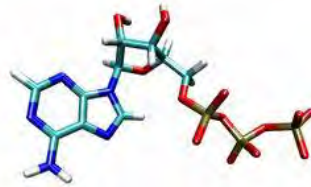


Australia Training

May 2016



Company Profile: Initiatives

AUTISM HOPE ALLIANCE Enzymedica is a founding member of the Autism Hope Alliance, a nonprofit foundation to promote education and awareness autism and other neurological difficulties. Enzymedica also donates to Vitamin Angels to support vital nutrition to families in need.



NEW LEAF PAPER® ENVIRONMENTAL BENEFITS STATEMENT
of using post-consumer waste fiber vs. virgin fiber

Enzymedica used the following resources by using New Leaf Sabara 50L, made with 100% de-inked recycled fiber and 90% post-consumer waste, processed chlorine free, and manufactured with electricity that is offset with Green® certified renewable energy certificates.

trees fully grown	water gallons	energy million Btu	solid waste pounds	greenhouse gases pounds
7	3,584	4	335	833

Calculations based on research by Environmental Defense Fund and other members of the Paper Task Force.
©2008 New Leaf Paper www.newleafpaper.com



Enzymedica's products are 3rd party tested. We utilize Kosher ingredients when available, and have been certified NSF GMP for FDA

Enzymedica has been certified "Carbon Neutral", due to its numerous green actions. Among these actions include printing literature on 100% de-inked, recycled paper through New Leaf

Scientific Panel



Mahamane Mamadou, PhD is currently the Chief Scientific Officer of Phytomedic Labs. He has been actively involved in enzyme-based formulations for health and wellness for over 20 years.

His scientific interests include disease prevention, nutritional disorders, chronic inflammation and degenerative diseases, regulation of gene expression, identification of health risk biomarker molecules, and the developmental origins of metabolic disorders.

He has taught and conducted research at several universities, and has provided consulting and research services for many health and nutrition related companies.

His present research activities focus on isolating new phytochemicals and enzymes for health and wellness dietary supplements.

3

Scientific Panel



Dr. Merrell's is the Founding Executive Director of the Center for Health and Healing in New York, the nation's largest and most comprehensive academic clinical center for Integrative Medicine

His practice is in Integrative Internal Medicine and is frequently used by national media to lend commentary and context to stories on health, wellness and the future of medicine.

Certified Physician Acupuncturist

Immediate past Chairman, Department of Integrative Medicine, Mt. Sinai Beth Israel Medical Center

Associate Attending Physician, Department of Medicine, Mt Sinai Beth Israel Medical Center

Chair of the annual Integrative Healthcare Symposium in New York, annual CME conference for Integrative Medicine

4

Scientific Panel



Dr. Ait-Ghezala is a Scientist, head of molecular biology/ genomic department at the Roskamp institute.

Dr. Ait-Ghezala Graduated with a bachelor's degree from the University of Science and Technology. She then received a master's degree and a PhD in molecular genetics of Aging.

Dr. Ait-Ghezala received an award from the French Down-Syndrome Association. for her accomplishments in the field of Down Syndrome.

She is also the Head of Molecular Biology at Archer pharmaceutical where she leads the program that is focused on developing molecular and cell biology-based screening of small molecule inhibitors.

Dr Ait-Ghezala is also involved in training student from different colleges in the Sarasota area as well as PhD student from Florida international university

5

Scientific Panel



Reid Eckert has been a Certified Nutritional Counselor, educated at Bastyr College. He has been counseling his customers and clients for the past 25 years.

His store, Nutrition Direct is located in the Fort Lauderdale, FL area, although his clients live across and beyond the United States.

Reid has an extensive knowledge of how vitamins, minerals, herb and food supplements address the seven main systems of the body. Reid is devoted to bringing nutritional education and quality of life to those with health challenges.

Reid specializes in the treatment of diseases and disorders of the human body offering aid from birth to elder care. He consults with medical professionals on the clients behalf helping to clarify options available to each individual in need.

Reid is a partner in Stem Longevity Research with Dr. Joseph Purita, that specializes in consultations regarding formulations.

6

Culture



Founded in 1998 with the vision to build the most complete line of enzyme based supplements available.



Enzymedica is a founding member of the Autism Hope Alliance, a nonprofit foundation to promote education and awareness of autism and other neurological difficulties.



Enzymedica has been certified "Carbon Neutral" since 2009 due to its numerous green actions.



- Facility built using all recycled steel
- 113 solar panels to reduce CO2 emissions and conserve energy
 - 200K lbs. of CO2 and \$25K
- Low energy fluorescent lights throughout the facility
- Facility, vehicle and air travel emissions



Enzymedica is certified GMP for FDA Compliance, through NSF, an independent organization.

