyphenols from Orléans strawberry (Fragaria vesca var Orléans) extract (fruit) and cranberry (Vaccinium macrocarpon) extract (fruit))	

\*Daily Value (DV) not established.

Other ingredients: Hydroxypropyl methylcellulose (capsule), cellulose.

<sup>A</sup>Zychrome® brand Chromium Dinicocysteinate is a trademark of InterHealth N.I.

Capros® is a registered trademark of Natreon, Inc.

GlucoPhenol® is a trademark used by Douglas Laboratories under license.

<sup>†</sup>These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

## QÜELL Fish Oil® Clinical Strength DHA

● new product

Formula	Size
202248	60 Softgels

Suggested Usage: 1-3 daily

View the **Cardiometabolic and Insulin Sensitivity Support Protocol**† on pg. 8

QÜELL Fish Oil® Clinical Strength DHA is Supercritical CO<sub>2</sub>-extracted docosahexaenoic acid (DHA) in triglyceride form, manufactured exclusively for Douglas Laboratories. The product contains 90% of the essential omega-3 fatty acid DHA, which has been shown in recent research to support biomarkers of cardiometabolic health.† QÜELL Fish Oil® is unique among other fish oils for its supercritical extraction, purity, bioavailability and concentrations.

### SUPPLEMENT FACTS

Serving Size 1 Softgel • Servings Per Container 60

Amount Per Serving	%DV
Calories.....	10
Calories from Fat.....	10
Total Fat.....	1 g 2%^
Omega-3 Supercritical CO <sub>2</sub> Triglyceride Concentrate.....	1,000 mg *
Providing:	
DHA (Docosahexaenoic Acid).....	900 mg *

\*Daily Value (DV) not established.

^Percent Daily Value (DV) based on a 2,000 calorie diet.

Other ingredients: Gelatin (capsule, from fish [Tilapia]), glycerin, purified water, natural-source mixed tocopherols.

This product contains fish oil (anchovies, sardines, mackerel).

Visit [www.douglaslabs.com/heart-metabolic.html](http://www.douglaslabs.com/heart-metabolic.html) for

ADDITIONAL  
CARDIOMETABOLIC PRODUCTS:†

Name	Formula
Homocystrol® + TMG.....	201329

## LIPID METABOLISM



Cardio-Edge® supplies Sytrinol™ (a clinically studied proprietary blend of polymethoxylated flavones from citrus fruit and tocotrienols from palm), plant sterols, and standardized pomegranate extract to help support cardiovascular health and normal cholesterol metabolism.†

### Cardio-Edge®

Formula	Size
99134	120 Vegetarian Capsules

Suggested Usage: 2, twice daily, with meals

### SUPPLEMENT FACTS

Serving Size 2 Vegetarian Capsules • Servings Per Container 60

Amount Per Serving	%DV
Plant Sterols (Phytosterols) (from soy).....	400 mg *
Sytrinol™.....	150 mg *
(Proprietary extract of polymethoxylated flavones and tocotrienols from citrus and palm fruits)	
Standardized Pomegranate Extract (fruit).....	50 mg *
(Standardized to 40% ellagic acid)	

\*Daily Value (DV) not established.

Other ingredients: Calcium carbonate, hydroxypropyl methylcellulose (capsule), cellulose, vegetable stearate and silica.

Sytrinol™ is a registered trademark of InterHealth N.I.

