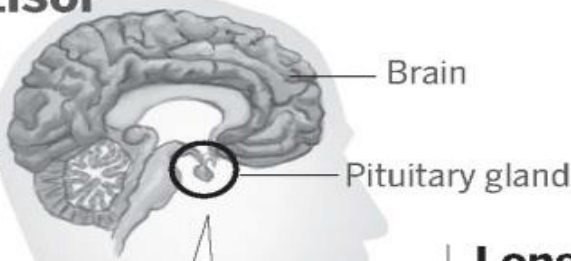


The stress effect

Middle-class people aren't living as long as wealthier people in the same area. One explanation is **chronic stress** — those experiencing more financial hardships and dealing with more everyday worries aren't as healthy as wealthier people. Over time, chronic stress can lead to a condition called **allostatic load**, which becomes even more pronounced in people lower on the socioeconomic ladder.

Stress and cortisol

In response to stress or perceived danger, hormones produced by the adrenal glands (including cortisol and adrenalin) work together when the body must react quickly to sudden threatening situations.



① **The brain** and the body react to stress.

② **Adrenal glands**
In a flight-or-fight response, the adrenal glands produce cortisol (and other hormones) to give the body more energy.



Cortisol and craving

The hormone cortisol is secreted from the adrenal gland and helps regulate glucose, which the body uses for energy. But chronic stress creates a constant state of alarm, making the body crave sugar and carbohydrates.

Long-term effects of high allostatic load

- Elevated levels of cortisol can create a feeling of hunger, leading to overeating and obesity.
- High blood pressure
- Poor glucose regulation: Under stress, people crave sugar and carbohydrates, which give a quick boost, but then lead to a drop in energy. Over time, this increases the risk of developing diabetes.
- Lowered immune system resistance: can lead to inflammation and increased odds of developing many diseases.

Defending against allostatic load

Regular exercise

Physical exertion can have a powerful effect in diminishing the cascade of stress hormones.



A good night's sleep

Lack of sleep exacerbates the detrimental effects allostatic load can have on health.



Source: Nancy Adler, MacArthur Network on Socioeconomic Status and Health

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