I have been a Nurse Practitioner for the past forty years and have decided to share what I have found regarding methylation in the body and its importance.
Today we will be discussing the benefits of methylated vitamins.

Why do we need methylated vitamins?
… Much of the world's population may not be able to convert active vitamins that aren't methylated.
…As humans, we all have a gene called the MTHFR gene. It is the gene which assists in the initiating of the metabolic process that converts some vitamins into their usable state by the body.
…In was discovered by the Human Genome Project in 2002 that 60% of the United States population had a mutation of the gene and 40% of the British and Australian populations also had mutations. These mutations can prevent the body from converting the un-methylated vitamin into a usable form in the body.
…having a gene abnormality doesn't allow for the normal absorption of folate and B-complex vitamins.
… The inadequate ability of the body to absorb doesn't affect all of the vitamins, but it does affect three of the most crucial ones, those being vitamin B6, B12, and folate.

Why do we need these vitamins to be absorbed?
B9 (folic acid)
-Contributes to the proper development and growth of the fetus.
-Essential for the production of red blood cells
- Maintains healthy levels of homocysteine which is converted into glutathione and methionine.
--- Glutathione is a primary antioxidant that acts as a major de-toxifying agent in your body. A shortage of it can lead to increased stress and an increased buildup of toxins.
---Methionine helps prevent free radical damage, anemia, inflammation, arteriosclerosis, and fatty liver.
B6
-Helps with healing such as with carpal tunnel syndrome, premenstrual syndrome, water retention, diabetic neuropathy, and other forms of nerve pain.
B12 Cyanocobalamin (un-methylated) vs Methylcobalamin (Methylated)

-Cyanocobalamin is not usable in its existing state and has a cyanide part to it's molecule which must be striped away. It doesn't exist in any living organism, and is laboratory-manufactured. It isn't usable by the body without having the cyanide component stripped away, which it can do, and eliminated. It is used by vitamin companies because it so much cheaper.

-Methylcobalamin has a methyl group which is part of it's composition, it exists in nature, it is in an active and in a usable state by the body. It stays in your blood stream much longer than Cyanocobalomin, allowing it to provide health benefits much longer than the lab fabricated Cyanocobalamin.

Vitamin B 12 deficiency can look like this-
- excessive weakness and fatigue
- shortness of breath and chest pains
- memory loss
- poor reflexes
- confusion or disorientation
- unexplained soreness around the mouth or on the tongue
- a yellowish tinge to the skin
a numbness or tingling in the extremities

I realize this was quite long…sorry. There is just too much that I wanted to share with you!

If you want to know the best source for vitamins that I have found that includes methylated B9, B12 and folate just ask and I will be glad to pass on the information.