# **PureResponse**<sup>TM</sup> Self-Tissue Response Brochure<sup>‡</sup>



Featuring an Exclusive Protocol developed by Dr. Samuel Yanuck, D.C., FACFN, FIAMA<sup>+</sup>

+Dr. Samuel Yanuck is a retained advisor to Pure Encapsulations.

<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.



## Self-Tissue Response

The immune system must distinguish between self and non-self to protect and maintain homeostasis in the body. The robustness of this process depends on a healthy balance of T helper cell types, as well as balanced cytokine expression.

While support for a healthy immune response is particularly important in patients with self-tissue response, it is essential in all patients. Along with the endocrine and nervous systems, the immune system is one of the three great regulating systems of the body, affecting all other systems and functions. The more we learn about immunology, the more we realize that practically all of the patterns seen commonly in a functional medicine practice have a fundamentally immunological basis.

In fact, the relevance of the immune system goes far beyond natural defenses. Immunology is at the root of many common clinical objectives, including:

- Tolerance of self-tissue
- Digestive health
- Cytokine balance
- Brain function, mood and cognition
- Joint function
- Glucose homeostasis
- Sinus and respiratory health
- Cardiovascular function

It is important to have a plan in place to address the immunological basis of your patients' concerns and the right tools to implement the plan.



This brochure will introduce you to functional immunology thought leader Dr. Samuel Yanuck, D.C., FACFN, FIAMA. It includes exclusive resources to augment your plan of care, help you modulate self-tissue response, and address the immunological basis of the patterns seen commonly in your patients.

The following PureResponse<sup>™</sup> assets are included in this brochure:

- **Product Overview Table** to quickly identify appropriate products for modulating self-tissue responsiveness<sup>†</sup>
- Dr. Yanuck's Self-Tissue Response Protocol a step-by-step guide
- Lab and Genomic Assessment Recommendations to personalize your plan of care
- On-Demand Educational Resources featuring Dr. Yanuck's latest lectures and complimentary access to Cogence Immunology, a comprehensive functional immunology course
- Product Descriptions and Ingredients for our exclusive line of evidence-based formulas designed to support a healthy immune response<sup>t</sup>

## **Product Overview**

The following formulas were co-created with Dr. Samuel Yanuck, D.C., FACFN, FIAMA to support various functions within the immune system. They can be used individually to address specific clinical objectives or in concert as part of the PureResponse<sup>™</sup> Self-Tissue Response Protocol on page 5.<sup>±</sup>

CLINICAL OBJECTIVE	ASSESSMENT (per provider discretion)	PRODUCT RECOMMENDATION	DOSING
Adequate Nutrient Status PureResponse <sup>™</sup> Multivitamin is specifically designed to support the nutritional needs of patients with self-tissue response. <sup>4</sup>	Assess presence of self-tissue response (e.g., autoantibodies)	PureResponse™ Multivitamin See page 18	2 capsules daily, with a meal
Innate Immune Response Support for natural defenses, natural killer (NK) cell and macrophage activity, and mucosal health. <sup>4</sup>	<b>Viral and bacterial IgGs</b> (and IgMs as needed): EBV, CMV, HSV 1 & 2, HHV-6, Parvovirus B19, Coxsackie Virus, ASO titer, Anti-DNase B, Mycoplasma	<b>Innate Immune Support</b> See page 17	1 capsule, 1-2 times daily, between meals
<b>T-helper Cell Balance</b> Support for a balanced repertoire of T-helper cells, a key objective in promoting a balanced immune response. <sup>±</sup>	<ul> <li>Viral and bacterial IgGs (and IgMs as needed): EBV, CMV, HSV 1 &amp; 2, HHV-6, Parvovirus B19, Coxsackie Virus, ASO titer, Anti-DNase B, Mycoplasma</li> <li>CBC with differential white count: Neutrophils above 68% may suggest Th17-mediated neutrophil increase</li> </ul>	<b>Th1 Support</b> See page 19	2 capsules, 1-2 times daily, with or between meals
	Lymphocytes above 40% suggests increased T and B cell activation Monocytes above 11% suggests increased activity of monocytes Eosinophils above 2% suggests Th2-mediated eosinophil increase Basophils above 1% suggests Th2-mediated basophil increase	<b>Th2 Modulator</b> See page 19	2 capsules, 1–2 times daily, between meals
<b>Cytokine Balance</b> Support for appropriate cytokine production through modulation of pertinent pathways, e.g., NFkB and NLRP3. <sup>†</sup>	Acute phase reactants (e.g., hsCRP and ferritin) GlycA	<b>Balanced Immune</b> See page 14	1 capsule, 1-2 times daily, with or between meals
Mucosal Immune Response Modulation of the mucosal immune responses supports Gl integrity, a healthy microbiome environment, and mucosal protection. <sup>†</sup>	History and/or ongoing GI symptoms	<b>Epilntegrity powder</b> See page 16	1 scoop, 1-2 times daily. Add 1 serving to 8 oz of water or juice. Shake or stir until dissolved
White Blood Cells Support for healthy white blood cell number and function. <sup>†</sup>	Complete blood count (CBC)	<b>Coriolus extract</b> See page 15	1 capsule, 1-2 times daily, between meals
Mast Cell Activity Modulation of mast cell activity and Th2 cytokines; support for mucosal health. <sup>‡</sup>	Self-reported mast cell related symptoms	Hist Reset See page 16 Perilla extract See page 17	2 capsules daily, between meals 1 capsule, 1-2 times daily, between meals
<b>Cognitive Function</b> Support for concentration, mental clarity, and memory associated with brain fog. <sup>+</sup>	Self-reported cognitive issues, such as brain fog	<b>Brain Reset</b> See page 15	2 capsules daily, between meals



## **PureResponse**<sup>™</sup>

Developed with Functional Immunology Thought Leader Samuel Yanuck, D.C., FACFN, FIAMA<sup>+</sup>

Dr. Yanuck has been in private practice since 1992 in Chapel Hill, N.C. He serves as CEO & director of education for Cogence<sup>®</sup>, LLC, an online functional immunology education company serving 5,000+ functional medicine clinicians on six continents.

