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DNA Testing and Women's Health

- ▶ 1 to 30 Minutes
- ▶ **DNA Testing = Purpose and Value**
- ▶ 31 minutes to 45 minutes:
- ▶ **Why many women suffer needlessly**
- ▶ 45 minutes to 1 hour
- ▶ **Q&A**

Test Don't Guess / What's in Your Genes?



What do they do?

- ▶ **Genes are specific sequences of bases that provide instructions on how to make important proteins– complex molecules that trigger various biological actions to carry out life functions.**
- ▶ **DNA gives the instructions for various functional proteins to be produced inside the cell.**

A Roadmap to Health

Mission: to empower clinicians in the realm of Personalized Medicine to provide health solutions driven by genetic insights.



Why Test?



Why Test?

More than 75% of all patients have significant genetic variations (SNPs) in the most important nutritional metabolism pathways.

>70% of the supplements taken provide no biological effect for the patient.

Why Test?

Genetic testing identifies potential risk factors (e.g. ADD, Depression, Estrogen Metabolism) that may affect one in the future or explain current difficulties.

Benefits of Genetic Testing for Health

Understand the cause of any suffering and learn how to correct it.

Learn what risk factors are in the genes of your child/children and how to address them.

Learn what lifestyle, diet, supplements are best to optimize your health.

UC Davis Center of Excellence for Nutritional Genomics

- Diet is a serious risk factor for disease
- Common dietary chemicals affect **gene expression** or structure
- Dietary influences on health depend on **genetic make up** and biochemical individuality

Who Should Test?

everyone



Conditions Related to Gene Mutations

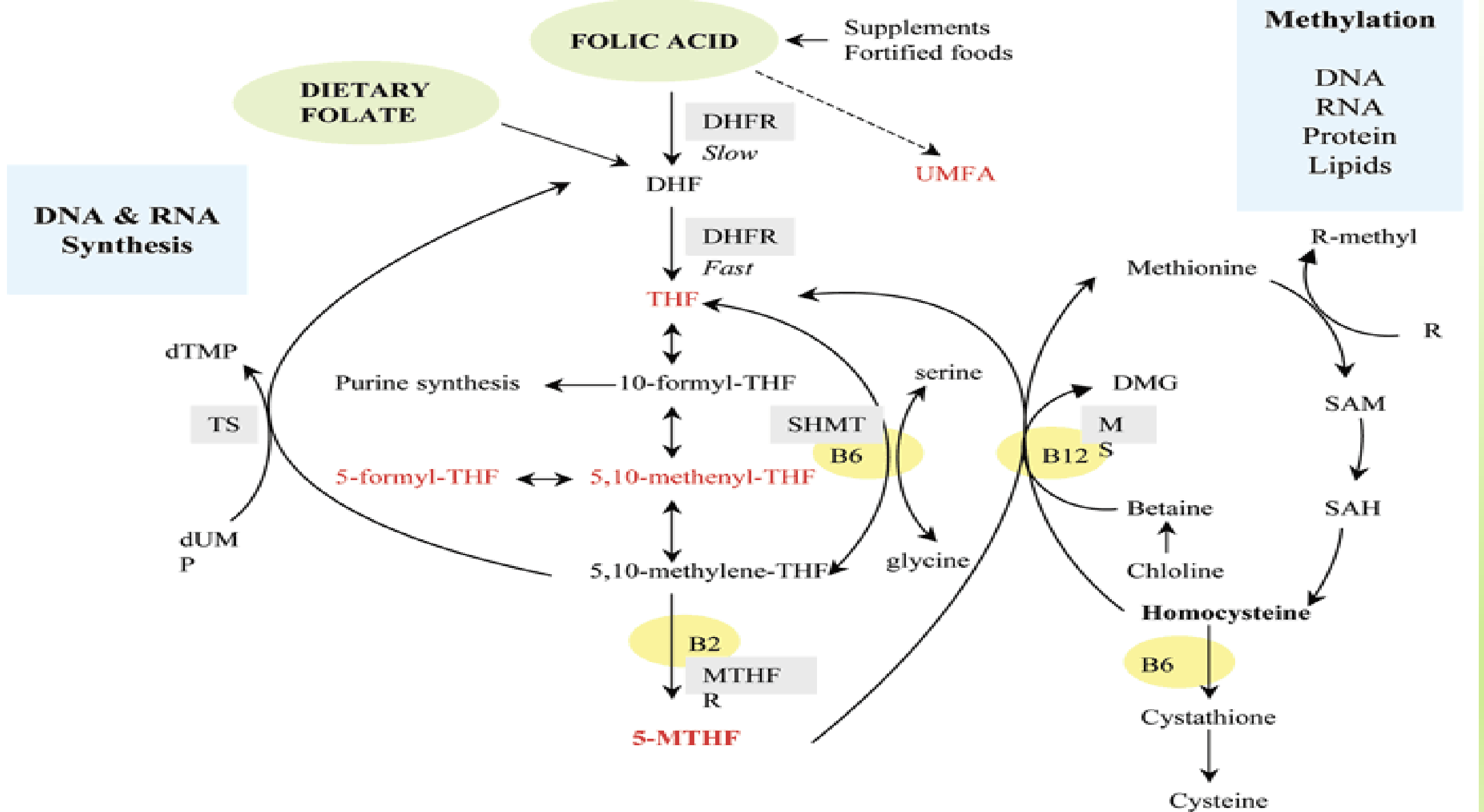
- ▶ **Poor sleep, brain fog, fatigue or low energy**
- ▶ **Depression, Anxiety**
- ▶ **Digestive issues, IBS, Leaky Gut**

