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# HEALTHWISE

*News to enrich your lifestyle*

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## Misunderstood, Misdiagnosed and Often Mistreated: Solving the Puzzle of Lyme Disease

Unsurprisingly for an illness known as “The Great Imitator,” the misconceptions surrounding Lyme Disease continue to proliferate. Acute or chronic? Highly treatable or stubbornly resistant? Misdiagnosed because of symptoms that mimic conditions like lupus, multiple sclerosis, Parkinson’s and Lou Gehrig’s disease, or overestimated for the same reason? While television celebrity Yolanda Foster recently gained national attention during her bout with chronic Lyme disease, she also fanned the flames of controversy surrounding this sometimes mystifying condition. A brief overview of current knowledge follows...however experts have not yet reached a consensus on all aspects of this disease.

Research indicates that Lyme disease is transmitted to humans by a bite from a tick infected by the spirochete bacteria, primarily found on the East Coast and in the Midwest. Carried by deer and migratory birds, Lyme disease is on the rise, estimated at 300,000 cases annually in America, considerably larger than the 30,000 cases earlier reported by the Centers for Disease Control (CDC).

The distinctive bull’s eye rash is one identifiable marker of the disease, seen in 70 percent of patients. In the early stages, fatigue and flu-like aches and pains are typical; in later stages, nerve numbness or pain, facial paralysis or weakness, and heart problems are seen; and if not treated, serious and long-term complications that affect the brain, joints, nerves, heart and muscles can occur, according to the Lyme Research Alliance.



Lab tests are generally needed to confirm the diagnosis, followed by a course of oral antibiotics. However, people with early Lyme disease do not develop antibodies for several weeks, resulting in frequent false negatives on the commonly used ELISA or Western Blot antibody tests. For that reason, treating patients based solely on clinical findings, such as a rash and known exposure to ticks, is recommended by some experts, while others advise more aggressive, longer and individualized treatment. All agree, however, that earlier treatment is more effective.

About 20 percent of patients with Lyme disease continue to experience symptoms months and years after treatment ends...and this is where the real debate begins. Muscle and joint pain, cardiac and neurological problems and fatigue have been reported by those with chronic Lyme disease. Some experts believe it indicates an ongoing bacterial infection, while others attribute lingering symptoms to residual

damage to tissue and the immune system. Still others, including Dr. Allen Steere, who first recognized Lyme disease back in 1975, say it is being over-diagnosed, mistaken for chronic fatigue or chronic pain.

The continued questioning spurred John Aucott, MD, assistant professor of rheumatology at Johns Hopkins University School of Medicine and founder of the Lyme Disease Research Foundation, to launch the nation’s first controlled study examining long-term health and outcomes of the disease.

“It does no good to keep debating the existence of long-term problems related to Lyme disease while people are suffering a debilitating illness. These patients are lost. No one really knows what to do with them. It’s a challenge, but the first thing we need to do is recognize this is a problem,” he said.

The headwinds have been strong. Lyme disease ranks well below breast cancer and HIV/AIDS for federal funding, despite a significantly higher rate of cases, according to [lymedisease.org](http://lymedisease.org), but Aucott’s study and others represent hopeful progress.

In the meantime, decrease your risk of contracting Lyme disease by wearing shoes, long pants tucked into your socks, a long-sleeved shirt, hat and gloves when walking in woody areas; sticking to trails and avoiding low bushes and long grass; and using insect repellents with a 20 percent or higher concentration of DEET. If you are bitten by a tick, call my office promptly, but do not panic...your chances of acquiring Lyme disease are no more than 1.4 percent.

### *From the desk of David A. Chappell, MD*

Dear Patient:

Welcome to spring, the best time to start relishing the pleasures of longer, sunnier days outside...but not without a good night’s sleep. Research shows one third of American adults struggle with restless nights and drowsy days, and we are all logging two fewer hours each night than our ancestors. We’ll explain why the restorative power of sleep is essential at every age and share tips to ensure a restful night.