Visit [www.douglaslabs.com/heart-metabolic.html](http://www.douglaslabs.com/heart-metabolic.html) for

ADDITIONAL  
LIPID METABOLISM PRODUCTS:†

Name	Formula
Ayur-Guggulipid.....	7674
Ayur-Triphala.....	7684
Beni-Koji RYR.....	83339
Garlic.....	7420
Lipotrol™.....	81158
Nopal Cactus.....	98249
Policosanol.....	99251
Ultra Cardio Support Pack.....	66354



# MITOCHONDRIAL SUPPORT



Ubiquinol-QH is a softgel containing 100 mg of ubiquinol in a patented, naturally self-assembling nano-colloid system called VESIsorb® technology for enhanced absorption.<sup>†</sup> Ubiquinol is the biologically reduced form of ubiquinone, also known as coenzyme Q<sub>10</sub>. Ubiquinol may be of special importance for older adults looking to support healthy aging and cardiovascular function.<sup>†</sup>

## Ubiquinol-QH

### With VESISORB® Technology

Formula	Size
201899	30 Softgels 60 Softgels

**Suggested Usage:** 1 daily  
View the **Cardiometabolic and Insulin Sensitivity Support Protocol**<sup>†</sup> on pg. 8

#### SUPPLEMENT FACTS

Serving Size 1 Softgel

Amount Per Serving	%DV
Vitamin E.....10 IU (as d-alpha-tocopheryl)	33%
Ubiquinol.....100 mg (Kaneka QH™ - reduced form of CoQ10)	*

\*Daily Value (DV) not established.

Other ingredients: Gelatin (capsule), medium chain triglycerides, polysorbate 80, polyglycerol fatty acid esters, glycerin and caramel color.

VESIsorb® is a registered trademark of Vesifact AG.

Kaneka QH™ is a trademark of Kaneka Corporation.

## Enhanced Absorption Patented VESIsorb® Delivery System

- Developed by Vesifact, a Switzerland-based company dedicated to innovative technology and research
- Patented lipid-based delivery system increases bioavailability of a bioactive that is fat-soluble or that has poor water solubility<sup>†</sup>
- Self-assembling colloidal system forms evenly-dispersed fluid droplets upon contact with water in the G.I. tract, each with a mean diameter of less than 100 nanometers and with the bioactive at its core
- Nanosized water-soluble droplets or micelles allow the bioactive to cross the water layer of the G.I. tract for absorption<sup>†</sup>
- Provides extended release of the bioactive over time<sup>†</sup>

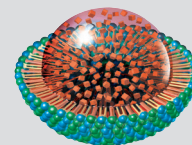
The VESIsorb® technology is broken down into three steps:

#### Step 1

Formation of the colloidal delivery system

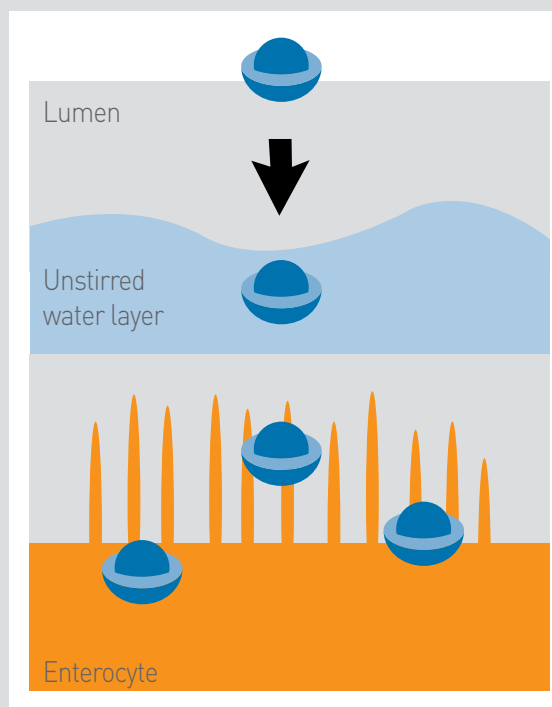
#### Step 2

Diffusion across the unstirred water layer



#### Step 3

Transfer to the absorptive surface of the G.I. epithelium



<sup>†</sup>These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

Visit [www.douglaslabs.com/heart-metabolic.html](http://www.douglaslabs.com/heart-metabolic.html) for  
**ADDITIONAL MITOCHONDRIAL  
 SUPPORT<sup>†</sup> PRODUCTS:**

