

Women's Health Strategies that Work Wellness Today™

from Susan Lark, M.D.



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Dr. Lark is a distinguished physician and educator who continues to teach and write. She has written 12 books on various aspects of women's health, the most recent of which are *Eat Papayas Naked* and *Hormone Revolution*.

Dear Friend,

Several months ago, after moving into her new apartment, "Jenny" began to suffer from headaches, increased muscle tension, and short-term memory loss that caused her to have difficulty remembering people's names, dates, and appointments. Her sleep habits, which had been an issue for about seven years as she began to notice shifts in her hormonal pattern, became worse. Instead of sleeping for six or seven hours a night, her sleep became more fitful and she woke up several times at night. As a result, she felt tired and groggy throughout the day. She was mystified by her symptoms and sought medical care, but her physician couldn't find any cause for these complaints.

Perhaps some of Jenny's symptoms sound similar to symptoms you've been experiencing, but you're not sure why, either. In fact, this scenario is more common than you might realize. Every day, women all over the U.S. go through medical evaluation and lab testing and never find the cause of their symptoms. And they are often put on a variety of medications that they don't need and that don't really bring them significant relief.

In Jenny's case, her symptoms were finally traced to pollution from electromagnetic frequencies from cell phone tower radiation. Did you ever think that the cell phone tower down the street might be a health hazard to you? Or would you ever have imagined that your computer and your alarm clock could disrupt not only your energy level, but also your emotional well-being, your sleep patterns, and many other components of your body chemistry such as your hormones? The problem is, they do, because electromagnetic radiation (EMR) is becoming increasingly common.

As a physician, I am very concerned about this issue and have been for many years. The research documenting the dangers of EMR continues to increase as more and more health issues linked to it are being identified. It is crucial that you become aware of this health hazard so that you can take steps to identify and treat symptoms arising from it, or prevent problems from even occurring in the first place.

This month, I am going to discuss provocative research that shows how dangerous EMR can be to your health and hormones, and the steps that you can take to shield yourself from it.

The Dangers of the Digital Era

The potential risks of EMR were debated decades ago, when children who were raised near high-voltage power lines were thought to have a higher incidence of leukemia. Studies eventually proved a solid link between the EMR given off by those power lines and childhood

leukemia, but the debate flared up again when cell phones came onto the scene and the incidence of brain cancer seemed higher in cell phone users. Eventually, studies demonstrated real, dire health risks.

Scientists used to believe that the only radiation that posed a health risk was what's called *thermal* radiation, which is radiation with energy high enough to heat up the tissues. The EMR from power lines, cell phones, cordless phones, Wi-Fi computer systems, TV and computer monitors, appliances, bedside digital clock radios, blow dryers, and other electronics is too low to heat tissues, so it's called *sub-thermal*. Taking its cue from the scientific community, the U.S. government declared EMR to be safe. Now we know better. In fact, according to many scientists, subthermal EMR (now called electropollution) may turn out to be one of our worst environmental health hazards. It has been linked to such diseases as leukemia, brain tumors, inner ear tumors, Lou Gehrig's disease, Alzheimer's disease, breast cancer, accelerated aging, and depression.

How Electropollution Harms

Every single cell in the human body is encased in a cell membrane. The cell membrane is studded with receptors that decide what can enter the cell (such as nutrients that act as fuel) and what can leave (such as the waste products of metabolism). The movement of chemical "messengers" such as sodium ions and calcium ions into and out of cells is also how cells communicate with each other. Intercellular communication governs every single bodily function. It alerts the immune system when a pathogen invades, for example. And it tells the brain when carbon dioxide in the blood has gotten too high and it's time to inhale.

Manmade electropollution, which easily penetrates our tissues, is completely foreign to our cells. Cell membranes respond precisely how they should when invaded by something foreign: They shut down, allowing nothing in or out. This is called the cellular stress response, and it cuts the affected cell off from communication with the rest of the body. With the cell on lockdown, toxins and wastes can't get out and

nutrients can't get in. Free radicals accumulate inside the cell, cellular energy declines, and the stage is set for premature aging, degenerative diseases, DNA damage, and cancer-causing mutations, all from electropollution that's way below current government-set "safety" limits (May 2009, *Bioelectromagnetics*).

