

Get a daily DOSE of these four "happy" chemicals



There are four major chemicals in your brain that influence how happy you are. Our bodies produce these chemicals naturally, but in some people, the body doesn't produce enough. This deficiency can make us sad, anxious, negative, hopeless, and depressed.

Fortunately, there are things we can do to increase these chemicals.

Use the acrostic DOSE to remember these four hormones.

Dopamine motivates us to take action toward goals, desires, and needs, and gives a surge of reinforcing pleasure when achieving them. Procrastination, self-doubt, and lack of enthusiasm are linked with low levels of dopamine.

Oxytocin both motivates us to establish intimate relationships and helps us sustain them. It is the "cuddle hormone" responsible for humans being social creatures.

Serotonin flows when you feel significant or important. Loneliness and depression appear when serotonin is absent. It helps regulate mood and social behavior, appetite and digestion, sleep, memory, and sexual desire and function.

Endorphins are released in response to pain and stress and help to alleviate anxiety and depression. The surging "second wind" and euphoric "runner's high" during and after a vigorous run are a result of endorphins.

If your body is not producing enough of these four chemicals, don't be passive about it. [Take the initiative](#) in three areas.

1. Prescription drugs can help. For instance, most antidepressants are designed to increase oxytocin and serotonin levels.
2. Natural products can help. For instance, L-tyrosine, Rhodiola, Mucuna, and L-theanine (available as over-the-counter supplements) can boost dopamine levels.
3. Engaging in some simple, daily functions can increase levels of the four chemicals.

I'll focus on the third area. I'll identify the key need that is associated with each chemical, give some practical steps we can take to increase them, and make suggestions on how we can help others.

Dopamine

Need - that our lives have meaning; we are not sleep-walking through life; we are making progress toward meaningful goals.

Solutions - [Set goals](#) and diligently pursue them. When you achieve a goal, celebrate—literally—pop open a bottle of champagne or treat yourself to a personal splurge. [Break down big goals into smaller ones](#) and celebrate when you achieve each step. Dopamine is also produced as we *anticipate* meaningful activities, so always have something you're looking forward to.

We can help others by encouraging them to set goals and celebrating their achievements.

Oxytocin

Need - emotional and physical intimacy and trust in relationships.

Solution - Develop close, intimate relationships. In a survey that has been taken annually for many years, Americans are asked, "How many close friends do you have?" As recently as ten years ago the average answer was, five. In a recent survey the average answer was, none. No wonder depression and anxiety are rampant in our society.

Here's a short-term solution: oxytocin is nicknamed the "cuddle hormone"; a simple way to keep oxytocin flowing is to give someone a hug. Psychologists suggest that eight hugs a day will make a big difference.

We can help others by committing to be a close friend.

Serotonin

Need - This need is summed up in Viktor Frankl's book *Man's Search for Meaning*. Frankl taught that our primary drive in life is not pleasure, but the discovery and pursuit of what we personally find meaningful.

Solution - discover what "makes your boat float." What energizes your core? Also, good diet and exposure to sunlight will help. As much as 95 percent of the serotonin in your body is produced in your gut so proper diet is important.

Help others by coaching them toward meaningful activity.

Endorphins

Stress and pain are the two most common factors leading to the release of endorphins.

Endorphins interact with the opiate receptors in the brain to reduce our perception of pain and act similarly to drugs such as morphine and codeine.

Solution - Don't avoid stress and pain; in moderation, they are good for you so don't pursue a stress-free, pain-free life. Exercise is the main thing way to produce endorphins.

Help others maintain a proper balance of stress in their lives: not too much or too little. I recently led a group of friends on a vigorous tour through Europe. Our pace was unrelenting; we walked at least six miles a day, so at the end of each day we were

exhausted but somewhat euphoric. Laughter also helps release endorphins.

This post is a brief attempt by a non-scientist to help us understand how certain brain chemicals affect how happy we are. The bottom line for me is:

1. If you're consistently unhappy:

Exercise, eat a balanced diet, spend time outside.

Develop deep friendships.

Engage in meaningful work.

Set goals and measure your progress.

Take natural supplements

2. If you're still unhappy, talk to your physician about taking medication.

I get impatient with people who complain of being unhappy but they don't take the initiative to do what they *can* to improve. Get out of the passenger seat and into the drivers's seat; there are steps you can take to feel happier.