Name	Formula
ATP-20.....	83029
Citrus Solu-Q™.....	201775
Citrus-Q10® 100.....	200053
Citrus-Q10® 300.....	99950
Citrus-Q10® 60.....	200052
Co-Enzyme Q10 Softgel.....	CQS1
Coenzyme Q-10 with Lipoic Acid.....	7362
Coenzyme Q-10 with Vitamin C.....	7350
Corvalen M®.....	57452P
Corvalen®.....	57451P
Corvalen® Chews.....	201245
Corvalen® OPC.....	57497P
Juvenon Pro Longevity.....	201309
MitoTone®.....	MIT
Ultra Coenzyme Q-10.....	7200
Xtra-Cell® Anti-Aging Support (Frozen).....	99460

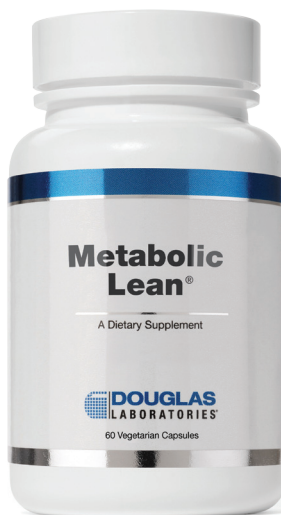
Visit [www.douglaslabs.com/heart-metabolic.html](http://www.douglaslabs.com/heart-metabolic.html) for  
**ADDITIONAL  
 HEART & METABOLIC PRODUCTS:<sup>‡</sup>**

Name	Formula
<b>CIRCULATORY/VASCULAR</b>	
Cardio-Stolix™.....	200596
Grape Seed Extract-V.....	77342
Hawthorne Max-V.....	77347
Hesperidin Methyl Chalcone.....	HMC
Nattosyn™.....	99250
Pycnogenol® (Capsules).....	7041
Pycnogenol® (Tablets).....	PC03
Pycnogenol® (Tablets).....	PC09
V:V 7 Supplement.....	83030
Xtra-Cell® Remilyn (Frozen).....	99461

**GLUCOSE SUPPORT**

Gluco-Mend.....	80442
GlucoBrium™.....	99155
Glucoset®.....	GST
R-Lipoic Acid.....	200460
Ultra Benfotiamine.....	201815
Ultra Glucose Support Pack.....	66811

## WEIGHT MANAGEMENT



Metabolic Lean® is a novel weight management<sup>†</sup> formula that includes three branded and clinically studied ingredients—Meratrim® plant extract, Capsimax™ capsicum extract, and Zychrome® chromium complex. This special combination of ingredients may improve lipolysis, thermogenic activity, and insulin function for overall metabolic support.<sup>†</sup> The ingredients in Metabolic Lean® also help increase adiponectin levels to facilitate proper fat metabolism and glucose regulation.<sup>‡</sup>

### Metabolic Lean®

Formula	Size
201350	60 Vegetarian Capsules

**Suggested Usage:** 1, twice daily

View the **Cardiometabolic and Insulin Sensitivity Support Protocol<sup>†</sup>** on pg. 8

#### SUPPLEMENT FACTS

Serving Size 1 Vegetarian Capsule • Servings Per Container 60

Amount Per Serving	%DV
Chromium (as Chromium Dinicocysteinate) <sup>A</sup> .....	100 mcg 83%
Meratrim® Proprietary Blend.....	400 mg *
(Sphaerantus indicus [flower heads] extract, Garcinia mangostana [fruit rind] extract)	
Capsaicinoids.....	.0.5 mg *
(from Capsimax™, providing capsaicin, dihydrocapsaicin, nordihydrocapsaicin)	

<sup>A</sup>Daily Value (DV) not established.

Other ingredients: Hydroxypropyl methylcellulose (capsule), dicalcium phosphate, cellulose, vegetable stearate, pharmaceutical glaze and silica.

