

 $\underset{\scriptscriptstyle R}{THORNE}_{\scriptscriptstyle B}$

immune support

BioDerm PermaClear

antioxidants

Anti-Oxidant
R-Lipoic Acid
Glutathione-SR
Ultimate-E
Planti-Oxidants
Co-Q100 SoftGels
Extra Nutrients

essential fatty acids

Black Currant Oil Super EPA Omega Plus

detox and cleanse

Basic Detox Nutrients

Sulfonil

Vitamin C with Flavonoids

stress and sleep

PharmaGABA-PRO

speed healing

Traumogen Phytoprofen

vein support

Venocap Diosmin-HMC Perfusia-SR

collagen and elastin support

Collagen

OPC-100



Researchers are discovering proper nutrition can make the difference between having soft, supple, durable skin and suffering from chronic dry, inflamed, scaly, itchy skin. Skin must be protected, but it must also be nourished from within. A high-quality diet rich in essential fatty acids, antioxidants, vitamins, and minerals is optimal; however, most patients do not meet dietary guidelines suggesting five servings daily of fruits and vegetables, as well as high quality lean protein and fish and low saturated fat intake. The resulting nutrient deficiencies can bring about numerous symptoms of poor skin health.



Thorne Research healthy skin maintenance program

multi-faceted approach to restore and maintain healthy skin from within natural source, drug-free formulations support healthy tissue repair and regeneration can be used in combination with topical treatments, most drug treatments, and phototherapy

Health experts say that the skin is a barometer of the body's health — so when skin conditions occur, from psoriasis to varicosities, they may be a manifestation of overall nutritional needs. The focus is no longer about just using the right skin care products – it's nurturing the skin from the inside out, since research shows numerous skin conditions benefit from nutritional supplementation.

Thorne Research dermatology products are based on new research demonstrating the power of antioxidants such as lipoic acid and coenzyme Q-10, as well as essential fatty acids, in the promotion of healthy skin. Our science-based formulas encourage optimal skin health by providing specific nutrients that support healthy collagen formation, tissue repair, and tissue regeneration, while preventing oxidative skin damage and subsequent wrinkling.

Thorne is the most trusted company in the industry because of its pharmaceutical-based Good Manufacturing Practices and quality of manufacturing. Not only is Thorne Research trusted and utilized by clinics, hospitals, doctors, and pharmacies, this trust is exemplified by the number of teaching and research facilities using Thorne products in their clinical studies, including Tufts University, Oregon Health Sciences University, Columbia University, the Department of the Navy, and others.

Thorne's manufacturing facility is certified by the Therapeutic Goods Administration of the Australian government – the Australian equivalent of the FDA, and the agency with the most stringent dietary supplement (actually, pharmaceutical standard) regulations in the world.

At Thorne we manufacture our own products, allowing total quality control of every aspect of the manufacturing process. This ensures every product we offer is of the highest quality and purity. In addition, our commitment to science-based formulations is unparalleled in the industry. We base every product decision on sound research. This commitment is echoed in our physician-based educational offerings, including publication of Medline-indexed *Alternative Medicine Review,* an information-rich website, in-person seminars, and webinars.



Bio-DERM™

Supplement Facts Serving Size: One Capsule Servings Per Container: 60 Each Capsule Contains: % DV Isolated Whey Protein fraction (XP-828L complex!) 400 mg. *

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space – MagnesiumCitrateLaurate, Leucine, Silicon Dioxide.

Contains ingredient derived from milk.

[†]The active ingredient used in BioDerm was developed and patented by Advitech, Inc., Quebec City, Canada.

60 Vegetarian Capsules Code: SP650 Dosage: 1 capsule bid



BioDFRM™

immune-modulating formula for psoriasis relief

- → clinically proven to reduce flaking and redness associated with psoriasis
- → helps balance the skin's immune response
- → convenient 2 capsule a day dosing
- → no messy ointments or creams
- → no adverse side effects
- → may be used in conjunction with other therapies

Psoriasis affects 2-4 percent of the U.S. population. Thorne Research offers an innovative nutritional supplement to help manage symptoms and support healthy, smooth skin.

BioDERM is an innovative approach to reducing scaly, irritated skin associated with psoriasis. Clinical trials have demonstrated BioDERM to be safe and effective. In a double-blind, placebo-controlled, crossover study on patients with mild-to-moderate psoriasis, individuals experienced significant reduction in scaly patches and redness within eight weeks of treatment compared to placebo. Furthermore, continued improvement was experienced by those who maintained their dosing for an additional eight weeks. No adverse side effects were observed.

BioDERM is an all-natural product that utilizes a patented process to extract specific protein complexes from whey. These protein complexes act as immune modulators, balancing the immune response of the skin and thereby helping ease the discomfort of psoriasis symptoms. Thorne Research is proud to be the exclusive supplier of this beneficial formula to health-care practitioners.

Perma-Clear®

gut health can directly affect skin health

- → optimizes intestinal barrier function
- → improves first-line immunity
- → promotes beneficial gut flora

Many health-care practitioners believe that food allergies and hypersensitivity reactions may be an underlying cause of a number of dermatological problems.

A healthy intestinal mucosa acts as a semi-permeable barrier, selectively allowing substances to cross. This barrier ensures proper absorption of nutrients, protects against toxins from entering the bloodstream, and facilitates healthy immune function by secreting immunoglobulins that bind to bacteria and other antigens, preventing their absorption. Disruption of this mucosal lining can lead to hyperpermeability. Aptly termed, "leaky gut syndrome" can lead to inflammatory and allergic responses that can contribute to skin conditions such as psoriasis and atopic dermatitis.

With a combination of nutrients such as glutamine and N-acetyl-glucosamine for gut integrity, quercetin chalcone and ginger for inflammation, and *Lactobacillus sporogenes* and *Saccharomyces boulardii* to provide beneficial intestinal flora, Perma-Clear provides nutrients that can help restore and maintain a healthy intestinal mucosa.

