

Dog days of Winter? Maybe your internal clock is off

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When it's grey, rainy, and cold for months on end, it can be easy to feel a little down. This is not uncommon and is often referred to as the "Winter Blues."

In severe cases where one feels depression seasonally, the official medical classification is Seasonal Affective Disorder (SAD). To better understand the Winter Blues, SAD, and why people may feel down during the colder months (and what they can do to help prevent it), Oregon Health Sciences University (OHSU) School of Medicine Associate Professor of Psychiatry Dr. Jonathan Emens provides background on SAD and how it may differ from a more ordinary sense of melancholy during the winter months.

What is SAD?

"In terms of what causes the Winter Blues, it technically would be a major depressive episode with a seasonal pattern. And so, what that means is, in our definitions of psychiatric disorders, would mean that you would have to have it occur only during a particular time of the year. Typically, it's the fall or the winter,

although, less commonly, you do have folks who only have their depression episodes in the summer,” Dr. Emens said. “It means that it also has to go away during certain times of the year as well, and you have to have it, by definition, have occurred over at least a two-year period for us to say you have a seasonal depression.”

Knowing what SAD is, is one thing; however, tacking down the causes is something less known. There are a variety of hypotheses on the subject.

“The biggest clue, of course, is light, right? So, the nights get longer in the winter; they get a lot longer if you go farther north, in the northern hemisphere,” Emens said. “In the winter, the winters get even longer; what’s interesting is that you find as you go further north, you have more Seasonal Affective Disorder in the winter, so that makes you suspicious. Could it be the light?”

Though it may be a component, there are some holes in the theory, according to Emens, as some native populations who live in the far north, like the Lapps in Finland, do not have high rates of SAD. One of the other theories on causes of SAD and the general worsening of mood during winter months goes back to the idea of longer nights.

Tuning your internal body clock

“We don’t necessarily know, but we do think that as the nights get longer, one theory; these long nights, that our 24-hour body clock, that regulates the timing of not just when we’re awake and sleepy, but blood pressure, many other parts of our biology, our physiology are regulated by this 24-hour body clock and the hypothalamus of our brain, but it also controls the timing of mood,” Emens said. “We actually have an intrinsic 24-hour rhythm to our mood even. So one theory of why these long nights make us feel worse, even if we don’t have SAD, there’s plenty of evidence showing that people of sub-syndromal levels of SAD, or even without meeting the criteria for SAD, that you do tend to see worse mood, worse energy level, increases in appetite, that sort of thing, even in the normal population that tend to be worse in the winter months.”

Essentially, what is happening, According to Emens, is the lack of light during long nights is throwing off the internal body clock, moving it later, as we don’t have the morning light.

“So your clock might get set too late. And we have evidence from a bunch of research studies at OHSU that in both seasonal and the non-seasonal depression, if your body clock is set later, your mood is worse,” Emens said.

In some cases, people’s body clocks can be set too early, which is a result of the dusk arriving earlier in the day. This theory is based on the idea that the availability of light changes how people’s body clock schedule looks.

“And, of course, when I’m saying the timing of your clock is moving earlier or later, it’s not necessarily relative to what time it is on the wall clock, as much as the timing of your clock is moving earlier or later relative to many other things, the timing of sleep and other activities,” Emens said. “That, in most people,

your body clock moving too late, and in, perhaps, the minority, your body clock moving too early in the winter, might be the reason why we have the Winter Blues.”

An interesting parallel may be the idea of jet lag. These more significant time transitions that accompany daylight savings and the different seasons throw our body’s internal clocks out of wack.

As far as the Pacific Northwest is concerned, Emens is not aware of any higher rates of SAD in the largely overcast region. However, data is relatively split on national rates of SAD.

“In terms of how common it is, this is the other thing; some studies say it’s anywhere from roughly 1.5% to almost 10% prevalence of Seasonal Affective Disorder. That’s a pretty wide range,” Emens said.

Things to help alleviate the Winter blues

If someone is experiencing more severe cases of SAD, they should seek help from a primary care provider or a mental health expert. One potential treatment would be “bright light therapy.” This treatment revolves around having light in the morning to readjust your body clock to an earlier time. Something similar may help those who find that winters affect their energy levels and mood.

“For those of us who don’t have SAD, but maybe our energy level is a little bit off, yeah, having a consistent timing of lights on that is stable across the days is important, and this includes weekends,” Emens said. “We tend to stay up later, get a little bit of evening light, tend to sleep in, and don’t get a lot of morning light on the weekends. And there’s some great studies to show that when we do that, when we shift the timing of light, our body clock moves later, which is the last thing we want in winter depression.”

Emens said that data shows that a consistent schedule throughout the week is better for your mood. Changing your schedule on the weekend can be “very bad” for your mood. This ties back to also maintaining a steady sleep schedule.

“Consistency is really going to be key, both in terms of not just sleeping and waking, but lights out and lights on,” Emens said.

On top of the change in light, winter times bring changes in physical activities and eating habits. Maintaining a pattern of physical activity, good eating habits, and social connection is essential.

“Regardless of when a blue mood might strike, we know physical activity is good for mood,” Emens said. “Which, of course, can be hard; it’s hard to go for that run or go for that walk when it’s dark outside, compared to when it’s still light at 8 o’clock or 9 o’clock at night. But that’s really key, to make sure we’re still getting that same level of physical activity. And that we’re still eating right. And then I would say the last piece would be social contacts; we know that’s so important for our mood. It’s much easier when it’s warm and light outside to do things with other people, and so really maintaining your social contacts in the winter months is really key.”

