

## Is festive stress really so bad for our health?

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Christmas is perennially highlighted as one of the most stressful times of the year with the natural assumption being that stress is always bad for our physical health.

However, our research is showing that the picture may be rather less clear and that there may be health risks inherent in not reacting to stressful situations.

People who have low (blunted) cardiovascular and cortisol reactions to acute stress could be at greater risk of conditions such as depression and obesity, and have lowered immunity to infection.

These findings emerged from our analysis of a large community study set up by the Medical Research Council Unit at the University of Glasgow. We continually found seemingly contradictory associations and instead of high stress reactivity being related to negative health outcomes or behaviours, it was the low stress reactors who were more at risk. In fact, those who did not show large heart rate and blood pressure reactions to a short laboratory stress task were more likely to become depressed and obese over the following five years.

With heart disease the biggest cause of the death in the UK today, it is widely accepted that people who have a profound physical reaction to acute stress, such as raised heart rate and respiration, run a higher risk of developing cardiac problems including high blood pressure and heart attack, or stroke.

By implication, low heart reactivity has been thought to be benign – and even protective – leading to the belief that ‘chilled out’ folk who show the lowest stress reactions are also likely to be the healthiest. But our new findings suggest there are significant health risks at both ends of the reactivity spectrum.

It is likely that having lower or no reaction to short-term stress actually reflects some sort of disorder of the motivational systems in the brain, which are the same areas that are disordered among smokers and alcoholics.

Whereas high reactivity contributes to, and exacerbates, inflammatory cardiovascular disease, low reactivity may compromise immunity and our ability to fight infectious disease and, as such, be the maladaptive response.

In a recent meta-analysis, other negative psychological or behavioural traits, including anxiety, neuroticism and negative affectivity, were also revealed to be related to decreased cardiovascular reactivity.

Although the mechanisms of such associations are not yet fully understood, the growing literature associated with low stress responses suggests that we need to rethink our understanding of the links between departures from normal physiological response patterns and our health.

Whilst we wouldn't want to wish anyone a stressful Christmas it may be some comfort to realise that short term stress reactions may not be such a negative thing for our health as previously thought.

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