Perma-Clear's multifaceted support helps decrease inflammation and hypersensitivity throughout the body.

Perma-Clear®

Supplement Serving Size: Four Capsules Servin		
Four Capsules Contain:		% DV
L-Glutamine	1200 mg.	*
N-Acetylglucosamine	1000 mg.	*
Saccharomyces boulardii	150 mg.	*
Lactobacillus sporogenes	100 mg.	*
Quercetin Chalcone	150 mg.	*
Ginger extract (root) (Zingiber officinalis)		
(5% Gingerols)	40 mg.	*

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space - Silicon Dioxide.

180 Vegetarian Capsules
Code: SF741
Dosage: 2 capsules tid



Anti-Oxidant

Supplement Serving Size: Three Capsules Serv		
Three Capsules Contain:		% DV
Vitamin C (as Ascorbic Acid)	200 mg.	333%
Thiamine (from 100 mg.Thiamine HCl)	80 mg.	5333%
Riboflavin (from 50 mg. Riboflavin		
5'- Phosphate)	36.5 mg.	2147%
Niacin (as Niacinamide)	180 mg.	900%
Vitamin B6 (from 50 mg. Pyridoxal 5'		
5'- Phosphate)	33.8 mg.	1690%
Pantothenic Acid (from 65 mg.		
Calcium Pantothenate)	59 mg.	590%
Zinc (as Zinc Picolinate)	15 mg.	100%
Selenium (as Selenium Picolinate)	225 mcg.	321%
Dimethylglycine (DMG)	75 mg.	*
R-Lipoic Acid	25 mg.	*
Reduced Glutathione	50 mg.	*
N-Acetyl-L-Cysteine	81 mg.	*
Glutamic Acid	45 mg.	*
Glycine	23 mg.	*
*Daily Value (DV) not established		

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space – Magnesium Citrate, Leucine, Silicon Dioxide.

60 Vegetarian Capsules Code: SF702 Dosage: 1 to 2 capsules tid

R-Lipoic Acid

Suppleme Serving Size: One Capsule	nt Facts Servings Per Cont	
Each Capsule Contains:		% DV
R-Lipoic Acid	100 mg.	*
*Daily Value (DV) not established.		

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space - Magnesium Citrate, Leucine. Silicon Dioxide.

60 Vegetarian Capsules Code: SF771 Dosage: 1 to 2 capsules daily

Antioxidants

The skin is constantly exposed to numerous endogenous and environmental oxidative processes that can result in the generation of reactive oxygen species (ROS), otherwise known as free radicals. Free radicals can attack, infiltrate, and injure vital cell structures, leading to lipid peroxidation, a destructive chain reaction that causes damage to the lipid layer of cell membranes and can even cause DNA breakage. Premature aging of the skin, as well as numerous inflammatory and allergic skin conditions, are thought to be mediated by ROS. Antioxidants work with one another, so the efficacy of one is reliant on the adequacy of another. Because of this, a variety of antioxidants are necessary to counter this oxidative onslaught, as each individual antioxidant plays a role in the oxidant/antioxidant balance in the body.

Anti-Oxidant

a unique broad-spectrum antioxidant formula

This broad-spectrum antioxidant formula includes a wide variety of antioxidants and biochemical nutrient cofactors involved in antioxidant activity. In addition to zinc, selenium, vitamin C, and associated nutrients, Anti-Oxidant features reduced glutathione – the essential intercellular antioxidant and detoxification factor – as well as R-Lipoic acid, which is involved as an antioxidant and a vital component of the energy-producing Krebs cycle.

R-Lipoic Acid

the most biologically active form of lipoic acid

Lipoic acid is present in the mitochondria of all cells, and appears to be especially active as an antioxidant in skin cells. Present as an ingredient in many topical skin formulas, lipoic acid taken orally prevents the depletion of vitamin E in situations involving oxidative stress, optimizes skin microcirculation (especially in diabetics), and may improve wound healing. R-Lipoic Acid is the most biologically active form of lipoic acid, and is readily and easily absorbed from an oral dose.

Glutathione-SR™

Thorne's exclusive, patent-pending, sustained-release formulation of this essential nutrient

Reduced glutathione (GSH) is an essential cofactor for many detoxification and antioxidant enzyme systems. In addition to the potent antioxidant capacity of glutathione, GSH status in the body is a highly sensitive indicator of cell function and viability. GSH depletion is linked to many chronic disease states. GSH is often used to protect the skin from damage due to ultraviolet radiation. Another use that has little clinical research is as a skin lightening substance. It is thought that taken in high dose GSH might inhibit melanin formation.

Ultimate-E®

the ultimate vitamin E formula, containing all the essential, naturally-occurring tocopherols (alpha, beta, gamma, delta) found in nature

Vitamin E is one of the most essential of the antioxidants and is the most potent lipid-soluble antioxidant in the body. Since it is an oil-soluble vitamin, its activity is in fatty areas of the body, including the fatty acids in the skin. Vitamin E in present in many topical skin protection formulas; when taken orally this antioxidant protects the skin from ultraviolet radiation, pollutants, and other causes of oxidative damage that contribute to aging. And Ultimate-E does NOT contain the typical soy oil filler found in virtually every other vitamin E product.

Glutathione-SR™

Supplement Facts Serving Size: One Capsule Servings Per Container: 60 Each Capsule Contains: % DV Reduced Glutathione' 175 mg. * Time-Sorb® 75 mg. * *Daily Value (DV) not established

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space – Leucine, Silicon Dioxide.

[†]Reduced Glutathione in a patent-pending time release matrix – Time-Sorb® (high and low viscosity hydroxypropylmethyl-cellulose USNF and magnesium-citrate-laurate).