Electropollution is also an endocrine disruptor, interfering with the secretion and action of several hormones, including melatonin, which is secreted by the pineal gland. In addition to regulating the sleep/wake cycle, melatonin is one of the body's most powerful natural antioxidants and free-radical scavengers, and it strengthens the immune system's ability to fight cancer. In addition, melatonin inhibits the release of estrogen, thereby suppressing estrogen-sensitive cancers such as breast cancer. It also makes breast cancer chemotherapy work better and softens chemo's side effects, plus it directly stops breast cancer cells from growing. On top of all that, studies show that melatonin improves thyroid function.

Electropollution interferes with all of these functions. In fact, in the laboratory, breast cancer cells that had stopped growing because they had been treated with melatonin started growing again when exposed to electropollution. As a result, women in jobs with high electropollution, such as electrical engineers, mainframe computer technicians, telephone installers, and power line workers, are at higher risk of dying from breast cancer. And men with those jobs have a breast cancer risk that's six times higher than in the general male population. And, regardless of career, after 10 years of cell phone use, the risk of certain brain cancers for both sexes doubles (December 2007, *Biomedicine & Pharmacotherapy*; March 2009, *Surgical Neurology*).

Electro-Protection

So how can you protect yourself from electropollution and its harmful effects? Unfortunately, government regulations don't protect you because they're based on outdated science. And it's now impossible to avoid electropollution, even if you never use a cell phone or computer.

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Dr. Lark is compensated on the sales of her Daily Balance supplements (a division of Doctors' Preferred, LLC, and a subsidiary of Healthy Directions, LLC). She is not compensated for other companies' products that she recommends in this newsletter.

A strong proponent of giving women the information they need to make health decisions, Dr. Lark has applied

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Cell phone towers are everywhere. WiFi computer systems flood our airports, coffee shops, highway rest stops, stores, public libraries, schools, hospitals, and private households with radio frequency radiation. Satellite TV and Internet bombard most communities, and the average person carries a growing array of electronics during the day and sleeps perilously close to them every night. These layers of exposure are believed to have cumulative physical effects.

Luckily, you can minimize your exposure and help repair the damage that has already taken place by doing the following things:

Lifestyle Factors

- ▶ Use your cell phone only when necessary, turn it off when not in use, and never carry it on your person. Its electropollution irradiates everything within six or seven inches. In fact, men who carry cell phones on their belts have a 30 percent lower sperm count (May 2009, *Bioelectromagnetics*).
- ▶ Don't use a wireless headset with your cell phone. It increases brain-damaging, cancer-causing radiation by as much as threefold (May 2009, *Bioelectromagnetics*). Instead, use the speakerphone feature.
- ▶ Don't keep wireless or cordless devices in the bedroom. That includes cell phones, cordless phones, Blackberries, and laptop computers.
- ▶ Move wired devices, such as digital clock radios and CD players, away from your bed. Also, position your bed as far as possible from wall outlets and wires inside the wall.
- ▶ If at all possible, don't live near (and certainly not under) high power lines, especially if children live with you. Studies show a 500 percent increased lifetime cancer risk among children who live within 300 meters of such lines during their first five years. And with adult exposure, there's a higher risk of malignant melanoma and leukemia.

Nutritional Support

- ▶ Take supplemental melatonin to counteract the suppression of pineal gland secretion. I recommend 300 mcg–3 mg every evening, half an hour before bedtime.
- ▶ Take supplemental vitamins C and E, which, according to early studies, significantly decrease tissue damage caused by cell phones (August 2007, *Toxicology and Industrial Health*). I recommend daily dosages of at least 1–2 grams of mineral-buffered vitamin C (in divided doses) and 800 IU of vitamin E.

