



## Boulder Natural Medicine Clinic's

January 2008 e-Newsletter

By Erik Flatland, ND, LAc

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The New Year has just begun and it is ripe with possibilities. Did you know that you have the power to change your health? We all have the ability to grab hold of the New Year's energies and take charge of our lives, whether it is adding a new exercise regime to our daily routine or eliminating toxic foods (or stressors) from our bodies. The New Year brings a new energy, a fresh start to make such changes. Sometimes though, with all good intentions, we need help directing that positive energy to help bring about permanent change.

Here at *Boulder Natural Medicine Clinic*, I can help you focus that new year energy towards long-lasting health, whether it is helping to eliminate stressors to the body that promote illness, or by laying the new foundation for optimum health through educational and nutritional methods. The New Year is here, let us embrace its energy and celebrate ways to enrich our health! For those of you who have made a commitment to lose weight in the New Year, I can help you succeed with your short and long term goals in many ways. Please call today for more information. To contact us or to schedule an appointment, call 303-447-1339 or email us at [info@bouldernatural.com](mailto:info@bouldernatural.com)

The topic of discussion for January 2008 is on the dietary supplement [Folic Acid](#), or Vitamin B-9, a water-soluble member of the B-Complex family. Learn why this nutrient is necessary for many of the body's processes. For those of you who need a jump-start to their new years exercise resolution, we have added an [Exercise of the Month](#) section to our newsletter! ☺ If you are interested in our product special, you can read about it at the end of this newsletter or simply [click here](#).

When reading our newsletter, please feel free to comment on its contents with inquiries for more information, or alternately with suggestions for topics in which you want to learn more about. To write to us, please send us your questions or comments to [info@bouldernatural.com](mailto:info@bouldernatural.com)



## **Topic: Folic Acid, a dietary requirement**

Folic acid is Vitamin B-9, a water-soluble member of the B-complex family. This valuable nutrient is necessary for DNA synthesis and is involved in many body processes. It plays a role in preventing and treating cervical dysplasia. It also plays a role in preventing neural tube defects. Other areas where folic acid is useful are ulcerative colitis, insomnia, irritability, forgetfulness, depression, neuropathy and restless leg syndrome. Interestingly, humans cannot synthesize folic acid; therefore, it is a dietary requirement. The best folate sources are green-leafy vegetables, sprouts, fruits, brewer's yeast, and liver. The body takes in these dietary forms of folate and converts them to metabolically active forms. These conversion steps require coenzymes such as other B-vitamins, zinc and vitamin C. Due to genetic enzyme defects, malabsorption or reduced liver function, some individuals have an impaired ability to activate dietary forms of folic acid into active forms. In such individuals, supplementation with folinic acid or 5-methyl-tetrahydrofolate is required. Folic acid primary role is a "methyl" donor in numerous biochemical processes, such as DNA synthesis, forming methycobalamin (activated B-12), and converting the toxic compound homocysteine to methionine, an important amino acid.

## **Signs and Symptoms of Folic Acid Deficiency**

Periodontal Disease  
Gout  
Inflammatory Bowel Disease Anemia  
Fatigue  
Vitiligo  
Irritability  
Neuropathy  
Restless Legs Syndrome  
Weight Loss  
Insomnia  
Depression  
Dementia  
Cognitive Disturbances (Brain Fog)  
Elevated Homocysteine  
Cervical Dysplasia



## **Periodontal Disease**

One of folic acid's most exciting applications is in the treatment of periodontal problems and gingivitis. A mouthwash containing 5 mg of folate per 5 ml of mouthwash used twice daily for four weeks, with a rinsing time of one minute, appears to be the most effective manner of application. The effect of folate on gingival health appears to be moderated largely, if not totally, through a local influence.