60 Vegetarian Capsules Code: SA540 Dosage: 1 capsule tid

Ultimate-E®

Each Gelcap Contains:		% DV
Vitamin E (as d-Alpha Tocopherol		
from 1,000 mg mixed tocopherols)	500 IU.	1666%
Typical profile of Ultimate E:		
d-Alpha tocopherol (500 IU minimum)	335 mg.	
Beta tocopherol [†]	9-11 mg.	
Gamma tocopherol†	400-450 mg.	
Delta tocopherol [†]	115-150 mg.	
Daily Value (DV)		
†Beta, Gamma, and Delta tocopherols do	not have recognize	d III

Other Ingredients: Gelatin, glycerin, and water.

60 Gelcaps Code: E143 Dosage: 1 to 3 gelcaps qd



Planti-Oxidants®

Each Capsule Contains:		% DV
Bilberry extract (Vaccinium myrtillus)		
(25% Anthocyanosides)	20 mg.	*
Milk Thistle extract (seed) Silybum marianum		
(80% Silymarin)	50 mg.	*
Grape Seed extract (seed)		
Oligomeric proanthocyanidins (95%)	20 mg.	*
Green Tea extract (leaf) (Camellia sinensis)		
(80% total Polyphenols)	50 mg.	*
Quercetin Chalcone	50 mg.	*

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space – Magnesium Citrate, Leucine, Silicon Dioxide.

60 Vegetarian Capsules Code: SF701 Dosage: 1 to 2 capsules bid

CoQ100 Softgels

Each Gelcap Contains:		% DV
Calories	2	
Calories from Fat	2	
Total Fat	0.5 g.	1%*
Saturated Fat	0 g.	0%*
Trans Fat	0 g.	0%*
Coenzyme Q10	100 mg.	**

Other Ingredients: Gelatin (from tilapia), Glycerin (vegetable source) gelcap. Rice Bran Oil, Beeswax, Lecithin (from sunflower), Vitamin E (mixed tocopherols), Zinc Oxide, Riboflavin (Vitamin B2).

Contains ingredient derived from fish (tilapia).

90 Fish Gelatin Gelcaps Code: SP617 Dosage: 1 - 2 gelcaps tid

a formulation of potent flavonoid-based antioxidants

Flavonoid molecules found in pigmented fruits and vegetables are responsible for providing color and antioxidant activity to the plant. When these common plants are eaten, the antioxidant activity of their flavonoids is passed on to us. However, most individuals in the United States do not eat enough fruits and vegetables to get the full effect of their flavonoid content. Planti-Oxidants is a formulation of potent flavonoid-based antioxidants found in blueberries, milk thistle, grape seeds, green tea, and Thorne's patented flavonoid Quercetin Chalcone. These powerful plant antioxidants enhance the activity of nutrient-based antioxidants, strengthen blood vessel walls, and help protect skin cells from oxidative damage and premature aging.

CoQ100 Softgels

potent antioxidant to protect the skin from effects of aging

Coenzyme Q10, also known as CoQ10 and ubiquinone for its ubiquitous presence in human cells, is active in the energy-producing mitochondria and provides critical antioxidant activity throughout the cell. CoQ10 is made within the body, but levels tend to drop as we age; they are also lower in many disease conditions and with the use of some prescription medications, including cholesterol-lowering statins. In the skin, higher CoQ10 levels may prevent photo-aging and wrinkling.

CoQ10 is best absorbed as a supplement when in a softgel and in an oil carrier. Thorne's CoQ100 Softgels include 100 mg CoQ10 in rice bran oil. Our softgel capsules offer a breakthrough – made from fish gelatin instead of the bovine-based gelatin found in most other supplements.

Extra Nutrients

a comprehensive multiple vitamin-mineral formula with extra antioxidants

Extra Nutrients provides a broad spectrum of highly absorbable vitamins and minerals in their most active, bioavailable forms. In addition to the usual nutrients found in a high potency multiple vitamin, Extra Nutrients also includes reduced glutathione, CoQ10, hesperidin methyl chalcone, and R-lipoic acid.

Features of Extra Nutrients (and other Thorne multis):

- → contain all hypoallergenic ingredients
- → free of pre-diluted ingredients and hidden preservatives
- → do not contain magnesium stearate, stearic acid, or ascorbyl palmitate that can interfere with absorption
- → provide the active forms of B vitamins folate and vitamins B2, B6, and B12
- → contain advanced mineral forms for optimal absorption – citrate-malates, picolinates, and our patented chromium (UltraChrome®)

For over 20 years our multiple vitamin-mineral formulas have set the standard for exceptional formulations in the nutritional supplement industry. Like all Thorne products, our multiple vitamin-mineral formulas are manufactured using superior raw materials and highly sophisticated methods of quality assurance and control. Extra Nutrients is the highest quality multi with extra antioxidants on the market.

In addition to the multiple vitamins featured in this booklet (Extra Nutrients and Basic Detox Nutrients), Thorne provides a complete line of multiple vitamin formulas for all phases of life (call customer service for information on our multiple vitamin products, or on the full line of Thorne products – 800-228-1966).