- ▶ Take honeybee propolis, a rich source of the potent free-radical scavenger and antioxidant caffeic acid. In lab rat studies, caffeic acid significantly protected against cell phone–induced damage to heart and kidney tissue (October 2005, *Toxicology and Industrial Health*; August 2005, *Molecular and Cellular Biochemistry*). I recommend 500–1,000 mg of propolis twice daily. I like YS Organic Bee Farms Propolis, which is available at www.vitacost.com.
- ▶ Increase your intake of apples, turnips, radishes, cauliflower, bok choy, arugula, kale, and cabbage, all of which are good sources of caffeic acid.
- ▶ Take *Ginkgo biloba*. After seven days' exposure to cell phones, the oxidative damage to brain tissue in control rats was significant, and their natural brain tissue antioxidant levels were depleted. But in rats pretreated with *Ginkgo biloba*, brain damage was prevented and natural brain antioxidant levels were preserved (February 2004, *Clinica Chimica Acta*). I recommend 60–120 mg daily.
- ▶ Take supplemental zinc. It is known to protect against a cell membrane–damaging process known as lipid peroxidation, which electropollution causes in brain tissue. In laboratory rats exposed to electropollution for five minutes every other day for six months, plasma zinc levels significantly dropped (February 2006, *Tohoku Journal of Experimental Medicine*). I recommend 15 mg daily.

BIOPRO-tection

Consider installing BIOPRO chips onto your cell phone, computer, and other electronic devices and household appliances. Their patented Molecular Resonance Effect Technology (MRET) provides an invisible shield against low-energy electropollution by emitting frequencies that neutralize it and resonate with the human electromagnetic field.

When human blood samples were exposed for 15 minutes to cell phones that did not have MRET shielding, the distribution of white blood cells in the samples shifted to a typical stress response. When samples were exposed with shielded cell phones, their white blood cells shifted in the opposite direction, to a distribution that indicated even less stress than in the control samples that were not exposed to any cell phone radiation at all (July–August 2008, *Explore!*). You can learn more at www.ibiopros.com or by calling 1-866-650-1551.

Remember, electropollution is everywhere, but you can protect yourself with the tips I've provided for you here. I wish you the best of health! ■

My Views on the Health News

Lack of Sleep Leads to Falls

In a recent study of almost 3,000 women with a mean age of 83 years, those who didn't get a good seven to eight hours of uninterrupted sleep each night were found to be at significantly higher risk of recurrent falls, irrespective of whether they had other health issues or took sleeping pills, tranquilizers, or sedatives such as Valium. These women were also more likely to take naps during the day and to spend more of the daytime being physically inactive. This confirms an earlier study, which found that daily napping is a risk factor for falls and fractures in older adults (September 2008, *Archives of Internal Medicine*).

My Take:

As many as a third of all people older than 65 are estimated to fall every year. There are a number of factors that are seen as contributors to a woman's risk of falling. On closer inspection, however, they all seem to stem from the same root cause: lack of exercise. For example, many studies cite tripping over a household pet as one of the most frequent causes of recurrent falls. But the truth is, when a young woman trips over an obstacle like a pet, she's more likely to catch herself, while an older woman is more likely to fall.

Is the cat or dog to blame? Not necessarily. The difference between a woman catching herself or falling is largely the number of neuromuscular junctions she has, which are the solid, competent connections between the nerves that perceive the threat of falling, and the muscles that respond fast enough and powerfully enough to prevent the fall. People who engage in strength-building exercise on a regular basis not only preserve muscle strength, they also preserve neuromuscular junctions. As a result, if they trip, they're much less likely to fall.

The current study found that older women who suffered recurrent falls did not get a healthy amount of uninterrupted sleep each night, and were more likely to take naps during the day and less likely to engage in regular daytime activity. That translates to loss of muscle and loss of neuromuscular junctions. It might be the crack in the sidewalk that "caused" a woman to fall, but in the final analysis, she fell because her neuromuscular system didn't keep that minor misstep from turning into a major incident.

The bottom line is, every woman needs to make sleep and exercise priorities not only for the health benefits, but also because exercise helps you sleep

better. Start an exercise program that includes an aerobic component (like walking) and a strength training component. And if you're having trouble sleeping, I suggest taking 300 mcg–3 mg of melatonin at bedtime. Start with the lowest dosage and increase as necessary until you get the desired effect.

Off-Label Treatment for Vulvodynia?

Vulvodynia is a poorly understood condition that causes burning, stinging, rawness, throbbing, soreness, and/or pain in the vulva. But despite the fact that it affects about one in six women in the U.S., nobody has yet been able to pinpoint the cause. As a result, the standard treatment is aimed at alleviating the symptoms using off-label drugs such as oral gabapentin (Neurontin), which is normally prescribed for seizures and psychiatric problems. By most reports, gabapentin's ability to bring relief from the symptoms of vulvodynia isn't particularly impressive, and its side effects are significant, including confusion, dizziness, sedation, and fatigue.