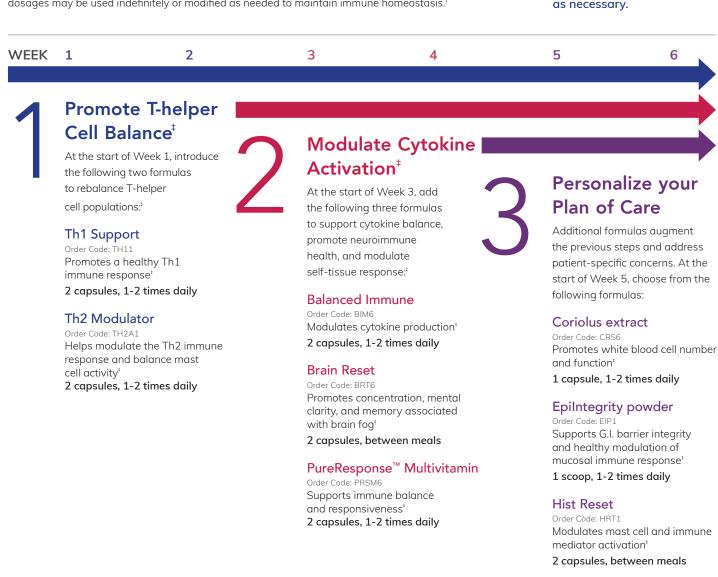
Dr. Yanuck lectures internationally on topics in functional immunology, is an adjunct assistant professor in the Program on Integrative Medicine at the University of North Carolina School of Medicine, and has published peer-reviewed papers on immunology and neuroimmunology in the medical literature.



"The more you learn about immunology, the more you realize how many of the patterns you see in your patients have a fundamental immunological basis. It's essential that you have a systematic plan to address the immunological basis for these patterns and the right tools to implement the plan." – DR. YANUCK

## Self-Tissue Response Protocol

This three-step protocol is intended for patients with an immune response directed at self-tissue. Each step supports a key aspect of the immune system and cumulatively helps promote a balanced immune response. Follow this protocol in a stepwise fashion. Once implemented, the formulas and dosages may be used indefinitely or modified as needed to maintain immune homeostasis.<sup>‡</sup> Ongoing use of the formulas in this guide is recommended. Re-evaluate patient needs as necessary.



#### Innate Immune Support

Order Code: IIS6 Promotes healthy cellular immune response to support innate immunity<sup>\*</sup> 1 capsule, 1-2 times daily

#### Perilla extract

Order Code: PRL9 Supports healthy modulation of Th2 cytokines and mucosal health<sup>\*</sup> 1 capsule, 1-2 times daily

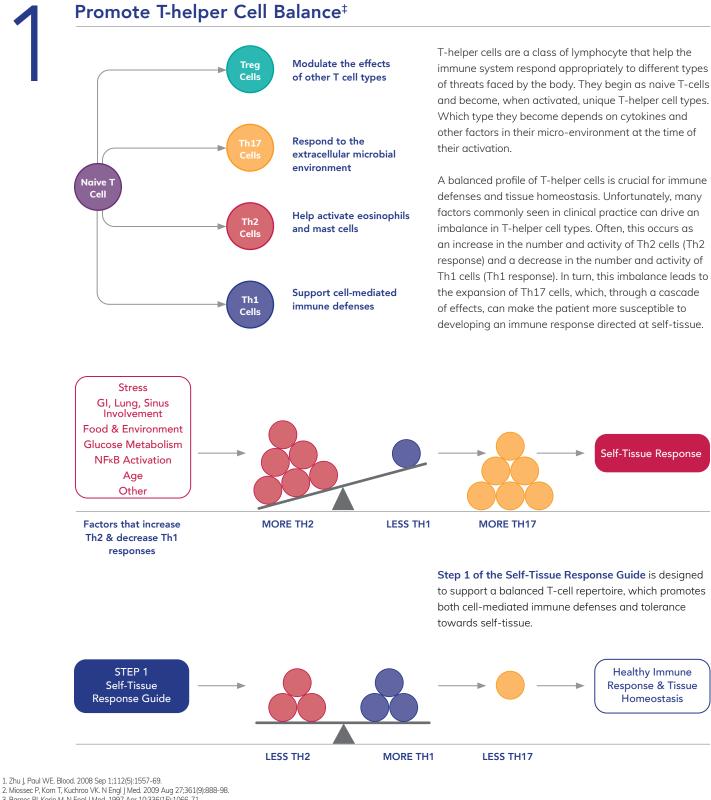
#### Available for download at PureEncapsulationsPro.com/PureResponse

+Dr. Samuel Yanuck is a retained advisor to Pure Encapsulations.

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

#### 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.

## **Key Mechanisms of Self-Tissue Response**

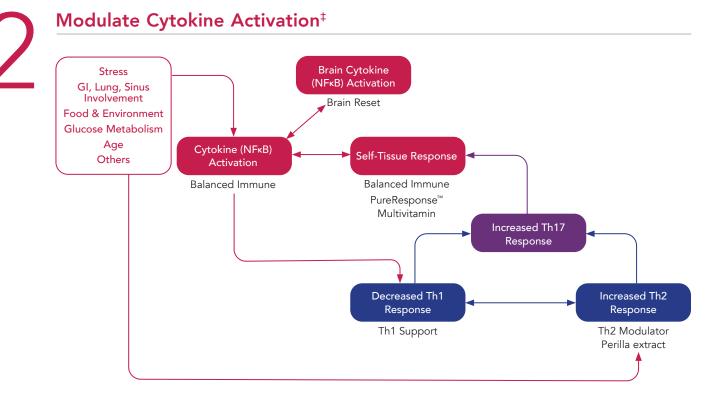


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O'Shea JJ, Plenge R. Immunity. 2012 Apr 20;36(4):542-50.
 Maddur MS, Miossec P, Kaveri SV, Bayry J. Am J Pathol. 2012 Jul;181(1):8-18.