Extra Nutrients

Supplement Serving Size: Six Capsules Servings P	Facts er Containe	S r: 30
Six Capsules Contain:		% DV
Vitamin A (as 2,500 IU Palmitate and		
12,500 IU Mixed Carotenes)	15,000 IU.	300%
Vitamin C (as Ascorbic Acid)	850 mg.	1417%
Vitamin D (as Vitamin D3)	800 IU.	200%
Vitamin E (as d-Alpha-Tocopheryl)	400 IU.	1333%
Thiamine (from 50 mg Thiamine HCI)	40 mg.	2667%
Riboflavin (from 15 mg Riboflavin		
5'- Phosphate)	11 mg.	647%
Niacin (from 30 mg Niacin and		
from 130 mg Niacinamide)	160 mg.	800%
Vitamin B6 (from 15 mg Pyridoxal		
5'- Phosphate)	10.15 mg.	507.5%
Folate (500 mcg as Calcium Folinate and 50	O mcg	
as 5-Methyl-tetrahydrofolate)	1000 mcg.	250%
Vitamin B12 (225 mcg as Adenosylcobalamir	n and	
225 mcg as Methylcobalamin)	450 mcg.	7500%
Biotin	400 mcg.	133%
Pantothenic Acid (from 450 mg		
Calcium Pantothenate)	413 mg.	4130%
Calcium (as Calcium Citrate-Malate)	300 mg.	30%
lodine (as Potassium Iodide)	225 mcg.	150%
Magnesium (as Magnesium Citrate-Malate)	285 mg.	71%
Zinc (as Zinc Picolinate)	15 mg.	100%
Selenium (as Selenium Picolinate)	200 mcg.	286%
Copper (as Copper Picolinate)	1.5 mg.	75%
Manganese (as Manganese Picolinate)	6 mg.	300%
Chromium (as UltraChrome®)	200 mcg.	167%
Molybdenum (as Molybdenum Picolinate)	100 mcg.	133%
Potassium (as Potassium Citrate-Malate)	90 mg.	2.5%
Boron (as Boron Picolinate)	3 mg.	*
Choline Citrate	100 mg.	*
Vanadium (as Vanadium Picolinate)	100 mcg.	*
Glutathione (as Reduced Glutathione)	50 mg.	*
Coenzyme Q10	50 mg.	*
Hesperidin Methyl Chalcone	100 mg.	*
R-Lipoic Acid	5 mg.	*
*Daily Value (DV) not established.		

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space – Leucine. Silicon Dioxide.

180 Vegetarian Capsules Code: VMX Dosage: 1 to 2 capsules tid



Black Currant Oil

Other Ingredients: Gelatin, water, and glycerin.

Each Gelcap Contains:		% DV
Calories	6	
Calories from Fat	6	
Total Fat	0.64g.	<1%*
Saturated Fat	0 g.	0%
Vitamin E (d-alpha Tocopherol)	5 IU.	16.7%
Black Currant Oil (providing 100 mg.		
Gamma Linolenic Acid)	640 mg.	**

60 Gelcaps Code: SP602 Dosage: 2 gelcaps bid - tid

Essential Fatty Acids

With the refinement of oils, reliance on fast foods, and increased consumption of either trans fats or low-fat fare during the past several decades, the Western diet has become abysmally deficient in essential fatty acids (EFAs). Due to lack of EFAs in the diet or because of poor absorption, actual deficiency states are common, manifesting in a number of ways, including dry skin and hair, increased skin inflammation, dermatitis, fatigue, immune deficiency, depression, and dry mucus membranes.

Undoubtedly due to widespread deficiency states, there are numerous and varied conditions that have been found to benefit from the addition of EFAs, either in the diet or via supplementation – including psoriasis, eczema, and autoimmune conditions with dermatological manifestations such as Sjogren's disease. EFAs are used as basic substrates in the development of the phospholipid bi-layer in virtually every cell in the human body, including the dermis and epidermis. Because we know that no two patients are alike, at Thorne we offer several essential fatty acid products to satisfy the varying needs of your patients. This is a small selection of what we offer.

Black Currant Oil

a rich source of gamma linolenic acid

Black currant oil is high in the essential fatty acid, gamma linolenic acid (GLA). GLA helps the body produce prostaglandin E1 (PGE1) that has anti-inflammatory effects. Individuals with psoriasis and eczema may be deficient in GLA, which can result in dry skin and poor trans-dermal water retention. Studies have demonstrated dietary supplementation of GLA can help restore skin moisture and decrease overall inflammation.

GLA has been the most extensively studied for atopic dermatitis. In one study, 60 adults and 39 children with atopic eczema were treated with dosages of GLA ranging from 90-360 mg daily for children and 180-720 mg daily for adults or placebo for 12 weeks. A moderate improvement in clinical signs including itching followed supplementation, particularly at the higher doses.

Super EPA

concentrated omega-3 fatty acids from cold-water fish

The omega-3 fatty acids found in fish oil provide potent antiinflammatory effects. Omega-3s can influence the pathophysiology of skin conditions including psoriasis and eczema via several mechanisms: (1) impacting the kinetics of cell membranes; (2) affecting dermal and epidermal blood flow; and (3) acting as an immunomodulating agent, resulting in decreased inflammation. Several studies have found omega-3 fatty acids EPA and DHA taken orally can benefit patients with psoriasis.

Super EPA has been one of our best-selling products for over two decades because of its exceptional purity and quality. Molecular distillation ensures removal of cholesterol and contaminants, including PCBs and heavy metals. This concentrated formula allows higher EPA/DHA supplementation without having to take more capsules, resulting in better efficacy and patient compliance.

Omega Plus

therapeutically-balanced omega-3 and omega-6 fatty acids

While omega-3 fatty acids have significant health benefits, the omega-6 fatty acid gamma-linolenic acid (GLA) offers similar anti-inflammatory effects; borage oil is a rich source of GLA. Omega Plus provides an omega 3:6 ratio designed to provide a healthful balance of these important EFAs.

While higher doses of GLA and EPA/DHA may be indicated for treatment of chronic dermatological conditions, Omega Plus provides a well-balanced dosage for prevention in susceptible individuals or maintenance of healthy skin after treatment with higher doses.



Super EPA

Each Gelcap Contains:		% DV
Calories	10	
Calories from Fat	10	
Total Fat	1 g.	3%*
Saturated Fat	0 g.	0%*
Trans Fat	0 g.	0%*
EPA (Eicosapentaenoic Acid)	425 mg.	**
DHA (Docosahexaenoic Acid)	270 mg.	**

Other Ingredients: Gelatin (from tilapia), Glycerin (natural source) gelcap. Vitamin E (mixed tocopherols). Contains ingredient derived from fish (fish oil = sardine, anchovy, mackerel), (gelcap = tilapia).