According to the National Institute of Dental and Craniofacial Research, periodontal disease comes about because, "our mouths are full of bacteria". These bacteria, along with mucus and other particles, constantly form a sticky, colorless "plaque" on teeth. Routine brushing and flossing help get rid of most plaque, however plaque that is not removed can harden and form bacteria-harboring "tartar" that brushing does not clean. Only a professional cleaning by a dentist or dental hygienist can remove tartar. I have found that every patient who has been diagnosed with periodontal disease and has diligently swish with our folic acid wash has not needed deep cleaning, scaling or root planing that was recommended to them by their dentist. Their dentists changed their minds after the patients return to them having used the folic acid wash.

## **Memory and mental agility**

In a 3-year trial on 818 people over the age of 50, short-term memory, mental agility and verbal fluency were all found to be better among people who took 800 micrograms of folic acid daily—twice the current RDA—than those who took a placebo.

## **Depression**

Some evidence links low levels of folate with depression. There is some limited evidence from randomized clinical trials that using folic acid in addition to antidepressant medication may have benefits. Researchers at the University of York and Hull York Medical School have confirmed a link between depression and low levels of folate in a research study involving 15,315 people. However, the evidence is probably too limited at present for this to be a routine treatment recommendation.

## **Heart disease**

Adequate concentrations of folate, vitamin B12, or vitamin B6 may decrease the circulating level of homocysteine, an amino acid normally found in blood. There is evidence that an elevated homocysteine level is an independent risk factor for heart disease and stroke. The evidence suggests that high levels of homocysteine may damage coronary arteries or make it easier for blood clotting cells called platelets to clump together and form a clot. However, there is currently no evidence available to suggest that lowering homocysteine with vitamins will reduce your risk of heart



disease. Clinical intervention trials are needed to determine whether supplementation with folic acid, vitamin B12 or vitamin B6 can lower your risk of developing coronary heart disease. The NORVIT trial suggests that folic acid supplementation may do more harm than good.

As of 2006, studies have shown that giving folic acid to reduce levels of homocysteine does not result in clinical benefit. One of these studies suggests that folic acid in combination with B12 may even increase some cardiovascular risks.

## **Stroke**

Folic acid appears to reduce the risk of stroke. The reviews indicate only that in some individuals the risk of stroke appears to be reduced, but a definite recommendation regarding supplementation beyond the current recommended daily allowance has not been established for stroke prevention.

## **Vitiligo**

In some individuals, administration of folic acid appears to be a rational aspect of a nutritional protocol to treat vitiligo. Degrees of re-pigmentation ranging from complete re-pigmentation in six subjects and 80% re-pigmentation in two subjects was reported out of eight individuals who followed a three-year protocol with a dosage of 2 mg folic acid twice daily, 500 mg vitamin C twice daily, and intramuscular injections of vitamin B-12 given every two weeks.

A two-year study using a combination of folic acid, vitamin B-12, and sun exposure for the treatment of vitiligo reported positive results. One hundred patients with vitiligo were treated, with a repigmentation occurring in 52 of those treated. Total re-pigmentation was seen in six patients and the spread of vitiligo was halted in 64% of the patients. Re-pigmentation was most evident on sun-exposed areas.

## **Side Effects and Toxicity**

In doses typically administered for therapeutic purposes, folic acid is considered non-toxic. At doses of 15 mg per day and above, gastrointestinal complaints, insomnia, irritability, and fatigue have been mentioned as occasional side effects. Folic acid is considered safe during pregnancy, with an established recommended intake of 800 mcg (.8 mg) per day.



## Dosage

The dose of folic acid required varies depending upon the clinical condition. For lowering homocysteine, a minimum dose of 800 mcg per day is generally used. The most common therapeutic dose is in the range of 1-3 mg per day. Doses of greater than 10 mg per day have been used in conditions such as cervical dysplasia.

Dosage of over-the-counter folic acid supplements are restricted to no more than 800 mcg of folic acid per serving, although prescription and doctor prescribed supplements are available in higher doses.

For more information about folic acid, the folic acid wash for your gums or any other questions contact Boulder Natural Medicine Clinic.