<sup>B</sup>Zychrome® is a trademark of InterHealth N.I.

Meratrim® brand proprietary blend of two natural plant extracts.

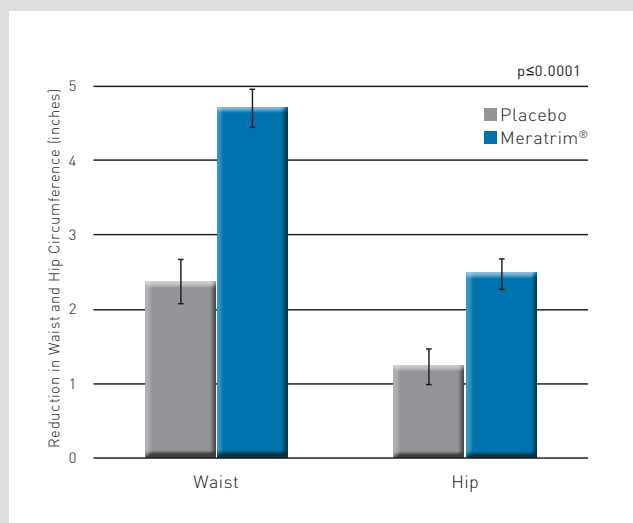
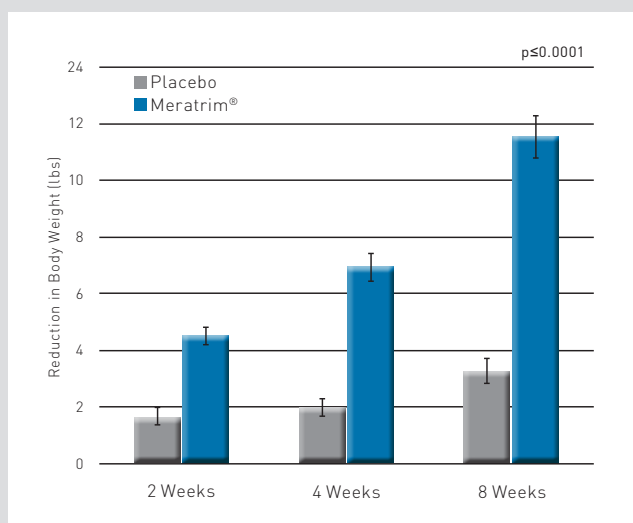
Meratrim® is exclusively distributed by InterHealth N.I.

Capsimax™ is a trademark of OmniActive Health Technologies.

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

## Metabolic Lean® With Meratrim®

Meratrim® is a proprietary plant extract blend for weight management† derived from two plants, Sphaeranthus indicus and Garcinia mangostana, traditionally used in Southeast Asian culture. Meratrim® has been shown in two independent, randomized, double-blind, placebo-controlled clinical studies to significantly reduce body weight, BMI, and waist circumference within eight weeks when used in combination with a 2,000-calorie diet and moderate exercise plan.† Meratrim® significantly reduced body weight by 11.5 lbs after eight weeks, 3.5 times better than placebo, ( $p \leq 0.0001$ ) and significantly reduced waist and hip circumference by 4.7 inches ( $p \leq 0.0001$ ) and 2.5 inches ( $p \leq 0.0001$ ), respectively.†



Stern JS, et al. Obesity (Silver Spring). 2013 May;21(5):921-7

## Tri-Metabolic Control™

● new product

**Formula** 202230 **Size** 120 Vegetarian Capsules

**Suggested Usage:** 2, three times daily

View the **Metabolic Hormone Support Protocol†** on pg. 9

Tri-Metabolic Control™ combines the clinically studied extracts of the Piper betle leaf and Dolichos biflorus seed plus acetyl-L-carnitine to support three metabolic hormones: adiponectin, leptin, and ghrelin to help control appetite, satiety and fat metabolism as part of a healthy weight management† program.†

### SUPPLEMENT FACTS

Serving Size 2 Vegetarian Capsules • Servings Per Container 60

Amount Per Serving	%DV
LOWAT® Proprietary Blend .....300 mg (Dolichos biflorus [seed] extract, Piper betle [leaf] extract)	*
Acetyl-L-Carnitine (as Acetyl-L-Carnitine HCl) .....300 mg	*

\*Daily Value (DV) not established.

