

Appreciation to: ROD INGRAHAM, M.D. for this work

BASIC BRAIN MAINTENANCE FOR ADULTS

Basic Brain Maintenance means making a specific effort, every day, to keep our brain working as normally as possible, to maintain the normal function of our brain's systems, to develop positive and healthy habits and lifestyle, now and for the future, and to stay connected to reality and what life requires for a meaningful, successful life.

1. Normal sleep: Sleep is brain restoration time. We replenish our brain's neurochemistry with normal sleep biorhythms. The brain requires regular sleep to maintain normal brain systems function, including normal attention, alertness, emotion processing, mood stability, memory formation, and thought organization. Having a good day depends on a good night's sleep.

2. Normal nutrition: The brain requires normal nutrition to maintain and replenish the brain's proteins and chemicals. A balanced diet with salads, fruits, vegetables, brown breads and cereals, and (if desired) lean meat, especially chicken, turkey, or fish.

3. Regular exercise: Regular exercise and physical work does several important things for our human brain:

§ Boosts the brain's endorphins, which are the brain's built in "feel good" hormones.

§ Boosts dopamine, which is the important neurotransmitter which keeps our alertness, attention, thought organization, and motivation circuits on line.

§ Boosts BDNF (Brain Derived Neurotrophic Factor). BDNF stimulates the growth of neurons in our hippocampus, maintaining and improving memory and thought organization.

§ Stabilizes the brain's emotion processing and mood regulation systems.

4. Regular outdoor time: The sky, the trees, the mountains, the flowers, being intuned to nature. Being outdoors is therapeutic. Our human brains were not made to be indoors all the time. Regular outdoor time improves our mood, our outlook, our attitude. Our brain's intunement to reality gets reset each time we walk outside.

5. Regular work: Meaningful, useful work keeps our human brain connected to reality and meaning in life. The prefrontal cortex, our brain's CEO, has to stay booted up in order to work. So, regular work gives the prefrontal cortex practice in staying on line, staying intuned to life. Using our abilities every day in meaningful, useful work makes one's life worth while and is the only consistent way to boost and maintain self esteem. Those who never work never mature.

6. Reward yourself regularly: After working hard take regular breaks. Reward yourself for your hard work. Do something you really enjoy every day.

7. Have structure in your everyday life: Have structure in your life, so that you are sleeping regularly, going to work regularly, exercising regularly, and eating regularly. The brain has built in biorhythms. The brain likes routine. A structured life gives you more free time to do the things you really want to do.

8. Try to learn something new every day: Keep your brain learning. The brain works best with continued stimulation. Keep the brain learning in order to keep the brain working. The brain, like our heart and our muscles, goes by our body's universal principle: "If you don't use it you lose it."

8. Try to learn something new every day: Keep your brain learning. The brain works best with continued stimulation. Keep the brain learning in order to keep the brain working. The brain, like our heart and our muscles, goes by our body's universal principle: "If you don't use it you lose it."

9. Pray or meditate every day: Prayer or meditation activates the very highest part of our human brain, the prefrontal cortex, and decreases the activation of the primitive limbic fear / fight flight circuits.

10. Treat each person like you want to be treated: Treat each person with kindness and respect, even if that person is not kind to you. Be gentle. Be fair. Be honest. Be helpful. Share your life with others. Walk the extra mile.

11. Practice forgiveness every day: Forgive yourself if you make a mistake. Forgive others who make mistakes. Forgive those who hurt you. Forgiveness turns off the negative emotion processing circuits in the brain and frees up the higher systems. You cannot be happy when your emotion processing circuits are reset on negative. Forgiveness resets the brain's emotion processors back on positive.

12. Practice gratitude every day: Every day is a gift. Be thankful for every moment. A beautiful day. Time with your family. Time with your friends. A beautiful song. A beautiful sunset. These are priceless gifts.

13. Get in tune with your real values and priorities: Be intuned to your priorities: Your God, your family, your work, your friends, and be intuned to yourself. Make your life more personal and less driven. Get off the roller coaster of materialism.

14. No exposure to violence: Do not expose your brain to violence, whether in the environment or violence in the media, including TV, videos, video games, movies. The brain doesn't know the difference, whether the violence is on a screen or in person. The repeated activation of primitive limbic stress response circuits decreases higher thinking and resets our emotion processing circuits on negative.

15. Learn about your brain's systems: The brain's highest systems are the thinking systems. Practice keeping your thinking systems in charge. Let your thinking circuits call the plays, not the lower emotion circuits. Thinking circuits make better decisions. Thinking brain up. Lizard brain down.

16. When you don't feel normal, keep doing the normal things: If you have a "bad day" still keep doing the normal things. If you keep doing the normal things. and stick with it, you start to feel more normal (Butt up mood up). So never give up. Things will always get better if you stick with the plan.

BASIC BRAIN MAINTENANCE: GOALS

Prefrontal Executive / Attention System Goals:

- Keep thinking systems on line, in charge, and making the decisions.
- Not have thinking systems "hijacked" by abnormal emotion / mood processing.
- Not have thinking systems "hijacked" by dysfunctional gating / control systems.
- Not have thinking systems "hijacked" by abnormal reality processing systems.
- Maintain normal basic brain maintenance (e.g. sleep, nutrition, exercise, structured life, positive brain exposure environment).

Emotion Processing System Goals:

- Keep emotion (fear / fight / flight) processing "even".
- Prevent the "reset" of emotion processing on negative.
- Prevent the inappropriate activation of negative emotion circuits.
- Practice using thinking and not the dominance of negative emotion circuits to make decisions (Thinking brain T, Lizard brain J).
- Maintain a positive brain exposure environment.

Mood Regulation System Goals:

- Keep mood regulation "even".
- Stop inappropriate mood cycling.
- Practice the normal hierarchy of brain function, with thinking systems "up", dominance of primitive limbic circuits "down".
- Maintain normal biorhythms, normal sleep, normal brain metabolism.
-

Gating / Control System Goals:

- Keep the gating / control systems of the brain work normally.
- Keep the brain's ("C.E.O") in control of gating / activation of circuits.
- Keep the brain's "C.E.O." in charge of fluency and intensity of brain activation.
- Keep the brain's "C.E.O." in charge of attention / cognition / emotion processing / mood regulation / behavior / motor function.

Memory Formation / Reality Processing System Goals:

- Normal formation and accessing of memory.
- Normal "feet on the ground" reality processing, free from distortions, delusions, hallucinations.
- Normal thought organization.