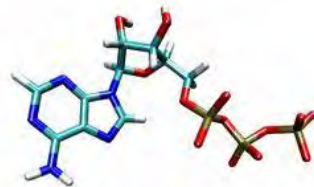


Every Enzymedica product is 100% vegetarian.
We seek out and utilize Kosher ingredients when available.

Mission Statement



Enzymedica is dedicated to providing exceptional enzyme-focused supplements at the most therapeutic levels available in the natural foods industry and beyond. It is our commitment to provide unprecedented education and research that propels individuals on the path to vibrant health.



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Enzymes

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- Biologically active proteins that are *necessary for life to exist*.
- Unique protein structures → unique functions.
- Catalyze and regulate every biochemical reaction that occurs within the human body, making them essential to cellular function and overall health.



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Enzyme Facts

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- All living things manufacture enzymes
- Enzymes perform specific functions.
- All enzymes work within a specific pH and temperature range
- There are thousands of different enzymes functioning in our bodies, each with a unique role.



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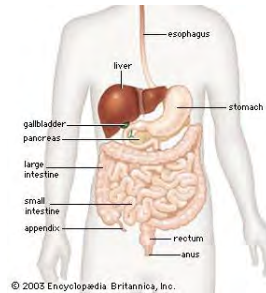
Digestive Enzymes

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•The enzymes that are secreted along the digestive tract to break down and help absorb nutrients

Include:

- Lipase
- Amylase
- Protease
- Many others...

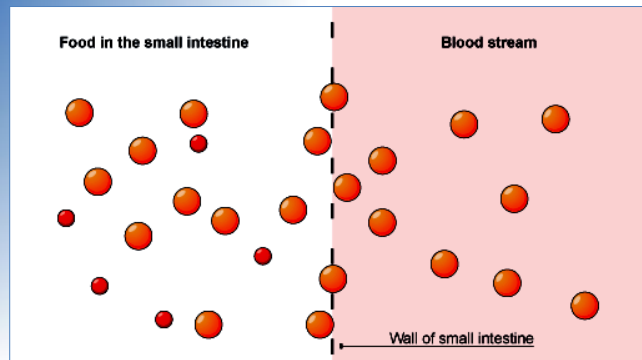


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Absorption

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Only small, soluble substances can pass across the wall of the small intestine. Large insoluble substances cannot pass through.



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Food Enzymes

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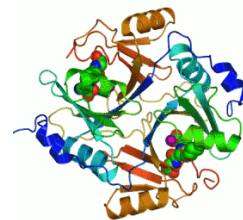


- Found in raw foods
- Help us digest food
- Destroyed easily by heat or processing
- Only enough to digest that one food

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Metabolic Enzymes

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- Catalyze and regulate all biochemical function
 - Life cannot exist without them
 - Give life
 - See, hear, think, move, act...LIVE!
 - Energy of Life / Spark of life

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Health & Energy

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There is a direct correlation between health and cellular (metabolic) energy. High energy availability equates to greater disease-fighting capability (metabolic efficiency).

Energy Allocation

Energy Demand Restriction

The **more energy** required by digestion, the less energy available for proper metabolic function.

Health=Energy Availability & Allocation

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Scientific American

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“Maintenance of the human body is expensive and resources are generally limited. Out of the daily intake of energy, some might go to growth, some to physical work and movement and some to reproduction... Another allocation powers the energy-hungry garbage disposal mechanisms that clear molecular debris.”

“Restricting calories effects **energy allocation** (from growth and reproduction to maintenance and repair)”




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The Basics

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Life Span

- Support the immune system
- Reduce inflammation
- Protect against oxidation






Health Span

- CR (Calorie restriction / 900 - 1500)
- Fasting (Walford)
- Raw foods (Harvey Diamond)
- Enzyme supplementation (why?)

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Supplemental Enzymes

- Types
 - Glandular
 - Animal based
 - Trypsin, pancreatin, pepsin...
 - Enzymedica does not use
 - Plant / Tropical
 - Bromelain, Papain
 - Microbial – (Vegetarian)
 - 1000's of different types harvested from microorganisms
 - Cover all needs
 - Digestive or Therapeutic

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Supplemental Enzymes

Targeted enzyme strains =
More food broken down across a
wide pH

Targeted enzyme strains =
Activity throughout digestive system

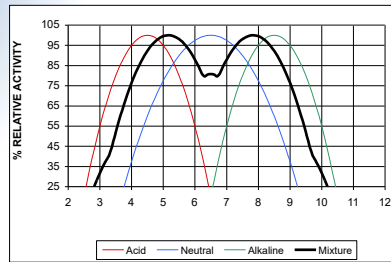
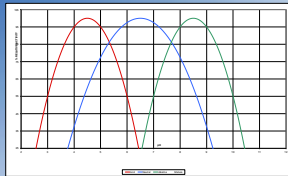
Targeted enzyme activity =
Better Assimilation/Elimination!



