

# Expert discusses the impact of daylight saving time on the body

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This Sunday morning, most people in the United States will turn their clocks back by one hour in observance of daylight saving time, but won't get "an extra hour" of sleep. Daylight saving time just changes our circadian rhythm, which can disrupt our biological clocks and impact our health.

Helmut Zarbl, director of the Rutgers Environmental and Occupational Health Sciences Institute and chair of the Environmental and Occupational Health Department at Rutgers School of Public Health, is an expert in [circadian](#) rhythm and its influence on [sleep-wake cycles](#), hormone release, eating habits and more. We asked him to explain how daylight savings time affects us.

## How does daylight saving time affect the body's circadian rhythm?

Zarbl: Circadian rhythm regulates many important biological processes, such as hormone production and sleep patterns, and is largely controlled by external cues in the environment – mainly light. Changing sleep-wake cycles by an hour has an

effect on our [circadian clock](#). Since light is normally a key regulator of our [biological clock](#), the change will shift the phase of our rhythm away from that of the central pacemaker. As with any phase change, this will cause disturbances in sleep, metabolism, mood, bodily functions and productivity.

## What are some common effects of the time change on our body?

Zarbl: They may include feeling sleepy, listless, stressed and tired for a while. Daylight saving time-associated changes result in higher rates of automobile and workplace accidents. A few studies have even suggested a slight increase in heart attacks and stroke, probably in those already at a higher risk.

## Are there any tips/suggestions you have people to avoid the negative effects of the time change?

Zarbl: Let me answer that in two ways. You are not getting an extra hour of sleep; you are simply changing the phase. As with any change in sleep cycles due to shift work, jet lag, etc., it takes about a week to reset your biological [clock](#). Do not fight the change or keep referring to the previous time schedule. The sooner you adapt, the sooner you will feel normal again, so adjust your eating and sleep schedules accordingly. You change the clock at 2 a.m. on Sunday, so don't wait until Monday to make the necessary change. You should also avoid using caffeine and other stimulants or drugs to help adjust.

Secondly, winter affects exposure to sunlight, so our biological clocks gradually adjust and synchronize to shorter daylight periods. Individuals suffering from seasonal affective disorder do not adapt well and can become depressed and suffer physiological consequences. If you think you have this condition, you may improve your mood and function by using a light therapy box for several

hours each day and seeing your physician.

Provided by Rutgers University

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