

Health Conditions That May Contribute to Anxiety

It's likely that rather than having one identifiable cause, your anxiety springs from a variety of lifestyle, physical, and psychological factors. This chapter examines a number of common physical conditions that can aggravate anxiety or tax your system and make you more vulnerable to its effects. These conditions include adrenal exhaustion, thyroid imbalance, candidiasis, body toxicity, premenstrual syndrome, menopause, seasonal affective disorder, and insomnia. Hypoglycemia and food allergies, discussed in chapter 15, can have similar effects. In order to adequately address your problem with panic, phobias, generalized anxiety, or depression, it's important to deal with these conditions as well, since any one or more of them can aggravate your anxiety problems. While this list is by no means exhaustive of all of the conditions that can complicate anxiety, it includes some of the more common ones I've seen in my practice. Some of these conditions are obvious, while others are not. You know it if you can't sleep or if you suffer from PMS, but you (and your therapist) may not be aware of conditions such as adrenal exhaustion, candidiasis, body toxicity, thyroid imbalances, or seasonal affective disorder. Anyone who suffers from anxiety should be aware of the symptoms, causes, and treatments of all of the disorders discussed in this chapter.

Adrenal Exhaustion

Prolonged and unremitting stress taxes your adrenal glands. In *The Stress of Life*, stress expert Hans Selye describes how protracted stress on the adrenal glands results in a state of chronic underfunctioning or exhaustion. Insufficient adrenal resources, in turn, tend to affect how you handle stressful situations, making it more likely that you will become anxious in the face of stress. Inadequate sleep; prolonged exposure to heat or cold; exposure to toxins, pollutants, or substances you're allergic to; and taking cortisone over a period of time can also contribute to adrenal exhaustion. Sudden trauma or severe physical illness can initiate or worsen adrenal exhaustion. Notice that many of these factors, particularly sudden trauma, such as losses or life transitions, also play a role in the onset of anxiety disorders. Anxiety disorders and adrenal exhaustion frequently occur together.

Adrenal exhaustion develops in stages. When you're combating stress, the adrenal glands tend to hyperfunction, producing large amounts of adrenaline and noradrenaline, as well as steroid hormones such as *cortisol*. As stress becomes prolonged, the glands begin to be

overtaxed and go into a state of temporary underfunctioning. If you are relatively healthy, the glands will try to compensate and can actually rebuild themselves to the point of *hypertrophy* (growing larger). However, if high levels of stress continue, the glands will eventually exhaust themselves again and then remain in a chronic state of underfunctioning. At this stage, they can oscillate between overproducing adrenaline, which can cause panic or mood swings, and underproducing adrenaline. The ultimate outcome of prolonged adrenal exhaustion can be chronic fatigue syndrome, fibromyalgia, chronic bronchitis or sinusitis, and autoimmune disorders, ranging from lupus to rheumatoid arthritis.

Symptoms of adrenal exhaustion include

- Low stress tolerance (little things that didn't use to bother you get to you)
- Lethargy and fatigue (often manifested in difficulty getting up in the morning)
- Light-headedness when standing up quickly (called *postural hypotension*)
- Light sensitivity (difficulty adjusting to bright light outdoors)
- Difficulties with concentration and memory
- Insomnia
- Hypoglycemia
- Allergies (to foods, environmental substances, pollens, molds, and so on)
- Increased symptoms of premenstrual syndrome
- More frequent colds and respiratory conditions

Hypoglycemia and adrenal exhaustion. Hypoglycemia and adrenal exhaustion often go hand in hand. The adrenals function along with the pancreas in helping to maintain stable blood sugar levels. When the adrenals underfunction, blood sugar levels tend to become erratic. As adrenal fatigue worsens, the immune system is compromised, leading to increased susceptibility to allergies, asthma, respiratory infections, and colds.

Addictions and adrenal exhaustion. Addiction to caffeine, tobacco, alcohol, or recreational drugs is frequently associated with adrenal exhaustion, as is the physiological craving for sugar. Continued use of any of these substances tends to worsen the condition. If you have any of these addictions, your risk of adrenal insufficiency is higher than average.

Your day-to-day life and adrenal exhaustion. A day-to-day life that is chronically stressful and demanding due to perfectionism and self-imposed pressure to achieve also often leads to adrenal exhaustion.

Recovery from Adrenal Exhaustion

To recover from adrenal exhaustion, you have to address it on a few different fronts. Certain lifestyle changes, supplementation, and dietary modifications can be helpful. These are outlined below:

Simplify your life. Ask yourself which of your habits, practices, and obligations clutter your life rather than enrich it.

Regularly practice your preferred form of relaxation. Whether this is progressive muscle relaxation, guided visualization, yoga, or meditation, try to commit to practicing it daily.

Give yourself downtime daily. Remember that downtime is not a luxury, it is necessary for maintaining a vibrant, fulfilling life (see chapter 4). Break up your day with two or three twenty- to thirty-minute periods of relaxation.

Strive to get eight hours of sleep at night. Sufficient sleep is not a luxury, either. Turn in by ten or eleven at night if possible. Whenever you can sleep late in the morning, let yourself do so.

Exercise regularly. Get twenty to thirty minutes of moderate exercise every day, preferably outdoors (see chapter 5).

Eliminate caffeine, nicotine, alcohol, and recreational drugs. Substitute herb teas for caffeinated beverages. Licorice tea is especially good if you're hypoglycemic.

For three months, eliminate all forms of sugar except xylitol or stevia. This includes white and brown sugar, honey, chocolate, molasses, corn syrup, maple syrup, and dried fruit. Substitute fresh fruits in moderation. Xylitol is a sugar that is made from the fiber of the birch tree. It produces only a small increase in blood sugar and no rise in insulin levels. Stevia is derived from a South American herb and is many times sweeter than sugar. It has no calories and is much safer than artificial sweeteners like aspartame and saccharin. Both xylitol and stevia are available at most health food stores. After three months, you can reintroduce natural sugars such as honey in very small amounts.

Eat a healthy, balanced diet. As much as possible, eliminate processed foods and foods to which you're allergic. Emphasize whole grains, fresh vegetables, and fresh fruits in your diet. Eat protein in the form of beans and grains; eggs; organic poultry; free-range, hormone- and antibiotic-free meat; or fish. Do not overeat carbohydrates. Reduce your consumption of simple starches: pasta, bread, chips, potatoes, cereal, crackers, rolls, and so on. Combine a fat, protein, and complex carbohydrate source at every meal. Avoid eating just fruit first thing in the morning and avoid fruit juices (see chapter 15).

If you have hypoglycemia, eat the appropriate diet. Be sure to eat a protein-carbohydrate snack two to three hours after each main meal (see chapter 15).

Supplements for Adrenal Exhaustion

Certain supplements can help relieve adrenal exhaustion. Talk to your health professional about taking the supplements and quantities listed below:

- Vitamin C with bioflavonoids: 500 to 1000 mg three times per day with meals
- Zinc: 30 mg daily

- Vitamin B₆ in the form of P5P (pyridoxal-5-phosphate): 50 mg twice daily
- Calcium with magnesium (preferably in chelated forms such as citrate or aspartate): 1000 mg calcium and 500 to 1000 mg magnesium at bedtime
- Pantothenic acid: 100 to 500 mg daily

With the assistance of a holistic physician, naturopath, or other professional health practitioner, you may want to try an adrenal cortical glandular supplement. Recommended companies for this include Bezwecken, Allergy Research, and Enzymatic Therapy. Adrenal cortical glandulars are preferable to whole adrenal glandulars, which can be overstimulating for some people.

Some people find licorice, in the form of whole licorice root capsules, to be helpful in treating adrenal exhaustion. Do not take licorice, though, if you have high blood pressure or high estrogen levels.

Thyroid Imbalances

Your thyroid gland sits above your breastbone and directs metabolic reactions throughout your body. It secretes two hormones, thyroxine and triiodothyronine, which play a role in regulating your body temperature and metabolic rate, among many other things.

The thyroid gland can be out of balance in two ways: either it can become sluggish and not secrete enough hormones, a condition called *hypothyroidism*, or it can become overly active, which, as you might have guessed, is referred to as *hyperthyroidism* (or *thyrotoxicosis*). According to Dr. Ridha Arem, author of *The Thyroid Solution*, approximately 10 to 20 percent of the adult population suffers from some kind of thyroid imbalance.

