

shedding light on seasonal affective disorder

There *is* a cure for the wintertime blues.

Are you having trouble waking up on these cold, dreary mornings? Have your clients seemed more lethargic or grouchy during training sessions lately? Do your students complain that their energy levels are lower than the temperature outside?

It's important for fitness professionals to realize that such signals may point to more than just postholiday doldrums. You or your clients could be suffering from seasonal affective disorder, commonly known as SAD.

What Is SAD?

According to the American Psychiatric Association, SAD is marked by mood disturbances that disrupt normal functioning and tend to recur in regular seasonal patterns over a period of at least 2 years (APA 1994). Although the condition can occur in winter or summer, more people suffer from fall-onset SAD, which typically begins in late autumn or early winter and then remits in the spring or summer. (Fall-onset SAD is the focus of this article.)

SAD is believed to be caused by a biochemical imbalance in the hypothalamus due to the shortening of daylight hours during the winter months; the hypothalamus is the part of the brain that controls sleep and wakefulness. Another theory is that, as seasons change, our internal biological clocks, or circadian rhythms, shift in response to changes in sunlight patterns. According to the National Mental Health Association, melatonin may also be a culprit, since the pineal gland in the brain produces more of this sleep-related hormone when the body is exposed to darkness.

One hallmark of SAD is that it recurs each year about the same time. The signs and symptoms can run the gamut from minor sleep disturbances and occasional lethargy to extreme mood changes and episodes of severe depression. Some sufferers also show signs of a weakened immune system during the winter months, making them more vulnerable to infections and other illnesses.

For a look at the many ways SAD can present itself, see "Signs and Symptoms of SAD," right.

Who Gets SAD?

An estimated half a million people experience SAD symptoms each winter, particularly during the months of December, January and February, according to the SAD Association in England (SADA 2004a). Although some people experience mild symptoms, others become so severely depressed that they are unable to function normally without treatment.

Women are four times more likely than men to suffer from SAD (American Academy of Family Physicians 2000). Although children and adolescents can be affected, the onset of the condition typically occurs after age 20.

Not surprisingly, the incidence of SAD is higher the farther north you live. For example, the condition is seven times more common in Washington state than in Florida (American Academy of Family Physicians 2000).

Treatment Options

There is light at the end of the tunnel for SAD sufferers. Those with mild symptoms can benefit from spending time outdoors during daylight hours. Research has shown that a 60-minute walk in winter sunlight is just as effective as 2½ hours un-

der bright artificial light (American Academy of Family Physicians 2000). Diet, exercise, counseling and stress management can also alleviate some SAD symptoms (Morano 2003).

For people with more severe symptoms, light therapy has been shown to suppress the brain's secretion of melatonin (National Mental Health Association 2004). Although more research is needed, many sufferers appear to respond to this type of treatment, which employs fluorescent lighting on a metal reflector or a light visor worn on the head like a cap. Generally, light therapy takes about 30 minutes a day during the winter months. It consists of sitting 2–3 feet away from a specially designed light source, which is positioned on a table so the light can shine directly into the user's eyes (American Academy of Family Physicians 2000). When used properly, light therapy pro-

signs and symptoms of SAD

- weight gain
- a craving for sweets or starchy foods
- a heavy feeling in the limbs
- lowered energy level
- fatigue
- a tendency to oversleep
- difficulty concentrating
- irritability
- loss of libido
- increased sensitivity to social rejection
- avoidance of social situations
- feelings of hopelessness or helplessness
- headaches and stomachaches
- weakened immune system
- severe depression

Source: American Psychiatric Association (APA). 1994. *Diagnostic and Statistical Manual of Mental Disorders (4th ed.)*. Washington, DC: APA; National Mental Health Association website (www.nmha.org).

let there be light

Feeling SAD? Here are some strategies to cope with typical symptoms of this disorder:

- Take a walk outside each day during your lunch break. Even if the sky is overcast, you will benefit from the sun's rays, especially at midday. A 60-minute walk outdoors has been shown to be just as effective as 2½ hours of exposure to bright artificial light.
- Rearrange your inside environment to maximize your exposure to natural light. Move your office desk under a southern-facing window. Open your shades and heavy draperies each morning to let light flood into your home. Paint your rooms a light, sunny color to reflect the most light.
- Since women are at greater risk than men for SAD, band with your best female buddies to exercise outdoors at least once a week all winter long.

- Pay special attention to eating a healthy diet during the winter months, when cravings for sweets or starchy foods may be greatest. Skipping meals or restricting any one food group will only make you more vulnerable to such cravings.
- To avoid sleep deprivation, practice good sleep habits (e.g., go to bed at the same time each night and wake at the same time each morning; don't fall asleep with the TV on, etc.).
- Augment your regular physical activity regimen with a mind-body modality, such as yoga or tai chi, to help reduce stress during the winter.
- Consider psychotherapy, counseling and other similar complementary therapies (e.g., meditation) to learn new ways to relax.
- Consult with your physician about light therapy and/or medication designed to reduce SAD symptoms.
- Ask your physician about the benefits of taking the herb St. John's wort, which has been shown to alleviate some SAD symptoms. But never combine St. John's wort with light therapy, since the herb increases sensitivity to light.
- Do not use a tanning bed to treat SAD. The light sources in tanning beds are high in ultraviolet rays, which can harm the eyes and skin.
- Get a flu shot and wash your hands often to reduce your risk of getting ill; SAD sufferers often have a weakened immune system, which makes them more vulnerable to infections and other illnesses during winter months.
- Recognize that the symptoms of SAD will subside when spring arrives, which can help you more readily accept the limitations of this seasonal disorder.

duces few side effects. However, it can cause headaches, fatigue, irritability and inability to sleep if used too late in the day. It is also vital that light therapy be continued all winter, since stopping treatment too soon will cause symptoms to reappear.

Some people with SAD seem to benefit from taking supplements containing the herb St. John's wort (Morano 2003). However, this herb can sensitize the eyes and cause eyestrain and headaches. Experts recommend that St. John's wort should *not* be used in conjunction with light therapy.

Antidepressant drugs have been shown to reduce SAD symptoms (National Mental Health Association 2004). However, certain antidepressants, such as tricyclics, have a sedative effect and can exacerbate the sleepiness and lethargy associated with the condition (SADA 2004b). More prom-

ising are nonsedative antidepressants, like Prozac, which work well when combined with light therapy.

Here Comes the Sun

It's important to learn more about SAD so you can tell if you are simply having a bad day or are suffering from SAD and

SAD Resources

National Mental Health Association,
www.nmha.org

National Organization for SAD,
www.nosad.org

Outside In (light therapy specialists),
www.outsidein.co.uk/

SAD Association,
www.sada.org.uk/

Society for Light Treatment and Biological Rhythms, www.sltbr.org

are likely to be depressed or lethargic for the entire winter season. By sharing some simple, but effective, coping strategies (see "Let There Be Light," left), you are also in a unique position to help clients combat mild cases of SAD.

When you or your clients are facing your darkest days this month, know that they will pass. The truth is that the sun will shine again. In fact, now that the winter solstice is behind us, the days are already getting longer!

Diane Lofshult is a senior editor of IDEA Fitness Journal.

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