# Excerpt from "A neuroscience researcher reveals 4 rituals that will make you happier" by Eric Barker

## 1. The most important question to ask when you feel down

Sometimes it doesn't feel like your brain wants you to be happy. You may feel guilty or shameful. Why?

Believe it or not, guilt and shame activate the brain's reward center.

### Via The Upward Spiral:

Despite their differences, pride, shame, and guilt all activate similar neural circuits, including the dorsomedial prefrontal cortex, amygdala, insula, and the nucleus accumbens. Interestingly, pride is the most powerful of these emotions at triggering activity in these regions — except in the nucleus accumbens, where guilt and shame win out. This explains why it can be so appealing to heap guilt and shame on ourselves — they're activating the brain's reward center.

And you worry a lot, too. Why? In the short term, worrying makes your brain feel a little better — at least you're doing *something* about your problems.

#### Via The Upward Spiral:

In fact, worrying can help calm the limbic system by increasing activity in the medial prefrontal cortex and decreasing activity in the amygdala. That might seem counterintuitive, but it just goes to show that if you're feeling anxiety, doing something about it — even worrying — is better than doing nothing.

But guilt, shame, and worry are horrible, long-term solutions. So what do neuroscientists say you should do? Ask yourself this question:

What am I grateful for?

Yeah, gratitude is awesome ... but does it really affect your brain at the biological level? Yup.

You know what the antidepressant Wellbutrin does? Boosts the neurotransmitter dopamine. So does gratitude.

#### Via The Upward Spiral:

The benefits of gratitude start with the dopamine system, because feeling grateful activates the brain stem region that produces dopamine. Additionally, gratitude toward others increases activity in social dopamine circuits, which makes social interactions more enjoyable ...

Know what Prozac does? Boosts the neurotransmitter serotonin. So does gratitude.

#### Via The Upward Spiral:

One powerful effect of gratitude is that it can boost serotonin. Trying to think of things you are grateful for forces you to focus on the positive aspects of your life. This simple act increases serotonin production in the anterior cinqulate cortex.

I know, sometimes life lands a really mean punch in the gut and it feels like there's nothing to be grateful for. Guess what?

Doesn't matter. You don't have to find anything. It's the searching that counts.

#### Via The Upward Spiral:

It's not finding gratitude that matters most; it's remembering to look in the first place. Remembering to be grateful is a form of emotional intelligence. One study found that it actually affected neuron density in both the ventromedial and lateral prefrontal cortex. These density changes suggest that as emotional intelligence increases, the neurons in these areas become more efficient. With higher emotional intelligence, it simply takes less effort to be grateful.

And gratitude doesn't just make your brain happy — it can also create a positive feedback loop in your relationships. So express that gratitude to the people you care about.

For more on how gratitude can make you happier and more successful, click here.