We also take a timely look at Lyme disease, which is seen most frequently during this season when ticks, which carry the bacterium, are prevalent. The condition is often misdiagnosed and the best treatment is still a matter of much debate among physicians...all of which makes prevention essential. You’ll find information in this issue of *HealthWise* on how to spot the symptoms, current approaches to treatment, and most important, how to avoid tick bites while enjoying walks in the great outdoors.

Finally, we hope you will try our quick guide to ordering the healthiest options when dining out at your favorite ethnic restaurant. Whether you’re seeking new tastes, or prefer tried-and-true dishes, we’ll help you make the right choices. Bon appetit!

Wishing you good health,

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## Eyes Wide Shut: Why Eight Hours of Sleep is a Prescription for Better Health

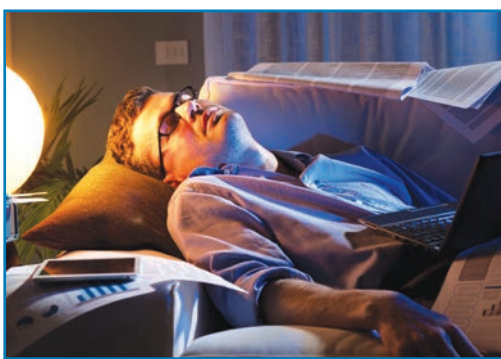
In today's time-pressed world, a full night's sleep has become akin to a luxury, but beware: it is a vital necessity. Lack of sleep affects your health, from stress to heart disease to overall well-being. Even an occasional all-nighter impedes our ability to concentrate, analyze information, and significantly, to drive, making sleepiness at the wheel the cause of over 100,000 car accidents each year.

Call it a by-product of our increasingly hectic lifestyle: we now sleep two hours less nightly than our ancestors, and in just the last decade, another 38 minutes has been shaved off. Despite the fact that at least seven to nine hours of sleep is recommended for the average individual under 65, and for over 65, an average seven to eight hours, 40 percent of adults report sleeping less than six hours nightly. Additionally, between 50 and 70 million adults suffer from some sort of sleep disorder, with one in three saying they had trouble falling or staying asleep, according to the National Sleep Foundation.

### To sleep, perchance to dream...

To understand why these numbers concern the medical community, consider how critical sleep is to human functioning. Many essential physiological activities that aid digestion, cell and tissue repair and growth, muscle growth, protein synthesis and release of growth hormone occur mostly, or sometimes only, during sleep. Sleep also regulates the hormones epinephrine, dopamine and serotonin, which are closely linked to mood and behavior.

The rejuvenating power of sleep is most evident during REM (rapid eye movement). This deepest, last, and most important phase accounts for 25 to 30 percent of the sleep cycle, when dreaming occurs. At this point, the learning region of the brain is stimulated, new neuronal connections are formed and proteins



associated with aging and neural degeneration are eliminated. For example, one expert theory states the production of adenosine in brain cells remains high during wakefulness, but promotes the "drive to sleep." Once the body has a chance to clear adenosine from the system during sleep, we wake feeling rested and more alert.

What happens when the body is regularly deprived of life-sustaining sleep? It's enough to keep you more awake at night, with research pointing to the potential for: more frequent colds; irritability; lower quality of life; elevated blood pressure which can increase the risk of kidney disease; decreased insulin sensitivity and glucose tolerance (diabetes); impaired pancreatic cell responsiveness; calcification of coronary arteries (heart disease and stroke); mood disorders (anxiety and depression); and obesity (lower levels of appetite-controlling hormone, leptin, and higher levels of ghrelin, which tends to make people ravenous). The immune system is particularly affected, as production of proteins needed by the body to fight infections and inflammation decreases.

### Sleep easy

Reassuringly, an extra 15 to 30 minutes of sleep each

night can make a significant difference in overall health and quality of life. Sleep specialists offer these tips:

- **Disconnect.** Sixty percent of Americans bring electronic devices along for the night. "We can't resist the stimulation," says *Sleepless in America* director John Hoffman. "It's exceeding anything that we were designed to experience...it's keeping us up beyond what we're designed for." Turn off phones, tablets and TV one hour before sleep time.

- **Avoid alcohol before bedtime.** Trickier than caffeine, alcohol typically makes it easier to fall asleep but the sleep is of poorer quality. Most people will fall asleep sooner, but spend less time in REM sleep and consequently wake up feeling less refreshed.

