

# This Is How Joy Affects Your Body

Medically reviewed by [Timothy J. Legg, PhD, PsyD, CRNP, ACRN, CPH](#) on June 27, 2018  
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Feeling like bouncing off the walls? Here's what's going on inside your body.

Oh, joy! That happy, buoyant emotion is a great feeling, whether it's brought on by a big life event (like a wedding or birth) or something as simple as finding the perfect fruit at the farmer's market.

On an emotional level, we may feel joy in a variety of ways — tearfully, euphoric, with a deep sense of contentment, and more. On a scientific level, we feel joy in our neurotransmitters, which are tiny chemical “messenger” cells that transmit signals between neurons (nerves) and other bodily cells.

Those neurotransmitters are responsible for processes and feelings in almost every aspect of the body, from blood flow to digestion.

## Benefits of feeling more joy

- promotes a healthier lifestyle
- boosts immune system
- fights stress and pain

- supports longevity

Feeling joyful? Here are all the ways happiness runs throughout your body.

## 1. Your brain

Every emotion you feel is affected by your brain and vice versa.

According to Diana Samuel, MD, an assistant professor of clinical psychiatry at Columbia University Medical Center, “The brain does not have a single emotional center, but different emotions involve different structures.”

For example, she explains, your **frontal lobe** (commonly known as the “control panel” of the brain) monitors your emotional state, while the **thalamus** (an information center that regulates consciousness) participates in how your emotional responses are executed.

We feel joy in our bodies because of the release of dopamine and **serotonin**, two types of neurotransmitters in the brain. Both of these chemicals are heavily associated with happiness (in fact, people with clinical depression often have lower levels of serotonin).

If you're feeling down, simple activities like going for a walk in nature, petting a dog or cat, kissing a loved one, and yes, even forcing yourself to smile, can help those neurotransmitters do their job and raise your mood.

So, when something you perceive as happy happens, your brain receives the signal to release these chemicals into your central nervous system (which consists of your brain and spinal cord). This then causes reactions in other bodily systems.

## **2. Your circulatory system**

Ever noticed that when you feel especially happy, your face flushes or your heart races?

This is because of the effect on your circulatory system, explains Dr. Samuel: "Butterflies in your stomach, your facial expressions, even changes in your finger temperature... all of these can depend on your emotions. The effects on the circulatory system can present in different ways physically."

Your circulatory system consists of your heart, veins, blood vessels, blood, and lymph. Of course, joy isn't the only emotion that affects this system — fear, sadness, and other emotions can cause reactions in these parts of the body as well.

## **3. Your autonomic nervous system**

Your autonomic nervous system is the bodily system responsible for all the things your body does without conscious effort from you — like breathing, digestion, and dilation of the pupil.

And yes, it's also affected by feelings of joy and elation. For example, your breathing can pick up when you're doing something particularly fun (like riding a roller coaster) or slow down when you're participating in a more relaxing pleasurable activity (like walking in the forest).

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It's well-known that your **pupils dilate** when you're sexually aroused, but they can also grow or shrink based on other emotional states, too.

Other autonomic aspects that can be affected by pleasure include salivation, **sweating**, body temperature, and even metabolism. Any type of emotional arousal can also affect your , says Dr. Samuel, which are located in the walls of your hollow organs (like your stomach, intestines, and bladder).

These involuntary muscles are responsible for things like blood flow and the movement of food through your digestive tract — so

that could be a reason why your appetite revs up or slows down when you're feeling positive emotions.

So, what comes first — the emotion or the bodily response?

It's hard to say which comes first because your feelings and your physiology are inextricably linked. Dr. Samuel says, "When something joyous happens, the emotional and physical response occurs right away because all of these things are happening simultaneously in the body."

And don't worry — it's normal to experience varying physical sensations in reaction to your happy emotions and to have different bodily responses than those around you.

You may literally get the urge to jump for joy, while your friend or sibling is more of the happy-crying type.

"Exercise can also take your mind off worries and negative thoughts that may feed depression and anxiety." — Dr. Samuel  
Wondering if you can actually trick your body into feeling happy?

In a way, you can, says Dr. Samuel.

Even just the simple act of smiling can help. She explains, "Smiling can trick your brain by elevating your mood, lowering your heart rate, and reducing your stress. The smile doesn't have to be based on real emotion because faking it works as well."

Another way to use your physiology to enhance your emotional state? Exercise (yes, even when you don't feel like doing it).

Samuel says that exercise "can help ease depression and anxiety by releasing feel good endorphins and other natural brain chemicals (neurotransmitters) that enhance your sense of well-being. Exercise can also take your mind off worries and negative thoughts that may feed depression and anxiety.

If you're feeling down, simple activities like going for a walk in nature, petting a dog or cat, kissing a loved one, and yes, even forcing yourself to smile, can help those neurotransmitters do their job and lift your mood.

Now that you know how your body and your emotions can work in tandem, it may be a little easier to "hack" your mood so that you feel more joyful on a daily basis.

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