But in recent years, a few doctors have been sending their vulvodynia patients to formulary pharmacies for a prescription of gabapentin in a custom-prepared topical form. When researchers learned about this, they conducted a study to find out whether topical gabapentin gave those patients better relief than oral gabapentin did, and whether it came with the same side effects. In all, the records of 35 of the 51 women who were given topical gabapentin contained enough detail for the investigators to assess how the treatment performed. The results showed that 80 percent of those women improved by at least 50 percent, and 29 percent reported complete relief within about eight weeks of treatment—all without side effects (September 2008, *Obstetrics and Gynecology*).

My Take:

Any hint that a medication might show improved efficacy in topical form without side effects is cause for cautious optimism. However, it's still too early to celebrate. If you have vulvodynia, before asking your physician to write an off-label prescription, consider the following. First, nobody knows what dose will give the best results. The doctors prescribing topical gabapentin were not doing so as part of a coordinated study, and the dosages they used varied widely. Second, we don't know if, and for how long, the benefits might last after treatment stops. Third, we don't know what the pharmacists used as the base of their formulas. Was it a cream, a gel, an ointment, or a water-based

foam, and were other ingredients added that might have effects of their own? Perhaps most importantly, nobody knows how the treatment works. And with no formal study, and nowhere near enough time for a track record, we don't know anything about long-term side effects.

As I wrote about in the October 2006 issue of *Women's Wellness Today*, there's already a highly effective treatment for vulvodynia that involves no drugs and aims at the problem's underlying physiology, rather than its symptoms. It's a biofeedback protocol that was developed specifically for the most common form of vulvodynia, based on the fact that it's often accompanied by hyperirritability of the pelvic floor muscles. That hyperirritability can best be described as a sort of pelvic floor "Charlie horse" that apparently irritates adjacent neural tissue, resulting in pain and discomfort due to irritation of the nerve itself. By easing those hyperirritable muscles, targeted biofeedback gives the irritated neural tissue the chance to heal naturally and permanently. Preliminary studies show an amazing 83 percent improvement with this protocol (September 2002, *Reviews in Gynaecological Practice*), and in long-term follow-up studies, the benefits not only continued, but actually improved over time (January 2008, *Obstetrics and Gynecology*). For more information, visit www.vulvodynia.com.

A Celiac–Osteoporosis Connection

Dr. Peter Green, physician and researcher at New York's Columbia University medical school, was among the first to report a solid link between osteoporosis and celiac disease, which is now believed to

be the result of both impaired mineral absorption and increased inflammation. Dr. Green and his cohort ordered a dual energy X-ray absorptiometry (DEXA) test for bone mineral density in 105 women and 23 men, average age 56 years, who had already been diagnosed with celiac disease. They found that 27 percent of the patients had osteoporosis at the femoral neck. However, a year or two after putting these patients on a gluten-free diet, their femoral neck bone density had increased by an impressive 7.5 percent (January 2001, *American Journal of Gastroenterology*).

My Take:

This study was first published more than eight years ago, and the link between osteoporosis and celiac disease has since been confirmed many times over. However, the majority of women I see still tell me that, after being diagnosed with osteoporosis, their doctors don't order a test for celiac disease but, rather, prescribe a bisphosphonate drug such as Fosamax or Boniva. I've written many times about the dangers of such drugs, which is why I always recommend a more natural approach to building bone density.

In Green's study, the 7.5 percent improvement in bone density that was seen after just a year or two on a gluten-free diet is fantastic news that the pharmaceutical industry has apparently managed to suppress for years. For this reason, if you have osteoporosis, I recommend following a gluten-free diet that is rich in gluten-free whole grains like quinoa, brown rice, buckwheat, and amaranth. ■

Beauty Corner: Away, Age Spots!

I have always taken great care of my skin and, as a result, it is still clear, vibrant, and youthful-looking. But I hear from patients all the time that the older they get, the more discolorations and age spots they seem to discover. Age spots are common, but are they an unavoidable part of getting older? Once you get an age spot, is it permanent? And are you doomed to get more? The answer to these questions is no!