> 90 Fish Gelatin Gelcaps Code: SP608 Dosage: 2 gelcaps tid

Omega Plus™

Each Gelcap Contains:		% DV
Calories	10	
Calories from Fat	10	
Total Fat	1.1 g.	2%*
Saturated Fat	0.3 g.	2%*
GLA (Gamma Linolenic Acid) from Borage Oil	40 mg.	**
EPA (Eicosapentaenoic Acid)	180 mg.	**
DHA (Docosahexaenoic Acid)	120 mg.	**

Other Ingredients: Gelatin (from tilapia), Glycerin (natural source) gelcap. Vitamin E (mixed tocopherols). Contains ingredient derived from fish (EPA/DHA = sardine, anchovy, mackerel), (gelcap = tilapia).

> 90 Gelcaps Code: SP607 Dosage: 2 gelcaps tid



we are all toxic!

Detoxify and Cleanse

Today's physicians are faced with a dilemma unlike any previously encountered: the challenge of patients non-responsive to regular therapies because of internal burdens of multiple toxic environmental compounds. This environmental poisoning is no longer confined to poorly-protected workers in toxic industries, but to all who breathe, eat, and drink.

Our environment is flooded with chemicals that fill our air, our water, our food, and ourselves. Since 1976, the Environmental Protection Agency (EPA) has been conducting the National Human Adipose Tissue Survey (NHATS). This study takes adipose samples from all regions of the country and measures the level of toxins present. In 1982, they expanded beyond their previous list to look for the presence of 54 environmental chemical toxins. Their results were astounding. Five of the chemicals were found in 100 percent of all samples, another nine chemicals were found in 91-98 percent of all samples, including such toxins as benzene, toluene, chlorobenzene, ethylbenzene, DDE, and dioxins. PCBs, which are highly toxic to the immune system, were found in 83 percent of all samples. A total of 20 toxic compounds were found in more than 76 percent of all samples!

These ongoing assessments have shown quite clearly that it is not a question of IF we are carrying a burden of toxic xenobiotic compounds; it is a question of HOW MUCH is being carried and what role they play in one's health problems. As a result of this widespread environmental contamination, physicians are faced with increased rates of toxin-related cancers, neurological diseases, autoimmunity, reduced immune function, allergies, and the newer diagnoses of multiple chemical sensitivity, chronic fatigue syndrome, and fibromyalgia. Physicians are finding their usual treatment modalities are not as effective as before due to the presence of toxic compounds in the patient. Once the presence of these toxic "obstacles-to-cure" are recognized, proper environmental treatment is needed. Such treatment is composed of three phases:

- 1. Avoidance of further toxic exposure.
- 2. Supplementation to replace nutrient deficiencies, prevent further toxic damage, and assist in cleansing.
- 3. Cleansing to reduce body stores of toxins.

Basic Detox Nutrients

a comprehensive multiple vitamin-mineral with additional nutrients to aid in detoxification

Basic Detox Nutrients was designed for all individuals with environmental toxicity. It can be used within a cleansing program or as a stand-alone product for preventive use. Basic Detox Nutrients is a complete multi-vitamin mineral formulation with higher levels of nutrients commonly found deficient in those with chemical overload, as well as nutrients and botanicals that help the body handle the toxic load, including:

B vitamins: Thiamine (vitamin B1) is essential to restore oxidized glutathione and lipoic acid and is depleted by chlorinated pesticides and formaldehyde, two ubiquitous toxins. Riboflavin 5'-Phosphate (active form of vitamin B2) helps block free-radical damage by recycling glutathione. Pyridoxal 5'-Phosphate (active form of vitamin B6) is depleted by many toxic substances and a B6 deficiency makes it difficult for the liver to detoxify.

Other important detox nutrients: Magnesium Citrate-Malate is a well-absorbed form of magnesium, one of the most commonly deficient nutrients in the chemically toxic individual. Choline is needed for the production of hepatic cytochrome P450 detoxification enzymes, N-acetylcysteine increases glutathione levels in the body, MSM provides sulfur for detoxification reactions, and R-lipoic acid is a powerful antioxidant that increases glutathione levels.

Botanical extracts: Green tea extract is an herbal antioxidant shown to prevent the occurrence of cancer, particular skin cancers. Milk thistle has proven its ability to increase liver glutathione levels and prevent liver cell damage from toxins. Curcumin extract (from Turmeric) is hepatoprotective and has been shown to suppress the mutagenicity of several common chemical carcinogens. Both broccoli extract and dandelion root also enhance liver detoxification.

Basic Detox Nutrients

Twelve Capsules Contain:		% DV
Vitamin A (from 25,000 IU Mixed Carotenes		
and 2,500 IU Palmitate)	27,500 IU.	550%
Vitamin D (as Vitamin D3)	400 IU.	100%
Vitamin E (as d-Alpha-Tocopheryl)	400 IU.	1333%
Vitamin K	100 mcg.	125%
Vitamin C (as Calcium Ascorbate)	1,000 mg.	1667%
Thiamine (from 253 mg Thiamine HCI)	200 mg.	13333%
Riboflavin (from 68.5 mg Riboflavin	0	
5'- Phosphate)	50 mg.	2941%
Niacin (from 30 mg Niacin and		
from 100 mg Niacinamide)	130 mg.	650%
Vitamin B6 (from 148 mg Pyridoxal		
5'- Phosphate)	100 mg.	5000%
Folate (500 mcg as Calcium Folinate and 500		
as 5-Methyl-tetrahydrofolate)	1000 mcg.	250%
Vitamin B12 (225 mcg as Adenosylcobalamin		
225 mcg as Methylcobalamin)	450 mcg.	7500%
Biotin	400 mcg.	133%
Pantothenic Acid (from 437 mg.		
Calcium Pantothenate)	400 mg.	4000%
Calcium (as Calcium Citrate-Malate)	300 mg.	30%
odine (as Potassium Iodide)	150 mcg.	100%
Magnesium (as Magnesium Citrate-Malate)	500 mg.	125%
Zinc (as Zinc Picolinate)	30 mg.	200%
Selenium (as Selenium Picolinate)	200 mcg.	286%
Manganese (as Manganese Picolinate)	6 mg.	300%
Chromium (as UltraChrome®)	200 mcg.	167%
Molybdenum (as Molybdenum Picolinate)	100 mcg.	133%
Potassium (as Potassium Citrate-Malate)	90 mg.	2.5%
Boron (as Boron Picolinate)	3 mg.	*
Choline Citrate	300 mg.	*
nositol	60 mg.	*
Vanadium (as Vanadium Picolinate)	100 mcg.	*
Green Tea extract (leaf)	200081	
(Camellia sinensis) (40% EGCG)	50 mg.	*
R-Lipoic Acid	50 mg.	*
N-Acetyl-L-Cysteine	200 mg.	*
MSM (Methyl Sulfonyl Methane)	100 mg.	*
Siliphos® extract (Silybum Marianum -	100 1118.	
Phosphatidylcholine complex) (30% silybin)	100 mg.	*
Proceoli extract	50 mg.	*
Dandelion (root) (Taraxacum officinale)	10 mg.	*
Turmeric extract (rhizome)	TO IIIE.	
(Curcuma longa) (85% curcumin)	100 mg.	*

