

# MARTIN PALL, PH.D.

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Martin L. Pall, Ph.D., is Professor Emeritus of Biochemistry and Basic Medical Sciences at Washington State University in Pullman, where he taught medical biochemistry. His long term interests in biological regulatory mechanisms and in free radicals and reactive oxygen/nitrogen species have been key influences in leading him to his conceptual breakthrough in viewing multi-system health conditions.

## STEPHEN LEVINE, PH.D.

Stephen Levine, Ph.D., is the founder of NutriCology and it's chief scientific advisor. Dr. Levine's great interest in free radical processes was marked by his groundbreaking textbook Antioxidant Adaptation, which he co-authored with Parris Kidd, Ph.D., in 1985.

## NEW MULTI-SYSTEM ANTIOXIDANT FORMULAS

"Dr. Pall explains the NO/ONOO<sup>-</sup> cycle ("no, oh no!") with exacting detail, and draws together the most recent data in molecular biology/biochemistry. Pall explains the very specific interaction of nitric oxide, superoxide and peroxynitrite, and the immensely important biochemical processes they are involved in." - Stephen Levine, Ph.D.



Recently, Dr. Pall and Dr. Levine have worked together to create some of the most advanced and comprehensive multi-system antioxidant formulas available today.

## NEW MULTI-SYSTEM ANTIOXIDANT FORMULAS!

### Antioxidant and Pro-Mitochondrial Suggestions from Martin Pall, Ph.D.

#### Down-regulation of the NO/ONOO<sup>-</sup> Cycle

Martin Pall, Ph.D., School of Molecular Biosciences, Washington State University, has identified the NO/ONOO<sup>-</sup> cycle – the stress-induced increase in the levels of nitric oxide and its oxidant product peroxynitrite, and the biochemical vicious cycle that keeps these levels chronically elevated – as a key mechanism underlying oxidative stress. Below are individual and full-spectrum antioxidant preparations that together may assist in down-regulating this NO/ONOO<sup>-</sup> cycle mechanism.\* These suggestions are intended as nutritional support, not as a replacement for medical treatment of any condition.

#### CoQ-Gamma E with Tocotrienols & Carotenoids, #55930

Take 1 softgel daily, in the morning. Some individuals may increase to 1 softgel two times daily, morning and mid-day.

#### MVM-A #55940

Take 2 capsules, two times daily, with or following meals. Multivitamin/mineral with acetyl-L-carnitine and R-alpha-lipoic acid.

#### FlaviNOx® #55780

Take 1 capsule, three times daily, spread out over the day. Take one capsule in the middle of the night if one wakes up.

Flavonoids are rapidly absorbed and excreted, substantially elevating blood levels for roughly four hours. Divided dosages can significantly support antioxidant levels in the body for longer periods.

#### NAC Enhanced Antioxidant Formula, #55960

Take 1 tablet, two times daily, following or with meals. Provides antioxidant activity and supports production of glutathione.\*

#### Super EPA Fish Oil Concentrate, #51250, #53870

Take 1 softgel, one or two times daily. Take the first dose with the CoQ-Gamma E with Tocotrienols & Carotenoids.

A source of EPA and DHA, and may help lower induction of inducible nitric oxide synthase.\*

#### Buffered Vitamin C capsules #50010

Take 1 Buffered Vitamin C capsule, four times daily (1 with each meal and 1 in the evening).

#### QuatreActiv™ Folate Plus #56540

Take 1 capsule two times daily, always with a Buffered Vitamin C. The vitamin C can act as a peroxynitrite scavenger and help lower the oxidation of 5-MTHF, as well as reduce the first oxidation product of 5-MTHF back to 5-MTHF.\* Buffered C also supplies extra magnesium, which supports energy metabolism and many other functions in the body.\*

A combination of patented QuatrefoliC®, the glucosamine salt of 5-methyltetrahydrofolate (5-MTHF), with vitamin C, RNA, and resveratrol.

#### FibroBoost® #55910

Take 1 capsule three times daily before meals.

This polyphenol/phlorotannin supplement may be used in addition to the above formulas, or in place of FlaviNOx®.