True Colors

Normally, your overall skin tone is determined by the amount of pigment, or melanin, that you are born with. Ultraviolet radiation (UVR) darkens your skin from there. UVA radiation causes oxidative damage of the melanin already in your skin, darkening it. UVB

triggers production of more melanin by your melanocytes (pigment-manufacturing cells in the deepest layers of your skin), which then use pigment-carrying arms called melanosomes to transfer the melanin to your superficial skin cells (keratinocytes).

As suggested by the official name—*skin hyperpigmentation*—age spots are places where excess melanin has been delivered to the skin. But while their common name suggests that they're an unavoidable part of getting older, studies show that they're more about inflammation than age (November 2007, *Annals of the New York Academy of Sciences*). In fact, a woman can be well into her 80s and not have a single age spot, because the number one cause of age spots happens to

be the most pervasive cause of skin inflammation, and also the easiest to avoid: UVR.

Conventional Treatment

Conventional treatment usually involves applying a drug called hydroquinone (a somewhat irritating prescription skin lightener) and a prescription corticosteroid, which is used to counteract the inflammatory effects of the hydroquinone. For greater efficacy and speed, this approach is often paired with the use of harsh chemical skin peels or dermabrasion to stimulate new skin to grow and replace the old hyperpigmented skin faster.

This regimen can be effective, but it poses some problems. First, corticosteroids cause thinning of the skin—the last thing you want as you age. And, hydroquinone can make skin even more sensitive to damage by UVR. Even worse, hydroquinone can be absorbed into the general circulation and worsen a pre-existing kidney or liver problem. Furthermore, this regimen significantly increases the skin's inflammatory burden and can trigger rebound hyperpigmentation that's worse than before treatment!

The Better Age Spot Alternative

The rule of thumb when treating hyperpigmented skin is that if you continue injuring your skin by allowing unprotected sun exposure, it will continue to respond with heightened melanin production. And your age spots will stay with you forever and increase in number. Reversing this process is very doable with this 5-step regimen:

- 1. Protect against UVR** and avoid the sun-induced skin inflammation that triggers hyperpigmentation in the first place. No skin lightener will work if sun-induced inflammation isn't avoided. Use a top-quality sunscreen that blocks both UVA and UVB and has a sun protection factor (SPF) of 15 or more. Also make sure it does not contain any inflammatory ingredients such as PABA. A good sunscreen to try is UV Natural (available at www.uvnaturalsunscreenstore.com), which includes anti-inflammatory grapeseed oil, macadamia seed oil, and green tea extract.
- 2. Cleanse gently and always moisturize.** It doesn't take harsh detergent to get your face clean. Try using a mild facial cleanser once a week unless your face is genuinely dirty. On the other days, cleanse twice a day with oil instead of soap. Using about 1/4 teaspoon of a high quality, perfume-free oil such as organic jojoba, olive, grapeseed, macadamia, and/or squalane oil, gently massage your

face. Then, wet a clean washcloth with warm (not hot) water, and remove the oil by scrubbing gently in a downward direction to clean and close your skin's pores. Follow by massaging in about 1/4 as much of the same oil, preferably while your face is still damp. If your skin feels too oily afterward, gently dab away the excess with a clean cloth. I recommend using a moisturizer that contains jojoba combined with olive-sourced squalane, such as Trilane (available at www.drlark.com).

- 3. Twice a week, exfoliate** with 10 percent glycolic acid. For most women, 10 percent is gentle enough even for everyday use without causing inflammation. I recommend Mango Madness SkinCare's Exfoliate Me Glycolic Acid Cleanser (available at www.mangomadnessskincare.com).
- 4. Choose a natural topical skin lightening regimen** that avoids the chemical inflammation and toxic effects caused by hydroquinone, while maximizing the reversal of hyperpigmentation by attacking it from two different angles. Read the ingredients list on the label and choose a product that includes:
 - ◆ Niacinamide (vitamin B3), which is proven to inhibit melanin transfer to the keratinocytes; and
 - ◆ At least one of these gentle but highly effective tyrosinase inhibitors: arbutin, mulberry extract, or licorice extract. Tyrosinase is an enzyme involved in the production of melanin. Tyrosinase inhibitors block that process.