6. Steinman L. Nat Med. 2007 Feb;13(2):139-45

7. Akdis M, Burgler S, Crameri R, et al. J Allergy Clin Immunol. 2011 Mar;127(3):701-21.e1-70.



Cytokines are messenger molecules that orchestrate immune system function. NFkB is a protein complex that induces gene expression of a mixture of cytokines that initiate immune activation, which can increase self-tissue response. Persistent NFkB can decrease Th1 response, while other factors can increase Th2 response. Decreased Th1 response and increased Th2 response can increase Th17 response, which can contribute to development of a self-tissue response. Step 2 of the Self-Tissue Response Protocol

modulates the expression of NFkB, which supports cytokine balance, a healthy T-cell repertoire and tissue homeostasis. While supporting cytokine balance (Step 2) is an essential step, it is crucial to first support a balanced T-helper cell profile (Step 1).<sup>1</sup>

3

### Personalize your Plan of Care

The interconnectedness of elements in the immune system is often bi-directional. In some patients, progress depends upon addressing factors you would normally think of as downstream from the mechanisms discussed in steps 1 and 2. For instance, G.I., sinus, lung, or bladder mucosal function, or mast cell activation can affect T cell polarization or cytokine activation. Therefore, modulating mast cell activation (with Hist Reset) or supporting GI mucosal health (with Epi-Integrity) can also contribute to a healthy T-helper cell profile.<sup>4</sup>

Personalize your plan of care by identifying the formulas in this category that match the circumstances of your patient's case.

#### Consider the following formulas:

Innate Immune Support promotes healthy cellular immune response to support innate immunity<sup>1</sup>

**Coriolus extract** promotes white blood cell number and function<sup>1</sup>

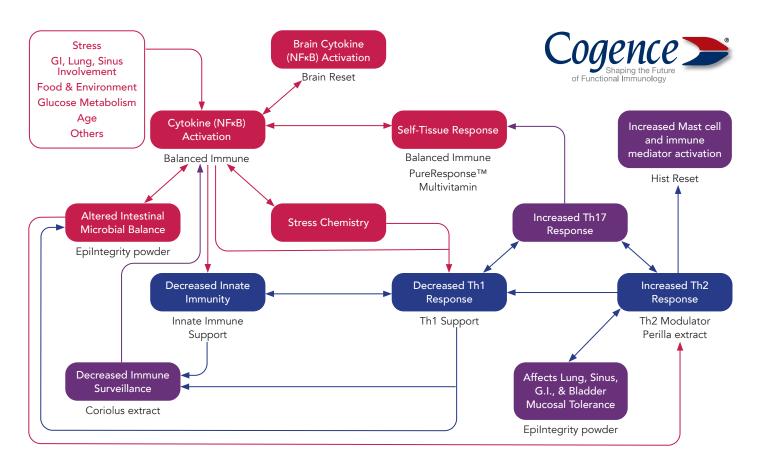
**EpiIntegrity** promotes healthy modulation of mucosal immune responses to support GI integrity in a great-tasting powder.<sup>±</sup>

**Perilla extract** supports healthy modulation of Th2 cytokines and mucosal health<sup>1</sup>

Hist Reset modulates mast cell and immune mediator activation<sup>1</sup>

## Self-Tissue Response Roadmap

This roadmap illustrates the interrelationships among key elements of the immune system and other biological processes. Key formulas are indicated on this roadmap where they are supportive of the underlying immune function. Visit **CogenceImmunology.com** to learn more about the underlying immunology of self-tissue response.<sup>+</sup>



### **PureResponse**<sup>™</sup> Products



#### Available for download at PureEncapsulationsPro.com/PureResponse

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## Assessment Recommendations

The functional immunology clinical assessment is chiefly based on the patient's history and current presentation. Areas of primary clinical focus are the extent of cytokine activation; the presence of self-tissue response; the need to support immune surveillance in the context of microbial balance; and the extent of support needed for mucosal integrity in the intestines, sinuses, lungs, vaginal tract or bladder. Assessments can be ordered through major lab testing companies (such as LabCorp® or Quest Diagnostics®), unless otherwise indicated. Not all assessments may be necessary, and additional testing may be warranted.

### Promote T-helper Cell Balance<sup>‡</sup>

- CBC with differential white count:
  - Neutrophils above 68% may suggest Th17-mediated neutrophil increase.
  - Lymphocytes above 40% suggests increased T and B cell activation.
  - Monocytes above 11% suggests increased activity of monocytes.
  - Eosinophils above 2% suggests Th2-mediated eosinophil increase.
  - Basophils above 1% suggests Th2-mediated basophil increase.

### Modulate Cytokine Activation<sup>‡</sup>

- Genetic Markers (PureGenomics<sup>®</sup>)
- Self-tissue antibodies • IL-6
- TGF-B1
- GlycA
- CRP

• Vitamin D

Vitamin A

Zinc

- Viral and bacterial IgGs (and IqMs as needed): - FBV
- CMV
- HSV 1 & 2
- HHV-6
- Parvovirus B19 - Coxsackie Virus
- ASO titer
- Anti-DNase B
- Mycoplasma

- TGF-β1
- Glutathione
- Total Quantitative IgE
- 24-hour salivary cortisol
- IqG subclasses
- Cogence<sup>®</sup> Brief Immunological Assessment\*
- The following markers will only move out of range in more vigorous cases:
- Acute phase reactants (such as CRP and ferritin)
- Liver function tests
- Potassium (should be greater than 4 mEq/L)

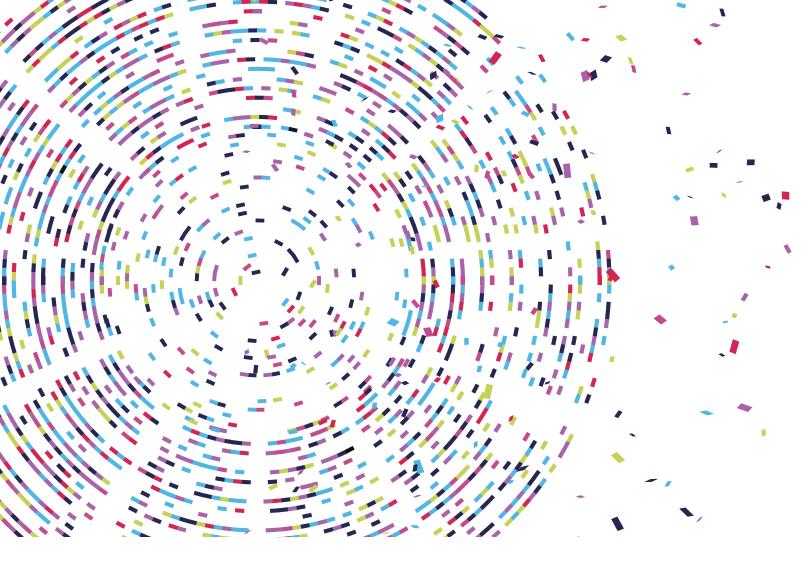
## Personalize your Plan of Care

- G.I. assessments:
- History related to bloating and other factors
- Stool analysis (including zonulin)
- ASCA/ANCA antibodies
- Food IgG/IgA tests
- Mycotoxin tests
- Innate immune assessments:
  - NK cell levels
  - Viral and bacterial IgGs
  - (and IgMs as needed): See step 1