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space – Leucine, Silicon Dioxide.

Contains ingredient derived from soy.

360 Vegetarian Capsules Code: VMD Dosage: 3 to 4 capsules tid



Sulfonil®

Supplement Serving Size: One Capsule	nt Facts Servings Per Cont	
Each Capsule Contains:		% DV
Reacted Sulfur (Thioglycerol)	60 mg.	*
*Daily Value (DV) not established.		

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space - Magnesium Citrate, Leucine, Silicon Dioxide.

60 Vegetarian Capsules
Code: SF783
Dosage: 2 capsules upon wakening,
1 capsule every 4 to 6 hours, 2
capsules at bedtime

Vitamin C With Flavonoids

Supplement Facts Serving Size: One Capsule Servings Per Container: 180		
Each Capsule Contains:		% DV
Vitamin C (as Ascorbic Acid)	500 mg.	833%
Citrus Bioflavonoids	75 mg.	*
*Daily Value (DV) not established.		

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space - Silicon Dioxide.

180 Vegetarian Capsules Code: C152 Dosage: 1 to 2 capsules tid

Lifestyle choices contribute to aging skin

Aging skin can be caused by bad habits and lifestyle choices. Making unhealthy choices such as excessive sun bathing and tobacco smoking can contribute significantly to rapidly aging skin – including wrinkles and hyperpigmentation.

Regardless of whether one smokes or just spends time in a smoke-filled environment, the results can be the same. Research has shown that exposure to cigarette smoke significantly increases skin wrinkles and dryness due to oxidative damage. In addition, cigarette smoking causes a deficiency of vitamin C, a key antioxidant for healthy collagen formation.

Sulfonil®

a natural, patented product to decrease nicotine cravings

The patented thioglycerol compounds in Sulfonil have been shown to preferentially bind to nicotine cell surface receptor sites, thereby preventing nicotine from attaching, and subsequently minimizing the desire to smoke.

A small, two-week study of 24 individuals demonstrated that this thioglycerol compound significantly reduced both the craving for cigarettes and the number of cigarettes smoked per day. Thus, Sulfonil is an important component of smoking cessation protocols.

Vitamin C with Flavonoids

for collagen stabilization

Vitamin C is an essential, water-soluble antioxidant for collagen stabilization. A deficiency, such as can be caused by tobacco smoking, can result in poor collagen cross-linkage. Bioflavonoids, a family of phytochemicals found in all plants, exist in nature along with vitamin C and have some of the same mechanisms of action – including collagen stabilization. Thorne's Vitamin C with Flavonoids combines 500 mg of pure ascorbic acid (vitamin C) with 75 mg of citrus bioflavonoids.

Now, for the first time, a medical study has proven what we've all suspected: Stress speeds up aging.

Stress and lack of sleep can exert significant effects on the body, contributing to the aging process. From a 2004 study in the Proceedings of the National Academy of Sciences:

"...the exact mechanisms of how stress gets 'under the skin' remain elusive. We investigated the hypothesis that stress impacts health by modulating the rate of cellular aging. Here we provide evidence that psychological stress – both perceived stress and chronicity of stress – is significantly associated with higher oxidative stress, lower telomerase activity, and shorter telomere length, which are known determinants of cell senescence and longevity."

Epel ES, Blackburn EH, Lin J, et al. Accelerated telomere shortening in response to life stress. Proc Natl Acad Sci U S A 2004;101:17312-17315.

PharmaGABA-PRO™

an important stress-relieving neurotransmitter

Gamma-aminobutyric acid (GABA) is a major neurotransmitter widely distributed throughout the central nervous system. Because too much excitation can lead to irritability, restlessness, insomnia, seizures, and movement disorders, it must be balanced with inhibition. GABA – the most important inhibitory neurotransmitter in the brain – provides this inhibition, acting like a "brake" during times of runaway stress. Medications for anxiety, such as benzodiazepines, stimulate GABA receptors and induce relaxation. Studies indicate GABA can improve relaxation and enhance sleep.

PharmaGABA-PRO is a natural form of GABA, manufactured from *Lactobacillus hilgardii* (the bacteria used to ferment vegetables in the preparation of the traditional Korean dish, kimchi).

Clinical studies have shown that natural PharmaGABA increases the production of alpha-brain waves, creating a profound sense of physical relaxation while maintaining mental focus. In contrast, stress-related beta-waves are decreased. In addition to changes in brain waves, PharmaGABA has been shown to produce relaxation as evidenced by reduced pupil diameter, heart rate, and markers of stress – salivary cortisol and chromagranin A. In a head-to-head, double-blind trial of natural PharmaGABA versus synthetic GABA, synthetic GABA did not demonstrate these effects.

PharmaGABA-PRO™

Supplement Facts Serving Size: One Capsule Servings Per Container: 60 Each Capsule Contains: % DV Gamma-aminobutyric acid 100 mg. * *Daily Value (DV) not established.