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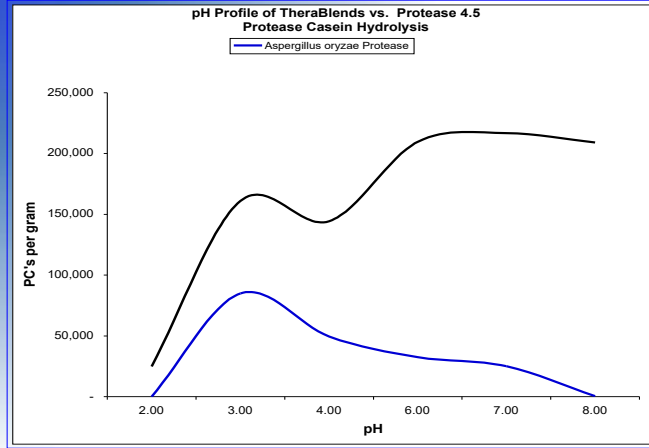
Blends

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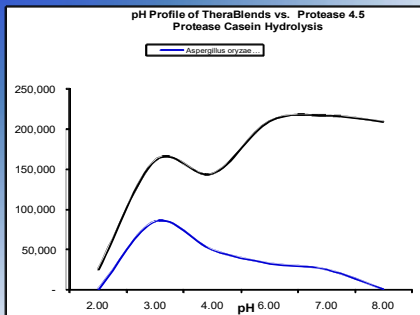
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Blends



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Critical Need



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Autism / Digestion

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“Obvious” Symptoms

- Stomach Pain
- Constipation
- Diarrhea
- Gas, Bloating
- Dark Circles Under Eyes
- Food particles in Stools
- Fatigue
- IBS



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Other Symptoms

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- Hyper Activity
- Poor Memory
- Moody Behavior
- Constant Hunger
- Sleep Problems
- Extreme Picky Eater



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Gut / Brain

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The gut is intricately connected with the...

- Immune System
- Nervous System
- Behavior and Learning



Michael D. Gershon, M.D. (Author of The Second Brain) helped prove that serotonin is a primary neurotransmitter in the gut and these investigations, long rebuffed in the neuroscience world, have led to the discovery of numerous other gut neurotransmitters.

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Gut / Brain

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Opioid Peptides:

Short sequences of amino acids that mimic the effect of opiates in the brain.


Partially digested food (exorphins).
Gluteomorphin, Casomorphin

Brain opioid peptide systems are known to play an important role in motivation, emotion, the response to stress and pain, and the control of food intake.



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Food Reactions


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Food Allergies
IgE: Immediate histamine release
Anaphylaxis - life threatening


Food Sensitivities / Intolerances
IgG, IgA, IgM: Delayed reaction (hrs / days)
80% to Wheat, Dairy, Eggs, Sugar

Enzyme Deficiencies
Non-immune reactions
Lactose, Gluten, Disaccharide, Phenols,



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Research


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Research: Cade's large study of **150 children** with autism found that 87% had **IgG antibodies** (allergy) to gluten, vs. 1% of the age and gender-matched controls, and 90% had IgG antibodies to casein, vs. 7% of the controls.

Cade found **that long-term use of digestive enzymes was beneficial**, but that **the GFCF diet was even more helpful**.

He also studied 70 autistic children who followed a GFCF diet for 1-8 years, and found that **81% improved significantly by the third month**, with improvements continuing over the **next 12 months**. Large improvements were observed in social isolation, eye contact, mutism, learning skills, hyperactivity, stereotypic activity, and panic attacks. Among the 19% who did not improve, about 1/3 of them were not following the GFCF diet, and had lots of gluten and casein peptides still in their blood.

Cade R, Privette M et al. "Autism and Schizophrenia: Intestinal Disorders" Nutr. Neurosci 3 (2000) 57-72. Published by Overseas Publishers Association, (OPA) N.V.

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Research



Clinical Psychopharmacology and Neuroscience 2015;13(2):188-193

A Randomized, Placebo-controlled Trial of Digestive Enzymes in Children with Autism Spectrum Disorders

101 children (82 boys and 19 girls) aged from 3 to 9 years

Results: The ASD group receiving digestive enzyme therapy for **3 months** had **significant improvement** in emotional response, general impression, autistic score, general behavior and gastrointestinal symptoms. Our study demonstrated the usefulness of digestive enzyme in our population of ASD patients.