- WBC numbers and function
  - WBC count on CBC should be  $\geq 4$
- Mast Cell Activation:
  - DAO (Dunwoody Labs)
  - Histamine, plasma
- Self-reported mast cell related symptoms
- Cogence<sup>®</sup> Brief Immunological Assessment
- Genetic Marker (PureGenomics): AOC1 (DAO)

 Interleukin-6 (rarely high, meaningful when found) SED rate

- Zinc



## Nutrigenomics—A New Level of Personalized Care

Genetic testing can help you create a more personalized plan of care, especially when it comes to immunology. For instance, genetic variations can affect the requirements of nutrients—such as zinc; vitamins A, D, and E; EFAs; and others that play an important role in immune function. Other genetic variations can affect immune function through the expression of cytokines like IL-6 and TNF-a, or indirectly through other bodily functions, such as detoxification, glucose metabolism, cognition, and cardiovascular and gastrointestinal health. **PURE** Genomics®

PureGenomics® nutritional information is not intended for use in the diagnosis, cure, mitigation, treatment or prevention of disease.

### **Better Health From Within**

To help you quickly and easily integrate nutrigenomics in your practice, Pure Encapsulations<sup>®</sup> offers complimentary access to PureGenomics<sup>®</sup>, a nutrigenomic service dedicated to empowering healthcare providers with simple, reliable, and actionable genomic information.

### How it Works

Using a patient's genetic data, previously collected by 23andMe® or Ancestry®, PureGenomics creates individualized, actionable reports with evidence-based nutritional and lifestyle recommendations.

### What's Included

PureGenomics offers nutrigenomic insights into 60+ genetic variations across 11 health categories, plus:

- Comprehensive genetic reports rooted in verifiable science
- Actionable insights customized for your patients
- Support, education, and resources for you
- Personalized recommendations for PureResponse<sup>™</sup> supplements and more

Learn more and discover the role that nutrigenomics can play in your practice: PureGenomics.com

"Every one of my patients gets a PureGenomics evaluation. It's an indispensable part of how I map each patient's unique immunological pattern."

- DR. YANUCK

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## Recommended Functional Immunology Resources

# Complimentary Access to Cogence<sup>®</sup> Immunology

Cogence<sup>®</sup> is an online course—built by Dr. Samuel Yanuck, D.C., FACFN, FIAMA<sup>+</sup>—that offers an in-depth functional immunology learning experience. Designed to connect underlying immunology with clinical applications, Cogence<sup>®</sup> creates a rigorous yet intuitive program that will allow you to navigate each patient's unique clinical pattern.

At Pure Encapsulations<sup>®</sup>, we have made a unique commitment to provide functional medicine practitioners with full access to this course at no additional cost, assuming the full cost of membership.

Your complimentary Cogence<sup>®</sup> membership will give you access to over 200 instructional videos, each 20 to 90 minutes long and grouped into 22 modules, covering a wide range of topics.

To get started, visit **PureEncapsulationsPro.com/Cogence** 

### Protocols, On-Demand Learning and More!

Find additional brochures, protocols, product information, on-demand lectures and more at

PureEncapsulationsPro.com/ PureResponse

### Pure Encapsulations— Nutritional Supplements You Can Trust

At Pure Encapsulations, we've spent the last 30 years researching, innovating, and developing our comprehensive line of premium supplements to bring you uniquely formulated products made with high-quality and pure ingredients, backed by verifiable science. And what goes in our products is just as important as what we leave out. That's why Pure Encapsulations offers a comprehensive line of supplements FREE FROM unnecessary additives and many common allergens, providing your patients with everything they need, and nothing they don't—that's goodness encapsulated.

## **10 Exclusive Formulas**

Developed with of Dr. Yanuck, PureResponse<sup>™</sup> features 10 exclusive formulas to support various aspects of immune health.<sup>‡</sup>

### 

Formula Order Code	Innate and Adaptive Immune Response	GI-Sinus-Lung Support	Mast Cell Modulation	Cytokine Activation	Self-Tissue Response	WBC Support	Brain Support
Hist Reset HRT1		**	***				
Brain Reset BRT6				**			***
TH1 Support TH11	***	**			**	***	
TH2 Modulator TH2A1		***	***				
Innate Immune Support IIS6	***					*	
Balanced Immune BIM6				***	***		
Epilntegrity powder EIP1		***	**	**			
Perilla extract PRL9		**	**		***		
Coriolus extract CRS6	**					***	
PureResponse™ Multivitamin PRSM6					***		

+Dr. Samuel Yanuck is a retained advisor to Pure Encapsulations.

## **PureResponse**<sup>™</sup> **Products**

### **Balanced Immune**

#### **PureResponse**<sup>™</sup> product line

Formulated with Samuel F. Yanuck, D.C., FACFN, FIAMA SUPPORTS HEALTHY CELLULAR IMMUNE RESPONSE AND CYTOKINE PRODUCTION<sup>‡</sup>

- Supports immune balance and tissue integrity, in part by targeting the NLRPs (NOD-like receptor proteins) and NFKB pathways to modulate cytokine production; NLRPs act as intracellular sensors to oxidative and environmental stressors<sup>1</sup>
- Promotes numerous enzyme and gene transcription pathways including SIRT1 and Nrf2<sup>±</sup>
- Promotes the health of joint, G.I. and thyroid tissue that is influenced by immunological factors<sup>\*</sup>

