

How can the human body adapt to work in the heat?

Autres langues vivantes

[FR](#)

[ES](#)

How can the human body adapt to work in the heat?

Video file

How can the human body adapt to work in the heat? AFP

Workers doing manual tasks in the heat can build tolerance through a process called “heat acclimatization”.

Acclimatization requires a steady but gradual increase in daily workload.

On the first hot day, a worker would do 20% of their normal shift.

Then, by adding 20% more per day, the worker’s body can safely adapt to do a full workload. Once acclimatized, the body can maintain a lower heart rate. More blood flows from the deep tissues to the skin. Blood vessels in the skin dilate and release heat to the surroundings.

The body can maintain a lower overall temperature. It also sweats more, but without losing minerals, like sodium or potassium, that help muscle function.

These adaptations are not permanent: they start to decrease two weeks after heat exposure ends. The adaption schedule needs to be repeated after a prolonged absence of the worker. By implementing such plans alongside other practical measures, workers can adapt to heat and be protected in the face of a warming climate.

Niveau

[Cycle 3](#)

[Cycle 4](#)

[Lycée](#)

Thématique

[Langues vivantes](#)

[SES](#)

[Sciences](#)