Low thyroid function is associated with depression, low energy, weight gain, fatigue, and lethargy. You may be inclined to feel cold, especially in your hands and feet, and tend to gain weight easily. Other symptoms can include menstrual problems in women, water retention, and poor concentration and memory. *An overly active thyroid, on the other hand, is associated with anxiety, hyperactivity, restlessness, difficulty sleeping, weight loss, increased heart rate, and a tendency toward profuse sweating and elevated body temperatures.*

Hyperthyroidism is a condition that is occasionally mistaken for generalized anxiety. If you're not only anxious but feel "hyper," have recently lost weight despite good or increased appetite, or you tend to sweat a lot, it would be a good idea to have your thyroid function evaluated.

If you suspect you might have a thyroid problem, it's best to consult with a physician. Your doctor should do a *complete* thyroid blood panel, preferably one that measures the following four factors:

- *TSH (thyroid stimulating hormone)*. A hormone released by your pituitary gland that tells your thyroid gland to make more or less of its hormones. A TSH value of three or higher is considered to be indicative of hypothyroidism. A value below one suggests a hyperthyroid condition.

- *T4 (free thyroxine)*. This is a less active form of thyroid hormone which you have on hand to convert to the more active thyroid hormone, T3.
- *T3 (free triiodothyronine)*. This is the active form of thyroid hormone. Low levels of T3 are commonly associated with depression and other symptoms of hypothyroidism. Many doctors may suspect you have a problem even if your T3 level is at the low end of the normal range.
- *Antithyroglobulin* and *antithyroperoxidase*. These are two factors that measure the number of antibodies you may be making that can attack your thyroid gland and suppress its function. High levels of these antibodies are indicative of a condition called Hashimoto's thyroiditis, which can lead to either hypo- or hyperthyroid conditions, and needs to be treated medically.

Treating Thyroid Imbalance

If your thyroid panel indicates abnormal thyroid function, your doctor may choose from among several alternative treatments. If blood test results indicate a *hypothyroid* condition, you will usually be put on a ninety-day trial of thyroid medication. This might be a natural form of thyroid hormone derived from pigs' thyroid glands, such as Armour Thyroid, or a synthetic form such as LevoxyI or Synthroid. Some people do better on the natural form of the hormone, while others do better with the synthetic forms. Beginning thyroid hormone replacement, whether natural or synthetic, is usually accompanied by a period of a month or two adjusting the dose upward or downward to determine the precise dose that you need. If you find you're too jittery on the medicine, your doctor will lower the dose to the minimum level you need to relieve symptoms of sluggishness, depression, and weight gain. Or you may try two or three different types of thyroid hormone. Generally, you need to stay on thyroid hormone for a year. At that point, you can try going off and see how you do. About two-thirds of people with hypothyroidism need to keep taking the hormone long term.

Some doctors will try dessicated natural thyroid before trying a synthetic drug. These natural extracts are available in some health food stores as well as over the Internet and appear to work for some people with milder forms of hypothyroidism. If you are hypothyroid, it's also a good idea to take zinc (15 to 30 mg per day), vitamin E (400 IU per day), and vitamin A (10,000 IU per day), all of which are needed in the manufacture of thyroid hormone. Finally, exercise is very important if you are hypothyroid. It stimulates thyroid gland secretion and enhances cellular sensitivity to thyroid hormone.

If test results indicate you are *hyperthyroid*, your doctor will want to perform further tests to rule out problems such as Graves' disease (another type of autoimmune problem). Mild cases of hyperthyroidism may resolve on their own over time. Sometimes beta blockers such as Inderal (propranolol) are given to reduce symptoms of anxiety, rapid heart rate, and sweating. In more severe cases, treatment can involve antithyroid medications, radioactive iodine (which destroys the thyroid and thus stops the excessive production of hormones), or surgery to remove part or all of the thyroid. If your thyroid gland has to be removed, you would need to take synthetic or natural thyroid hormone indefinitely to avoid developing hypothyroidism.

Candidiasis

Candidiasis, or “yeast syndrome,” is the result of an overgrowth of a particular yeast, *Candida albicans*, in the intestinal tract, genitourinary tract, or both. Normally, candida lives in a healthy balance with bacteria in the gut, but certain conditions can lead it to multiply, first proliferating throughout the intestinal tract and then moving beyond the gut to invade tissues and organ systems throughout the body. Candidiasis is common, especially among women.

In the early stages of candidiasis, localized infections—particularly skin rashes and “yeast infections” (vaginitis)—are common. Other symptoms include

- Chronic fungal infections such as athlete’s foot, ringworm, or jock itch
- Fatigue or feeling drained
- Depression or mood swings
- Gastrointestinal problems such as bloating, cramps, chronic diarrhea, or constipation
- Chronic anxiety and tension
- Food allergies
- Poor memory
- Headaches
- Rectal itching
- Extreme sensitivity to chemicals, perfumes, or tobacco smoke
- Severe premenstrual syndrome symptoms
- Muscle or joint pain
- Cravings for sweets, bread, or alcohol

A characteristic feature of candidiasis is that the symptoms worsen after you eat sugar or drink alcohol. All forms of sugar (except for xylitol) and alcohol feed the yeast and cause it to spread. Symptoms also tend to worsen in damp, moldy climates or environments. If you have five or more of the above symptoms, you may be dealing with candidiasis. If you have two or three of these symptoms, you may want to consult with a health professional to rule out the possibility of this problem.

What Causes Candidiasis?

Factors that increase your risk of developing candidiasis include frequent past use of broad-spectrum antibiotics such as ampicillin, amoxicillin, Ceclor (cefaclon), Bactrim (sulfamethoxazole), or Septra (sulfamethoxazole and trimethoprim); the use of birth control pills for more than a year; frequent or prolonged use of steroid hormones such as cortisone, prednisone, or other corticosteroids; living in a damp, moldy environment; heavy consumption of sweets or alcohol; and having certain diseases such as diabetes, cancer, or AIDS.

Diagnosing Candidiasis

There are three ways to diagnose candidiasis. One is to use a diagnostic questionnaire such as the one developed by William Crook in his classic book *The Yeast Connection*. Alternatively, your doctor can measure antibodies to candida (IgG, IgM, and IgA) with a blood test. Elevated IgG antibody levels indicate that the candida organism has proliferated to excessively high levels in the gut. Elevated IgM antibodies indicate that the candida has ventured beyond the intestine and become systemic. High levels of IgA antibodies are indicative of mucosal involvement, such as in vaginal yeast infections. Candidiasis can also be diagnosed through a stool analysis, which may show high levels of the yeast. However, the stool test may be negative, even when other indications are present.

Recovery from Candidiasis

Recovery from chronic candidiasis can be achieved with a three-pronged program. First, for three months, eliminate from your diet foods that the candida organism feeds on. This includes all kinds of sugar except xylitol or stevia: sucrose, fructose, dextrose, maltose, galactose, dried fruits, and fruit juices. (Xylitol and stevia do not feed candida.) Alcohol, yeast, fermented foods, cheese, vinegar, and refined flour products (including bread) should also be avoided, as they feed candida too. After three months you can reintroduce these foods in small quantities. See the section on the candida diet below.

Second, it is often necessary to take an antifungal medication, such as nystatin or Nizoral (ketoconazole), which would be prescribed by your doctor for a period of several months. Note that there is some controversy among health practitioners about the use of these drugs. Medical doctors are often more inclined to use these drugs in high doses, whereas some naturopaths and alternative health practitioners use nystatin modestly or not at all. One problem is that nystatin kills candida only in the gut and does not directly affect systemic proliferation. Another is that after you use nystatin six months or longer, the yeast may mutate to other forms that are resistant to the drug. An alternative to nystatin used by some health practitioners is *caprylic acid*. Since it is absorbed through the intestine, it can have a greater effect on systemic candidiasis. In addition, many practitioners use goldenseal and grapefruit seed extract. These plants contain *berberine*, which battles candida. Some people also like to add pau d'arco tea to their treatment program because of its antibacterial and fungicidal properties. Taking a multivitamin and multimineral capsule, vitamin C, vitamin E, and zinc can also be helpful, as can increasing your intake of essential fatty acids. Discuss these options with your doctor, and remember that they should be used in conjunction with the candida diet.