Balanced Immune is designed to support immune balance and tissue integrity, in part by targeting the NLRP and NFKB pathways to modulate cytokine production. NLRP (NOD-like receptor proteins) act as intracellular sensors to oxidative and environmental stressors. Research suggests curcumin and vitamin D support healthy cellular response, in part by modulating this pathway. The formula also promotes numerous enzyme and gene transcription pathways targeting nutrient metabolism in the liver, detoxification, and cellular protection against oxidative stress. Black ginger and resveratrol promote healthy SIRT1 protein levels. SIRT1 supports cellular homeostasis, plays an important role in insulin secretion and glucose homeostasis, and affects glucose and lipid metabolism in the liver. In a double-blind, placebo-controlled, crossover study, 100 mg of Sirtmax<sup>®</sup> black ginger extract for seven weeks supported healthy glucose metabolism and weight management<sup>†</sup>, while in vitro studies on its active constituents suggest a five-fold increase in SIRT1 activity compared to resveratrol. Sulforaphane and resveratrol support the activity of Nrf2, a transcription factor that supports cellular function by promoting cellular detoxification and protection against oxidative stress.\*

#### 1 capsule, 1-2 times daily, with or between meals, or as directed by a health professional.

#### Each (size 00) vegetarian capsule contains:

Vitamin D (as cholecalciferol) (D3)	25 mcg (1,000 IU)	
Meriva® turmeric phytosome	200 mg	
(Curcuma longa extract (root) and sunflower phospholipid cor		
(standardized to contain 18% curcuminoids)		
Broccoli (Brassica oleracea italica) sprout concentr	ate 150 mg	
(whole plant) (standardized to contain 600 mcg	sulforaphane)	
Trans-resveratrol	100 mg	
(from Japanese knotweed (Polygonum cuspidate	um) extract (root))	
Sirtmax® black ginger (Kaempferia parviflora) extra	act (root) 50 mg	
Quercetin	60 mg	
Other ingredients: vegetarian capsule (cellulose, w	ater), hypoallergenic	
plant fiber (cellulose)		

Meriva® is a trademark of Indena S.p.A.

Phytosome More Bioavailable is a trademark of Indena S.p.A.

Sirtmax<sup>®</sup> is a registered trademark of Tokiwa Phytochemical Co., Ltd.

Immune Support (GF) (VEG)

Balanced Immune	Quantity	Order Code
	60	BIM6



### **Brain Reset**

#### PureResponse<sup>™</sup> product line

Formulated with Samuel F. Yanuck, D.C., FACFN, FIAMA

PROMOTES CONCENTRATION, MENTAL CLARITY, AND MEMORY ASSOCIATED WITH BRAIN FOG $^{\ddagger}$ 

- Promotes concentration, mental clarity, and memory with a multi-faceted blend of nutrients and herbal extracts<sup>†</sup>
- Promotes neuroimmune health by supporting cellular function, neuroprotection, and immune mediator balance<sup>1</sup>

Brain Reset is designed to promote concentration and memory with multi-faceted support for healthy blood flow, immune mediator production, neuroprotection, and cognitive function. Ginkgo biloba and butcher's broom help sustain the strength and elasticity of blood vessels and capillaries, and may also promote the flow of oxygen and blood to the brain. Ginkgo biloba is included in this formula as Virtiva® ginkgo-phosphatidylserine phytosome complex. Phytosomes boost resistance to degradation in the digestive tract and promote efficient absorption across membranes for enhanced bioavailability. In a randomized, double-blind, placebo-controlled crossover study, phosphatidylserine-bound ginkgo extract enhanced secondary memory performance and significantly increased speed of memory task performance at 1, 2.5, 4 and 6 hours, compared to standard ginkgo extract or phosphatidylcholine-bound ginkgo extract. In another study, ginkgo extract promoted executive function in women. Preliminary research suggests that ginkgo may also support dopamine levels in the prefrontal cortex of the brain. Bacopa extract has over 35 years of clinical research focusing on support for memory and peak cognitive performance. In a randomized, controlled trial involving healthy adults, 320 mg of bacopa extract promoted performance on cognitively demanding tests. In another study, it promoted multi-tasking performance at 1 and 2 hours after administration, and supported positive mood. In a third trial, 90 days of supplementation with Bacopa promoted working memory performance, including spatial working memory accuracy and visual information processing accuracy. Riboflavin and feverfew have been studied for their ability to promote cranial comfort, with numerous randomized, double-blind, placebo-controlled trials exploring their supportive effects. Feverfew is thought to act in part by maintaining healthy cytokine, leukotriene and prostaglandin metabolism, as well as promoting healthy cranial vascular muscle function. Luteolin promotes neuronal health through antioxidant, immunomodulating, and mast cell stabilizing actions, helping to moderate the release of immune mediators. In a randomized, double-blind trial involving older men and women, daily supplementation with 3.2 grams of lion's mane powder (equivalent to 800 mg of lion's mane 30% polysaccharides extract) daily for 12 weeks promoted cognitive function, as assessed by the Mini mental state examination questionnaire (MMSE). It may also offer support for relaxation and mood. In vitro and animal research suggest that lion's mane promotes neuronal health by supporting nerve growth factor (NGF) synthesis.<sup>±</sup>

#### 2 capsules daily, between meals.

#### Two (size 00) capsules contain:

Riboflavin	20 mg
Lion's mane mushroom	400 mg
(Hericium erinaceus) extract (fruiting body)	
Bacopa (Bacopa monnieri) extract (aerial parts)	320 mg
(standardized to contain 20% bacosides)	
Virtiva® ginkgo-phosphatidylserine phytosome	120 mg
(Ginkgo biloba extract (leaf) and sunflower phospholipid compl	ex)
(standardized to contain 5% ginkgoflavonglucosides	
and 12% phosphatidylserine)	
Butcher's broom (Ruscus aculeatus) extract (root)	150 mg
Feverfew (Tanacetum parthenium) extract (leaf)	150 mg
Luteolin	100 mg
Other ingredients: vegetarian capsule (cellulose, water)	

Virtiva® is a registered trademark of Indena S.p.A., Italy.

Not to be taken by pregnant or lactating women.