**Initially, it may be desirable** to introduce these supplements one at a time, so that if one produces a negative response, that component can be identified and discontinued for a period of time (or permanently). The initial regimen would change every three days, as follows:

- Start by taking 1 CoQ-Gamma E with Tocotrienols & Carotenoids, one time daily in the morning, for three days.
- Add 1 MVM-A, two times daily, for three days.
- Add 1 MVM-A, two times daily, to a total of four daily, for three days.
- Add 1 FlaviNOx®, three times daily, for three days.
- If FlaviNOx® does not appear to be optimal, discontinue it and add 1 FibroBoost®, three times daily.
- Add 1 NAC Enhanced Antioxidant Formula, two times daily, for three days.
- Add 1 Super EPA Fish Oil Concentrate, one time daily, in the morning.
- Add 1 Buffered Vitamin C capsule, four times daily (1 with each meal and 1 in the evening), for three days.
- Add 1 QuatreActiv™ Folate Plus, two times daily, always taken with a Buffered Vitamin C.
- Optional, for additional antioxidant support: After three more days, if FibroBoost® was not added earlier, add 1 FibroBoost®, three times daily.

The rationale for these nutritional components and how they support antioxidant function is discussed in Dr. Pall's book, *Explaining Unexplained Illnesses*.\*

**CoQ-Gamma E  
with Tocotrienols & Carotenoids**

Item no. 55930

Available in bottles of 60 softgels

A unique softgel formulation containing high levels of CoQ10, carotenoids, gamma-tocopherols, and DeltaGold® tocotrienols.

Serving Size: 1 Softgel	
Servings Per Container: 60	
<b>Amount Per Serving:</b>	
Vitamin A (as Beta-Carotene) . . . . .	3490 IU
Vitamin C (as Ascorbyl Palmitate) . . . . .	17 mg
Vitamin E (as D-alpha- Tocopherol) . . . . .	23 IU
Mixed Tocotrienols and Tocopherols . . . . .	10 mg
DeltaGOLD® Tocotrienols . . . . .	40 mg
Gamma-Tocopherol . . . . .	100 mg
Mixed Carotenoids . . . . .	3 mg
Lycopene . . . . .	3 mg
Lutein . . . . .	3 mg
Coenzyme Q10 . . . . .	75 mg
Alpha-Lipoic Acid (R-Form) . . . . .	9 mg

Other ingredients: Rice bran oil, gelatin, glycerin, water, yellow beeswax, soy lecithin, annatto extract.

**MVM-A**

*Hypoallergenic*

Item no. 55940

Available in bottles of 180 vegetarian capsules

Multiple vitamin and mineral formula with additional nutrients featuring acetyl-L-carnitine for antioxidant support.\*

Serving Size: 2 Capsules	
Servings Per Container: 90	
<b>Amount Per Serving:</b>	
Vitamin A (as Retinyl Palmitate) . . . . .	525 IU
Vitamin C (as Ascorbic Acid) . . . . .	67 mg
Vitamin D3 (as Cholecalciferol) . . . . .	540 IU
Vitamin K1 (as Phytionadione) . . . . .	25 mcg
Thiamine (as Thiamine Hydrochloride) . . . . .	8 mg
Riboflavin (as Riboflavin, Riboflavin-5-Phosphate) . . . . .	10 mg
Niacin (as Niacinamide & Niacin) . . . . .	18 mg
Vitamin B6 (as Pyridoxine HCl, Pyridoxine-5-Phosphate) . . . . .	8 mg
Folic Acid . . . . .	400 mcg
Vitamin B12 (as Hydroxycobalamin) . . . . .	30 mcg
Biotin . . . . .	100 mcg
Pantothenic Acid (as D-Pantothenate Calcium) . . . . .	20 mg
Calcium (as Calcium Carbonate, Sulfate, Citrate) . . . . .	83 mg
Iodine (as Potassium Iodide) . . . . .	50 mcg
Magnesium (as Sulfate, Citrate, Malate, Bisglycinate) . . . . .	120 mg
Zinc (as Zinc Citrate) . . . . .	7 mg
Selenium (as Selenomethionine) . . . . .	67 mcg
Copper (as Copper Sulfate) . . . . .	0.4 mg
Manganese (as Manganese Sulfate) . . . . .	1.5 mg
Chromium (as Chromium Picolinate) . . . . .	50 mcg
Molybdenum (as Sodium Molybdate) . . . . .	30 mcg
Glycine (as Magnesium Bisglycinate) . . . . .	8 mg
Taurine . . . . .	83 mg
Boron (as Boric Acid) . . . . .	1 mg
N-Acetyl L-Carnitine . . . . .	100 mg
Lipoic Acid . . . . .	40 mg

Other ingredients: Hydroxypropyl methylcellulose, microcrystalline cellulose, magnesium stearate, L-leucine, silicon dioxide.