- **Adjust your bedroom environment** by decreasing light, noise and temperature so that you are comfortable for the night.

- **Avoid discussing emotional issues or exercising right before bed,** both of which can cause the body to secrete the stress hormone cortisol, associated with alertness.

- **Try mindful meditation.** Focusing on breathing and remaining in the present moment was found to improve sleep quality in older adults with moderate sleep disturbance, according to *JAMA Internal Medicine*.

- **Reset your body clock.** Frequent travelers and seniors are at particular risk for sleeping problems, including advanced sleep phase syndrome, which causes earlier than normal sleepiness and too-early wake up the next morning. Using specialized light boxes before bed or taking melatonin, the "sleep hormone," have proven effective in readjusting circadian rhythms.

Still can't get a good night's sleep? Please call my office.



## Nutrition Corner

### Choose This, Not That... a Smart Eating Series

Healthy eating need not mean deprivation, but simply opting for better choices on the menu, around the grocery aisles and in your kitchen. In this first of a series, we offer smart swaps for dining out on today's favorite ethnic cuisines. We'll continue with a look at healthy substitutes for your own table in the next *HealthWise*.

ORDER THIS	AVOID THAT
<b>MEXICAN</b>	
Gazpacho; Jicama	Fried tortilla chips
Vegetable-filled burritos, tamales	Meat quesadillas—tortilla filled with meat and cheese and fried
Chicken or fish fajitas—marinated protein grilled with onions, green peppers, lettuce, diced tomatoes with a soft corn tortilla	Flautas—crisp tortillas with shredded meat, sauce Chimichangas—fried tortillas with meat and cheese and tomato sauce Burritos—flour tortillas with beans or meat, tomato sauce, shredded cheese Taco salad
Black or pinto beans, Spanish rice	Refried beans
Tofu, grilled chicken breast, fish or shrimp fillings	Chorizo (sausage), carnitas (pork)
Salsa, pico de gallo, cilantro, low-fat sour cream, jalapeno peppers	Cheese, sour cream, guacamole sides, con queso dip
Light Mexican beer, glass of wine	Margaritas
<b>CHINESE</b>	
Hot and sour soup, wonton soup	Egg drop soup

ORDER THIS	AVOID THAT
<b>CHINESE (cont.)</b>	
Vegetable spring rolls, steamed dumplings, lettuce wraps Vegetable stir fries: broccoli, mushrooms, Chinese eggplant, cabbage, green onions, bean sprouts, bok choy, snap peas, water chestnuts	Fried egg rolls, fried dumplings Dishes with fried meats, peanuts, cashews, crispy noodles
Low-sodium soy sauce, sweet and sour sauce, plum sauce	Lobster, bean or oyster sauce, regular soy sauce
Steamed brown rice, edamame	Fried rice, lo mein noodles, crab rangoons
<b>ITALIAN</b>	
Roasted peppers, minestrone soup	Fried calamari
Pasta primavera	Fettucini Alfredo
Marsala and piccata dishes; grilled chicken or fish herb-brushed with extra virgin olive oil	Scallopine or parmigiana dishes—floured, fried and baked with cheese
Marsala, marinara, and clam sauces	Butter or cream sauces, such as Alfredo
Pizza with spinach, mushrooms, broccoli, roasted pepper toppings	Pizza with pepperoni, sausage, extra cheese toppings
<b>GREEK</b>	
Hummus with pita	Saganaki—fried cheese
Tzatziki sauce—cucumber and Greek yogurt	Skordalia, mashed potatoes and garlic dip
Souvlaki—grilled meat skewers with	Gyros sandwiches
Dolmades—grape leaves stuffed with ground meat and vegetables	Avegolemono—lemony chicken orzo soup thickened with eggs
Briam—roasted vegetables	Mousaka—vegetables and meat in cream sauce
Stifado stew—meat and onions in wine sauce Lamb or fish with steamed vegetables	Pastitsio—Greek lasagna

Sources: *Healthy Dining Finder*, AHA, Academy of Nutrition and Dietetics