Brain Reset	Quantity	Order Code
	60	DDTC

60 BRT6

### **Coriolus extract**

#### PureResponse<sup>™</sup> product line

### Formulated with Samuel F. Yanuck, D.C., FACFN, FIAMA HOT WATER MUSHROOM EXTRACT TO PROMOTE WHITE BLOOD CELL NUMBER AND FUNCTION<sup>‡</sup>

Coriolus versicolor, also known as turkey tail mushroom, is used in traditional Chinese medicine, primarily to enhance immune function and energy. Research indicates an immunomodulatory effect and promotion of white blood cell number and function, including lymphocyte, macrophage and NK cells. It has also been shown to support antibody production, cytokine balance, and a healthy gut microflora. The main bioactive compounds in this mushroom are polysaccharides, namely beta-glucan. Pure Encapsulations' Coriolus extract is wild-crafted and organic, produced using only carefully controlled hot water to break apart the cell walls for concentration of the soluble beta-glucans.<sup>‡</sup>

### 1 capsule, 1-2 times daily, between meals, or as directed by a health professional.

#### Each (size 00) vegetarian capsule contains:

 Turkey tail mushroom (Coriolus versicolor) extract (fruiting body)
 500 mg

 (certified organic) (standardized to contain 30% beta glucan)

Other ingredients: vegetarian capsule (cellulose, water)

Immune Support GF (NON) (V) (VEG

Coriolus extract	Quantity	Order Code
	60	CRS6

## Epilntegrity powder

PureResponse<sup>™</sup> product line Formulated with Samuel F. Yanuck, D.C., FACFN, FIAMA

#### PROMOTES HEALTHY MODULATION OF MUCOSAL IMMUNE RESPONSES TO SUPPORT GI INTEGRITY IN A GREAT-TASTING POWDER<sup>‡</sup>

Epilntegrity powder combines glutamine, prebiotic fiber and herbal extracts to promote healthy modulation of mucosal immune response to support gastrointestinal (G.I.) integrity and function. Th2 modulation may be indicated when addressing immune balance in the G.I. tract. L-glutamine is an essential fuel for enterocytes (the cells that line the small intestine and colon), supporting cellular renewal, glutathione production and healthy, everyday tissue repair, while promoting healthy villous function. Arabinogalactan is a prebiotic fiber found in high concentrations in North American larch trees. It has been shown to increase the concentration of beneficial bacteria, such as Bacteroidetes and Faecalibacterium prausnitzii. Beneficial microflora are crucial for proper gut associated lymphoid tissue (GALT) function and development. Research suggests higher levels of F. prausnitzii are associated with healthy cytokine balance and G.I. function. In clinical trials, arabinogalactan has been shown to promote immune cell function. In a randomized three-week trial involving healthy adults, arabinogalactan potentiated the innate immune system, supporting key first-line defenses. Perilla supports cytokine homeostasis of the G.I. mucosal tissue. In a randomized, controlled trial involving 50 individuals, 150 mg of Benegut® Perilla frutescens extract twice daily offered statistically significant support for G.I. comfort. Research suggests that perilla also helps maintain cytokine balance and stabilize mast cells. Astragalus promotes cytokine balance and supports macrophage, natural killer (NK) cell and T-cell activity. Adaptogens like astragalus support physiological and cellular homeostasis and have positive effects on immune function and antioxidant defenses. Deglycyrrhizinated licorice (DGL) maintains intestinal comfort by supporting the protective mucosal lining.\*

### 1 scoop, 1-2 times daily. Add 1 serving to 8 oz of water or juice. Shake or stir until dissolved.

Serving size: 1 scoop (approximately 5.7 g) Servings per container: approximately 30

#### One scoop (approximately 5.7 g) contains:

Calories	15	
Total Carbohydrate	2.5 g	
Sodium (naturally occurring)	25 mg	
Arabinogalactan	2.4 g	
I-Glutamine (free form)	2.4 g	
Benegut® Perilla (Perilla frutescens) extract (leaf)	150 mg	
Astragalus (Astragalus membranaceus) extract (root)	200 mg	
Deglycyrrhizinated licorice (Glycyrrhiza glabra) extract (root)	50 mg	
Other ingredients: citric acid, natural strawberry and lemonade flavors		

malic acid, purified stevia leaf extract

Benegut® is a trademark of Vital Solutions GmbH, Germany.

Immune Supp	ort	Gastrointestinal	) (	GF	) (N		) (	v	) (	VEG	)
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Epilntegrity powder	Quantity	Order Code
	6 oz (171 g)	EIP1

### **Hist Reset**

### PureResponse<sup>™</sup> product line Formulated with Samuel F. Yanuck, D.C., FACFN, FIAMA MODERATES MAST CELL AND IMMUNE MEDIATOR ACTIVATION<sup>‡</sup>

Histamine is a substance found in many foods such as meat, spinach, avocados nuts, tomatoes, and chocolate, or released as part of the local immune response by immune cells, primarily mast cells, upon exposure to an immune trigger. Some individuals have difficulty breaking down histamine. This formula is designed to modulate mast cell and immune mediator activation, support healthy histamine metabolism, and promote respiratory and tissue health. Ouercetin, luteolin, and rutin are flavonoids known to exhibit antioxidant and immune modulating activity. In vitro studies involving mast cells suggest that these compounds help to stabilize mast cells and modulate the release of immune mediators, including histamine, leukotrienes and prostaglandins. The mechanism of action is believed to be in part due to modulating extracellular signal-regulated kinases, including PKC. Animal studies suggest that these flavonoids can moderate IgE antibody-mediated response in skin. Bromelain (from pineapple) acts as a protease, promoting healthy levels of kinins to support tissue comfort. Research suggests that bromelain also supports healthy T cell function and cytokine production. Riboflavin, niacinamide, and molybdenum are included as cofactors for aldehyde dehydrogenase, a key enzyme in the breakdown of histamine. Preliminary research suggests that supplementation with vitamin C modulates bronchial responsiveness to histamine in sensitive subjects. Optimal vitamin C serum levels have been associated with lower blood histamine levels. NAC promotes immune and lung defense through mucolytic and antioxidant actions. It acts as a free radial scavenger by supporting glutathione production. Due to its sulfur content, NAC is able to disrupt disulfide bonds within mucus, thinning and easing its expulsion, along with the trapped particles, from the lungs.<sup>‡</sup>

#### 2 capsules daily, between meals.

#### Two (size 0) capsules contain:

Vitamin C (as ascorbic acid)	250 mg
Riboflavin	5 mg
Niacin (as niacinamide)	20 mg
Molybdenum (as molybdenum glycinate)	100 mcg
N-Acetyl-I-cysteine	100 mg
Quercetin	300 mg
Bromelain (from pineapple stem)	200 mg
(2,400 GDU/gram)	
Luteolin	100 mg
Rutin	100 mg
Other ingredients: vegetarian capsule (cellulose, water)	
Not to be taken by pregnant or lactating women	

Not to be taken by pregnant or lactating women.

