

HOW TO GUIDE

HEALTHY BRAIN

Teacher Guide



Lessons in Mental Health

Dopamine

- **Description:** Dopamine is often called the "reward" neurotransmitter. It plays a major role in pleasure, motivation, and attention. It also influences movement, memory, and emotional responses.
- **Ways to Support Dopamine:**
 1. **Exercise** – Aerobic activities like running or swimming can boost dopamine production.
 2. **Eat Protein-Rich Foods** – Foods high in tyrosine, such as chicken, eggs, and dairy, are building blocks for dopamine.
 3. **Meditation** – Reduces stress and enhances focus, indirectly supporting dopamine balance.
 4. **Sleep Well** – A good night's sleep helps the brain regulate dopamine receptors, affecting mood and energy levels.
 5. **Listen to Music** – Enjoying music you love can increase dopamine release.

Endorphins

- **Description:** Endorphins are the body's natural painkillers, helping to reduce pain and induce feelings of pleasure or euphoria. They're often associated with a "runner's high" and help manage stress.
- **Ways to Support Endorphins:**
 1. **Regular Exercise** – Physical activities, especially high-intensity exercise, boost endorphin production.
 2. **Laughter** – Laughter not only reduces stress but also triggers endorphin release.
 3. **Spicy Foods** – Eating foods like chili peppers can increase endorphin levels due to the release of heat-inducing chemicals.
 4. **Sunlight Exposure** – Helps stimulate endorphin production and improve mood.
 5. **Yoga or Meditation** – These practices promote relaxation and reduce pain perception.

Serotonin

- **Description:** Serotonin helps regulate mood, sleep, and appetite. It contributes to feelings of well-being and happiness and is involved in the sleep-wake cycle.
- **Ways to Support Serotonin:**
 1. **Get Sunlight** – Exposure to sunlight helps the body produce serotonin naturally.

2. **Eat Tryptophan-Rich Foods** – Foods like turkey, eggs, and cheese contain tryptophan, a precursor to serotonin.
3. **Exercise Regularly** – Physical activity boosts serotonin production, enhancing mood and energy.
4. **Meditate** – Mindfulness and relaxation practices help boost serotonin levels.
5. **Consume Omega-3 Fatty Acids** – Found in foods like salmon and walnuts, omega-3s can help serotonin function effectively.

GABA (Gamma-Aminobutyric Acid)

- **Description:** GABA is an inhibitory neurotransmitter that calms the nervous system, reducing feelings of anxiety and promoting relaxation and sleep.
- **Ways to Support GABA:**
 1. **Practice Yoga** – Yoga can increase GABA levels, enhancing relaxation.
 2. **Limit Caffeine** – Reducing caffeine intake can prevent overstimulation and support GABA's calming effect.
 3. **Eat Fermented Foods** – Foods like kimchi and yogurt support gut health, which is linked to GABA production.
 4. **Engage in Deep Breathing** – Breathing exercises help activate the parasympathetic nervous system, promoting calmness.
 5. **Try Herbs like Valerian Root** – Natural herbs such as valerian root and passionflower can help increase GABA levels.

Best Practices for a Healthy Brain

1. **Get Consistent, Quality Sleep** – Aim for 7-9 hours per night to support memory, focus, and mood.
2. **Eat a Balanced Diet** – Include brain-boosting foods like leafy greens, berries, fatty fish, and nuts for essential nutrients.
3. **Exercise Regularly** – Physical activity, especially aerobic exercise, supports blood flow to the brain and neurotransmitter health.
4. **Stay Hydrated** – Dehydration affects cognitive function, so drink plenty of water throughout the day.
5. **Manage Stress** – Use techniques like meditation, deep breathing, or yoga to keep stress hormones balanced.
6. **Engage in Mental Stimulation** – Activities like reading, puzzles, or learning a new skill keep the brain engaged and healthy.
7. **Limit Alcohol and Avoid Drugs** – These substances can negatively impact neurotransmitter production and brain health.
8. **Socialize** – Positive social interactions support mood-regulating neurotransmitters and reduce stress.
9. **Practice Mindfulness** – Being present helps reduce stress and improve focus.
10. **Limit Screen Time Before Bed** – Blue light can interfere with sleep quality, which is crucial for brain function.