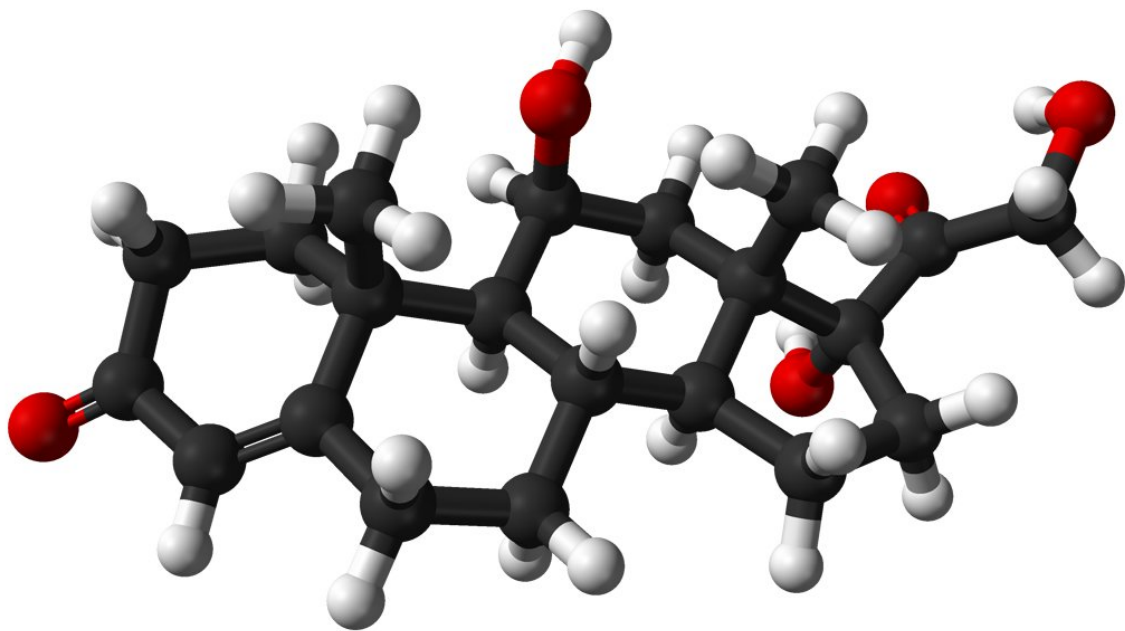


Higher cortisol levels may help predict risk of people developing depression in the future

July 5 2022



Ball-and-stick model of the cortisol (hydrocortisone) molecule. Credit: Public Domain

Higher levels of the stress hormone cortisol may increase the risk of developing depression, according to new research from Trinity.

Researchers from The Irish Longitudinal Study on Aging (TILDA)

found that higher cortisol levels in [older adults](#), measured from hair samples collected in 2014, were associated with an increased likelihood of [depression](#) during the early months of the COVID-19 pandemic, six years later.

Cortisol measured in hair is thought to reflect previous stress exposure as well as other biological and [psychological factors](#), yet to be fully determined.

Higher levels are sometimes observed in individuals who are currently depressed, but the findings suggest that cortisol, measured in this way, may also help predict who is vulnerable to depression in the future, following a period of heightened stress.

The study of people aged 60 and over during the first year of the COVID-19 pandemic found that the results did not differ between men and women.

Dr. Joanne Feeney, lead author of the study and Senior Research Fellow in medical gerontology at Trinity, explained that the research highlights a key benefit of longitudinal studies. She said, "As TILDA has been gathering data for years, we were able to look back in time to 2014 to when [cortisol levels](#) were measured and investigate whether they were associated with an increased risk of depression during COVID-19."

According to the researchers, the results are timely. "Given the negative impact of the virus and lockdowns on [mental health](#), the findings are important for understanding who may be most at risk and thinking about possible protective measures for the future," added Dr. Feeney.

Professor Rose Anne Kenny, TILDA's principal investigator, said: "The measurement of [cortisol](#) using [hair samples](#) is a very novel approach in a population study. It is also the first time that this has been used on such a

large scale in Ireland. This allows us to easily measure hormonal stress effects —which previously required five samples of blood or saliva in one day. Cortisol is linked to fast and slow aging processes and stress is an important determinant of these and of our biological aging."

More information: J. Feeney et al, Hair cortisol as a risk marker for increased depressive symptoms among older adults during the COVID-19 pandemic, *Psychoneuroendocrinology* (2022). [DOI: 10.1016/j.psyneuen.2022.105847](https://doi.org/10.1016/j.psyneuen.2022.105847)

Provided by Trinity College Dublin

Citation: Higher cortisol levels may help predict risk of people developing depression in the future (2022, July 5) retrieved 14 February 2024 from <https://medicalxpress.com/news/2022-07-higher-cortisol-people-depression-future.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--