

## Methyl FMT

Fundamental methylation support and complete cofactor fuel designed for the entire family, from genetics and mood to healthy homocysteine\*



### Patient Profile†

- Genetic predisposition (SNPs)
- A step beyond for mood and energy support
- Preventative care: Cardiovascular to oxidative stress concerns

### Key Ingredients

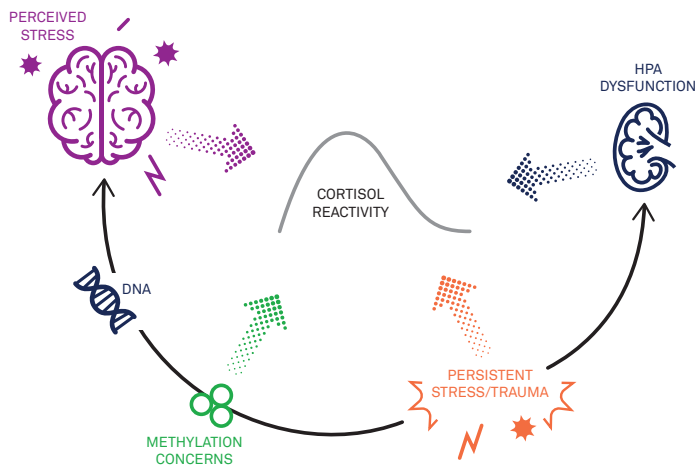
|                  |  |
|------------------|--|
| Riboflavin (B2)  | <ul style="list-style-type: none"> <li>■ Essential for MTHFR and MTRR coenzyme FAD in the folate cycle</li> <li>■ Riboflavin supplementation has been shown to significantly reduce homocysteine levels in those with genetic predisposition<sup>1*</sup></li> </ul>   |
| Niacin (B3)      | <ul style="list-style-type: none"> <li>■ Niacin, in the form of NAD, is a necessary cofactor for the enzymes DHFR in the folate/tetrahydrobiopterin cycles and S-adenosylhomocysteine hydrolase in the methionine cycle<sup>2</sup></li> </ul>   |
| Vitamin B6       | <ul style="list-style-type: none"> <li>■ Essential cofactor for multiple enzymes in the methylation and transsulfuration pathways including SHMT, CBS, and CTH<sup>3,4</sup></li> <li>■ Essential cofactor for synthesis of neurotransmitters such as dopamine, GABA, norepinephrine, epinephrine, and serotonin</li> </ul>          |
| L-5-MTHF (B9)    | <ul style="list-style-type: none"> <li>■ Primary form of folate used by the body; does not require metabolism for absorption</li> <li>■ Patented crystallization form for preferred stability<sup>**</sup></li> </ul>  |
| Vitamin B12      | <ul style="list-style-type: none"> <li>■ Essential cofactor for the metabolism of L-5-MTHF in the folate pathway and homocysteine activity in the methionine pathway</li> </ul>  |
| Magnesium        | <ul style="list-style-type: none"> <li>■ Specific form of magnesium bound to glycine molecules naturally creating a low weight chelate with enhanced bioavailability<sup>**</sup></li> <li>■ Required cofactor for methionine adenosyltransferase, the enzyme responsible for synthesizing SAME in the methionine pathway</li> </ul> |
| Zinc             | <ul style="list-style-type: none"> <li>■ Essential cofactor enzymes in the methylation pathway including MTR and BHMT</li> </ul>   |
| Trimethylglycine | <ul style="list-style-type: none"> <li>■ Potent methyl donor and substrate for BHMT, sparing choline resources<sup>*</sup></li> <li>■ Trimethylglycine supplementation has been shown to support healthy homocysteine levels<sup>5*</sup></li> </ul>   |

### Integrations

#### The stress and methylation connection

- Rapid rise and decline in cortisol after stress is considered the desirable dynamic, adaptive response. Conversely, changes in cortisol stress reactivity marks susceptibility for systemic complications and can be impacted by internal and external factors<sup>6\*</sup>
- Exposure to stressors/trauma can impact DNA methylation that is functionally relevant for stress programming in the human brain<sup>6\*</sup>
- Methylation is associated with balanced cortisol stress reactivity<sup>6</sup>

Combining Methyl FMT and Calm CP supports healthy cortisol at the genomic and cellular level for short- and long-term cortisol management\*



