

# The EnLyte Story for ADHD/Depression as Mono or Adjunctive Therapy

ADHD/Depression is familial with an estimated genetic heritability of 70-80%+ (a significant root cause)

**EnLyte Gel Cap**  
(No Age Restriction)



CANCELS  
→  
MITIGATES

**EnLyte Gummy**  
(Ages 2-8)



Methylation  
Pathways  
Gene SNPs:  
**MTHFR +21**  
others

TO  
→

**Normalize and  
Balance  
Biochemical End  
Points:**  
Neurotransmitters,  
SAM-e, glutathione,  
Taurine, HCY  
DNA, RNA, BH4, NO

**Resulting in Published Clinical Improvements  
and Remissions for all Ages**

**FDA Indication:** Dietary Management of ADHD/Depression



# Impactful Polygenic Methylation Genetic Polymorphisms

**MTHFR** SNP, limits Methylfolate production.  
\*Methylfolate, B2/FAD, B3/NAD

**85%**

**BHMT** SNP, limits Betaine production.  
\*Betaine, Zinc

**29%**

**JCP, 05/16, 330 Patients MDD/MTHFR SNP  
8 Week Monotherapy Study  
EnLyte Group (159) 42% Remission, .93 ES  
Placebo Group (123) 1.8% Remission  
Side Effects = Placebo  
Only MTHFR Study in the Literature**

**DAO** SNP, Breaks down Histamine improving ADHD symptoms.  
\*All Ingredients

**79%**

**MTHFD1** SNP, limits Folinic acid production.  
\*Folinic Acid, B2/FAD, Zinc

**50%**

**HNMT** SNP, Inactivation of Histamine.  
\*All Ingredients

**15%**

**DHFR** SNP, limits production of all folates downstream.  
\*Methylfolate, Folinic Acid

**28%**

**COMT** SNP, regulates Dopamine levels in prefrontal cortex.  
\*All Ingredients

**25%**

**SHMT** SNP, limits 5,10 Methylene THF production.  
\*Methylfolate, B6/P5P

**37%**

**TCN1/2** SNP, reduces B12 transport intracellularly.  
\*B12/ADSYL, B6/P5P, Methylfolate

**44%**

**MTR** SNP, limits Methionine Synthase production.  
\*All Ingredients

**33%**

**AHCY** SNP, regulates SAH to Homocysteine conversion.  
\*All Ingredients

**25%**

**MAO-A** SNP, regulates Neurotransmitter breakdown.  
\*B2/FAD, B3/NAD, Magnesium, Iron

**40%**

**APOE4** SNP, increases brain inflammation.  
\*PS Omega 3s, Methylfolate, B6/P5P, B12/ADSYL

**20%**

“The broad-spectrum B vitamin coenzymes, mineral cofactors, and phospholipid omega 3 ingredients in EnLyte were specifically designed to empirically manage and mitigate all 13 methylation polymorphisms for normal and balanced methylation outcomes, which correlate with proven clinical outcomes in ADHD and Major Depressive Disorder as mono or adjunctive therapy.” — Towny Robinson, Inventor of EnLyte

\*EnLyte Ingredient Remedy

# Complete Methylation Team

Brain Bio-Active B-Vitamin Coenzymes, Mineral Cofactors, and PS Omega 3s  
Designed to Circumvent All 13 Polygenic Methylation Genetic Polymorphisms

## EnLyte Ingredients

### Reduced Folates

L-Methylfolate Magnesium .....	7mg
Folinic Acid .....	3.5mg

### B Vitamins in their Bioactive Coenzyme Form

B12 (Adenosylcobalamin) .....	50mcg
B6 (Pyridoxal-5-Phosphate) .....	25mcg
B1 (Thiamine Pyrophosphate) .....	25mcg
B2 (Flavin Adenine Dinucleotide) .....	25mcg
B3 (Nicotinamide Adenine Dinucleotide) .....	25mcg
Bioperine (B Vitamin Bioenhancer) .....	500mcg
Betaine (Trimethyl Glycine) .....	1mg

### Minerals in their Bioactive Cofactor Form

Magnesium Ascorbate .....	24mg
Magnesium L-Threonate .....	1mg
Zinc Ascorbate .....	1mg
Ferrous Glycine Cysteinate .....	1.5mg

### Phospholipid Form—Brain Ready

PS-Omega-3 (Phosphatidylserine, EPA, DHA) .....	23.3mg
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### Absorption Enhancer

Sodium Citrate .....	6mg
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### Energizer

