What is the mechanism behind blushing?

Most of us know what it feels like to blush. The face becomes warm and red, and we experience self-conscious emotions. Researchers explored why we blush and what the underlying mechanisms are.

The experiment
Female adolescents, a group known to be particularly sensitive to blushing, were invited to the lab for 2 sessions.

Session 1: participants were asked to sing a song
Session 2: Each participant listened to their [and others’] recording in front of an audience while their blushing and brain activity was measured.

As expected...
Participants blushed more while listening to their own recordings compared to other participants’ recordings.

Brain areas associated with blushing
Early visual areas: This suggests that the videos of themselves captured their attention.

Cerebellum: This area is most known for its role in movement and coordination but research suggests that it’s involved in emotional processing and social cognition as well.

Future research
The researchers may explore blushing in younger infants, before they develop the cognitive skills to understand other people’s thoughts...

...or try to help people with social anxiety, who have developed a phobia of blushing.

“Blushing in itself is so universal that it’s interesting to know more about it in general.”
Milica Nikolic (first author)

Read the full article on our website.