Other ingredients: Hydroxypropyl methylcellulose (capsule), cellulose, silica and ascorbyl palmitate.

LOWAT® is exclusively distributed by InterHealth N.I.

LOWAT® brand botanical blend derived from Ayurvedic plants.

Visit [www.douglaslabs.com/heart-metabolic.html](http://www.douglaslabs.com/heart-metabolic.html) for

**ADDITIONAL  
WEIGHT MANAGEMENT† PRODUCTS:**

Name	Formula
7-Keto™	99246
CLA (Conjugated Linoleic Acid)	98336
Coleus Extract	99247
M.C.T. A Structured Lipid	201767
Medium Chain Triglycerides	81255
Metabolic Management Pack	66212
Nature's Diet Caps® +	7441
Nature's Diet Caps® + Herbs	7442
Super HCA™	98028

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

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

[ Developed by Dr. Angela Mazza ]

## Protocol Objectives:

To address optimal cardiometabolic health and to provide additional recommendations for hormonal health that may be related to insulin sensitivity.<sup>†</sup>

Clinical Objective <sup>†</sup>	Assessment	Select from the Following Recommendations <sup>**</sup>	Dosing
<b>Insulin Sensitivity and Cardiometabolic Support<sup>†</sup></b> <ul style="list-style-type: none"> <li>Blood lipids and cholesterol already in the normal range</li> <li>Healthy blood glucose/insulin response</li> <li>Endothelial health</li> <li>Circulatory health</li> </ul>	Patient presents with fatigue, weight gain, and difficulty losing weight  Physical: to include BP, weight, waist circumference +/- waist hip ratio  Lab: assess fasting lipid panel, glucose, insulin, hemoglobin A1c, vitamin D	<b>Cardio MetX™ with GlucoPhenol®</b>	1 capsule twice daily before a meal
		<b>QÜELL Fish Oil® Clinical Strength DHA</b>	1-3 softgels daily
		<b>Ubiquinol-QH</b>	1 softgel daily
		<b>Vitamin D 5000 IU</b>	1 tablet daily with food if needed
<b>Additional Support of Blood Lipids and/or Blood Glucose Already in the Normal Range<sup>†</sup></b>	Lab: lipid panel, fasting and post-prandial blood glucose	<b>Berberine Balance</b>	1 capsule twice daily
<b>Support Weight Management<sup>†</sup> and Fat Metabolism<sup>†</sup></b>	Body weight: BMI > 25 Waist circumference: Men > 102 cm (40 in) Women > 88 cm (35 in)	<b>Metabolic Lean®</b>	1 capsule 30 minutes before breakfast and dinner
<b>Support Insulin Sensitivity and Hormone Health in Women<sup>†</sup></b>	Patient presents with clinical signs of elevated testosterone: irregular menstrual cycles, skin or hair changes including facial hair, acne, abdominal fat, and imbalanced blood glucose levels.  Additional Labs: assess androgens/ testosterone levels	<b>TestoQuench™ for Women</b>	2 capsules daily with a meal
<b>Support Insulin Sensitivity and Hormone Health in Men<sup>†</sup></b>	Patient presents with clinical signs of low testosterone: low libido, low stamina, decreased mood, fatigue, difficulty focusing, and decreased muscle mass.  Additional Labs: assess androgens/ testosterone levels	<b>TestoGain™</b>	2-4 capsules daily with food
<b>Support Insulin Sensitivity Associated with Menopause and Perimenopause<sup>†</sup></b>	Patient presents with heat intolerance, night sweats, mood changes, and change or absence of menstrual cycle.  Additional Labs: assess LH, FSH, estradiol, progesterone, and testosterone levels	<b>Ultra Menoease™</b>	2 capsules daily with a meal
<b>Support Insulin Sensitivity Influenced by Stress<sup>†</sup></b>	Patient presents with increased emotional stress or physical stress, including chronic or acute illness. May have difficulty sleeping.  Additional Labs: cortisol assessment	<b>Sereniten Plus</b>	1 or 2 capsules twice daily without food