\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

# MORE SCIENCE BEHIND METHYL FMT

Figure 1. The Three Pathways of FMT

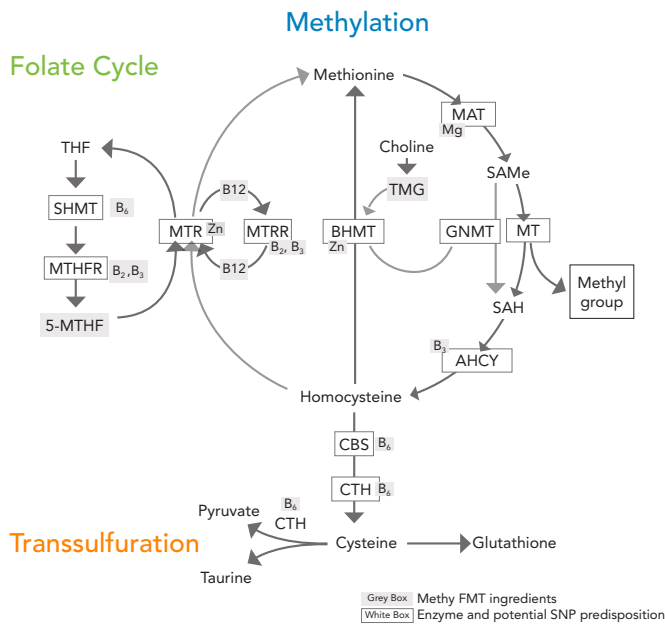
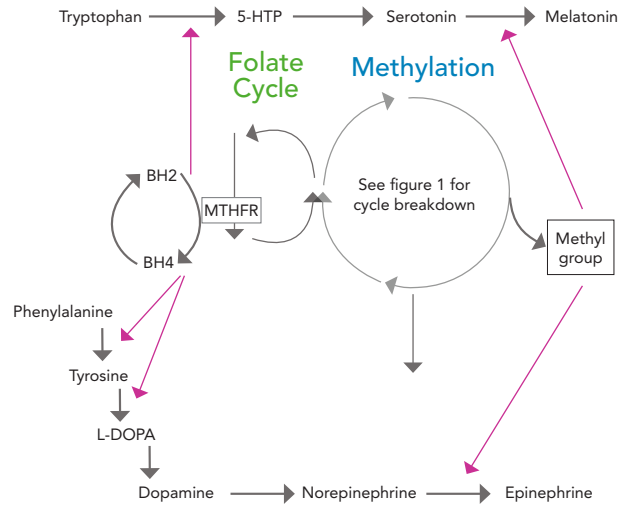


Figure 2. Small Cycles, Vast Symptoms Impact



## Methylation support: Beyond folate

- 5-MTHF is reduced in the **folate cycle**, impacting methionine in the **methylation cycle** where SAMe is reduced to homocysteine, donating a methyl group.
- Homocysteine can be recycled to methionine and SAMe with available folate and B12 resources. If resources are deficient, homocysteine enters an alternate path dependent on choline or trimethylglycine (TMG) availability.
- **Transsulfuration** occurs when methylation needs are met. SAMe upregulates enzymatic activity converting homocysteine to internal antioxidant glutathione and ATP supporting pyruvate.

**Methyl FMT provides key precursor support and complete enzymatic cofactor coverage for the FMT pathways, targeting methylation to homocysteine<sup>1-5\*</sup>**

## Methylation matters

- Folate and B12 availability determine how oxidative stress and cardiovascular marker homocysteine is recycled in the methylation pathway.\*
- The folate cycle impacts biopterin, required for hydroxylase enzymes involved in serotonin, dopamine, and norepinephrine production, impacting a variety of symptoms such as mood, cravings, cognition, temperature regulation, and immune activity.<sup>7-11\*</sup>
- Methylation, or SAMe, is required for epinephrine and melatonin production, impacting energy, endurance, motivation, and the sleep wake cycle.<sup>7-10\*</sup>

**Supporting the FMT pathways can unlock the key to successful symptom support...**



...for the complete family.

|                  |                     |                   |
|------------------|---------------------|-------------------|
| Ages 4-8 years   | Ages 9-13 years     | Ages >14 years    |
| 1 capsule daily. | 1-2 capsules daily. | 2 capsules daily. |

| Item Number | Available Sizes | Serving Size |
|-------------|-----------------|--------------|
| 20062       | 60 capsules     | 2 capsules   |



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2. Kennedy D. Nutrients 2016, 8, 68.
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