Finally, candida tends to crowd out healthy intestinal bacteria, so you need to restore normal bacterial ecology in the intestine by implanting useful bacteria such as *Lactobacillus acidophilus* and *Lactobacillus bifidus*. Probiotic supplements are usually part of the treatment. Talk to your doctor about these. After one to three months on this regimen, you should be retested to see if your candida levels have returned to normal.

The Candida Diet

What follows is a series of dietary principles that help in the recovery from candidiasis. You may need to modify them to fit your particular needs or lifestyle, but in general they provide a good rule of thumb.

Foods that should be *avoided* include

- Milk and other dairy products
- Sweets and all forms of sugar, except xylitol or stevia
- Alcohol
- Fruit and fruit juices (with the possible exception of grapefruit)
- Honey, molasses, artificial sweeteners
- Chocolate
- Foods containing yeast, including all forms of bread made with yeast
- Aged cheese
- Peanut butter
- Smoked or processed nuts
- Vinegar
- Mushrooms
- Carrot juice
- Peanuts
- Starchy foods, such as pastas, chips, or potatoes, in large quantities
- Leftovers (except if they've been frozen)

The following are foods that you should *include* in your diet:

- Chicken or fish
- Raw or cooked vegetables
- Grains in moderation (whole-grain rice is preferable to wheat)
- Eggs
- Beans
- Lemon- or oil-based salad dressings (without vinegar)
- Raw nuts
- Yeast-free breads (available in most health food stores)
- Unaged cheeses (such as Monterey Jack)

- Garlic
- Enteric-coated volatile oil preparations (for example, oregano oil)

Some people call the candida diet the “can’t eat it” diet because it seems so restrictive. If you’re used to eating large quantities of sweets, you may find yourself calling it this in the week or so after you begin. After a few weeks, however, you’ll find that a diet free of sugar can still be enjoyable, and your cravings will begin to dissipate.

If you are like many people who successfully recover from candidiasis, you are likely to find that you have increased energy, less depression, fewer gastrointestinal problems, and more overall vitality. These benefits will also make the dietary trade-offs easier to bear.

Body Toxicity

Excessive body toxicity may not directly increase anxiety, but it adds to the physical stress level of your body and thus makes the impact of anxiety symptoms greater. Body toxicity often aggravates allergies and chemical sensitivities, which in turn can aggravate anxiety. Factors that can cause toxins to build up in your body include consumption of chemicals, additives, and pesticides in food; exposure to environmental pollutants in the air and water; exposure to substances used indoors, such as household cleaners, deodorants, hairsprays, cosmetics, and even carpeting (which may outgas toxic chemicals); use of either prescription or recreational drugs; and buildup of your own metabolic waste products, which are produced in abundance when you’re under stress.

Those who have reached a high level of cumulative toxicity may experience any of the following symptoms frequently:

- Fatigue and low energy
- Joint or muscle pain
- Headaches
- “Brain fog” or mental confusion
- Irritability and moodiness
- Insomnia
- Sensitivity to chemicals in the environment
- Depression
- Heavily coated tongue or abnormal body odor
- Excess mucus (coughing and wheezing)
- Allergies
- Sinus or respiratory problems

The liver and colon are believed to be the organs most affected by toxic buildup. Next to the brain and heart, the liver is probably the most important organ in your body. It is the metabolic “factory” in which hundreds of functions necessary for life take place. Some of the more important ones include

- Filtration of the blood
- Secretion of bile, which is necessary to digest fats
- Extraction and storage of vitamins (such as vitamins A, D, and E) from nutrients in your bloodstream
- Synthesis of fatty acids from amino acids and sugar
- Oxidation of fat to produce energy
- Storage of sugar in the form of *glycogen*, which can be used when the body is depleted of blood sugar or glucose
- Detoxification of the by-products of digestion (such as ammonia from protein digestion)
- Detoxification of metabolic waste products as well as all chemicals and foreign substances to which you are exposed

Exposure to toxins, some drugs, poor diet, and overeating can cause accumulations of fatty deposits on the liver and interfere with its functioning. Regular consumption of large quantities of alcohol can damage the liver and eventually lead to cirrhosis. Chronic overeating forces the liver to work harder and may weaken it over time, especially if you are eating foods laden with preservatives and additives. Eating a lot of fried or processed foods containing trans fats can also be hard on the liver.

Detoxifying Your Lifestyle

Some of the most important measures you can take to decrease the level of toxicity in your body are everyday diet and lifestyle changes.

Avoid foods containing preservatives and additives. Try to eat unprocessed, whole foods as much as possible. Be sure to include plenty of fresh fruits and vegetables, preferably five servings a day.

Reduce or eliminate caffeine, nicotine, sugar, and alcohol. Aside from other health problems these substances can contribute to, they leave toxic waste products in your body.

Minimize your use of drugs. Take only necessary medications prescribed by your physician and avoid recreational drug use.

Reduce animal proteins (especially red meat) and increase vegetable sources of protein (tofu, tempeh, and beans). When metabolized, animal proteins can produce toxic by-products, especially if not properly digested.

Drink purified or filtered water. Eight eight-ounce glasses a day will assist your kidneys in their natural process of elimination. Your kidneys are critically involved in ridding your body of various toxic waste products.

Include ample fiber in your diet. Make sure your diet contains high-fiber foods such as whole-grain cereals, all kinds of bran, most fresh fruit, fresh raw vegetables, nuts and seeds, and legumes such as beans, lentils, or peas. You may also want to take a fiber supplement recommended by your health practitioner.

Move away from acid-forming, congestive foods toward more alkaline-forming, detoxifying foods. This means reducing your consumption of red meat, sweets, fried foods, fatty foods, milk, cheese, eggs, refined flour, and salty foods, as well as any foods you know you're allergic to, such as wheat or dairy.

Increase your consumption of fresh vegetables, fruits, whole grains, beans, nuts, and seeds, and increase the proportion of raw to cooked foods that you eat. It's good to have some raw, fresh vegetables or fruit at each meal. Be aware that the degree to which you move from acid- to alkaline-forming foods should be tailored to your individual constitution and needs. If you've been highly toxic in your eating habits, make the change gradually. You can have one day a week in which you lighten your diet.

Get regular, vigorous exercise. This helps to clear your body of toxins through sweating, and it aids the digestive, renal, and lymphatic systems.

Discuss the use of antioxidant supplements with your doctor. These supplements include vitamin C, vitamin E, beta-carotene, selenium, zinc, lipoic acid, coenzyme Q₁₀, and the amino acids cysteine and methionine.

Investigate various herbs that can help detoxify your body. Consult a naturally oriented physician or a qualified nutritionist or herbologist before using any herbs or supplements. Some herbs believed to aid detoxification are milk thistle, dandelion root, burdock, cayenne, ginger, licorice, echinacea, and goldenseal. A high-potency multivitamin and mineral supplement can help combat heavy metal poisoning and help the liver detoxify.

Support colon detoxification. Consider a natural laxative, which may contain bentonite, senna, or cascara sagrada. Psyllium seed husks, available in most health food stores, also cleanse mucus along the small intestine and pull toxins from both the small and large intestines. Discuss these options with your doctor or health practitioner. Remember that even natural laxatives can be habit-forming, so use them sparingly. Some people report benefits from receiving *colonics* from a certified colon therapist. In a colonic, your colon is irrigated and cleansed with water using a special machine.

Support liver detoxification. Eat foods that protect the liver and improve its function. These include vegetables in the *brassica* family, such as cabbage, broccoli, and brussels sprouts, and high-sulfur foods like garlic, onions, eggs, and legumes. Herbs such as dandelion root, burdock, and milk thistle are often used to help detoxify the liver.

