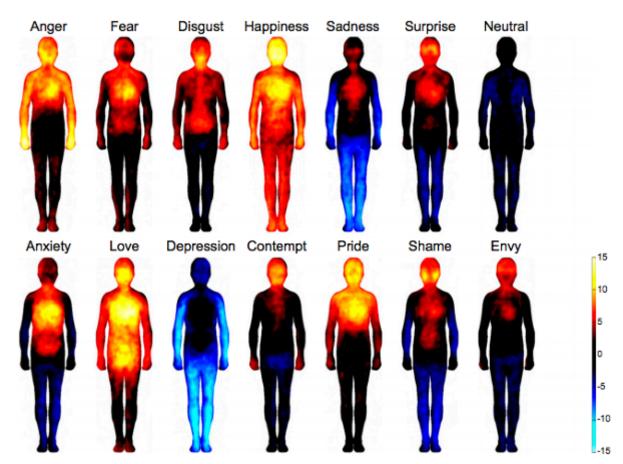


## An Atlas of The Human Body that Maps Where We Feel Emotions

Many people feel emotions in certain parts of their bodies - stress in their neck or anxiety in their stomach, maybe happiness in their chest. As you can see in the map below, "anger" is a heady, top-of-body emotion, while "love" and "happiness" is felt rather strongly all over the body. Feelings such as "sadness" and "depression," however, are experienced as a relative deactivation of sensations, compared to normal states.

It's all part of the fascinating new *Body Atlas*, produced from research conducted by Finnish scientists, which shows a heat map of where in our bodies we can expect different emotions to manifest the most.



To create the map, the researchers showed more than 700 volunteers various words, stories, movies, and images associated with different "basic" and "complex" emotions, and asked them to point out bodily regions where they felt increasing and decreasing activity in reaction.

Their results, reported in the *Proceedings of the National Academy of Sciences*, produced consistent heat maps that were statistically unique for each emotion, and reproducible among the subjects, who were of Finnish, Swedish, and Taiwanese. Their conclusion is that the emotional signatures in different parts of the body are "culturally universal" and are tied to biological systems, rather than triggered by what people have learned to think based on common language phrases, such as "having butterflies in the stomach."

A better understanding of bodily sensations associated with emotions could help doctors treat mood disorders like depression and anxiety, and even provide improved methods of diagnosis or detection of these problems.

"Emotional feelings are associated with discrete, yet partially overlapping maps of bodily sensations, which could be at the core of the emotional experiences," they conclude. "Perception of these emotion-triggered bodily changes may play a key role in generating consciously felt emotions."

More information is available at:

http://www.fastcoexist.com/3024327/visualized/an-atlas-of-the-human-body-thatmaps-where-we-feel-emotions