Conclusion: Digestive enzymes are inexpensive, readily available, have an excellent safety profile, and have beneficial effects in ASD patients...we **propose digestive enzymes for managing symptoms of ASD**. Digestive enzyme therapy may be a possible option in treatment protocols for ASD in the future.



Research



In a 2008 study from Holland, researchers found that putting children with ADD on a restricted **elimination diet reduced their symptoms by more than 50 percent in 73 percent of children**. This is basically the same effectiveness as prescription ADD medication without any of the side effects.

During the study, the children could eat only rice, turkey, lamb, vegetables, fruits, margarine, vegetable oil, tea, pear juice and water. But the results were stunning. In this study the researchers also found that the children's moods and oppositional behaviors were also improved.



Research

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“One of the most promising treatments in this category is a drug called CM-AT. A diagnostic test revealed that some autistic children lack enzymes that digest protein.”

Fallon believes this deficiency is linked to the most severe symptoms of autism, an orally ingested powder that delivers protein-digesting protease, showed “significant improvements.”

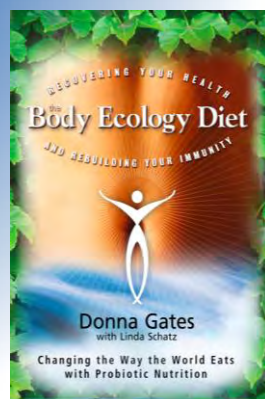
(Cure Mark – Fast Tracked by FDA)

Currently in Phase III clinical trial

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Elimination Diets

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Elimination Challenges evidence-based healthcare solutions

Excellent Results When Completely Eliminated

The challenge

- Detoxification
- Withdrawal
- Cross contamination
- Present in unexpected products



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Gluten & Casein evidence-based healthcare solutions

- 1% Celiac
- 15% Gluten Intolerance
- Much higher in ASD' s



Solution: GFCF Diet / Gluten and Casein Digesting Enzymes*


* Enzymes do not replace diet.

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Benefits

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- Maldigestion
- Malabsorption
- Dysbiosis
- Immune / Inflammation



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The Products

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Heartburn Soothe

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Management of Occasional GI Discomfort

Unique Features/Selling Points

- Contains enzymes plus natural ingredients that soothe the digestive tract
- Fast acting!
- Support for those who are challenged with occasional **heartburn** and **indigestion**

Botanical Support

- **Marshmallow root**- mucilaginous root helps relieve GI mucous membrane irritation & normalize mucous secretions
- **Papaya fruit**, source of proteolytic papain, is well-studied for soothing benefits & cleansing activity w/in GI tract
- **Gotu Kola** rich in B vitamins and potassium



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Digest Premium

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Optimal Digestive Support

Unique Features/Selling Points

- Highest Potency
- Enhances digestion and assimilation of food & other supplements
- For the whole family
- **Support for those:**
 - With digestive challenges
 - Who need gallbladder support
 - Understand the benefits of enzymes with every meal



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Intolergest

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Specialized Digestive Support

- Unique Features/Selling Points
 - **Food Intolerance** Support
 - For the whole family
 - Supports digestion of **gluten, lactose and casein**
 - One intolerance may lead to others
 - Increased mealtime **flexibility**



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The Suite

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Each Capsule Contains:	
Amylase	2,130 DU
Lipase	120 LipU
Cellulase	340 CU
Althaea officinalis root powder	110 mg
Carica papaya fruit powder	120 mg
Centella asiatica herb powder	63 mg

Each Capsule Contains:	
Protease	70,000 HUT
Amylase	19,600 DU
Lipase	1,700 LipU
Cellulase	850 CU
Tilactase (Lactase)	765 ALU

2 Capsules Contain:	
Protease	49,000 HUT
Amylase	6,000 DU
Lipase	430 LipU
Cellulase	600 CU
Tilactase (Lactase)	3,840 ALU



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Digestive Enzymes



- All products:
- Non-GMO
 - 100% vegetarian
 - Kosher when available
 - Free of all fillers

Enzymedica does not use ingredients produced using biotechnology.



Decisions / Recommendations

DIGESTIVE SUPPORT			
CONSIDER THIS PRODUCT IF:	Digest Premium	Intolergest	Heartburn Soothe
You want enhanced digestive support	✓		
You are sensitive to lactose, gluten or casein		✓	
You have occasional heartburn, acid reflux or indigestion			✓



***“The more we come to know,
the more we realize how
little we know....***

***Everything we have learned is
nothing compared to what
we have yet to learn.”***



A Science Odyssey: 100 Years of Discovery by Charles Flowers

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