<sup>\*\*</sup>Where multiple supplements are suggested, please note that the patient may not require all of them.

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

This protocol is intended for use by healthcare practitioners, is for informational purposes only, and does not establish a doctor-patient relationship. Please be sure to consult your physician before taking this or any other product. Consult your physician for any health problems.

Available for download at [www.douglaslabs.com/cardiometabolicsupportprotocol](http://www.douglaslabs.com/cardiometabolicsupportprotocol)



[ Developed by Dr. Penny Kendall-Reed ]

## Protocol Objectives:

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.<sup>†</sup>

Clinical Objective <sup>†</sup>	Assessment	Select from the Following Recommendations <sup>**</sup>	Dosing
<b>Support Adiponectin<sup>†</sup></b>	Patient presents with increased weight gain, bloating and fatigue after consuming carbohydrates, unstable blood sugars and increased serum lipids despite a good diet, and/or fast weight loss with caloric restriction.  Assess for low adiponectin level  Genetic SNPs: ADIPOQ (rs17300539), ADIPOQ (rs17366568)	<b>Tri-Metabolic Control™</b>	2 capsules 30 minutes before meals (2-3 meals daily)
		<b>L-Carnosine</b>	500 mg twice daily 30 minutes before meals
<b>Support Leptin Sensitivity<sup>†</sup></b>	Patient has general food cravings (no specific food) but is never satiated. Desire to keep eating even when full. Weight and BMI classified as obese.  Assess for low leptin level  Genetic SNPs: LEPR (rs8179183), LEPR (rs2025804), LEP (rs2167270), LEP (rs7796202), FTO (rs9939609), FTO (rs1121980)	<b>Tri-Metabolic Control™</b>	2 capsules 30 minutes before meals (2-3 meals daily)
		<b>L-Carnosine</b>	500 mg twice daily 30 minutes before meals
		<b>Sereniten Plus</b>	1 or 2 capsules twice daily without food. No snacking.
<b>Support Melanocortin 4<sup>†</sup></b>	Patient presents with obese status, insulin sensitivity, abnormal hunger and satiety signals, and increased weight gain from antipsychotic drugs, and/or low sex drive and poor erections.  Assess for low melanocortin 4 level  Genetic SNP: MC4R (rs17782313)	<b>Tri-Metabolic Control™, L-Carnosine, Sereniten Plus</b>	Refer to dosing recommendations above
		<b>Cal/Mag 2001</b>	2 tablets daily with food. No snacking, higher lean protein, low sugar
<b>Modulate PPAR<sup>†</sup> (Peroxisome Proliferator Activated Receptor)</b>	Patient presents with increased weight gain, poor fatty acid metabolism, low energy, increased adipose deposits (cellulite and dimpling under skin surface) and in CV system, and/or more rapid cognitive decline with age.  Genetic SNP: PPARG (rs1801282)	<b>Tri-Metabolic Control™, L-Carnosine, Sereniten Plus</b>	Refer to dosing recommendations above
		<b>Resveratrol</b>	1-2 capsules twice daily on an empty stomach
<b>Adrenal Support for Hyperadrenal States<sup>†</sup></b>	Orthostatic BP more than +15mm Hg  Patient presents with racing thoughts, difficulty falling asleep, irritability and restlessness, and/or weight gain.  Assess for high glucocorticoid/cortisol levels  Genetic SNPs: ADRA2B (rs442564), ADRA2B (rs283650317), ADRA2A (rs10885122), COMT (rs4860)	<b>Sereniten Plus</b>	1 or 2 capsules twice daily without food
		<b>Melatonin Prolonged Release</b>	3-9 mg before bed
		<b>Seditol® Plus</b>	2 capsules before bed if falling asleep is difficult, and 1 on waking in the middle of the night
		<b>GABA</b>	500 mg twice daily without food (optional)
<b>Adrenal Support for Hypoadrenal States<sup>†</sup></b>	Orthostatic BP less than +5mm Hg  Patient presents with feeling light headed on standing, fatigue, sleeping 8-9 hours but waking exhausted, weight gain.  Assess for low glucocorticoid/cortisol levels  Genetic SNPs: ADRA2B (rs442564), ADRA2B (rs283650317), ADRA2A (rs10885122), COMT (rs4860)	<b>Sereniten Plus</b>	2 capsules twice daily with a gradual decrease to 1 twice daily without food
		<b>Adrenplus-300</b> or <b>AdrenoMend™</b>	1-2 capsules daily  2-4 capsules daily
		<b>Melatonin</b>	6-9 mg before bed
		<b>Sereniten Plus</b>	1 or 2 capsules twice daily (1 daily as maintenance)
<b>Healthy Stress Response<sup>†</sup></b>	Assess for high cortisol with low DHEA levels while monitoring DHEA, estradiol, progesterone and bioavailable testosterone	<b>Relora®-Plex</b> or <b>GABA</b>	1 capsule twice daily  500-1,000 mg daily without food