Premenstrual Syndrome

Premenstrual syndrome (PMS) involves a constellation of disruptive physical and psychological symptoms that many women experience in the days or week prior to menstruation. Common physical symptoms include water retention, breast soreness, bloating, acne, headaches, increased hunger, and a craving for sweets. Psychological symptoms can include depression, irritability, anxiety and tension, mood swings, distractibility and forgetfulness, fatigue, and even a feeling of “going crazy.” Up to half of all women experience a premenstrual increase in depression, anxiety, or irritability in addition to some of the above physical symptoms. Panic reactions can also be a symptom of PMS. The question to ask is whether your panic attacks typically occur—or increase in frequency and intensity—during the days before menstruation. If so, treating your PMS may help to reduce or eliminate panic attacks.

Most medical theories relate PMS to an imbalance in the amount of estrogen and progesterone in a woman’s body, particularly during the second half of the menstrual cycle. During this fourteen-day period, women with PMS tend to experience elevated estrogen levels, while progesterone is reduced. Insufficient levels of progesterone relative to the amount of estrogen tend to promote water retention, reduced levels of serotonin in the brain, lower endorphin levels, impaired vitamin B₆ activity, and alterations in other hormone levels.

Other theories about PMS suggest that menstruation allows the body to throw off excess toxins accumulated through improper diet, as well as from exposure to environmental contaminants and pollutants. Thus the symptoms experienced just prior to menstruation reflect the body’s reaction to excess toxicity. The implication is that eating a healthy diet and reducing exposure to other toxins should help lessen PMS symptoms.

Both theories are probably valid. PMS symptoms can definitely be helped by eliminating foods that tend to aggravate them. Symptoms can also be alleviated in many cases with the aid of supplemental vitamins, minerals, and herbs, particularly those that raise the body’s level of progesterone. Recommendations for treating PMS follow. Before undertaking any of them, consult a physician, nutritionist, or qualified practitioner of Chinese medicine who is well versed in treating this problem.

Dietary Help for PMS

Avoid or minimize the following foods:

- Foods high in sugar as well as large amounts of simple carbohydrates (bread, chips, or pasta). It’s especially important to avoid the impulse to binge on sweets and carbohydrate foods, including chocolate, for one week before the expected onset of symptoms.
- Salty foods and table salt. This will help reduce bloating and water retention.
- High-fat foods. Reducing calories consumed as fat will help to reduce estrogen levels.
- Caffeinated drinks, including coffee, tea, and colas. Caffeine is linked to breast tenderness as well as psychological symptoms such as anxiety, depression, and irritability.

- Alcohol.

Eat plenty of fresh fruits and vegetables, whole-grain breads and cereals, and legumes, nuts, free-range poultry, and fish. Consume soy foods, such as tofu or soy milk, in moderation.

Vitamin and Mineral Supplements for PMS

What follows is a list of vitamin and mineral supplements that can help relieve PMS symptoms.

Vitamin B₆. The recommended dose is 200 mg daily during the week before menstruation, but you should avoid taking this much vitamin B₆ for more than one week out of every month.

Beta-carotene (provitamin A). During the entire month, take 25,000 IU per day.

A high-potency B-complex in conjunction with calcium and magnesium (1000 mg calcium to 500 mg magnesium). Supplementing with calcium and magnesium may help reduce menstrual cramps.

Zinc. During the entire month, take 15 to 20 mg per day.

Essential fatty acids. A good source of essential fatty acids can be found in fish oils, which contain both EPA and DHA omega-3 fatty acids. You can take 500 to 2000 mg per day of combined EPA/DHA in the form of fish oil capsules. An alternative is flaxseed oil, which provides a plant-based form of omega-3 fatty acids. However, the conversion to EPA and DHA is nowhere near as efficient as occurs with fish oils. Borage oil, black currant seed oil, or evening primrose oil are sources of GLA, a special form of omega-6 fatty acid that is essential for humans. You can take 300 to 900 mg of any one of these daily.

Herbs for PMS

The following herbs can help reduce the physical and psychological symptoms of PMS:

- Dong quai (*Angelica sinensis*). This herb can boost energy and stabilize your mood during PMS. It will also help relieve menstrual cramps. It can be taken in capsule form (follow dosage recommendations given on the label), in a tincture, in a liquid extract, or as a tea.
- Licorice root, taken three times per day in a powdered root form, as a tea, or as a liquid extract. It will help stabilize hormone levels and can also relieve cramps.
- Rosemary, cramp bark, and kava have been known to reduce cramps.
- Kombucha tea. This provides energy and stimulates the immune system. It has been reported to be helpful for some women.

Regular Exercise

A program of regular physical exercise will liven up your metabolism, help your mood, and reduce stress levels. If you can't do vigorous exercise, try walking at least one mile each day. See chapter 5.

Prescription Treatments for PMS

Below is a list of treatments prescribed by doctors to relieve PMS.

Oral contraceptives. These help to maintain proper estrogen-to-progesterone balance. Be aware that the effectiveness of oral contraceptives in preventing pregnancy can be reduced by some antibiotics and perhaps by Saint-John's-wort. Oral contraceptives have a number of short- and long-term side effects that you may wish to avoid.

Diuretics. These reduce water retention and breast swelling.

Natural progesterone. Natural progesterone creams are used effectively by many women to increase levels of progesterone prior to menstruation. These creams are available over the counter, but it's best if you consult with a health professional experienced in the use of these creams before you try one on your own. It's also important to monitor your progesterone levels after using progesterone cream for a month to be sure your progesterone levels aren't elevated and to determine the proper dose and frequency of use of the cream. For further information on PMS and on the use of natural progesterone to treat it, go to womenshealth.com.

For further information on PMS, see the books *Taking Back the Month* and *PMS: Solving the Puzzle* in the reading list at the end of the chapter.

Menopause

Menopause is medically defined as the cessation of menstrual periods for at least six months. On the average, it begins when a woman reaches the age of fifty to fifty-one, though it can start as early as forty or as late as fifty-five. Common symptoms that accompany menopause include

- Hot flashes
- Headaches
- Vaginal dryness
- Bladder or urinary tract infections
- Cold hands and feet
- Forgetfulness and the inability to concentrate
- Reduced libido

- Anxiety and/or depression

The main underlying cause of menopause is reduced production of the two main female hormones, estrogen and progesterone. Interestingly, the undesirable symptoms of menopause appear only in countries where aging of women is devalued, particularly in the United States and Western Europe. In many traditional cultures, where youthfulness and sex appeal are not worshipped and women receive increasing respect with aging, menopausal symptoms are mostly nonexistent. This is a clear example of the effect of culture on symptomatology, even though the underlying physiological basis of menopause is universal. In the United States, 60 to 85 percent of menopausal women experience hot flashes. Among Mayan Indian women, no one does.

Back in the 1950s and 1960s, the American medical establishment decided menopause is a "disease" based on estrogen deficiency. In his 1965 book, *Feminine Forever*, Robert A. Wilson declared that menopause renders women sexless "caricatures of their former selves—the equivalent of a eunuch." This view has remained the dominant outlook among Western doctors to this day. The medical establishment's answer to the problem of menopause is hormone replacement therapy.

Estrogen replacement therapy, as a treatment for menopause, began back in the 1950s with the administration of synthetic estrogen to women. After about twenty years, doctors finally realized that estrogen replacement is associated with up to thirteen times increased risk of developing endometrial cancer. Thus, in the 1970s, it became fashionable to add synthetic progesterone (progestin) to the estrogen, and so the treatment came to be called "hormone" replacement therapy. HRT is an effective treatment. It reduces hot flashes and other symptoms of menopause and has the added advantage of reducing women's risk of developing osteoporosis (loss of bone density that comes with age). After another twenty years, however, it became apparent that HRT significantly increases the risk of breast cancer, especially in women who are at risk for developing it. Worse yet, a more recent study (Women's Health Initiative 2002) found that the risk of heart disease and stroke increased with HRT, enough so that investigators halted the study and told all subjects to stop taking Premarin and Provera (brand names of synthetic estrogen and progesterone) immediately. Additional side effects of synthetic estrogen and progesterone can include nausea, breast tenderness, depression, liver disorder, fluid retention, and blood sugar disturbances. Because of all of these problems, many doctors currently do not recommend HRT except for women with severe risk of osteoporosis.

As with PMS, menopause symptoms can be helped effectively through a combination of diet, exercise, supplements (including *natural* hormone replacement), and herbs.