Conditions Related to Gene Mutations

- ▶ **Memory loss, poor focus and concentration – ADD / ADHD**
- ▶ **Hashimoto's disease and other auto-immune conditions**

Methylation

rs2071010	FOLR1	-/-
rs651933	FOLR2	+/+
rs1643649	DHFR	-/-
rs6495446	MTHFS	-/-
rs1076991	MTHFD1	+/-
rs1801133	MTHFR C677T	+/+
rs1801131	MTHFR A1298C	-/-
rs1051266	SLC19A1	+/-



MTHFR

- ▶ 40% of Population has at least one mutation
- ▶ The more mutations, the less the MTHFR enzyme can do its job
- ▶ Body's ability to rid itself of toxins and to repair itself
- ▶ **Delivery of nutrients to the cells**

MTHFR

- ▶ **Up to 90% impairment of body's ability to rid itself of toxins**
- ▶ **Must change cellular environment to turn off or mute gene expression**
- ▶ **60 different chronic diseases**

Autophagy - Janitor

rs2241880	ATG16L1	+/+
rs10210302	ATG16L1	+/+
rs510432	ATG5	+/-
rs26538	ATG12	+/+

Knowledge through Genetic Testing

40 million people are affected by anxiety disorders.

There are many symptoms of having a deficiency in the GABA neurotransmitter.

Some of these symptoms include insomnia, trouble sleeping, anxiety, depression, PTSD, ADD, ADHD.

Neurotransmitters & DNA

► The production of dopamine and serotonin, the balance of glutamate to GABA, the efficiency of the reuptake of serotonin and the breakdown of dopamine, norepinephrine and epinephrine, all are related to your genes.



NT Genes / Adrenal Complex

rs1042173	SLC6A4	+/+
rs6313	HTR2	+/-
rs4570625	TPH2	+/-

Stress / ADHD / Adrenal Complex

rs4680	COMT V158M	+/+
rs769407	GAD1	+/-
rs3828275	GAD1	-/-
rs1799836	MAO-B	+ /NA
rs6323	MAO-A	+ /NA

Inflammation

rs10402876	C3	+/+
rs2569191	CD14	+/-
rs2069812	IL5	+/+
rs1800795	IL6	+/-
rs1800925	IL13	+/-
rs10181656	STAT4	+/-
rs1800629	TNF	-/-
rs231775	CTLA4	+/-

Lactose Intolerance / Sugar Sensitivity

Lactose Intolerance / Sugar Sensitivity		
rs4988235	MCM6	+/+
rs1800544	ADRA2A	+/-

Health Precautions

rs1867277	FOXE1	+/+	Iodine, Selenium, Increased Risk of Hypothyroidism
rs4343	ACE	+/+	Increased risk of salt retention and hypertension
rs1800440	CYP1B1	+/+	Increased Levels of 4-hydroxy Estrogen, Endometriosis and Osteoporosis
rs6025	F5	+/+	
rs3211719	F10	+/+	

Detoxification

DigestZyme / Liver Support / ReleaseZyme

rs1021737	CTH	+/+
rs819147	AHICY	+/+
rs1056806	GSTM1	+/+
rs7483	GSTM3	+/+
rs1695	GSTP1 I105V	+/+
rs1208	NAT2	+/+
rs4880	SOD2	+/+