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space - MagnesiumCitrateLaurate, Cellulose, Silicon Dioxide.

60 Vegetarian Capsules
Code: SP652
Dosage: 1 to 2 capsules tid





Pre- and Post-Surgery/Wound Healing

- → accelerate healing
- \rightarrow reduce inflammation
- → decrease bruising

Traumogen®

comprehensive nutritional support for wound healing

The nutrients and botanicals in Traumogen promote tissue regeneration and support rapid wound healing. The amino acid glutamine is of vital importance to rapidly reproducing cells and tissues. Glutamine is used by white blood cells within the wound for reproduction, growth, and as a source of energy. Because optimal functioning of these cells is paramount to the healing process, glutamine is a necessary component of tissue repair. Glucosamine sulfate is included in Traumogen because of its ability to promote wound healing via increasing the body's production of hyaluronic acid, an important biochemical component of the extracellular matrix – the "glue" that holds tissues together.

Vitamin C is essential for wound healing because it is a cofactor for the synthesis of collagen, proteoglycans, and other organic components of the extracellular matrix. Vitamin C also provides important antioxidant activity and has been shown to improve immune function in humans. The combined effects of vitamin C on collagen synthesis, antioxidant status, and immune function make it an important nutrient for surgery patients and wound repair. Other nutrients important for proper tissue regeneration and repair include vitamin B6 and the minerals zinc, copper, and manganese. The botanical Gambir enhances both the production and strength of collagen, promoting tissue repair.

Traumogen®

Supplement Facts Serving Size: One Capsule Servings Per Container: 180		
Each Capsule Contains:		% DV
Vitamin C (as Ascorbic Acid)	200 mg.	333%
Vitamin B6 (from 5 mg. Pyridoxal		
5'- Phosphate)	3.4 mg.	170%
Zinc (as Zinc Picolinate)	5 mg.	33%
Copper (as Copper Picolinate)	0.25 mg.	12.5%
Manganese (as Manganese Picolinate)	3 mg.	150%
L-Glutamine	200 mg.	*
Glucosamine Sulfate	100 mg.	*
Gambir (leaves) (uncaria gambir)	120 mg.	*
*Daily Value (DV) not established.		

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following bypoallergenic ingredients to fill space - Magnesium Citrate, Leucine, Silicon Dioxide.

Contains ingredient derived from shellfish (crab and/or shrimp).

180 Vegetarian Capsules Code: SF723 Dosage: 3 capsules qid

Phytoprofen®

botanical anti-inflammatory extracts to minimize postoperative/post-injury inflammation and bruising

Phytoprofen is a combination of anti-inflammatory botanicals, including a synergistic blend of Ayurvedic herbs – Picrorhiza, Boswellia, and curcumin (from turmeric), all of which exhibit potent anti-inflammatory action by inhibiting inflammation-producing prostaglandins and leukotrienes. Bromelain – the anti-inflammatory, protein-digesting enzyme complex from pineapple – inhibits the production of prostaglandins and leukotrienes, as well as other chemicals involved in inflammation. Clinical research has shown bromelain reduces swelling, bruising, and pain, and speeds healing following trauma and surgical procedures.

Protocol Pre-surgery:

Traumogen – 4 capsules three times daily for two weeks prior to surgery

Post-surgery/injury:

Traumogen – 4 capsules three times daily until healed

Phytoprofen – 2 to 3 capsules three times daily until redness and inflammation resolve

Arnica 30C – 2 pellets twice daily between meals

Phytoprofen®

Supplement Facts Serving Size: One Capsule Servings Per Container: 60		
Each Capsule Contains:		% DV
Bromelain (3,200 m.c.u. minimum)	125 mg.	*
Picrorhiza kurroa extract (root) (4% Kutkin)	125 mg.	*
Boswellia serrata extract (gum)		
(60% Boswellic Acids)	125 mg.	*
Turmeric extract (rhizome) (Curcuma longa)	125 mg.	*
*Daily Value (DV) not established		

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space – Silicon Dioxide.

NOTE: Bromelain is derived from the pineapple plant.





Venocap®

Each Capsule Contains:		% DV
Gotu kola extract (herb) (Centella asiatica)		
(10% asiaticoside)	100 mg.	*
Horsechestnut extract (seed)		
(Aesculus hippocastranum) (20% aescin)	100 mg.	*
Diosmin	100 mg.	*
Witch-hazel (leaf) (Hamamelis virginiana)	30 mg.	*
Oligomeric proanthocyanidins		
(from grape seeds) (95%)	30 mg.	*
Butcher's broom extract (root & rhizome)		
(9% ruscogenin) (Ruscus aculeatus)	25 mg.	*

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space – Leucine, Silicon Dioxide.

120 Vegetarian Capsules Code: SF759 Dosage: 2 capsules bid

Diosmin-HMC

Supplement Facts Serving Size: One Capsule Servings Per Container: 60		
Each Capsule Contains:		% DV
Diosmin	400 mg.	*
Hesperidin Methyl Chalcone	50 mg.	*
*Daily Value (DV) not established.		

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space - Magnesium Citrate, Leucine, Silicon Dioxide.

60 Vegetarian Capsules Code: SB333 Dosage: 1 capsule bid

Varicose Veins

Nearly 40 million people in the United States alone, including up to 70 percent of women over the age of 60, have some degree of varicose or spider veins.

With normal aging, blood vessels can lose their integrity. Inflammation and stasis lead to increased capillary and venous blood pressure, edema, and loss of integrity of the collagen lining the blood vessels. Varicose veins and other signs of chronic venous insufficiency are due to decreased vascular integrity.

A number of botanicals and flavonoids have been found to improve vascular integrity and peripheral blood flow. Tonifying blood vessels and increasing blood flow ensure perfusion to peripheral tissues and prevent stasis.

Venocap®

a synergistic blend of herbs to strengthen veins

The botanicals and flavonoids in Venocap have astringent and collagen-strengthening actions that improve venous integrity. The herbs gotu kola, horse chestnut, witch hazel, and butcher's broom all have important astringent properties. The flavonoids diosmin and OPC stabilize collagen and provide anti-inflammatory activity.

