

What the MTHFR!



Ever heard of MTHFR? It's a somewhat suggestive acronym for an important enzyme in the body used to convert folic acid into a useable form. It's been getting a lot of press lately because about 50% of the population has a mutation in the genes that produce this enzyme, potentially leading to a whole host of common symptoms and health complaints. This enzyme (called methylenetetrahydrofolate reductase or MTHFR for short) is extremely important for a process called methylation. Methylation takes place in the body over a billion times a second and is required to:

- process and eliminate toxins;
- produce cellular energy;
- create neurotransmitters (which can affect mood and memory);
- produce internal antioxidants important to protect the body;
- build and maintain DNA, cell membranes and myelin (which coats our nerves so they function properly); and
- promote effective immune function.



Methylation is also needed to reduce the level of homocysteine in the body. Increased homocysteine is a known cardiovascular risk factor. Another very important thing impacted by this mutation is pregnancy. We know it is important to take folic acid to prevent neural tube defects, however, if you have this mutation, folic acid may not be as effectively utilized by the body. It is now thought that this un-metabolised folic acid could accumulate to toxic levels in genetically susceptible people, increasing the risk of miscarriage and other birth defects.

Poor functioning of MTHFR is associated with around 60 different health conditions, including diabetes, infertility, anxiety, depression, chronic fatigue, cancer, cardiovascular disease, insomnia, allergy, fibromyalgia, multiple sclerosis, Alzheimer's and dementia.

Simple test

There is a simple, inexpensive test you can take to see if you have this genetic mutation which naturopaths can order.

Good news

The good news is there is much you can do to lower the impact of this gene mutation. The most important thing you can do is to eat your greens! They provide you with naturally occurring folates which are more easily utilized in the body than the cheaply produced, synthetic folic acid form used in so many supplements. This is the safest way to ensure you are providing your body with useable forms of these important vitamins as overdoing supplements containing activated or methylated forms can potentially lead to other health problems. Therefore it is important to see your naturopath who can prescribe the correct forms at the correct dose according to your needs and genetic make up. They can also directly assist your detoxification processes and improve your general health and vitality which in turn reduces the expression of any detrimental gene mutations such as MTHFR.