

What week is it, kiddies? Why, it's National Folic Acid Week!

Folic acid, or folate, is a B vitamin that plays a major role in DNA expression; it helps your body produce and maintain new cells, and also helps prevent changes to DNA that may lead to cancer. It also is one of the nutrients—along with B12, B6, betaine, and choline—that helps to lower harmful levels of homocysteine.

The root of the word folate is the same as that of “foliage,” reminding us that green leafy vegetables are a rich natural source of the vitamin. So are dried beans, peas, lentils, oranges, whole-wheat products, asparagus, peppers, leeks, and beets. Among animal proteins, liver is the richest source of folate.



What happens when you don't get enough folate? You can become anemic or susceptible to certain cancers—especially of the digestive tract.

But of greatest impact is the effect of folate deficiency on expectant moms—it can lead to dreaded birth deformities called neural tube defects—including spina bifida, cranial abnormalities, and profound mental retardation.

Women who may become pregnant are advised to get 400 micrograms of folic acid daily. Women who are pregnant should receive 1.0 milligram (1000 micrograms). Women who have previously given birth to a child with a neural tube defect are sometimes advised by their physicians to take even higher doses.

Since the institution in 1996 of a concerted campaign of folic acid supplementation for women contemplating pregnancy, the incidence of neural tube defects has been substantially reduced.

But there's some new-think on folic acid fortification. Folic acid is actually a synthetic form of this essential B vitamin as such, it needs to be properly metabolized by the body for it to be properly utilized. That's usually fine for the majority of the population, but a considerable minority possesses a newly-discovered gene variation of methylenetetrahydrofolate reductase (MTHFR). Persons with this defect require a more body-ready form of folate, **methylfolate**, to fire up their DNA synthesis.

Some now theorize that supplementing persons with MTHFR defects with synthetic folic acid might be a bad thing. It's thought that all that extra folic acid hogs receptors for the vitamin, paradoxically creating a deficiency of the useful, metabolically active folate.

In addition, an excess build-up of unmetabolized folic acid might actually be harmful. Some studies have suggested that, while inadequate folate is associated with cancer risk, too much might actually cause cells to proliferate chaotically, promoting or exacerbating cancer. That's why I ask my patients with active cancer to refrain from supplementation with B complex vitamins or multis that contain folic acid.

Interestingly, studies now suggest that patients with MTHFR defects are susceptible to a wide variety of disorders: dementia, blood clots, depression and anxiety, certain cancers, and even autism.

Indeed, autism researchers are utilizing methylfolate in their treatment protocols;

a patented methylfolate (Deplin) is now being touted for depression; and methylfolate coupled with an antioxidant (Cerefolin NAC) is said to target dementia.

So, what's the take-home for you about folic acid?

First, incorporate natural sources of folate in your diet. That means lots of green leafy and cabbage family vegetables as well as fresh fruits and legumes. Check out [this handy guide](#) for foods rich in folate.

Second, find out if you have one of the common variants of MTHFR. If you have a C677 or 1298 mutation, particularly if you've got a double hit of the gene variant, you may want to eschew regular vitamins that contain folic acid and supplement instead with methylfolate or Methyl B Complex. Ask your health professional for an MTHFR test, which can now be performed via either blood or saliva.

Third, join the Alliance for Natural Health in opposing a proposed FDA ban on over-the-counter sales of natural folate supplements. By doing so, they're only protecting the sinecure of BigPharma companies that want to make methylfolate available exclusively by prescription at far higher costs to consumers.