Diosmin-HMC

vascular-protecting flavonoids that are safe during pregnancy

Varicose veins are unfortunate companions to many pregnancies. Studies have shown the flavonoids in Diosmin-HMC (diosmin and hesperidin methyl chalcone) are safe to use during pregnancy and lactation as they are non-mutagenic and do not show significant passage into the placenta or breast milk. Clinical trials using more than 2,850 patients have demonstrated the safety and efficacy of diosmin and herperidin as a venotonic and vasculoprotective agent.

Perfusia-SR®

Sustained-release L-arginine

The amino acid L-arginine is an essential nutrient involved in protein and amino acid synthesis, as well as wound healing. Like most amino acids, L-arginine functions as a building block of proteins; however, its presence also appears to be a crucial element in wound healing. Numerous clinical studies have shown L-arginine supplementation increases the speed of healing and the strength of the tissue in and around the wound during the healing phase.

L-arginine also has the unique ability to nourish vascular endothelial cells – the one-cell-thick lining of the interior of blood vessels. In these cells L-arginine is converted into nitric oxide, which diffuses into underlying smooth muscle and causes vasodilation. Without adequate L-arginine (and subsequently, nitric oxide) available to vascular endothelial cells, arteries cannot dilate when necessary, resulting in poor blood flow. Diabetics commonly have altered endothelial function and reduced blood flow to the extremities. Diabetics also tend to exhibit poor wound healing in the extremities. L-arginine supplementation has been shown to improve both peripheral blood flow and wound healing time in diabetics.

Studies on Perfusia-SR have shown increased blood flow to the heart muscle and the extremities, reduced blood pressure, and improved vascular elasticity. A 2004 study found Perfusia-SR potentiated the beneficial effect of statin drugs on the vascular endothelium, resulting in better blood flow.

Regular L-arginine is absorbed and metabolized very quickly, necessitating the use of large doses or frequent dosing throughout the day. Perfusia-SR is a sustained-release L-arginine that allows smaller doses to be used and is convenient for the patient, with twice-daily dosing.

Perfusia-SR®

Supplement Facts Serving Size: Two Capsules Servings Per Container: 60		
	% DV	
1000 mg.	*	
400 mg.	*	
	rvings Per Conta	

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space – Leucine, Silicon Dioxide.

'L-Arginine in a patent-pending time release matrix — Time-Sorb® (high and low viscosity hydroxypropylmethyl-cellulose USNF and MagnesiumCitrateLaurate).

120 Vegetarian Capsules Code: SA525 Dosage: 2 capsules bid





0.P.C.-100[™]

Supplement Facts Serving Size: One Capsule Servings Per Container: 60		
Each Capsule Contains:		% DV
Oligomeric proanthocyanidin extract		
(from Grape Seeds) (95%)	100 mg.	*
*Daily Value (DV) not established		

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space - Magnesium Citrate, Leucine, Silicon Dioxide.

60 Vegetarian Capsules
Code: SF745
Dosage: 1 to 2 capsules bid

Collag-en™

Two Capsules Contain:		% DV
Vitamin C (as Ascorbic Acid)	200 mg.	333%
Vitamin E (as d-Alpha Tocopheryl)	30 IU.	100%
Calcium (as Calcium Citrate-Malate)	35 mg.	3.5%
Magnesium (as Magnesium Citrate-Malate)	25 mg.	6%
Zinc (as Zinc Picolinate)	10 mg.	67%
Manganese (as Manganese Picolinate)	15 mg.	750%
Bioflavonoids	100 mg.	*
Chondroitin Sulfate	100 mg.	*
Mucopolysaccharide concentrate	200 mg.	*

Other Ingredients: Hypromellose (derived from cellulose) capsule. May contain one or more of the following hypoallergenic ingredients to fill space – Silicon Dioxide.

60 Vegetarian Capsules
Code: SG806
Dosage: 1 to 2 capsules bid

Maintain Skin Tone

- → enhance elastin for skin tone and elasticity
- → support healthy collagen formation that gives skin its strength and durability
- \rightarrow help prevent breakdown of collagen and elastin

OPCs

for enhanced support of collagen and elastin

OPCs are flavonoid-like molecules found in numerous plants and food sources – grapeseeds in particular. Evidence suggests OPCs stabilize collagen cross-linkage within skin and other connective tissues.

OPCs have also been shown to decrease capillary permeability (thus decreasing bruising and telangiectasia) and block the effects of hyaluronidase, elastase, collagenase, and other enzymes that degrade connective tissue.

Collag-en

a comprehensive formula for support of connective tissues

In addition to the important trace mineral, manganese, the macrominerals calcium, magnesium, and zinc are included in this multiple formula for general nutrient support. Vitamin C is important for normal collagen cross-linkage and free radical scavenging, while bioflavonoids help stabilize connective tissue cell membranes. Vitamin E provides additional antioxidant activity, as free radical damage occurs during tissue injury. Glycosaminoglycans (GAGs) that make up connective tissues are enhanced by the addition of chondroitin sulfate and mucopolysaccharide concentrate. GAGs are important water-holding molecules that help maintain skin moisture.

Thorne Research has been manufacturing the finest nutritional supplement products and supplying them to doctors and pharmacies around the world for over 20 years. Only the purest raw materials are used in our product line – which includes over 280 products.

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For the Dermatologist, Thorne offers an unparalleled regimen of products, including antioxidants, essential fatty acids, and products for detoxification, tissue healing, and stress support. Thorne products offer safety, efficacy, and quality you can rely on, made with the highest level of manufacturing standards possible. These products offer the patient added benefit and are easy to incorporate into existing patient management regimens. This guide has been designed specifically to help you incorporate nutritional supplementation into a dermatology practice. For added support, Thorne Research has physicians on staff to answer any protocol questions, at 800-228-1966 or info@thorne.com.