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## Healthy Eating:

### Baked Whole Pumpkin *(Contributed by R. Jurestovsky)*

This is a great substitute for the usual pumpkin pie dessert not to be solely a holiday treat but for all year round!

An interesting tidbit (or bite☺), this dish was a favorite of George Washington. While it was called a pie in the old days, it is certainly not, what we call a pie now. Here the custard pie is found inside the pumpkin and the whole thing is to be served up with a bit of anticipation for a very different pumpkin dessert.

### Ingredients:

- 1 pumpkin, 5 - 7 pounds
- 6 whole eggs
- 2 cups whipping cream
- ½ cup brown sugar
- 1 tablespoon molasses
- ½ teaspoon freshly grated nutmeg
- 1 teaspoon cinnamon
- ¼ teaspoon ginger
- 2 tablespoons butter



## Directions:

Cut the lid off the pumpkin just as you would a jack-o'-lantern. Remove the seeds and save for toasting later. Mix the remaining ingredients together with the exception of the butter. Fill the pumpkin with this mixture and top with the butter.

Cover with the pumpkin lid and place in a baking pan. Bake at 350 for 1 - 1 1/2 hours, or until the mixture has set like a custard.

Serve from the pumpkin at your table, scraping some of the meat from the pumpkin with each serving. Enjoy!

**If you would like to contribute any healthy recipes to this newsletter, please contact us at [info@bouldernatural.com](mailto:info@bouldernatural.com) . We would love to post them in the next month's newsletter!**

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## Exercise of the Month:

Have you been out shoveling snow recently? No, well why not protect your back anyway this winter with this great back exercise. It will strengthen your core muscles with particular attention to the spinal extensors.

Do not do this exercise if you have had a recent back injury. For your safety, please consult with a health professional before undertaking any exercise regime if you are over 50 or have been sedentary for over a year.

### **BIRD-DOG**

**Targeted Muscles:** Lumbar extensors - longissimus, iliocostalis, multifidi

From an all-fours position, extend one leg and the opposite arm so that they are parallel to the floor. Hold this position for seven to eight seconds, then repeat with the opposite arm and leg.



### **Training Points to Emphasize**

- Maintain neutral spinal alignment throughout the exercise.
  - Avoid "hiking" the hip, which twists the spine.
  - Maintain a mild contraction of the abdominal wall to help ensure spinal stability.
- (Exercise tip provided by the American Council on Exercise)*



## Product Special

### Folicare by Douglas Labs

FoliCare® is a nutrient-rich oral care solution for use as part of a total oral hygiene program. FoliCare's unique mouth rinse formula contains folic acid, zinc, and vitamin C in a non-alcoholic base. FoliCare is all natural, and includes aloe vera, chlorophyll, and natural mint flavor for mouth refreshment.



### **Suggested Use:**

For daily oral care, use nutrient-rich FoliCare to bathe gums and freshen the mouth as follows:

- 1) Fill cap with undiluted FoliCare (equivalent to one teaspoon).
- 2) Swish solution in mouth for one full minute before spitting out.
- 3) Do not rinse mouth with water or drink or eat for at least 15 minutes after using FoliCare.
- 4) Use twice daily, once in the morning and again at night.

If you are interested in purchasing FoliCare, please contact our office either by email at [info@bouldernatural.com](mailto:info@bouldernatural.com) or by phone (303) 447-1339.

Ingredients: Deionized water, sorbitol, potassium sorbate, natural mint flavor, sodium ascorbate (vitamin C), zinc, aloe vera, folic acid, sodium bicarbonate, and chlorophyll. Contains no alcohol, artificial flavors or sweeteners.

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

**Yours in Good Health,  
Erik Flatland, ND, Lac**

**P.S. Referrals are the best compliment that you can give us here at Boulder Natural Medicine Clinic. If you know of anyone that could benefit from our services, or that would appreciate reading our newsletter, please forward this newsletter to them with our compliments. Thank you.**