Detoxification

DigestZyme / Liver Support / ReleaseZyme

rs1021737	CTH	+/-	N-Acetyl Cysteine (NAC), Glutathione
rs819147	AHCY	-/-	
rs1056806	GSTM1	+/-	Glutathione
rs7483	GSTM3	-/-	
rs1695	GSTP1 I105V	+/-	
rs1208	NAT2	+/-	Silymarin, Alpha Lipoic Acid (ALA), P-5-P, Catechins
rs4880	SOD2	+/-	High Dose Antioxidants, Curcumin, Sulforaphane, Vitamin C

Histamine / Probiotics / Gluten / D3

rs10156191	AOC1	+/+
rs492602	FUT2	+/+
rs2187668	HLA DQA1	+/+
rs2858331	HLA DQA2	+/+
rs731236	VDR Taq	+/+
rs1076560	DRD2	+/+

Products

- ▶ **Digestive Enzymes (Methylation)**
- ▶ **LipoZyme (Gluten, Methylation....)**
- ▶ **BalanceZyme (autophagy,**
- ▶ **Protease (Detox, MTHFR, Inflammation....)**
- ▶ **Thyroid (NTs, PMS, MAO, Mitochondria....)**
- ▶ **MasterZyme (COMPT, CYP1B1 - MAO)**
- ▶ **Rezen / Calmzyme / (NTs)**

Needless Suffering

Miracle Hormone?

Women's Health

Difficult Periods

Migraines

Weight loss struggles

Miscarriages

Infertility

Poor Sleep

Fibrocystic Breasts

Women's Health

Post Partum Depression

No periods

Fibromyalgia

PCOS

Hysterectomy

Breast Cancer

Depression / Anxiety / Gaba

The Today Show / WHI study

Women's Health / Thyroid

Progesterone Is NOT PROGESTIN

BCP vs Progesterone

Lab Test: timing

Thyroid and Women's Health

It is in your head!

Take an anti-depressant!

Synthroid (T4)

The two primary hormones are thyroxine (T4), a prohormone, and triiodothyronine (T3), which is 300 times more biologically active than T4

Thyroid and Women's Health

T3 is utilized by mitochondria and contributes to metabolism of glucose and lipids, regulates metabolic responses according to energy intake, controls thermogenesis and basal and oxidative metabolism—essentially affecting all tissues in the body

Thyroid and Women's Health

**Labs: TSH, T4, Free T3,
Reverse T3**

APO(ab) (Hashimoto).....

Selenium / Iodine

Thyroid and Women's Health

Low energy, memory loss, struggles with excess body fat, adrenal fatigue, hair loss or thinning, night sweats — all can be related to the thyroid.

Thyroid Complex

Thyroid and Women's Health

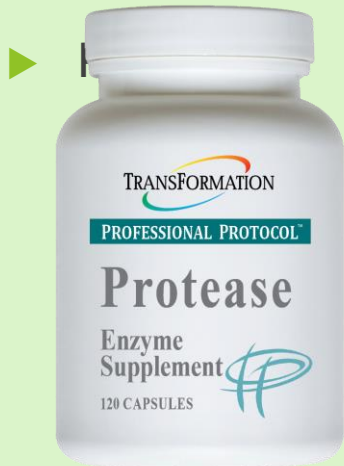
Thyroid Complex

B6, Zinc, Copper

L-Tyrosine

Thyroid Complex

Hypothalamus Bovine.....



Supplement Facts

Serving Size 1 Capsule
Servings Per Container 60/120

Amount Per Serving	% Daily Value
Tzyme™ Protease Blend (peptidases, bromelain) (355,020 HUT + 19 SAPU) (600,000 PU)	492 mg †

† Daily Value not established

OTHER INGREDIENTS: VEGETABLE CAPSULE (HYPROMELLOSE, WATER), CALCIUM CITRATE

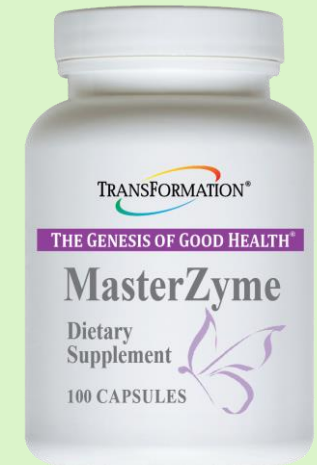
Supplement Facts

Serving Size 1 Capsule
Servings Per Container 100

Amount Per Serving	% Daily Value
Glandular Enzyme Blend (Glucoamylase, Protease 3.0, Alpha-Galactosidase, Cellulase, Peptidase, Protease 4.5, Phytase, Pectinase, Hemicellulase, Lipase, Protease 6.0)	50 mg †
Rose Hips powder (fruit)	52 mg †
Organic Shatavari powder (root)	52 mg †
Black Cohosh powder (root)	50 mg †
Bladderwrack powder (leaf)	40 mg †
Thyroid bovine powder	30 mg †
Parsley powder (leaf)	25 mg †
Suprarenal Cortex substance powder (bovine)	15 mg †
Anterior Pituitary substance powder (bovine)	15 mg †
Gonad Substance Blend (bovine) (Ovarian substance powder, Orchic substance powder, Prostate substance powder)	15 mg †
Adrenal substance powder (bovine)	10 mg †

