

DAVID BISBEE, MD  
STOWE PERSONALIZED MEDICAL CARE

# HEALTHWISE

*News to enrich your lifestyle*

*Spring 2014*

## Tipping Point: Stay Strong, Flexible and Balanced with Exercise

Much of life is a balancing act...from learning to sit up as an infant through avoiding falls in the later years. Balance is the ability to distribute your weight in a way that enables you to remain upright and steady. This requires multiple systems in your body to be working in sync with your brain, including: the central nervous system (spinal cord), the vestibular system (inner ear), the visual system (eyes), as well as position-sensing nerves, muscles and bones.

While balance is important at every stage of life, changes associated with aging such as weaker, more inflexible muscles, slower reflexes, worsening eyesight and fewer cells in the vestibular system can affect your balance. Inner ear disorders, Parkinson's disease, stroke, neuropathy and dips in blood pressure can also impact balance. According to the Centers for Disease Control and Prevention, at least one out of every three people over 65 experiences a fall each year.

The good news is that a wide variety of exercises, from weight training and aerobics to simple daily walks, can help you maintain and significantly improve balance as you age. A consistent regimen of training rehabilitates and strengthens muscles and improves stability and postural alignment. The benefits extend to a person's emotional and psychological



well-being. According to experts, "fear of falling" is ironically one of the biggest predictors of a fall, and faithful adherence to an exercise routine that includes balance-specific training replaces the fear with confidence.

A program to improve balance does not need to be complicated. Begin slowly with regular walks, and try simple exercises such as balancing on one foot or following along with a guided routine on a DVD. More targeted balance training may be done at a fitness center or through the use of a personal trainer or physical therapist. Professionals can assist you in conditioning the core—the set of muscles, bones and joints that link the upper and lower body and enable you to bend, twist, rotate or stand in one spot without losing your balance. An effective core workout may include exercises

such as squats, lunges, twists and ab crunches. Exercise experts also can introduce you to the use of specific equipment to challenge you while improving your balance, such as a BOSU (both sides utilized) balance trainer, a stability ball, or standing on a spongy, unstable surface.

Pilates, yoga, and the ancient Chinese art of tai chi, are also excellent for improving balance and core strength. Tai chi combines meditation with slow, graceful movements and deep breathing and relaxation, helping people achieve an inner serenity.

This approach benefits both mind and body, shown in multiple studies to: build up bones, stabilize joints, lower blood pressure and heart rate, bolster cardiovascular health and immunity, enhance quality of sleep, reduce stress and enhance mood. Practicing tai chi has been shown to reduce falls in seniors by up to 45 percent, and has proven effective in helping people with Parkinson's disease achieve better balance.

A fall can occur anywhere at any time at any age. Therefore, the importance of body balance in one's daily life should not be minimized. The American College of Sports Medicine recommends a program that combines strength, balance, flexibility and endurance. Explore one of these options you believe may work for you, call my office...and get started!

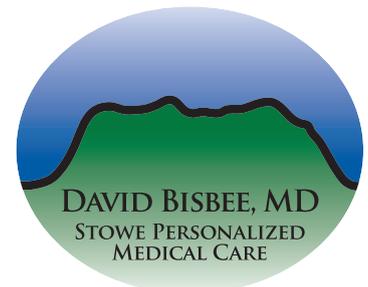
### *From the desk of David Bisbee, MD*

Dear Patient:

What better time than spring to regard long-held routines with a revitalized outlook? In this issue of *HealthWise*, we bring you new insights that may spur some healthy changes. We examine the literal balancing act we perform every day that makes it possible to do activities we all take for granted, from getting out of a chair to strolling down the block. You'll also find the latest information on artificial sweeteners, and what you may want to take into account before reaching for those familiar blue, yellow and pink packets. Finally, we discuss varicose veins, a condition that can impact a wide range of patients.

Refresh, renew and enjoy the spring!

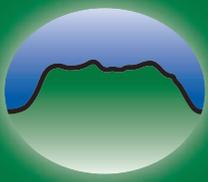
David Bisbee, MD



53 Old Farm Road  
P.O. Box 357  
Stowe, VT 05672

Phone: 802.253.5020  
Fax: 802.253.5021  
Cell: 802.595.5222

Website: [www.davidbisbeemd.com](http://www.davidbisbeemd.com)



# DAVID BISBEE, MD

## STOWE PERSONALIZED MEDICAL CARE

### Not for the Vain: Eliminating Varicose Veins is Good Medicine

Most of us sport at least a few of the blue, bulgy veins known as varicose, that make our legs resemble a twisted rope. Veins in the lower extremities are tasked with one of the body's most challenging jobs—propelling blood up to the heart, while contending with the force of gravity and the pressure of body weight along the way. Veins are smartly designed with one-way valves to prevent blood from flowing the wrong way. However, with age, the valves can weaken and begin working incorrectly. When the valves don't close, the blood flows backward, pools and enlarges the vein, resulting in prominent varicose, reticular (smaller veins that appear behind the knee) and flat spider veins. Fortunately, varicose veins can be eliminated quickly and painlessly with today's advanced techniques.

Half the population over age 50 has varicose veins, a consequence of a combination of factors including heredity, aging, excess weight, occupations that require a great deal of standing or walking, and for women, pregnancies and hormonal changes. Not just unsightly, they are often uncomfortable, causing aching, burning, pressure and heaviness in the legs. For many people, discomfort can be eased with regular exercise to improve circulation, an occasional pain reliever and over-the-counter compression stockings. A more permanent solution is to consider removing the veins. An examination of your varicose veins may signal chronic venous disease (CVD), a more serious condition which can lead to complications such as blood clots, phlebitis and deep vein thrombosis. In these instances, prompt treatment is important.

