



BRAIN HEALTH BOOST



This is Your Brain. This is Your Brain in Love.

*The Brain Health Initiative (BHI) is working to develop brain healthy communities, creating a culture that promotes brain health protective factors and decreases risk factors, thereby improving brain health, optimizing brain performance, and preventing and fighting brain illness across the lifespan for the Florida Suncoast region and beyond. **What happens to your brain when you're falling in love? And what needs to happen for you to stay there?***

There is a perfectly reasonable explanation for why the heart is the official symbol of Valentine's Day. What happens when you see the object of your affection? Your heart pounds and your pulse quickens, right? And what happens when that love is unrequited, or simply fades away? It feels like your heart is about to shatter.

But the heart is incapable of expressing such complex emotions on its own. It takes orders from a higher power, literally and figuratively. The brain, or more accurately the chemicals it produces, is in complete control of who and how much we love. It also controls the other physical reactions that visit us when we're alone with our beloved: sweaty palms, stuttering tongue, butterflied stomach.

Ultimately, though, the heart is much easier to draw and reproduce into chalky candy. And it's much prettier, although that begs an unrelated question: Why do we not regard the brain as an especially attractive organ? Doesn't it stand to reason that the brain would be smitten by its own reflection? Maybe that's a topic for another **BOOST**.

Back to love. According to a post from the [Harvard University Graduate School of Arts and Sciences](#), there are three categories of romantic love and hormones produced in the brain that correspond with each category.

- **Lust.** The brain's hypothalamus produces **testosterone** and **estrogen**, the male and female sex hormones, respectively. Increases in testosterone in particular, but also in estrogen, spurs the desire for sexual gratification.
- **Attraction.** Though it is related to lust, attraction can happen separately. The levels

of the hormones dopamine and norepinephrine, known as the reward center of the brain, increase, while the level of serotonin decreases. People with obsessive-compulsive disorder also have low levels of serotonin, which could indicate why lovers sometimes feel infatuation.

- **Attachment.** Oxytocin, also called the “cuddle hormone,” and vasopressin, an antidiuretic, are responsible for creating human bonds that extend beyond just romantic ties to include parent-child and friend relationships.

Now if we could only figure out, and then somehow control, when and how the brain releases these all-important hormones.

It would certainly be easier on our hearts.

WHAT YOU CAN DO TODAY TO PROTECT YOUR BRAIN HEALTH

The chemicals produced in the brain when we love someone can also be produced in other ways. So, if you're still waiting for that special someone to come along, try these activities to get the same gushy feelings.

- **Dopamine.** This neurotransmitter is the brain's reward system. It can be produced when we're doing anything that is pleasurable, like shopping or golfing, or enjoying a pleasant smell. The following foods are high in tyrosine, which the brain converts into dopamine: poultry, dairy foods, avocados, bananas, pumpkin and sesame seeds, and soy.
- **Norepinephrine.** This hormone makes us giddy, energetic and euphoric, but you might not want to try too hard to trigger it. Norepinephrine kicks into high gear in the fight or flight response.
- **Oxytocin.** This is the cuddle hormone, but there are other ways to trigger its release. Oxytocin can be released during positive social interactions between adults or with low-intensity stimulation of the skin.
- **Testosterone.** While this is the main male sex hormone, women have a small amount, too. Some natural ways to increase testosterone are exercising and lifting weights; eating protein, fat, and carbs, and getting high-quality sleep.
- **Estrogen.** You can increase levels of the female hormone naturally by eating soybeans, sesame seeds or flax seeds, taking B vitamins or Vitamin D, and taking supplements like chasteberry or black cohosh.

BE BRAIN HEALTHY and adopt a lifestyle that includes thoughts, behaviors, emotions, responses, and language that promote brain health protective factors:

- Stress resilience
- Nutrition
- Physical activity
- Sleep
- Social connection
- Emotional wellbeing
- Meaning and Purpose

- Cognitive stimulation and creativity
- Engaging with nature
- General health
- Positive impacts

About the Brain Health Initiative (www.brainhealthinitiative.org)

The Brain Health Initiative (BHI), a 501(c)(3) nonprofit, uses a cutting-edge approach to protecting brain health, promoting brain performance, and preventing and fighting brain illness across the lifespan. The BHI is building brain healthy communities, cultures that foster brain health protective factors and address risk factors, thereby improving brain health and optimizing brain performance outcomes for the Florida Suncoast region and beyond. Join the ***Be Brain Healthy*** movement, ***because brain health matters, and lifestyle makes a difference.*** To view all Brain Health Boosts [click here](#).