You may find all of the following to be helpful:

Natural Hormones

You can obtain natural progesterone in the form of creams, drops, or pills from health professionals who are conscious about natural alternatives or from some health food stores. As with PMS, natural progesterone appears to help many women with menopause. Natural forms of estrogen, including estriol and TriEst, are available by prescription and may be

associated with a slightly increased risk of breast cancer, though not to the same extent as with synthetic estrogen. When using natural hormone replacement, it's a good idea to have your doctor measure your estrogen and progesterone levels every three to six months to assure that your levels do not get too high. Many women use natural hormones in a "two weeks on, two weeks off" cycle to assure hormone levels remain in normal range.

Herbs

Many women find *black cohosh* to be an effective herb in reducing symptoms of menopause. Used by American Indians for centuries, black cohosh is effective in reducing hot flashes and other menopausal symptoms such as depression, headaches, and vaginal dryness. If you use black cohosh, it's recommended you purchase a product standardized to contain at least 1 mg of *triterpenes*, the active ingredient. *Dong quai* (angelica) also can be very helpful in relieving hot flashes and other symptoms of menopause. Licorice and chasteberry are additionally helpful in stabilizing hormone levels, although it's not clear that any herb can actually raise deficient levels of estrogen and progesterone up to normal.

Supplements

You may find the following supplements to be helpful in alleviating menopause symptoms:

- Vitamin E—400 to 800 IU per day
- Hesperidin (a bioflavonoid)—900 mg per day combined with 2000 mg vitamin C per day
- Gamma-oryzanol (ferulic acid)—300 mg per day

Diet

Along with the healthy diet recommended in chapter 15, it's good to eat foods that are high in phytoestrogens, which bind to estrogen receptors just like estrogen does in your body. Such foods include soy products, flaxseed oil, apples, whole grains, celery, parsley, and alfalfa. In general, vegetables and plant-based foods tend to be high in phytoestrogens relative to animal-based foods, which may explain why cultures whose diets are predominantly plant based (including soy) tend to have low incidence of menopausal symptoms.

Exercise

Regular physical exercise, so helpful in reducing symptoms of anxiety and depression, is also helpful in reducing the severity and frequency of hot flashes.

See the books by Christiane Northrup and John Lee in the references at the end of the chapter for further information on menopause.

Seasonal Affective Disorder

When the seasons change from spring and summer to fall and winter, do you develop the following symptoms? Check off the symptoms that are familiar.

- Lower energy than usual
- Awakening feeling tired, although you sleep more
- Mood changes such as feeling more anxious, irritable, sad, or depressed
- Diminished productivity or creativity
- Feeling that you have little control over your appetite or weight
- More memory and concentration problems
- Lowered interest in socializing
- Lessened ability to cope with stress
- Less enthusiasm about the future or reduced enjoyment in your life

If you checked off two or more of these, you may be one of the many people affected by *seasonal affective disorder* (SAD) or a milder form of this disorder known as *subsyndromal SAD*. Seasonal affective disorder is a cyclical depression that occurs during the winter months, typically between November and March. It's brought on by insufficient exposure to light. As the days get shorter and the angle of the sun changes during the fall, the symptoms of SAD begin to appear. An estimated 20 percent of the American adult population, or 36 million people, are affected by SAD and subsyndromal SAD. The farther from the equator you happen to live, the more susceptible you are.

Anxiety and SAD

Many individuals dealing with anxiety disorders experience an aggravation of their condition during the late fall and winter. Panic attacks may occur more often, and generalized anxiety may increase along with depression. It's not surprising that this is so, because the same systems of the brain that contribute to the neurobiological basis of depression, the *noradrenergic system* and the *serotonin system*, are also implicated in anxiety disorders, particularly panic disorder, generalized anxiety disorder, and obsessive-compulsive disorder. Biochemical imbalances in these systems tipped one way may cause depression; tipped the other way, they may aggravate anxiety disorders. And for many individuals, unfortunately, problems with anxiety and depression coexist, both becoming aggravated during the winter months.

Whether they manifest as depression or anxiety, the symptoms of SAD are caused by decreased availability of light. SAD can be aggravated not only by reduced light outside

during the winter months but by spending too much time in indoor environments that have low levels of light, whether at home or work. SAD symptoms have been reported even in the summer among people who work in environments without windows. They can also occur in sensitive individuals at any time of year after a succession of cloudy days.

It used to be thought that SAD was caused by insufficient suppression of a hormone in the brain called *melatonin*. Melatonin is secreted by the pineal gland in the brain at night after several hours of darkness. It is one of the mechanisms by which your brain lets you know it is time to go to sleep. With light in the morning, melatonin secretion is suppressed, and you know that it's time to wake up. Although popular for many years, the hypothesis that SAD is caused by insufficient melatonin suppression has not been borne out by systematic research. Results of studies have been mixed, and researchers have looked in other directions to find clues to the cause of SAD. The hypothesis that is currently receiving the most attention is that light insufficiency can cause a reduction in levels of serotonin in the brain. Norman Rosenthal, one of the leading researchers in this field, writes in *Winter Blues* that when susceptible individuals are exposed to too little environmental light—such as during winter—they produce too little serotonin. Rosenthal and others believe that these low levels of serotonin are responsible for the symptoms of SAD.

Serotonin deficiencies are frequently associated with symptoms of depression, anxiety, or both; that is why drugs that block the reuptake of serotonin in the brain—drugs such as Prozac (fluoxetine), Zoloft (sertraline), or Paxil (paroxetine)—often alleviate depression and many of the anxiety disorders. But why should reduced light affect serotonin? And why only in certain individuals? The answer to the first question is still being researched. In answer to the second question, there is some evidence that people who are susceptible to SAD may have difficulty receiving or processing light at a neurological level.

During the winter, people with SAD tend to crave sweets and carbohydrates. Eating large amounts of carbohydrates usually increases the amount of *tryptophan* (an essential amino acid derived naturally from protein foods) that gets into the brain. Once in the brain, tryptophan becomes serotonin, the neurotransmitter that is so critical to psychological well-being. Eating sweets and carbohydrates gives tryptophan a competitive edge over the body's other amino acids in getting into the brain. So, if you tend to be drawn to sweets and starches in the wintertime, it may be your body's attempt to raise your levels of serotonin.

Light Therapy for SAD

The treatment that most effectively reduces the symptoms of SAD is *light therapy*. In principle, it would be possible to reduce SAD in the winter by spending prolonged periods of time outdoors every day. Unless you're a ski instructor or a snowplow operator, however, this is pretty impractical. Light therapy involves the use of one or more specific devices indoors to increase your exposure to bright light. Sometimes light-sensitive individuals can experience an improvement simply by increasing normal room light or installing brighter lightbulbs. However, most SAD sufferers seem to require exposure to higher light levels—at least four times brighter than normal household and office light.

Light boxes are commonly used to alleviate symptoms of SAD. A light box is a set of fluorescent bulbs in a box, with a diffusing plastic screen. Most of these devices deliver between 2,500 and 10,000 lux of light energy—considerably above the usual range of indoor lighting (approximately 200 to 1,000 lux). A typical light therapy session involves sitting within two or three feet of a light box for a period of half an hour to two hours in the morning. It's neither necessary nor advisable to look directly at the light; rather, you can use the time to read, write, eat, sew, or do whatever you need to do. The amount of daily light exposure needed to achieve a reduction in symptoms varies from one person to another. Experiment with varying the duration of exposure according to your own needs.

Other devices used in light therapy are *dawn simulators* and *light visors*. The dawn simulator creates an artificial dawn in your bedroom by having a light come on very dimly at, say, six in the morning and gradually brightening until seven o'clock. The light visor is a lightweight source of light that you can wear on your head. It allows you to have more mobility than with the light box.

Light therapy is very effective when administered properly, as Norman Rosenthal documents. In experimental trials, it has been shown to help 75 to 80 percent of SAD sufferers within a week if used regularly. Before undertaking light therapy on your own, you should consult with a physician or another health professional who is knowledgeable about this therapy and its application. Although light therapy devices are available without a prescription, you can save yourself time—as well as such possible side effects as headache, eyestrain, irritability, or insomnia—by getting assistance in using them properly.

