

MTHFR

Why is it Important?

MTHFR gene is critical in the Methylation Cycle. The Methylation Cycle is a biochemical pathway that manages or contributes to a wide range of crucial bodily functions, including:

- Detoxification
- Immune function
- Maintaining DNA
- Energy production
- Mood balancing
- Controlling inflammation

All these processes help the body respond to environmental stressors, to detoxify, and to adapt and rebuild. That's why lowered methylation function may contribute to many, major chronic conditions, including:

- Cardiovascular Disease
- Cancer
- Diabetes
- Adult neurological conditions
- Autism and other spectrum disorders
- Chronic Fatigue Syndrome
- Alzheimer's disease
- Miscarriages, fertility, and problems in pregnancy
- Allergies, immune system, and digestive problems
- Mood and psychiatric disorders
- Aging

The MTHFR C677T gene defect significantly contributes to elevated homocysteine.

- Elevated homocysteine is a commonly known risk factor contributing to recurrent pregnancy loss, preeclampsia, infertility, Down Syndrome and other serious concerns surrounding pregnancy.
- In the absence of sufficient methylfolate, homocysteine levels may rise to a harmful level.

What are the mutations and management plans?

A1298C

1 copy (heterozygous) =OK

- Baby aspirin daily
- NO Lovenox
- Methylfolate
- 2 copies (homozygous) = Bad
 - Baby aspirin daily
 - Lovenox with + pregnancy test
 - Methylfolate