CoQ10 .....	500mcg
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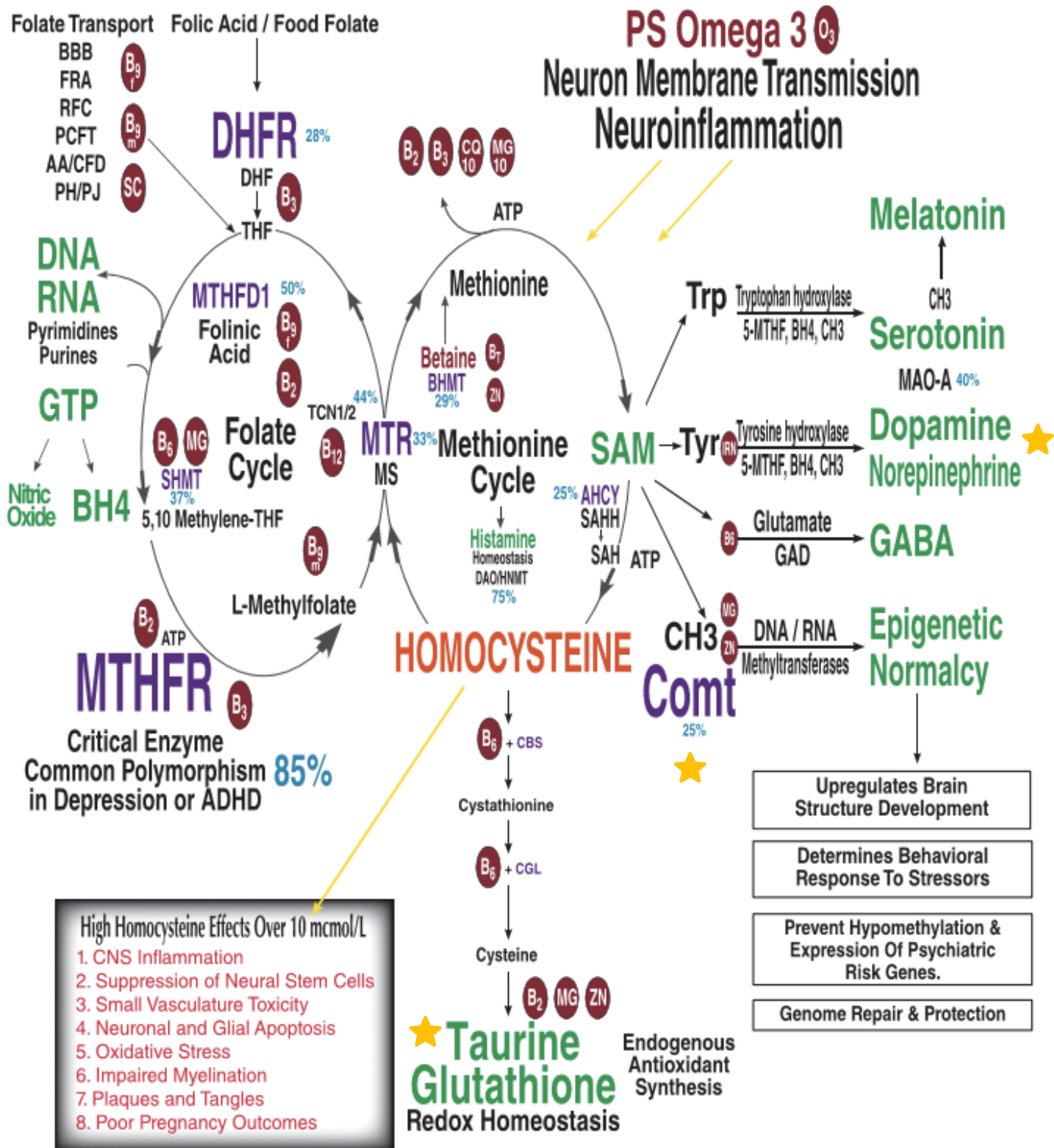
## Q. What is the difference in a vitamin and a vitamin coenzyme?

A. Coenzymes are in their final metabolized forms, making them ready to be the catalyst fuel for methylation production of biochemical end points.

# Methylation Chart

EnLyte provides all the downstream bio-active coenzymes, cofactors, and omegas needed to normalize and balance biochemical endpoints, which correlates into clinical remissions in depression clinical trials.

**EnLyte Coenzyme/Cofactor Product Ingredients Maroon,**  
**Biochemical End Points Green, Enzymes Purple, SNP Incidence Blue**



\*Kennedy, David G., B Vitamins and the Brain: Mechanisms, Dose and Efficacy - A Review, Figure 2. The interlinked folate and methionine cycles.

