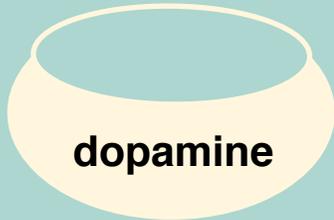


# You Have Power Over Your Brain

## #1 Know the job of each happy brain chemical



**dopamine**

**the joy of expecting a new reward**

- meets a need
- “I can get it!”
- novelty

The brain habituates to rewards, which is why we keep seeking new and improved.



**serotonin**

**the pleasure of gaining a one-up position**

- social importance
- getting respect
- pride

We easily see this in others but we hate to see it in ourselves.



**oxytocin**

**the comfort of social trust given or received**

- safety in numbers
- social support
- touch

The brain releases trust cautiously to promote survival and avoid harm.

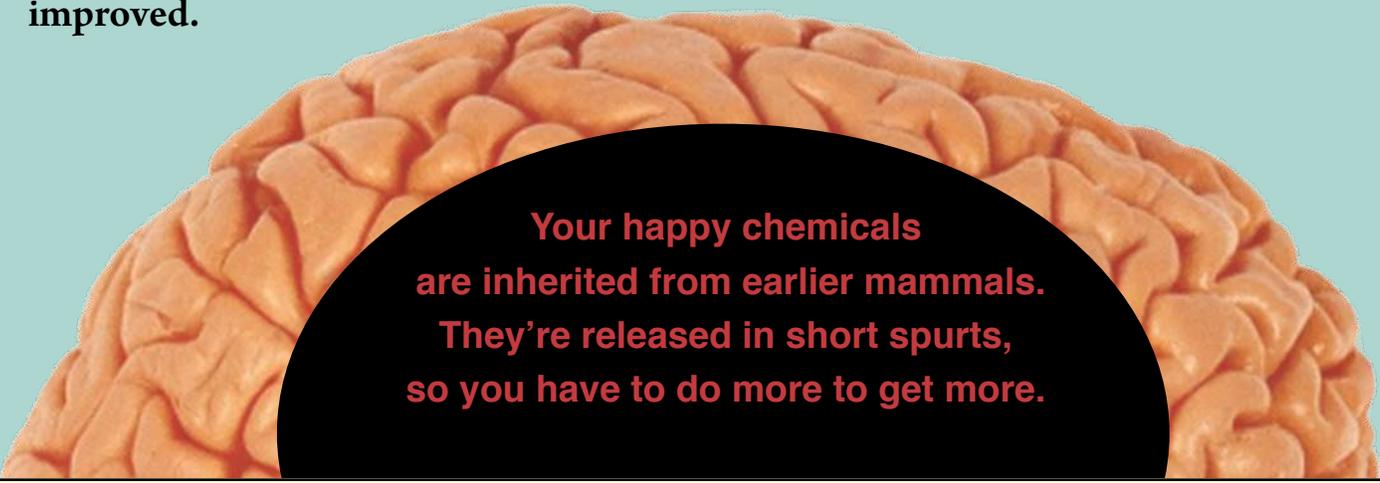


**endorphin**

**oblivion that masks physical pain**

- evolved for emergencies
- exercise, laugh

Do not inflict pain to get it: it's a bad spiral. Belly laugh & stretch daily.



**Your happy chemicals are inherited from earlier mammals. They're released in short spurts, so you have to do more to get more.**



# You Have Power Over Your Brain

## #2 Tough choices are the task your brain is meant for



A step toward tighter social bonds may be a step away from your individual goals; and vice versa. You get to weigh and choose.



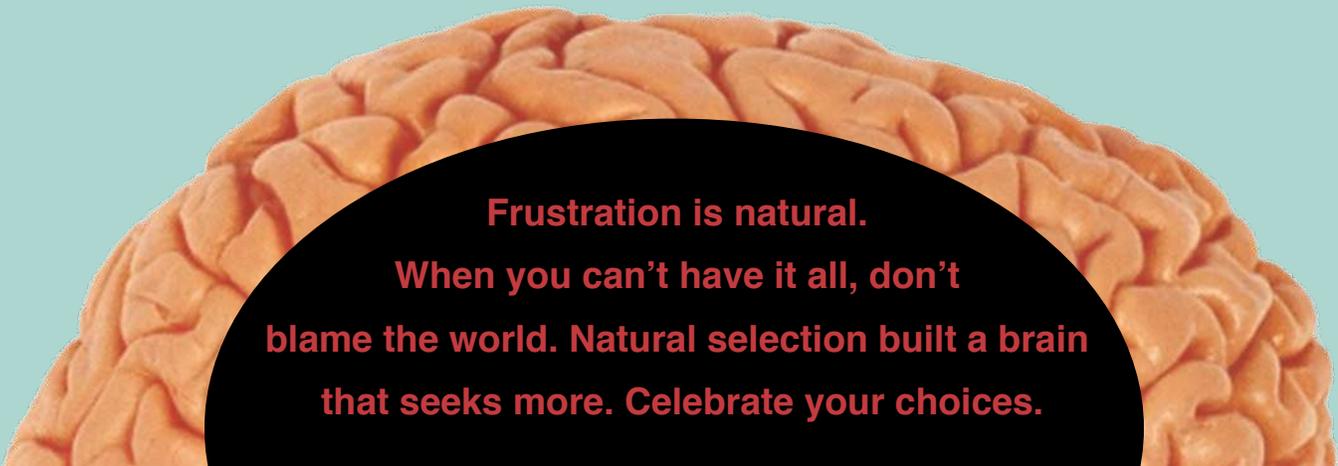
A step toward higher status may be a step away from your social bonds; and vice versa. Outcomes are never certain but you get to choose.