† Daily Value not established

OTHER INGREDIENTS: GELATIN CAPSULE (GELATIN, WATER), RICE FLOUR, BAMBOO LEAF EXTRACT (SILICA)



Products

MasterZyme

Adrenals

Menopausal Symptoms

Infertility

Irregular Menses

Nourishes Endocrine System

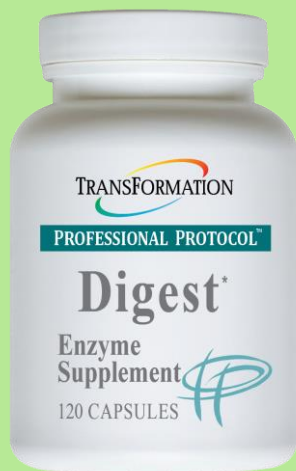
Supplement Facts

Serving Size 1 Capsule
Servings Per Container 60/90/120

Amount Per Serving	% Daily Value	
Tzyme™ Protease Blend (Protease and peptidase) (55,131 HUT + 11 SAPU)	67 mg	†
Lipase (7,518 FIP)	24 mg	†
Tzyme™ Polysaccharolytic Blend	301 mg	†
Amylase	20,000 DU	†
Phytase	42 FTU	†
Glucoamylase	25 AGU	†
Alpha-galactosidase	438 Gal U	†
Macerase	400 CU	†
Beta-glucanase	25 BGU	†
Lactase	610 ALU	†
Pectinase	14 endo-PGU	†
Cellulase	295 CU	†
Diastase	168 DP ^o	†
Invertase	56 SU	†
Hemicellulase	28 HCU	†

† Daily Value not established

OTHER INGREDIENTS: VEGETABLE CAPSULE
(HYPROMELLOSE, WATER), CALCIUM CITRATE



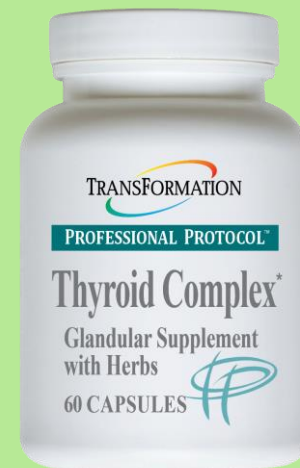
Supplement Facts

Serving Size 1 Capsule
Servings Per Container 60

Amount Per Serving	% Daily Value	
Vitamin B6 (as pyridoxal-5-phosphate)	5 mg	294%
Zinc (as zinc citrate)	10 mg	91%
Copper (as copper citrate)	1 mg	111%
L-Tyrosine	80 mg	†
Bladderwrack	70 mg	†
Thyroid concentrate	50 mg	†
Anterior Pituitary	25 mg	†
Hypothalamus Bovine	15 mg	†
Tzyme™ Enzyme Blend (Protease, Peptidase, Phytase, Glucoamylase, Pectinase, alpha-Galactosidase, Cellulase, Hemicellulase)	50 mg	†

† Daily Value not established

OTHER INGREDIENTS: GELATIN CAPSULE
(GELATIN, WATER)



PRODUCTS

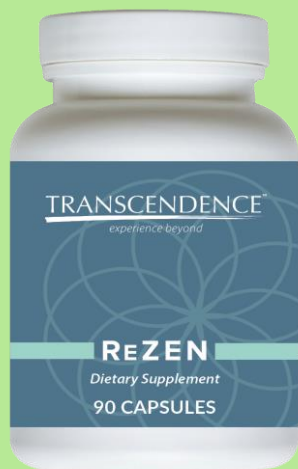
Supplement Facts

Serving Size 2 Capsules
Servings Per Container 45

Amount Per Serving	% Daily Value	
Vitamin B6 (as Pyridoxine HCl)	50 mg	2,941%
GABA (Gamma-Aminobutyric Acid)	200 mg	†
Ashwagandha Root Extract	200 mg	†
Bamboo Whole Plant Extract (Standardized Min. 70% Silica 105 mg)	150 mg	†
L-Theanine	150 mg	†
<i>Rhodiola Rosea</i> (root) extract	100 mg	†
<i>Bacopa Monnieri</i> (whole plant) extract	100 mg	†
Tzyme™ Enzyme Blend (Glucoamylase, Protease, Amylase, Lactase, Phytase, Lipase, Pectinase, Malt Diastase, Alpha-Galactosidase, Peptidase, Cellulase, Hemicellulase, Invertase)	82 mg	†