# A Nutrigenomic Coenzyme/Cofactor Monotherapy for Pediatric ADHD Ages 2-13: An Open Label Preliminary Trial and Abbreviated Case Series

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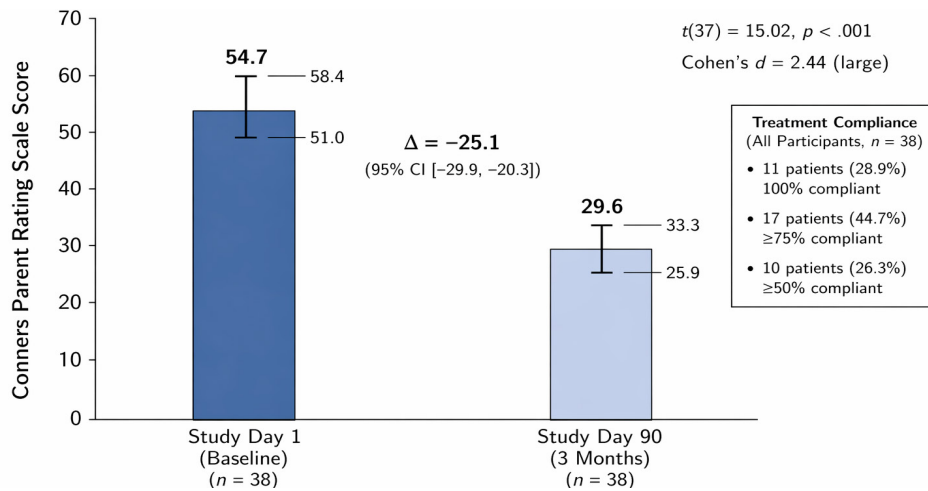
## Abstract

The most encountered neurodevelopmental condition in childhood is Attention Deficit Hyperactivity Disorder (ADHD), affecting roughly one in nine children. ADHD is highly familial, and significant genetic underpinnings involve a cluster of common Single Nucleotide Polymorphisms (SNPs) that affect the metabolism, transport, or absorption of vitamin coenzymes and mineral cofactors. These coenzymes and cofactors are essential for all neuronal methylation pathways and cellular homeostasis, yet the combination of SNPs and their impact on ADHD severity and symptoms are unique to each patient. The interplay between genetics, environmental stressors, and nutritional factors actuate the biochemical causes of ADHD. Understanding and addressing these interactions encompasses the true definition of nutrigenomic treatment.

Unlike stimulant therapy, which may resolve symptoms temporarily, nutrigenomic therapy addresses ADHD at its genetic, biochemical, and nutritional causes. The genetic variants that lead to inadequate nutrient absorption, transport, and metabolism cannot be corrected by diet alone. This is only achieved by providing the CNS methylation pathways with the pre-metabolized B vitamin coenzymes, mineral cofactors, and phospholipid omega 3s that, to varying degrees, may be chronically suboptimal in the CNS of the ADHD patient. This study reports the results of an open-label trial evaluating coenzyme/cofactor monotherapy in pediatric ADHD. The two preparations used were gel cap or gummy forms. We utilized the brand "EnLyte," as both forms contained identical formulations of all essential B vitamin coenzymes, mineral cofactors, omega-3, and omega-6 fatty acids, required by the CNS for optimal methylation, monoamine production, membrane integrity, synaptic transmission, and antioxidant protection.

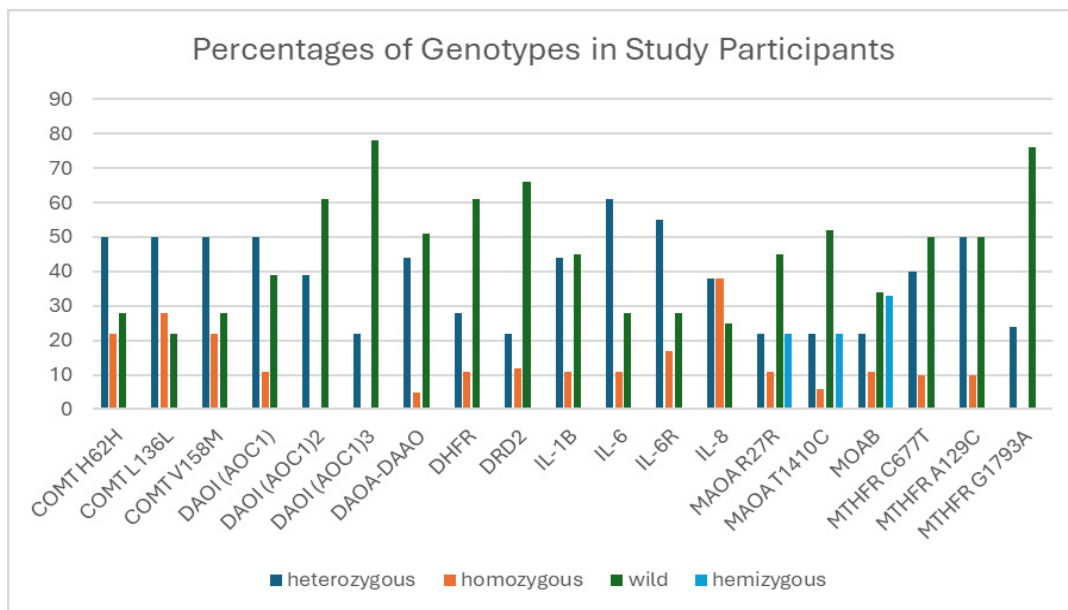
All 38 study completers (ages ranged from 2 to 13) responded well to coenzyme/cofactor therapy, with a mean reduction in the Conner's Parent Rating Scale from 54.7 to 29.6 after 90 days of therapy. There were no discontinuations due to side effects. Further, there were no "non-responders" in the sample, as each patient demonstrated some degree of benefit, even when compliance was less than 100%. These results suggest that coenzyme/cofactor therapy is a well-tolerated nutrigenomic strategy for pediatric ADHD, and larger placebo-controlled trials are warranted.