<sup>\*\*</sup>Where multiple supplements are suggested, please note that the patient may not require all of them.

This protocol is intended for use by healthcare practitioners, is for informational purposes only, and does not establish a doctor-patient relationship. Please be sure to consult your physician before taking this or any other product. Consult your physician for any health problems.

Available for download at [www.douglaslabs.com/metabolichormonesupportprotocol](http://www.douglaslabs.com/metabolichormonesupportprotocol)

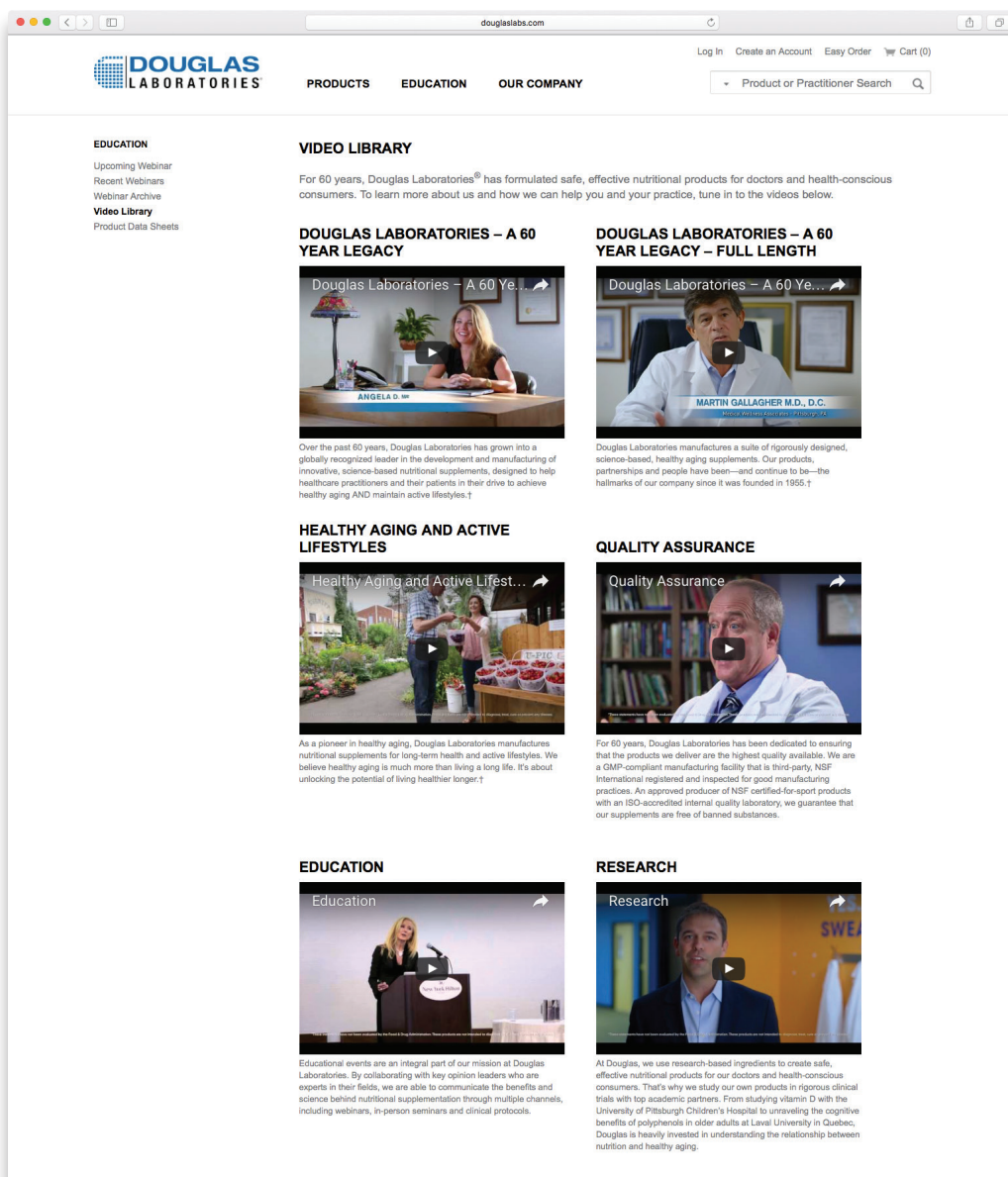
<sup>†</sup>These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

# EDUCATION

Helping practitioners make that critical link between research findings and clinical application is an integral part of our mission. We collaborate with our clinical advisory board to hold in-person seminars and webinars, as well as develop online tools.

Our website houses product selection guides, clinical protocols and recorded webinars, for round-the-clock access to accommodate busy schedules. Events are also posted online and through social media, making it easy to stay informed.

Visit: [douglaslabs.com/education](http://douglaslabs.com/education)



# COMPLETE ACCESS



JOIN US ONLINE AT DOUGLASLABS.COM  
24/7 Access + Free Shipping\*

## HOW TO PLACE AN ORDER

Douglas Laboratories offers a wide range of research-based dietary supplements directly to healthcare practitioners. As part of our credentialing process, we will ask you to provide proof that you are a licensed healthcare practitioner. Once verified, your account will be activated and you can begin purchasing.

### ONLINE

Secure online ordering at [www.douglaslabs.com](http://www.douglaslabs.com).

All of our product information is available online in our Product section.  
Search by health function, ingredient, name or item number.

### CALL US

1-800-245-4440

\*Valid in USA for online orders only.

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



Access our full Heart & Metabolic category of products, along with our nine other key healthy aging categories developed for customized patient support. Visit [www.douglaslabs.com](http://www.douglaslabs.com) today.<sup>†</sup>

---

**Order today and receive FREE SHIPPING on all web orders of \$100 or more.**

Use Coupon Code: **DL100** at checkout.\*

\*Valid in USA and for online orders only. Cannot be combined with any other promotions. Free standard shipping will apply to entire order and become available under Shipping Method.



[douglaslabs.com](http://douglaslabs.com) | 1.800.245.4440



PUSHING POTENTIAL.