

Bright light can affect metabolism and insulin resistance

<https://www.yahoo.com/news/bright-light-affect-metabolism-insulin-resistance-104428481.html>

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New research has found further evidence to support the beneficial effects of sunlight on health, finding that exposure to bright light could affect your metabolism and aid weight loss.

The recent [study](#) out of Northwestern University in the US, builds on the university's previous research into the effect of light on metabolism and weight loss.

In their new study researchers looked at the effect of both bright light and dim light on 19 participants over a four-day period.

The team found that exposure to bright light in either the morning or evening increased insulin resistance when compared to exposure to dim light. Insulin resistance is the body's inability to move glucose out of the bloodstream, which can result in a build-up of blood sugar. This build-up can eventually cause not only an increase in weight and body fat but also an increased risk of diabetes.

Exposure to bright light in the evening however also caused higher peak glucose (blood sugar) levels, a common problem for individuals with diabetes.

Kathryn Reid, senior author of the study commented, "These results provide further evidence that bright light exposure may influence metabolism. It's cool that bright light has this effect, but we don't understand why yet," however she added, "In theory, you could use light to manipulate metabolic function."

A previous study by Northwestern researchers published in 2014 also showed that participants who were exposed to the majority of their bright light in the morning had a significantly lower BMI than those who were exposed to most of their bright light after 12 pm, linking for the first time the timing, intensity and duration of light exposure during the day to weight.

The team also found that the earlier the light exposure occurred, the lower the BMI, and the later the light exposure occurred, the higher a person's BMI, with the results showing that exposure to morning light accounted for around 20 percent of a person's BMI.

The effect of morning light was also independent of an individual's physical activity level, caloric intake, sleep timing, age or season.

Senior author of the study Phyllis C. Zee commented on the results saying, "If a person doesn't get sufficient light at the appropriate time of day, it could de-synchronize your internal body clock, which is known to alter metabolism and can lead to weight gain," before adding, "The message is that you should get more bright light between 8 am and noon," with around 20 to 30 minutes of morning light enough to affect BMI.