Immune Support GF (NON) V (VEG

Hist Reset	Quantity	Order Code
	120	HRT1

### Innate Immune Support

### PureResponse<sup>™</sup> product line Formulated with Samuel F. Yanuck, D.C., FACFN, FIAMA

PROMOTES HEALTHY CELLULAR IMMUNE RESPONSE TO SUPPORT INNATE IMMUNITY<sup>‡</sup>

- Promotes NK cell and macrophage activity<sup>±</sup>
- Supports natural defenses<sup>t</sup>
- Contains clinically researched, biologically standardized AP-Bio<sup>™</sup> andrographis, along with astragalus and reishi mushroom beta glucans, to promote immune function<sup>t</sup>

Innate Immune Support is designed to promote cell-mediated immune response, including NK cell and macrophage activity, and may be indicated for enhancement of natural defenses and mucosal health. In vitro and animal studies suggest that astragalus supports NK cell activity, as well as IgA and IgG levels in serum, key antibodies that play a critical role in mucosal immune defense. The formula also includes clinically researched andrographis extract standardized for andrographolide and other bioactive diterpene lactones. In a randomized, double-blind, placebo-controlled study, supplementation with 200 mg of AP-Bio<sup>™</sup> andrographis for five days promoted immune function and supported respiratory comfort. Reishi mushroom offers a rich source of polysaccharides to promote cell-mediated immunity from both reishi mushroom extract and a unique, highly purified, reishi mushroom-derived beta 1,3/1,6-D glucan extract.<sup>1</sup>

### 1 capsule, 1-2 times daily, between meals, or as directed by a health professional.

#### each (size 00) vegetarian capsule contains:

Astragalus (Astragalus membranaceus) extract (root)	240 mg	
AP-Bio™ andrographis (Andrographis paniculata) extract (leaf)	200 mg	
(standardized to contain 31.5% andrographolide)		
Mushroom beta glucan (from reishi (Ganoderma lucidum)	100 mg	
extract (mycelia))(standardized to contain 70% beta 1,3/1,6 glucan)		
Reishi (Ganoderma lucidum) extract (fruiting body)	100 mg	
Other ingredients: vegetarian capsule (cellulose, water), hypoallergenic		
plant fiber (cellulose)		
AP-Bio™ is a registered trademark of Natural Remedies PVT. LTD.		



Innate Immune Support	Quantity	Order Code
	60	IIS6

### Perilla extract

### PureResponse<sup>™</sup> product line Formulated with Samuel F. Yanuck, D.C., FACFN, FIAMA

### SUPPORTS HEALTHY MODULATION OF TH2 CYTOKINES AND MUCOSAL HEALTH $^{\ddagger}$

Perilla seed offers a concentrated source of polyphenols (including rosmarinic acid and luteolin), along with other beneficial compounds. This herb has traditionally been used to promote healthy respiratory and immune function. In animal models of Th2 dominance, perilla helped maintain healthy upper respiratory cytokine levels. Perilla extract helps support healthy modulation of Th2 cytokines, and eosinophil and mast cell activity. It also helps maintain healthy modulation of mucosal immune responses to environmental factors and cytokine homeostasis of GI mucosal tissue.<sup>4</sup>

### 1 capsule, 1-2 times daily, between meals, or as directed by a health professional.

#### One (size 2) capsule contains:

Perilla (Perilla frutescens L.) extract (seed)	150 mg
(standardized to contain 3% polyphenols)	
Other ingredients: vegetarian capsule (cellulose, water)	



Perilla extract	Quantity	Order Code
	90	PRL9

### PureResponse<sup>™</sup> Multivitamin

### PureResponse<sup>™</sup> product line Formulated with Samuel F. Yanuck, D.C., FACFN, FIAMA

### MULTIVITAMIN/MINERAL COMPLEX DESIGNED TO SUPPORT IMMUNE BALANCE AND RESPONSIVENESS<sup>‡</sup>

Available exclusively from Pure Encapsulations<sup>®</sup>, PureResponse<sup>™</sup> Multivitamin was designed to support key pivot points in immune function, including neutrophil and Natural Killer (NK) cell response, and cytokine production. This first-of-its kind, unique formulation supports healthy cell-mediated immunity with a comprehensive blend of nutrients and reishi mushroom extract. It also includes the adaptogen eleuthero to promote physiological balance and moderate occasional stress, including corticosterone activity, cytokine balance and nutrient metabolism. PureResponse<sup>™</sup> Multivitamin features enhanced levels of fat-soluble vitamins, including pre-formed vitamin A, 125 mcg (5,000 IU) vitamin D<sub>3</sub>, vitamin E with mixed tocopherols, and both vitamin K<sub>1</sub> and K<sub>2</sub>. To accommodate the needs of patients with self-tissue response, PureResponse<sup>™</sup> Multivitamin is free from iron, copper, iodine and manganese.<sup>1</sup>

#### 2 capsules daily, with a meal.

#### Two (size 00) capsules contain:

Vitamin A (as vitamin A acetate)	1,500 mcg	
Vitamin C (as ascorbic acid)	100 mg	
Vitamin D (as cholecalciferol) (D₃)	125 mcg (5,000 IU)	
Vitamin E (as d-alpha tocopherol succinate)	15 mg	
Vitamin K (as vitamin K1)	135 mcg	
Thiamin (as thiamin HCl) (B1)	5 mg	
Riboflavin (as riboflavin and 60% riboflavin-5-ph	osphate 5 mg	
(activated B <sub>2</sub> ))		
Niacin (as niacinamide)	20 mg	
Vitamin B <sub>6</sub>	10.4 mg	
(as pyridoxine HCl and 76% pyridoxal-5-phosphate (activated $B_6$ ))		
Folate (as Metafolin <sup>®</sup> , L-5-MTHF) 667 mcg DF	E (400 mcg L-5-MTHF)	
Vitamin B <sub>12</sub> (as adenosylcobalamin	1,000 mcg	
and 50% hydroxycobalamin)		