My favorites include Meladerm (available at www.civantskincare.com) which contains niacinamide, mulberry extract, licorice extract, and alpha arbutin, as well as a variety of anti-inflammatory and moisturizing ingredients; and RejuvaMask (available at www.drlark.com), the 20-minute home facial that contains arbutin serum, licorice extract, powerful moisturizers, and the antioxidant protection of *Pinus pinaster*.

- 5. Nourish your skin from the inside out** with a diet that avoids red meat, caffeine, refined carbohydrates and sugars, and hot spices. Make sure you get plenty of anti-inflammatory foods such as cold-water fish and whole fresh produce rich in antioxidants, omega-3 fatty acids, and phytonutrients. Make sure your multinutrient contains mineral-buffered vitamin C, vitamin E, and beta-carotene to help counteract sun-induced skin inflammation that triggers hyperpigmentation and to encourage the healing of existing damage.

By following these recommendations, you'll see youthful, "spotless" skin in no time! ■

Healthy Ears Throughout the Years

Many women worry about their eyesight deteriorating as they age, but your hearing can also be affected the older you get. For instance, tinnitus, or ringing in the ears, affects about 20 percent of the general population. Causes have been associated with:

- ▶ Acoustic neuroma—a rare benign tumor in the inner ear, which has become more common with the upsurge in cell phone usage;
- ▶ Exposure to loud noise;
- ▶ High blood pressure, diabetes, atherosclerosis, or heart disease; and
- ▶ Certain medications, including antibiotics, chemotherapy, diuretics, and aspirin.

But for as many as 80 percent of sufferers, the cause of tinnitus is the unnatural silence caused by underlying hearing loss, especially age-related hearing loss, a progressive hearing problem that affects a third of the aging population. That's why relief from tinnitus in any woman past middle age is likely to require effective treatment of an underlying hearing problem. Thanks to recent breakthroughs, that no longer means a surgical cochlear implant.

Here's what you can do to relieve tinnitus and protect your hearing:

1. Protect what you have. Age-related hearing loss usually progresses slowly. Protective measures can stop the progression and provide the opportunity for healing:

- ◆ **Stop smoking**, which is associated with increased prevalence and earlier onset of age-related hearing loss.
- ◆ **Wear ear protection** when you're around excessive noise. Noise mostly damages high-frequency (high pitch) sound perception.
- ◆ **Take care of your heart health.** Cardiovascular disease causes age-related hearing loss, thanks to sluggish circulation in the inner ear, which results in mostly low-frequency hearing loss. In fact, low-frequency hearing loss is a new warning sign for cardiovascular disease, peripheral artery disease, coronary artery disease, strokes, and heart attack (March 2009, *Laryngoscope*). If you have been diagnosed with hearing loss, you should request a cardiovascular health evaluation.
- ◆ **Lay off the hormone replacement therapy (HRT).** Studies show that progestin (the synthetic progesterone that's included in conventional HRT regimens) negatively affects both the ear and the

brain's auditory center (September 2006, *Proceedings of the National Academy of Sciences*; March 2009, *Hearing Research*).

- ◆ **Check your fillings.** Hearing loss is also associated with amalgam dental fillings. In a study of nonsmoking women ages 40 to 45, researchers found that for each amalgam filling, there was an additional 2.4 decibel decline in high-frequency hearing (December 2008, *Journal of Audiology*).
- 2. Regain what you've lost.** The cochlea, the snail-shaped, fluid-filled bony structure in the inner ear, is lined with about 50,000 hair-like nerve endings. We hear when soundwaves make ripples in the fluid and vibrate those hairs, which then transmit their neural impulse to the auditory center in the brain. While virtually every other tissue in the body has at least some ability to regenerate itself via stem cells, the old belief system is that the cochlear "hairs" you were born with are all you'll ever have, and they are so highly differentiated that, once damaged or lost, they can never be replaced. Therefore, hearing loss is permanent. However, recent studies seem to disagree.
- ◆ **Take supplemental antioxidants.** Free radical-scavenging antioxidants often work through a variety of chemical pathways, so combining selected antioxidants can have synergistic effects. This appears to be true of the powerful antioxidants N-acetylcysteine (NAC) and acetyl-L-carnitine, which together give profound protection to cochlear hair cells (April 2007, *Hearing Research*). And, in one study, eight weeks after 46 elderly patients with age-related hearing loss took a combination treatment including daily alpha-lipoic acid (ALA) and vitamin C, hearing levels at all frequencies were significantly improved (January 2009, *Acta Otolaryngologica*). To protect your ears, I recommend 500 mg of NAC, 300 mg of acetyl-L-carnitine, 60 mg of ALA, and 600 mg of mineral-buffered vitamin C daily.
 - ◆ **Take your vitamins.** In one study, women with diagnosed hearing loss had more than 30 percent less vitamin B12 and folic acid in their blood than women with normal hearing (March 1999, *American Journal of Clinical Nutrition*). Make sure your daily multinutrient regimen includes 100 mg of the B-complex vitamins, including 500–1,000 mcg of B12 and 800 mcg of folic acid.