† Daily Value not established

OTHER INGREDIENTS: VEGETABLE CAPSULE
(HYPROMELLOSE, GELLAN GUM), ASCORBYL PALMITATE



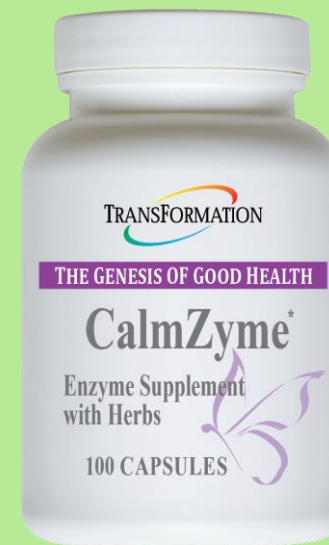
Supplement Facts

Serving Size 1 Capsule
Servings Per Container 100

Amount Per Serving	% Daily Value	
Tzyme™ Enzyme Blend	18.95 mg	†
Amylase	2,500 DU	†
Protease	3,600 HUT	†
Cellulase	160 CU	†
Lipase	25 FIP	†
Valerian Root Extract	105 mg	†
Hops Strobile (flower)	76.6 mg	†
Skullcap (aerial part)	75 mg	†
Wild Lettuce (leaf)	25 mg	†

† Daily Value not established

OTHER INGREDIENTS: VEGETABLE CAPSULE
(HYPROMELLOSE, WATER), RICE BRAN EXTRACT



PRODUCTS

Supplement Facts

Serving Size 1 Capsule
Servings Per Container 90

Amount Per Serving	% Daily Value	
Iodine (from Bladderwrack)	22.5 mcg	15%
Chromium (from Chromium Polynicotinate)	100 mcg	286%
Enzyme proprietary blend	59 mg	†
Protease	30,000 HUT	†
Amylase	3,000 DU	†
Lipase	1,500 FIP	†
Cellulase	200 CU	†
Garcinia Cambogia (Fruit) Extract	250 mg	†
Plantain (<i>Plantago major</i> L.) (Leaf)	75 mg	†
Stinging Nettle (<i>Urtica dioica</i>) (Leaf)	75 mg	†
Cordyceps Mushroom Extract	75 mg	†
Bladderwrack Algae	75 mg	†
Fenugreek (Seed)	50 mg	†

† Daily Value not established

OTHER INGREDIENTS: VEGETABLE CAPSULE (HYPRMELLOSE, WATER)



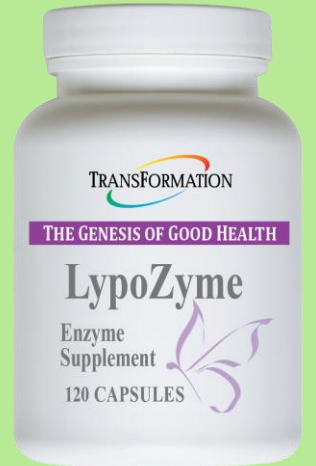
Supplement Facts

Serving Size 1 Capsule
Servings Per Container 60/120

Amount Per Serving	% Daily Value	
Enzyme Proprietary Blend	137 mg	†
Amylase	5,000 DU	†
Lipase	6,250 FIP	†
Protease	20,000 HUT	†

† Daily Value not established

OTHER INGREDIENTS: VEGETABLE CAPSULE (HYPRO-MELLOSE, WATER), MICROCRYSTALLINE CELLULOSE



Why Us?

- ▶ **State-of-the-art genetic testing services.**
- ▶ **CLIA approved and COLA accredited facility, located in Austin, Texas.**
- ▶ **Over 99% reproducibility and sensitivity.**
- ▶ **Turnaround Time: Results in 5-7 business days.**
- ▶ **Privacy: Strict adherence to HIPAA compliance standards, ensuring the confidentiality of patient information.**
- ▶ **We do not sell or distribute personal data and information.**

Products

Questions?

Want to Learn More

Order Tests

Personal Training

mikeclark@seekingperfecthealth.com

DNA Tests

- ▶ SPH Premium
- ▶ Trico Test for Hair Loss
 - ▶ Sports Panel

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