Coping with SAD

The National Organization for Seasonal Affective Disorder (NOSAD) offers the following suggestions:

- Discuss your symptoms with your physician. You may be referred to a psychiatrist who may diagnose seasonal affective disorder or subsyndromal SAD and prescribe special light treatments to help relieve your symptoms. Certain SSRI antidepressants also can be helpful in treating some people with seasonal depression.
- If you have a medical diagnosis of SAD or subsyndromal SAD and your doctor prescribes light treatment, do not skip or shorten treatment because you're feeling better; you may relapse. Work with your doctor in adjusting the length of time, time of day, distance, and intensity of light for your own individualized treatment.
- Get as much light as possible and avoid dark environments during daylight hours in winter.
- Reduce mild winter depressive symptoms by exercising daily, preferably outdoors, to take advantage of natural light.
- If you are unable to exercise outdoors in the winter due to extreme cold, exercise inside. If possible, try sitting in sunlight from a south-facing window for short but frequent periods during the day.

- Rearrange work spaces at home, and work near a window, or set up bright lights in your work area.
- Stay on a regular sleep–wake schedule. People with SAD report being more alert and less fatigued when they get up and go to sleep at preset hours than when they vary their schedules.
- Be aware of cold outside temperatures and dress to conserve energy and warmth. Many people affected by seasonal changes report sensitivity to extreme temperatures.
- Arrange family outings and social occasions for daytime and early evening in winter. Avoid staying up late, which disrupts your sleep schedule and biological clock.
- Conserve energy by managing time wisely and avoiding or minimizing unnecessary stress.
- Try putting lights on a timer in your bedroom or use a dawn simulator set to switch on a half hour or more before you get up. Some people with SAD report that this light technique has an antidepressant effect and helps them awaken more easily.
- When possible, postpone making major life changes until spring or summer.
- Share experiences regarding SAD as a way to get information, understanding, validation, and support.
- If you are able, arrange a vacation during the winter to a warm, sunny climate.

During the winter months you may find it helpful to boost your serotonin levels either naturally or with prescription medication. For the natural approach, try taking 5-hydroxytryptophan (5-HT). You can start with 50 mg per day and go as high as 300 mg per day (see chapter 15 for more information on tryptophan). If you feel you're not getting help from 5-HT, consult with your doctor about trying a selective serotonin reuptake inhibitor (SSRI) medication such as Zoloft, Celexa, Luvox, or Paxil (see chapter 17 for more information on SSRIs).

Insomnia

Insomnia affects about 30 percent of adults and is the most common condition that can aggravate anxiety disorders. Anxiety problems of all kinds are generally worse after a poor night's sleep.

Most of us need seven to eight hours of sleep per night, at least six of which are uninterrupted. It is during the early hours of the night that we get the deep sleep needed to replenish our body systems for another day, while during the latter part of the night we get proportionately more REM (rapid eye movement) or dream sleep, which is necessary for the brain to integrate and work through "unfinished business" from the previous day. Sleep actually goes through a series of stages: four stages of progressively deeper sleep, followed by one stage of REM sleep. This five-stage cycle repeats itself three or four times during the night.

If you can't sleep, the problem may be either with *getting* to sleep, in which case it takes you more than twenty minutes to fall asleep, or in *staying* asleep, where you may fall asleep

easily but awaken hours before dawn and not be able to get back to sleep. Typically anxiety is more associated with the first type of problem, while depression is associated with “early morning awakening.” However, it’s not uncommon to have both types of problems if you’re anxious or depressed.

Ten Common Problems

Why is it that you are unable to sleep? Insomnia is complex and can have a very large variety of causes. In most cases there are, in fact, several causes operating at once. What follows are ten of the more common origins of sleeplessness.

1. *Too much caffeine during the day.* Excessive consumption of coffee, tea, cola beverages, and other foods or medicines containing caffeine is a very common culprit behind insomnia. Everyone, of course, is different. You may be so highly sensitive to caffeine that even one cup of coffee in the morning can keep you awake the following night. At the opposite extreme, you may be able to have coffee at bedtime. As a general rule, it’s best to avoid caffeine after noon if you’re having problems with sleep, and you may even want to consider cutting down your consumption in the morning. (See the *Caffeine Chart* in chapter 15 to determine how much caffeine you consume in a day.)
2. *Insufficient exercise.* When clients ask me what they can do to improve their sleep, the first thing I suggest is that they do an aerobic workout during the day. Vigorous exercise helps to release muscle tension and burn off excess stress hormones (such as adrenaline and thyroxine), both of which can interfere with sleep. It can also release pent-up frustration that can keep your mind racing at night. If you’re not working out during the day, you may be surprised to find how much such a workout can help your sleep and help you with your anxiety, as well (see chapter 5). The one precaution is to avoid vigorous exercise within three hours of bedtime, as it can be overstimulating and interfere with getting to sleep.
3. *Excess stimulation in the evening.* Anything that overstimulates you after eight in the evening can keep you from getting to sleep (or staying asleep) later that night. This could include a dramatic or violent TV show, surfing the Web, doing difficult tasks (including difficult reading), a stimulating phone conversation, or a domestic quarrel. You can also keep yourself awake by exposing yourself to bright light (such as a computer screen) late at night. It’s best to turn yourself down during the last two or three hours of the day with soothing TV programs, reading, or conversation. Better yet, try a warm bath or shower before bedtime to unwind.
4. *Excess worry about sleep.* Sleep is an automatic process that requires letting go. The more you try to pursue it, the more it tends to get away from you. In general, worrying about sleep will prevent you from falling asleep, whether at bedtime or at four in the morning. Telling yourself to stop worrying probably won’t be very helpful, so the best solution is some kind of diversion tactic. The various relaxation

techniques described in chapter 4 can all be helpful toward that end. Progressive muscle relaxation is helpful if your muscles feel tight, while mantra meditation or a guided visualization can be useful for a racing, anxious mind. For some people, just listening to soothing music or the drone of the TV can put them to sleep, while for others a boring novel does the trick. If you find yourself worrying, experiment with different diversionary tactics to redirect your mind away from it.

A famous, time-honored sleep principle is that if you're lying awake in bed for very long (more than thirty minutes to an hour), don't stay there. Get up and do a listening relaxation, meditation, or light reading in an easy chair or on the couch until you feel genuinely drowsy. Then get back in bed. That way your bed will become associated only with sleep—instead of with wakefulness.

5. *Serotonin and/or melatonin deficiency.* Over time, stress can deplete your brain's stores of the neurotransmitter serotonin and the hormone melatonin. Both are needed for sleep. Serotonin is needed to activate the parts of the brain that are responsible for sleep onset, and it's also needed to make melatonin. Melatonin is made from serotonin by your pineal gland, usually late in the day with the onset of darkness. It's the chemical your brain uses to signal to itself that it's time to sleep. In short, without melatonin, it's hard to get to sleep, and without serotonin, it's hard to make melatonin.

It's easy to increase your supplies of serotonin or melatonin with natural supplements available at your health food store or drugstore. Tryptophan, in the form of 5-hydroxytryptophan (50 to 150 mg) or L-tryptophan (500 to 1500 mg), is an amino acid that naturally converts to serotonin in your brain. Try 5-HT first at the suggested dose at bedtime, and if you aren't satisfied with the results, try L-tryptophan, which is available at some health food stores and over the Internet. The effect of tryptophan can be enhanced by taking it with a carbohydrate snack (such as orange juice or crackers) along with 100 mg vitamin B₆ and 100 mg vitamin B₃. The hormone melatonin is available in health food stores in tablets ranging from 0.5 to 3 mg. Experiment with the dose to determine what is best for you, since people vary a lot in what constitutes an optimal dose. If doses of 2 to 3 mg give you side effects, then lower the dose down to 0.5 or 1 mg. Keep in mind that it's okay to take both tryptophan and melatonin at bedtime to enhance your sleep.

If you find that natural supplements are ineffective in helping you to sleep, you may want to consult your doctor about prescription medications that boost serotonin. Any of the selective serotonin reuptake inhibitors (SSRIs such as Celexa or Zoloft)—medications commonly used to treat anxiety disorders—can also be helpful for insomnia. (See chapter 17 for a more detailed description of SSRIs.) Particularly if you're dealing with protracted depression along with insomnia, you may benefit from trying an SSRI. Generally when you take SSRIs, you need to take them on a daily basis for a period of six months to one year (or longer). If you are looking for a medication that can help you sleep without having the addictive problems associated with prescription sedatives (such as Restoril or Ambien), you may want to try trazodone, 25 to 100 mg, at bedtime.

