



# Blackbird Clinic PLLC

Winter 2008 Newsletter

## Vitamin D and “Winter Blues”

### **MARK YOUR CALENDAR!**



#### **OPEN HOUSE & ANNIVERSARY CELEBRATION**

for Blackbird Clinic PLLC  
Date: Friday, February 22  
Time: 3-5:30 pm

Refreshments, free blood pressure  
checks and door prizes!

*Dr. Andrea Black, Board Certified  
Naturopathic Physician, is director  
of Blackbird Clinic PLLC, which  
specializes in naturopathic and  
nutritional medicine:*

- ✓ For all ages and a variety  
of health conditions
- ✓ Addressing the underlying  
causes of disease
- ✓ Using a holistic approach
- ✓ Safe and effective natural  
therapies

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This winter we are focusing our newsletter on addressing those “winter blues”. In its most extreme form, Seasonal Affective Disorder (SAD) can be prevalent when vitamin D stores are low. SAD is associated with mood changes such as depression and anxiety, carbohydrate cravings, insomnia, and lethargy, which increase during the winter months.

Commonly known, vitamin D has an important role in maintaining blood levels of calcium and phosphorus, which are responsible for skeletal health. Vitamin D deficiency is pandemic and can cause osteopenia, osteoporosis, osteomalacia, and muscle weakness, which can increase the risk of fractures. It also contributes to the functioning of the immune system and reproductive system. Recent clinical and epidemiological studies suggest that vitamin D deficiency may play a role in several conditions unrelated to bone, including SAD, prostate cancer, breast cancer, colon cancer, heart disease, hypertension, multiple sclerosis, and type 1 diabetes.

### **Who’s at risk for deficiency?**

The elderly, strict vegetarians, alcoholics, those with dark skin, people with liver or kidney disease or unexplained bone loss, those who are housebound or institutionalized, or people with digestive disorders (i.e. Celiac disease, Crohn’s disease, irritable bowel syndrome, malabsorption syndrome) may be vitamin D deficient. Geographically, people who live in Canada or the Northern third of the U.S. (including the Pacific NW) may be at a higher risk for vitamin D deficiency.

Sunlight increases vitamin D synthesis in the body when exposed to bare skin. Those who restrict their sunlight and who have a chronic habit of using sunscreen may be deficient. The use of a sunscreen with SPF as low as 25 reduces the rate of vitamin D production by 99.9%. Living in an area with a lot of atmospheric pollution, which can block the sun’s ultraviolet rays, also appears to increase the risk of vitamin D deficiency.

One in seven adults has been reported to be deficient in vitamin D. In one study, 42% of hospitalized patients under age 65 were reported to be vitamin D deficient. In this same study, even though the subjects were eating the currently recommended amount of vitamin D, 37% of them were still found to be deficient. Age-related decline in vitamin D status may be due to reduced absorption, transport, or metabolism of vitamin D.

Also, various medications are known to cause vitamin D deficiency.

### **Is there a Vitamin D test?**

In order to determine your individual vitamin D status, you can get your vitamin D levels checked with a simple blood test called 25-Hydroxy Vitamin D. Vitamin D levels of 25-40 ng/mL are considered within normal range for adults. However, numerous practitioners of holistic/preventive medicine are recommending an optimal lab value for vitamin D of 50 ng/mL or greater for adults.

## **Can vitamin D be toxic?**

All published cases of vitamin D toxicity involve doses of at least 40,000 iu/day, mainly involving the use of vitamin D2. Although some researchers have suggested that the safe upper limit of vitamin D may be as high as 4,000 iu/day-10,000 iu/day, the Food and Nutrition Board of the National Research Council states that for the general public, 2,000 iu/day is the safe upper limit. Vitamin D toxicity can cause kidney stones, kidney failure, bone loss and excessive calcium levels in the blood (these cases often involve intakes above 40,000 iu/day). A pregnant or potentially pregnant woman should be cautious when supplementing with vitamin D because it has been shown to be teratogenic in animals when given in high doses.

## **How much to take?**

Although the recommended dose of vitamin D is 200-600 iu/day, depending on a person's age, scientific evidence suggests that the optimal daily intake should be higher. 1,000 iu/day for the elderly and other high-risk groups is what new guidelines are recommending. Some individuals may need even more, especially during winter time and if living in northern latitudes.

## **Sources of vitamin D:**

UV sunlight exposure to the skin without sunscreen promotes vitamin D production. This process is self-limiting and does not cause toxicity, although excessive sun exposure can cause premature aging and skin cancer. One hour of total body sun exposure can synthesize the equivalent of 10,000 iu of vitamin D. A natural source of vitamin D is bare skin exposure to sunlight with no sunscreen. Naturally, this goes against our sun-phobic society. Experts are rethinking the "no sun" message. We encourage you to "avoid sunburn, not sunshine". Visit our web site ([www.blackbirdclinic.com](http://www.blackbirdclinic.com)) and review our article entitled "Sun Exposure, Cancer and Vitamin D". Can a person get vitamin D from a tanning bed? Yes, however, most salons use tanning beds that have 95% UVA radiation, and all the vitamin D benefits come from the UVB rays. So make sure that a UVB tanning bed is used, and that users tan for only 50% of the recommended time (since UVB causes a burn more easily). Although it is very difficult to get 1,000 iu per day of vitamin D from our diet, good food sources include fatty fish such as wild salmon (see recipe) and sardines, and fish liver oils, such as cod liver oil. Cod liver oil can be a source of contaminants, and should be from a highly reputable company that can provide safety information and testing. Smaller amounts of vitamin D are also found in fortified soy milk, dairy, and egg yolks.

## **What type of vitamin D should I take?**

Vitamin D3, also known as cholecalciferol, is the natural form for humans and is preferable to the synthetic form, vitamin D2, also known as ergocalciferol. Why? Vitamin D3 has greater potency (3.4 times as potent as vitamin D2), greater stability, longer half-life and tighter binding to vitamin D-binding protein in the blood. Most vitamin D fortified foods, such as milk and breakfast cereals use the synthetic vitamin D2. We recommend having your vitamin D blood levels checked, especially during the winter months (even in sunny Eastern Washington!). If you repeatedly experience those "Winter Blues", and/or are a person at risk for vitamin D deficiency, testing your levels may be the first step towards your recovery.

### ***Roasted Salmon with Lemon Relish***

*¼ cup pine nuts  
¼ cup raisins  
Slivered zest and juice of 1 lemon  
4 salmon fillets (6oz each)\*  
Salt and pepper  
¼ cup chopped parsley  
3 tablespoons olive oil  
5 ounces baby spinach  
(about 5 cups loosely packed)*

*Preheat oven to 450°. Spread pine nuts on a rimmed baking sheet; toast in oven, tossing occasionally until lightly golden, 5 to 7 minutes. Remove from sheet, and reserve. Place raisins and lemon zest in a small bowl; cover with boiling water. Set aside.*

*Place salmon fillets on the baking sheet used to toast pine nuts; season with salt and pepper. Roast until salmon is opaque throughout, 8-10 minutes, depending upon thickness. Drain and discard liquid from raisins and lemon zest. Return raisins and zest to bowl; add lemon juice, pine nuts, parsley, and oil. Season with salt and pepper; stir to combine. Dividing evenly, make a bed of spinach on each of the four plates, place salmon fillet on spinach; spoon lemon relish over the top. Enjoy!*

*\*wild, commercially caught (not farm-raised)*

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