**Keywords:** ADHD, MTHFR, Coenzyme, Cofactor, Nutrigenomic, B12, Folate, SNP, Essential minerals, Omega-threes



**Figure 1** Conners parents rating scale at study day one and day 90 (3 months) including participants.

**Note:** Bars represent mean scores with error bars indicating  $\pm 3.7$  points (means deviation) above and below the mean. Scores range from 0 to 100, with higher scores indicating greater symptom severity. All participants ( $N=38$ ) are included in the analysis.



**Figure 2** Prevalence in percentages of the SNPs and polymorphisms in our ADHD study population, involving: COMT H62H — *Catechol-O-methyltransferase* (histidine at codon 62, synonymous variant), COMT L136L — *Catechol-O-methyltransferase* (leucine at codon 136, synonymous variant), COMT V158M — *Catechol-O-methyltransferase* (valine → methionine substitution at codon 158), DAO1 (AOC1) — *Diamine Oxidase 1* (also called *Amine Oxidase, Copper Containing 1*) DAO1 (AOC1)2 — Variant in *Diamine Oxidase*, DAO1 (AOC1)3 — Variant in *Diamine Oxidase*, DAOA-DAAO — *D-amino acid oxidase activator* (also called G72), DHFR — *Dihydrofolate reductase*, DRD2 — *Dopamine receptor D2*, IL-1B — *Interleukin 1 beta*, IL-6 — *Interleukin 6*, IL-6R — *Interleukin 6 receptor*, IL-8 — *Interleukin 8* (also known as CXCL8), MAOA R27R — *Monoamine oxidase A* (arginine at codon 27, synonymous variant), MAOA T1410C — *Monoamine oxidase A* (thymine → cytosine substitution at position 1410), MAOB — *Monoamine oxidase B*, MTHFR C677T — *Methylenetetrahydrofolate reductase* (cytosine → thymine at position 677), MTHFR A129C — *Methylenetetrahydrofolate reductase* (likely refers to A1298C: adenine → cytosine at position 1298), MTHFR G1793A — *Methylenetetrahydrofolate reductase* (guanine → adenine at position 1793)

teacher reports indicated she was “much more attentive in class and has been able to complete most assignments during class time.” Her recall of material was improved and reflected in higher grades. Parents were pleased that she would now “do homework right away when arriving home.” Her Conners score at the end of

the study was 22. She remains on EnLyte five months post study and is current in performance with her grade level in all subjects with report cards noting a “confidence that is rebuilt.”

**Case 2:** BC is a 3-year-old male who was described as “fully or partially” inattentive to instructions from parents and teachers.



# HOW TO PRESCRIBE

Submit Our Electronic Form

## Step 1

Visit

[www.enlyterx.com](http://www.enlyterx.com)

Fill out info and click “submit”  
EnLyte will be available in your EMR, but the most cost-effective way to prescribe is by using the "Prescribe Now" button. This ensures your patients receive 2 bottles at \$29.95 each, and the lowest price available moving forward. EnLyte Gummy is always \$99 for 90 Gummies.

## Step 2

### Inform Your Patient

Let your patient know that a friendly customer care representative will contact them shortly to get started on EnLyte for just \$1 a day for the first 60 days. EnLyte Gummy is always \$99 for 90 gummies.

### We Take Care of The Rest

A representative will contact your patient to arrange their order, which will typically be shipped the same day.

Our Medical Food Distributor will handle all refills to ensure uninterrupted care.