

# Adjusting your body clock when the time changes

4 November 2014, by Dr. Karyn Esser



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As we reset our clocks and watches for daylight saving time, it's a good opportunity to think about our body clocks as well. Our bodies naturally operate on 24-hour cycles, called circadian rhythms, that respond to external cues such as time of light and dark, eating and physical activity.

While we often think of the body as having one "[master clock](#)" in the brain, current science now makes it clear that every cell in the body has its own individual clock. Together, these timekeepers direct our behaviors—telling us when to sleep, wake up and eat—and work to keep our cells healthy.

When we set our clocks back an hour each

autumn, we don't see it as anything more than gaining an extra hour of sleep. In reality, though, all the cell clocks in our body are making an adjustment to this change in time. Even this small time change can cause our body clocks to become slightly and temporarily out of sync. As a result of the time change, for about a week you might feel tired earlier at night and wake up earlier in the morning. The good news is that the fall [time change](#), where we delay the clocks and our exposure to light by an hour (known as a "phase delay"), is easier for us to adjust to than setting our clocks forward.

For best health we need to be mindful our body clocks all year long. Minor changes like [daylight saving time](#) can have small, temporary effects on us. But long-term disruptions to your circadian rhythm, like [chronic sleep deprivation](#), shift work, or eating and exercising late in the day, can cause more serious problems. According to the National Institutes of Health, abnormal [circadian rhythms](#) have been associated with obesity, diabetes, cardiovascular disease, depression, bipolar disorder and [seasonal affective disorder](#).

How do you keep your body clock in healthy working order year round?

- Use light as your guide. The best way for you to keep your body clocks synchronized is to keep light, eating, and activity consolidated. Use daytime hours for your meals and exercise, and try to do most of that earlier in the day.
- Get enough sleep. Sleep serves an important function - it's when our bodies do maintenance, which is why our body clock tells us to go to sleep every day. Try to get about eight hour of sleep each night.
- Pay attention to your natural time cues of light exposure, when you eat, and when you're physically active/exercising. Your sleep cycle is an output of your [body clock](#)

system, and eating, exercising, and bright lights (including your cell phone, computer or TV) near bedtime can make it difficult to sleep.

Provided by University of Kentucky

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