[Health & Science](https://www.washingtonpost.com/national/health-science)

**Here’s another bad thing about stress: It may be connected to gaining weight**

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**The question**

Chronic stress can lead to headaches, irritability, sleeplessness and digestive problems. Might it also affect your weight?

**This study**

The researchers analyzed data on 2,527 adults (average age, 68), including waist size and body mass index (BMI). To gauge chronic stress, the study relied on analysis of a lock of hair about three-fourths of an inch long, representing about a two-month accumulation of cortisol, a hormone released when a person is stressed. As people’s weight increased, so did their cortisol levels. Compared with those who were overweight or normal weight, people who were obese (with a BMI of 30 or more) had the highest cortisol levels. Similarly, a large waist circumference correlated with a higher cortisol level than did a normal waist size. In addition, using weight data from two measurements four years apart, the researchers found that cortisol levels were lowest among people who were not obese at either measurement and highest among those who were obese at both points.

**Who may be affected?**

People experiencing long-term stress. A stressful situation can cause short-term mind and body issues, but it is less clear whether chronic stress directly causes health problems such as heart disease. Studies have shown, however, that stress can affect behaviors — such as smoking and drinking — that can contribute to health problems. Cortisol, nicknamed the “stress hormone,” is thought to increase people’s desire for sugary, fatty foods.

**Caveats**

Participants were all 50 or older; whether the findings would apply to younger people remains unclear. Participants’ stress was assessed only through cortisol measurements. It is possible that participants’ higher cortisol levels were a consequence of being obese — and the stress that that may involve — rather than being a cause of their obesity.

**Find this study**

March issue of Obesity ­([onlinelibrary.wiley.com](http://onlinelibrary.wiley.com/doi/10.1002/oby.21733/full); search for “obesity” under “publication titles”).

**Learn more**

Information on cortisol is available at [hormone.org](http://www.hormone.org/search-page?q=cortisol) (search for cortisol). To learn more about stress, go to [apa.org](http://www.apa.org/search.aspx?query=how%20stress%20affects%20your%20health) (search for “how stress affects your health”).

*The research described in Quick Study comes from credible, peer-reviewed journals.*