6. *Excess levels of stress hormones.* Your adrenal glands manufacture two types of stress hormones. Adrenaline and noradrenaline give you a sudden burst of energy necessary to respond to an emergency with a quick reaction of fight or flight. As explained in chapter 2, these hormones are implicated in panic attacks. The other type of stress hormones includes the steroid hormones, of which cortisol is perhaps the most important. You need cortisol to help you wake up and address the various challenges life brings you throughout the day. The problem is that under high stress, your cortisol can stay too high day and night, with the consequence that you're too activated round the clock to sleep easily. If your cortisol is too high at bedtime, you may have difficulty falling asleep; if it's too high early in the morning, you may wake up prematurely.

With the assistance of your doctor, you can have your cortisol levels measured at various intervals throughout the day to assess whether elevated cortisol is interfering with your sleep. If so, you can try a cortisol-regulating supplement called "phosphorylated serine" (not the same as phosphatidyl serine), which can be obtained under the brand name Seriphos. In consultation with your doctor, take Seriphos at dinnertime for about one month to gradually turn down your cortisol levels. Beyond this, it's important to utilize all the stress reduction measures described earlier in this chapter in the section on adrenal exhaustion.

A common reason for high levels of cortisol during the night is nocturnal hypoglycemia. When there is a drop in blood glucose levels during the night, you release hormones that regulate glucose levels, such as adrenaline, glucagon, cortisol, and growth hormone. If too much of these hormones is released, they may wake you up. By following the recommendations listed in chapter 15 for hypoglycemia, you may help your sleep. If you wake up in the early morning hours feeling hungry, or feeling that your blood sugar level is down, try having a protein-carbohydrate snack, such as bread and nut butter or cheese and crackers.

7. *Irregular bedtimes.* A very common problem for people who suffer insomnia is going to bed and getting up at irregular times. The body sleeps better when it has a routine, going to bed and getting up at approximately the same time every day. If you sleep in too late, you may find it hard to get to sleep the following night. That's why many people have difficulty sleeping Sunday night before Monday, having stayed up late on the two weekend nights. The extreme case of sleep disruption is working different shifts back to back. Unless you must, it's best to avoid jobs that require you to continually change your shift. Over time, you will lose a lot of sleep and compromise your health.

The body has a sleep-wakefulness cycle, called the *circadian* cycle, which it goes through every day—ideally about sixteen to seventeen hours out of bed and seven to eight in bed. This cycle will function much more smoothly, ensuring better sleep, if you retire and get up at the same times every day.

8. *Inadequate sleep environment.* There may be problems with your sleep environment that subtly undermine your sleep without your realizing it. A common problem

is a mattress that is either too soft or too firm. If at all possible, invest in a quality mattress that feels truly comfortable to you. The same applies for pillows (you want something more comfortable than what you'd find in the average motel). Room temperature is also an important variable; many people have problems sleeping if the temperature of their room is over 80 degrees. If you don't have air conditioning, use a fan to cool your room. The optimal temperature for sleep is about 70 degrees. Noise and light can also be problems. If you can't escape noise, get a fan or "white noise" machine to help mask it. In the case of excess light, dark curtains or eye shades will often help.

9. *Noisy partners.* One critical part of your sleep environment is your bed partner, if you have one. Loud snoring is a very common disrupter of sleep that affects millions of people who simply lie there and put up with it. There are many solutions to snoring, including sprays and nose guards that you can get at your local drugstore. On the Internet, you'll find hundreds of devices that can help snoring. Or you may want to go to an otolaryngologist who specializes in the treatment of snoring. For more severe cases, laser surgery or surgical techniques using high-frequency radio waves have been used effectively. Snoring is not something you have to live with. For more information, see the books *No More Snoring* and *Snoring from A to ZZzz* listed at the end of the chapter.
10. *Sleeping pills.* Sleeping pills include benzodiazepine tranquilizers and sedatives, such as Xanax, Ativan, Klonopin, Valium, Librium, Restoril and Dalmane, as well as nonbenzodiazepine sedatives, such as Ambien, Lunesta, and Sonata. Millions of people use sleeping pills, and they can be a lifesaver on certain occasions, such as night flights, or when negotiating highly stressful times. The problem comes when they are used on a long-term regular basis. They all have three major problems. One is that they eventually lose their effectiveness when used nightly. If you take them every night, you'll find that sooner or later they don't work very well. Also, even though they put you to sleep, they interfere with the quality of your sleep by reducing the amount of time you spend in deeper stages of sleep (or increasing your time in shallower sleep stages). Finally, they are all highly addictive unless used on only an occasional basis. Whether Xanax, Klonopin, Ambien, or Lunesta, if you take a prescription sedative for more than a few weeks, you're likely to become hooked on it. You may find you are unable to sleep without it. Eventually you may need to go through a difficult process of weaning yourself off the medication.

So these are some of the more common problems that can interfere with sleep. Others, beyond the scope of this section, include specific sleep disorders such as sleep apnea and restless leg syndrome, or specific health conditions, such as asthma and allergies, acid reflux, or chronic pain. For an in-depth discussion of sleep, sleep problems, and measures for improving sleep, see the books *No More Sleepless Nights* by Peter Hauri, or *The Promise of Sleep* by William Dement.

General Guidelines for a Good Night's Sleep

Sleep is as integral to physical and mental well-being as proper nutrition and regular exercise. The guidelines below are designed to help you maintain a healthy sleep routine.

Do:

- Exercise during the day. Twenty minutes or more of aerobic exercise midday or in the late afternoon before dinner is optimal. At minimum, forty-five minutes to an hour of brisk walking daily will suffice. Many people find a short walk (twenty to thirty minutes) before bedtime to be helpful.
- Go to bed and get up at regular times. Even if you're tired in the morning, make an effort to stick to your scheduled wake-up time, and don't vary your nightly bedtime. The next day, you can resume whatever you're working on or doing. Your body prefers a regular cycle of sleep and wakefulness.
- Turn yourself down during the last hour or two of the day. Avoid vigorous physical or mental activity, emotional upsets, and so on.
- Try a hot shower or bath before bedtime.
- Develop a sleep ritual before bedtime. This is some activity you do nightly before turning in.
- Reduce noise. Use earplugs or a noise-masking machine, like a fan, if necessary.
- Block out excess light.
- Keep your room temperature between 65 and 70 degrees. Too warm or cold a room tends to interfere with sleep. Use fans for a hot room if air conditioning is unavailable. Your room should be ventilated, not stuffy.
- Purchase a quality mattress. Try varying the firmness of your mattress. Invest in a new one or insert a board underneath one that sags or is too soft. For a mattress that is too hard, place an egg-crate foam pad between the mattress surface and the mattress cover.
- Pillows should not be too high or too puffy. Feather pillows, which compress, are best.
- Have separate beds if your partner snores, kicks, or tosses and turns. Discuss this with him or her and decide on a mutually acceptable distance.
- Have physically and emotionally satisfying sex. This often aids sleep.
- See a psychotherapist if necessary. Anxiety and depressive disorders commonly produce insomnia. Talking to a competent psychotherapist can help. Getting more emotional support and expressing your feelings to someone you trust often helps sleep.

Don't:

- Try to force yourself to sleep. If you're unable to fall asleep after twenty to thirty minutes in bed, leave your bed, engage in some relaxing activity (such as watching TV, sitting in a chair and listening to a relaxation recording, meditating, or having a cup of herbal tea), and return to bed only when you're sleepy. The same applies for waking up in the middle of the night and having difficulty going back to sleep.
- Have a heavy meal before bedtime or go to bed hungry. A small, healthy snack just before bedtime can be helpful.
- Indulge in heavy alcohol consumption before bedtime. For some people, a small glass of wine before bed may help, but your alcohol consumption should not exceed this.
- Consume too much caffeine. Try to limit caffeine intake to the mornings. If you're sensitive to caffeine, avoid it altogether and try decaf coffee or herb teas.
- Smoke cigarettes. Nicotine is a mild stimulant, and apart from its more publicized health risks, it can interfere with sleep. If you are a smoker, talk to your doctor about the best ways to curtail this habit.
- Engage in nonsleep activities in bed. Unless they are part of your sleep ritual, avoid activities such as working or reading in bed. This will help to strengthen the association between bed and sleep.
- Nap during the day. Short catnaps (fifteen to twenty minutes) are okay, but long naps of an hour or more may interfere with sleep the following night.
- Let yourself be afraid of insomnia. Work on *accepting* those nights when you don't sleep so well. You can still function the next day, even if you had only a couple of hours of sleep. The less you fight, resist, or fear sleeplessness, the more it will tend to go away.