The Yin of Yoga

As I mentioned last month in my discussion of menopause, yoga is a fabulous way of reducing hot flashes, night sweats, anxiety, stiffness, soreness, and other bothersome menopausal symptoms. It's also a great exercise for improving strength and flexibility. But if you're in midlife or beyond, or if you've never tried yoga, you may be reluctant to jump into a downward-facing dog without a little instruction first. Fortunately, I have the perfect yoga book that's written for women in this exact situation: *Lilias! Yoga Gets Better with Age* by Lilias Folan.

In this book, Lilias, who has been practicing and teaching yoga for more than 30 years, guides readers through her favorite poses and stretches—all of which are adapted for older practitioners. One of the chapters I like best is called "The Yin Approach." In traditional Asian medicine, health and well-being are believed to be a balance of two equally important, but opposing, principles—yin and yang. Yin is associated with femininity, receptivity, calmness, coolness, and moisture. Yang, on the other hand, is associated with masculinity, aggression, heat, and dryness.

When dealing with menopausal symptoms, you have a deficiency in yin and an abundance of yang. But with Lilias' approach to yoga, you can focus on increasing yin, thereby reducing the heat that can lead to hot flashes and other symptoms.

In The Yin Approach chapter, Lilias focuses on the yin component in yoga, which is stretching. (The yang component in yoga is strength.)

To improve your flexibility and relieve tightness in your muscles, Lilias discusses what she calls the "3 Rs"—resist, relax, and re-stretch. This technique involves "alternating isometric muscle contraction and passive stretching. Before stretching a muscle, you tighten it and push against a fixed object... The subsequent stretch becomes longer, deeper, and far more comfortable than holding a limb in a static stretch." She says that by using the 3 Rs, "many times, a middle-aged student of the yin approach will experience a breakthrough if a tight muscle is suddenly able to move into a new range of motion. What a moment!" The chapter includes 20 yin-boosting stretches and postures that use the 3 Rs.

The rest of the book is equally interesting and enlightening, teaching you breathing techniques, meditation, visualizations to connect with your emotional and spiritual self, and much more. Even though its main audience is women in midlife and beyond, I recommend this book to women of all ages because it's a wonderful introduction to yoga, and the perfect way to connect with your feminine side. You can buy *Lilias! Yoga Gets Better with Age* at Amazon.com.

◆ **Consider light therapy.** Evidence shows that low-level, or red light, laser therapy safely rejuvenates faltering neural tissue by stimulating mitochondrial energy production. (This type of laser, with a wavelength of 635 nm, is used to heal.) German physician Uwe Witt, M.D., first used this therapy to treat hearing loss in the early 1980s. Increasing mitochondrial energy production allows damaged cochlear hair cells to repair and regenerate themselves. Clinical trials sponsored by the National Institutes of Health are currently underway. Low-level laser therapy is also used to increase inner ear microcirculation and reduce vertigo in patients suffering from the inner ear disorder known as Ménière's disease (August 2008, *Photomedicine and Laser Surgery*).

◆ **On the horizon: Stem cell research.** Stem cell research has already yielded regeneration of cochlear hair cells in guinea pigs. Scientists report that it is relatively easy to transplant stem cells into the inner ear because it is a small, contained space that can be seeded without fear that the stem cells will stimulate cell growth in inappropriate places (June 2003, *Journal of Neuroscience*; May 2004, *Neuroreport*).

If you feel like your hearing isn't what it used to be, I encourage you to try these therapies!

* * *

May your August be full of sunshine and love!

Susan M Lark M.D.

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