**FlaviNOx®**

*Hypoallergenic*

Item no. 55780

Available in bottles of 90 vegetarian capsules

A state-of-the-art combination of herbal extracts with standardized bioflavonoids, providing broad spectrum antioxidant support.\*

Serving Size: 1 Capsule	
Servings Per Container: 90	
<b>Amount Per Serving:</b>	
Milk Thistle (Seed) Extract (Standardized to 80% Silymarin) . . . . .	80 mg
Bilberry (Berries) Extract (Standardized to 25% Anthocyanidins) . . . . .	100 mg
Ginkgo (Leaves) Extract (Standardized to 24% Flavoglycosides and 6% Terpene Lactones) . . . . .	40 mg
Grape Seed Extract (Standardized to 50% Polyphenols) . . . . .	100 mg
Green Tea Extract (Decaffeinated, Standardized to 35% EGCG) . . . . .	80 mg
Cranberry Juice (Berries) Extract . . . . .	100 mg
Hawthorn (50% as Berry and 50% as Leaves and Flowers) Extract (Standardized to 1.8% Vitexin-2-O'-Rhamnoside) . . . . .	100 mg

Other ingredients: Hydroxypropyl methylcellulose, microcrystalline cellulose, silicon dioxide, magnesium stearate.

**NAC Enhanced Antioxidant Formula**

*Hypoallergenic*

Item no. 55960

Available in bottles of 90 tablets

Enhanced antioxidant formula containing amino acids, nucleic acid, and lipoic acid that acts as a powerful antioxidant and supports glutathione production.\*

Serving Size: 1 Tablet	
Servings Per Container: 90	
<b>Amount Per Serving:</b>	
N-Acetyl-L-Cysteine . . . . .	200 mg
Trimethylglycine . . . . .	300 mg
Ribonucleic Acid . . . . .	120 mg
Alpha-Lipoic Acid . . . . .	100 mg

Other ingredients: Dicalcium phosphate, microcrystalline cellulose, magnesium stearate, silicon dioxide, stearic acid, croscarmellose sodium, ethyl vanillin.

**Super EPA**

**Fish Oil Concentrate**

Item no. 51250, Available in bottles of 60 softgels

Item no. 53870, Available in bottles of 200 softgels

Serving Size: 2 Softgels	
Servings Per Container: 30 (#71250) and 100 (#73870)	
<b>Amount Per Serving:</b>	
Calories . . . . .	20
Calories from Fat . . . . .	20
Total Fat . . . . .	2.4 g
Protein . . . . .	0.6 g
Vitamin E (as Mixed Tocopherols) . . . . .	10 IU
Fish Oil (from Sardine, Anchovy, Mackerel) . . . . .	2400 mg
Eicosapentaenoic Acid (EPA) . . . . .	720 mg
Docosahexaenoic Acid (DHA) . . . . .	480 mg

Other ingredients: Gelatin, glycerin, water.

**Buffered Vitamin C capsules**

Item no. 50010

Available in bottles of 120 vegetarian capsules

Serving Size: 2 Capsules	
Servings Per Container: 60	
<b>Amount Per Serving:</b>	
Vitamin C (as Ascorbic Acid) . . . . .	1000 mg
Calcium (as Calcium Carbonate) . . . . .	190 mg
Magnesium (as Magnesium Carbonate) . . . . .	104 mg

Other Ingredients: Hydroxypropyl methylcellulose, microcrystalline cellulose, silicon dioxide, magnesium stearate.

**QuatreActiv™ Folate Plus  
with Enhanced Antioxidant Support**

Item no. 56540

Available in bottles of 120 vegetarian capsules

A combination of patented Quatrefolic®, the glucosamine salt of 5-methyltetrahydrofolate (5-MTHF), with vitamin C, RNA, and resveratrol.

Serving Size: 1 Capsule	
Servings Per Container: 120	
<b>Amount Per Serving:</b>	
Vitamin C (as Ascorbic Acid, Cassava Source) . . . . .	600 mg
5-Methyltetrahydrofolate . . . . .	500 µg
(from (6S)-5-methyltetrahydrofolic acid, glucosamine salt)	
RNA . . . . .	50 mg
trans-Resveratrol (from <i>Polygonum cuspidatum</i> extract) . . . . .	25 mg

Other ingredients: Hydroxypropyl methylcellulose, microcrystalline cellulose, L-leucine.

**FibroBoost®**

*Hypoallergenic*

Item no. 55910

Available in bottles of 75 vegetarian capsules

FibroBoost® contains SEANOL®-F, a patented powerful extract from brown algae, rich in polyphenol/phlorotannin that have uniquely strong antioxidant properties.\* Phlorotannins support the cardiovascular system, brain, metabolism and general condition.\*

Serving Size: 3 Capsules	
Servings Per Container: 25	
<b>Amount Per Serving:</b>	
<i>Ecklonia cava</i> Extract (SEANOL®-F) . . . . .	1200 mg

Other ingredients: Hydroxypropyl methylcellulose, L-leucine.