In General:

- With your doctor's or health practitioner's approval, try natural supplements that can foster sleep. Herbs such as kava and valerian, in higher doses, can induce sleep. (See chapter 15 for more detailed information on these herbs.) Do not exceed recommended doses and be sure to discuss all herbs with your doctor before taking them.
- Some people find 0.5 to 3 mg of the hormone melatonin at bedtime to be helpful. Experiment with the dose to determine the amount that works best for you.
- The amino acid tryptophan is very helpful for many people in getting to sleep. You can obtain it at most health food stores either in the form of 5-hydroxytryptophan or in L-tryptophan. If you try 5-HT, take 50 to 150 mg at bedtime; for L-tryptophan, try 500 to 1500 mg before going to bed. The effects of either form of tryptophan can be enhanced by taking it with a carbohydrate snack and 100 mg of vitamins B₆ and B₃. You can take tryptophan every night if you need to. Finally, the amino acid GABA,

500 to 1000 mg before bedtime, may induce sleep for some people. Vary the dose, as some people find higher doses to cause agitation.

- For relaxing tense muscles or a racing mind, use deep relaxation techniques. Specifically, progressive muscle relaxation or recorded guided visualization exercises can be helpful (see chapter 4). Use a device that can play the recording in a continuous loop.
- If pain is causing sleeplessness, try an analgesic. In the case of pain, this is more appropriate than a sleeping pill.
- Avoid sleeping pills such as Restoril or Ambien except for occasional emergencies. Prescription sedatives such as these can interfere with your sleep cycle and ultimately aggravate insomnia. If you must take a prescription medication for sleep, try trazodone at 25 to 100 mg.
- If you're dependent on a sleeping pill and feel that it's interfering with your sleep, consult a competent physician or psychiatrist experienced with helping people discontinue these medications.

Summary of Things to Do.

1. If you suspect you are suffering from adrenal exhaustion, you need to eliminate caffeine and sugar from your diet as much as possible, as well as deal with any food allergies (see chapter 15). Strive to have a high-protein, low-carbohydrate diet and eliminate all processed or junk foods. It's important to simplify your life as much as possible in order to reduce stress, and make sure you get adequate sleep and exercise every day. Take the supplements recommended in the section on adrenal exhaustion and talk to your health professional about taking an adrenal cortical glandular supplement.
2. If you believe you have symptoms of either hypothyroidism or hyperthyroidism, have your doctor do a complete thyroid blood panel. Use the medications your doctor recommends and be sure to get adequate exercise.
3. Symptoms such as fatigue, fungal or yeast infections, abdominal bloating and cramps, and feeling ill after you consume sugar or are in a damp environment all suggest a problem with candidiasis. You may want to have your doctor confirm the diagnosis by doing a blood test for candida antibodies. If you have candida, follow the dietary recommendations listed in the section on candidiasis. You may also need to take nystatin for a while, as well as natural anticandida supplements, such as caprylic acid, grapefruit seed extract, and oregano oil capsules.
4. Symptoms such as fatigue, headaches, "brain fog" or confusion, muscle aches and pains, chemical sensitivity, irritability, rashes, and allergies all suggest your body may be overly toxic. Follow all of the dietary and lifestyle recommendations listed

in the section "Detoxifying Your Lifestyle." It's particularly important to eliminate caffeine, nicotine, alcohol and recreational drugs, refined sugar, and junk foods from your diet as much as possible. With your doctor's assistance, use only those prescription medications that you really need. Regular exercise accompanied by sweating is also very important. In consultation with your doctor or health care professional, you may want to try a week on raw foods or a four-day juice fast, take antioxidant supplements, work with detoxifying herbs such as milk thistle, dandelion, and burdock, and support colon detoxification by using psyllium seed products or receiving a series of colonics.

5. To relieve symptoms of PMS, reduce or eliminate sweets and refined carbohydrates from your diet as much as possible. You'll find reducing caffeine, alcohol, and salt also to be helpful. Increase vegetables, fresh fruits, and soy foods in your diet. Also increase your daily exercise. Take the supplements recommended in the section on PMS, including B-complex, B₆, vitamin A, calcium-magnesium, fish oil capsules, and GLA. Many women find the herb dong quai to be helpful. In consultation with your doctor or health care professional, use natural progesterone creams. For further information, visit womenshealth.com or call Madison Pharmacy Associates at 1-800-558-7046.
6. If you're dealing with menopause, discuss natural progesterone and possibly natural estrogen replacement with a doctor or health professional who is knowledgeable about these alternatives to synthetic hormone replacement. Black cohosh is an herb that can be very helpful for menopause; you can use it alone or in combination with other herbs, such as dong quai and licorice. Eat a diet that is high in phytoestrogens and get regular exercise.
7. For seasonal affective disorder (SAD), follow all of the suggestions listed in this chapter. Be sure to get exposure to the outdoors or to an indoor light box for at least one hour each day during the winter months. If the recommendations listed here are not enough, consider boosting your serotonin levels in the winter. This can be done either naturally, by taking tryptophan or Saint-John's-wort, or by consulting with your doctor about taking an SSRI medication such as Zoloft, Lexapro, Celexa, or Luvox (see chapter 17 for further information on SSRIs).
8. The causes and cures for insomnia are complex. Review the section on insomnia carefully to determine the possible cause of your problem with sleep. Then try out all of the different suggestions listed in the general guidelines section. If you feel you aren't getting sufficient help, take a look at the books by Peter Hauri and William Dement in the references and/or consult a sleep specialist.

Further Reading

- Arem, Ridha. *The Thyroid Solution*. New York: Ballantine Books, 2007.
- Bourne, Edmund J., Arlen Brownstein, and Lorna Garano. *Natural Relief for Anxiety*. Oakland, CA: New Harbinger Publications, 2004.
- Crook, William. *The Yeast Connection*. Third edition. Jackson, TN: Professional Books, 1989.
- Dement, William C. *The Promise of Sleep*. New York: Delacorte Press, 2000.
- Hahn, Linaya, and Allan Warshowsky. *PMS: Solving the Puzzle: Sixteen Causes of PMS and What to Do About It*. Chicago: Chicago Spectrum Press, 1995.
- Hauri, Peter, and Shirley Linde. *No More Sleepless Nights*. Revised edition. New York: John Wiley and Sons, 1996.
- Hoffstein, Victor, and Shirley Linde. *No More Snoring*. New York: John Wiley and Sons, 1998.
- Lee, John R. *What Your Doctor May Not Tell You about Menopause*. Revised edition. New York: Warner, 2004.
- Lipman, Derek S. *Snoring from A to ZZzz*. Portland, OR: Spencer Press, 2002.
- Murray, Michael, and Joseph Pizzorno. *Encyclopedia of Natural Medicine*. Revised second edition. Roseville, CA: Prima Publishing, 1998. (An outstanding reference for most of the conditions described in this chapter and many others.)
- Northrup, Christiane. *The Wisdom of Menopause*. New York: Bantam Books, 2003.
- Rosenthal, Norman. *Winter Blues: Everything You Need to Know to Beat Seasonal Affective Disorder*. Revised edition. New York: Guilford Press, 2006.
- Taylor, Diana, and Stacey Colino. *Taking Back the Month: A Personalized Solution for Managing PMS and Enhancing Your Health*. New York: Perigee, 2002.
- Wilson, James L. *Adrenal Fatigue*. Petaluma, CA: Smart Publications, 2001.
- Women's Health Initiative. "Risks and Benefits of Estrogen Plus Progestin in Healthy Postmenopausal Women." *Journal of the American Medical Association* 288 (2002): 321–333.