Biotin	300 mcg	
Pantothenic acid (as calcium pantothenate) (B₅)	50 mg	
Choline (as choline bitartrate)	20 mg	
Magnesium (as di-magnesium malate) (Albion®)	100 mg	
Zinc (as zinc citrate)	25 mg	
Selenium (as selenomethionine)	150 mcg	
Chromium (as chromium polynicotinate)	200 mcg	
Molybdenum (as molybdenum glycinate chelate) (TRAACS®)	150 mcg	
Potassium (as potassium citrate)	15 mg	
Vitamin K2 (menaquinone-7)	45 mcg	
Mixed tocopherols	20 mg	
FloraGLO® lutein	3 mg	
Zeaxanthin	500 mcg	
Eleuthero ( <i>Eleutherococcus senticosus</i> ) extract (root)	125 mg	
(standardized to contain 0.8% eleutherosides)		
Reishi (Ganoderma lucidum) extract (fruiting body)	75 mg	
Other ingredients: vegetarian capsule (cellulose, water), ascorbyl palmitate		

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Metafolin® is a registered trademark of Merck KGaA, Darmstadt, Germany.

<sup>®</sup>FloraGLO is a registered trademark of Kemin Industries, Inc.

Albion® and TRAACS® are registered trademarks of Albion Laboratories, Inc. U.S. Patent 6,706,904.

Zeaxanthin is sourced from OPTISHARP® brand. OPTISHARP® is a trademark of DSM.

Vitamin K may be contraindicated with Coumadin (Warfarin). If you are pregnant or lactating, have any health condition or are taking any medication, particularly blood thinning medication, consult your health professional before use.



PureResponse™ Multivitamin	tamin	Quantity	Order
			Code

60 PRSM6



### Th1 Support

### PureResponse<sup>™</sup> product line

Formulated with Samuel F. Yanuck, D.C., FACFN, FIAMA

### PROMOTES HEALTHY TH1-PREDOMINANT CELLULAR IMMUNE RESPONSE<sup>‡</sup>

- Supports healthy activation of Th1 cells to promote innate immunity and cell-mediated immune defenses<sup>1</sup>
- Th1 response is affected by stress, aging and cytokine changes resulting from metabolic, hormonal, physiological and environmental factors
- Helps maintain healthy immune biomarkers related to cell tissue health and comfort<sup>1</sup>
- Helps balance cytokine production in order to promote Th1 differentiation<sup>1</sup>

Th1 Support is designed to support healthy activation of Th1 cells to promote innate immunity and cell-mediated immune defenses. Support for Th1 may be indicated for enhancement of natural defenses. According to preclinical data, the formula ingredients support maturation of T cells into Th1 cells and production of IL-12 and IFN- $\gamma$ , important Th1-promoting cytokines. Studies suggest that berberine positively influences immune biomarkers related to cell and tissue health. Sulforaphane from broccoli promotes various aspects of immunological homeostasis that maintain the health of mucosal cells.<sup>+</sup>

### 2 capsules, 1-2 times daily, with or between meals, or as directed by a health professional.

#### Two (size 00) vegetarian capsules contain:

Zinc (as zinc picolinate)	10 mg	
Berberine HCI	500 mg	
Chinese skullcap (Scutellaria baicalensis) extract (root)	300 mg	
(standardized to contain 30% flavonoids as baicalins, baicaleins &		
wogonins)		
Broccoli (Brassica oleracea italica) sprout concentrate	100 mg	
(whole plant) (standardized to contain 400 mcg sulforaphane)		
Ginger (Zingiber officinale) extract (root)	120 mg	
(standardized to contain 5% gingerols)		
Other ingredients: vegetarian capsule (cellulose, water)		
Not to be taken by pregnant or lactating women. If you have any health		

condition or are taking any medication, consult your health professional before use.



Th1 Support	Quantity	Order Code
	120	TH11

### Th2 Modulator

#### PureResponse<sup>™</sup> product line

Formulated with Samuel F. Yanuck, D.C., FACFN, FIAMA

### HELPS MODULATE THE TH2 IMMUNE RESPONSE AND MAINTAINS TH1/TH2 BALANCE AT THE CELLULAR LEVEL<sup>‡</sup>

- Helps modulate Th2 cytokines, and eosinophil and mast cell activity<sup>t</sup>
- Th2 response is affected by stress, aging and cytokine changes resulting from metabolic, hormonal, physiological and environmental factors
- Offers support for healthy self-tissue response<sup>1</sup>
- Helps maintain healthy modulation of mucosal immune responses to environmental factors'

Th2 Modulator is designed to modulate the Th2 immune response, to support healthy Th1/Th2 balance, self-tissue response and mucosal health. This product helps support healthy modulation of Th2 cytokines, and eosinophil and mast cell activity. It also helps maintain healthy modulation of mucosal immune responses to environmental factors. Th2 modulation may be indicated when addressing immune balance in the sinus, respiratory, urinary, and intestinal tracts. Perilla maintains healthy upper respiratory cytokine levels in animal models of Th2 dominance. It also supports cytokine homeostasis of GI mucosal tissue. Perilla seed offers a more concentrated source of polyphenols, rosmarinic acid, luteolin and other beneficial compounds compared to leaf. N-acetyl-L-cysteine (NAC) offers mucolytic properties and promotes tissue levels of glutathione.<sup>1</sup>

### 2 capsules, 1-2 times daily, between meals, or as directed by a health professional.

#### Two (size 00) vegetarian capsules contain:

N-Acetyl-I-cysteine	300 mg
Quercetin	250 mg
Perilla (Perilla frutescens) extract (seed)	150 mg
(standardized to contain 3% polyphenols)	
Astragalus (Astragalus membranaceus) extract (root)	160 mg
Other ingredients: vegetarian capsule (cellulose, water), hypoal	lergenic
plant fiber (cellulose)	
Immune Support GF, (NON) V (VEG	
	Order

Th2 Modulator	Quantity	Code
	120	TH2A1

# <u>Pur</u>eResponse<sup>¬</sup>

Promote Active Response.<sup>‡</sup> Create Immune Balance.<sup>‡</sup>



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<sup>1</sup> Among professional supplement brands surveyed, Nutrition Business Journal® 2016, 2020

<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.



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