Whether the motivation is medical or cosmetic, there are several minimally invasive treatments, now standard procedure, used to seal shut or remove varicosities. **Sclerotherapy**, also known as injection therapy, is usually the first choice to



eliminate small varicose, reticular and spider veins, according to the Department of Health and Human Services. A chemical irritant, either liquid or foam, is injected into the vein, making it swell, stick together, and seal shut. This stops the flow of blood, turns the vein into scar tissue, and in a few weeks, the presence of the vein fades away. More than one session is generally required, and bandages and compression stockings are worn for a week or two afterwards. **Ultrasound-guided sclerotherapy** follows the same procedure, but uses ultrasound imaging to locate veins below the skin's surface that are not visible to the naked eye. **Microsclerotherapy**, is also similar to sclerotherapy for treating spider veins, but uses different injection solutions.

Other treatments for varicose veins use energy sources such as a laser, or radiofrequency energy. These minimally invasive techniques have very high success rates and can be performed in a doctor's office, under local anesthesia. **Surface laser therapy**, most effective for treating spider veins and smaller varicose veins, sends very strong bursts of light through the skin onto the vein, resulting in the vein slowly fading and disappearing. For most patients with deeper varicose veins, **endovenous** techniques have replaced the need for surgery. Guided by ultrasound imag-

ing, a small catheter is inserted into the vein and emits either laser or radiofrequency energy, which shrinks and seals the vein. Associated surface veins also shrink after this treatment. In all cases, the healthy veins located around the closed vein take over the normal flow of blood.

Traditional surgery is primarily used to treat very large varicose veins. These procedures can include: **ambulatory phlebectomy** (veins are pulled out with hooks through a series of tiny skin punctures made in the leg); **coil embolization** (alcohol is injected via a catheter into the vein, causing it to close and reroute blood to nearby healthy veins); and **endoscopic perforator vein surgery** (a thin video camera is inserted to guide the physician in closing veins that have caused leg ulcers).

According to the American College of Phlebology, there is no treatment to prevent more abnormal veins from developing when the valves weaken. However, there are some simple steps you can take to help: avoid standing for long periods of time; if you must stand, shift your weight from one leg to the other every few minutes. If sitting for a while, don't cross your legs, and be sure to take a short walk every 30 minutes. Try wearing elastic support stockings and avoid tight clothing that constricts your waist, groin or legs. Opt for lower-heeled shoes that can tone your calf muscles and help blood move through your veins. Maintain a normal weight and eat a low-salt diet rich in high-fiber foods. Finally, exercise regularly, with a focus on walking or running to keep your legs, veins and circulation operating at top strength.

Please contact my office if you are experiencing any of the symptoms described in this article.



### Nutrition Corner

#### The Sweet Life: Artificial Sweeteners vs. Sugar

When you reach for the artificial sweetener, do you pick the pink, nab a yellow, prefer the blue or go green? The difference may be less important than you think.

Each of the sweeteners contains a different FDA-approved main ingredient. For example, Sweet 'N Low contains saccharin, aspartame is in NutraSweet and Equal, neotame and sucralose in Splenda and stevia is in Truvia. All promise fewer calories and more sweetness than natural sugar (16 calories per teaspoon), making it a seemingly ideal choice for those who want to lower their caloric intake. Substituting one zero-calorie soft drink daily for regular soda (150 calories) can save 4,500 calories a month—a potential weight loss of one pound.

**The downside:** safety and health concerns have been swirling around for decades. Beginning in the 1970s, saccharin was linked to bladder cancer in rats, however, subsequent studies did not find evidence of the same effect in humans. Aspartame was scrutinized as a potential carcinogen, and sucralose was reported to potentially wipe out beneficial bacteria in the intestinal tract. Additionally, respected research showed daily consumption of any type of diet drink linked to increased risk of type 2 diabetes. Even the more natural stevia, made from the leaves of a South American shrub, has come under fire for being processed and blended with additives.

Dr. David Ludwig, obesity specialist at Boston Children's Hospital, discourages use of artificial sweeteners, saying they overstimulate sugar receptors and induce cravings for more sweet food. Artificial sweeteners are 200 to 600 times sweeter than sugar, and can distort taste preferences, making foods like a juicy apple seem not sweet-tasting.

In 2012, the American Heart Association and American Diabetes Association, made a somewhat guarded endorsement. "While they are not magic bullets, smart use of non-nutritive sweeteners could help you reduce added sugars in your diet, therefore lowering the number of calories you eat."

**The caution:** "Research, to date, is inconclusive on whether using non-nutritive sweeteners to displace caloric sweeteners can reduce carbohydrate intake, calorie intake or body weight, benefit appetite or lower other risk factors associated with diabetes and heart disease *in the long run.*"

There are also natural sweeteners such as agave nectar, barley malt, xylitol and birch syrup which the Institute for Integrative Nutrition says are generally considered safer than processed white sugar and artificial sweeteners, and create fewer fluctuations in blood sugar levels, when used in moderation.

**The best solution:** reduce your intake of both processed sugar and artificial sweeteners by retraining your taste buds with a healthier diet, advises Harvard School of Public Health. Quench your thirst with water, plain or bubbly; opt for unsweetened teas, plain yogurt and unflavored oatmeal. It may surprise you to see how little sugar you need to add to satisfy your sweet tooth.