A step toward your personal goals may be a step away from higher status; and vice versa. You can't get it all but you can choose your steps.



Every step toward meeting your needs could bring risk and stress. But if you don't take a step, that's a risk too. Your brain is designed to manage this!

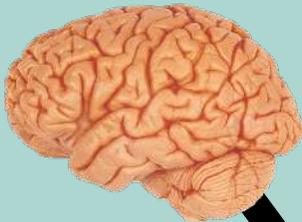


# You Have Power Over Your Brain

## #3 Your brain seeks rewards and avoids harm constantly

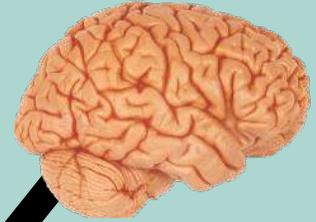
move away from harm

move toward rewards



← bad feelings

good feelings →



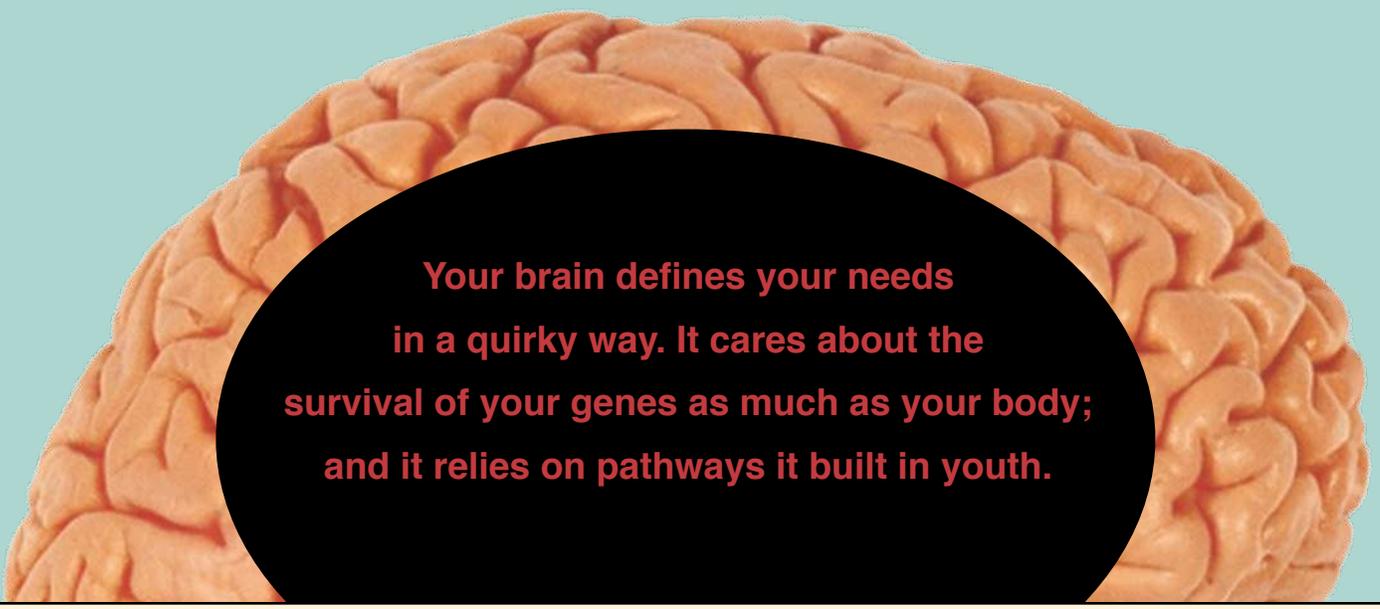
**Unhappy**  
brain  
chemicals  
warn you to  
pull back from  
possible threats  
to meeting your needs

- cortisol

**Happy**  
brain  
chemicals  
are released  
when you see  
a way to meet a need

- dopamine
- serotonin
- oxytocin
- endorphin

**mammalian  
limbic  
system**



Your brain defines your needs  
in a quirky way. It cares about the  
survival of your genes as much as your body;  
and it relies on pathways it built in youth.



# You Have Power Over Your Brain

## #4 Your brain defines pain and threat in a quirky way

**it anticipates pain based on past pain**

The cortisol spurts of your past connected neurons that turn it on today when similar patterns reach your senses.



**it confuses social pain with physical pain**

Social isolation and status setbacks threaten the survival of a mammal's genes, so the mammal brain treats social threats as survival threats.

Cortisol is pain, fear, stress, and anxiety. Without effort or intent, it alerts you to scan for familiar threat signals.

Consciously, you know a social disappointment won't kill you, but your mammal brain scans for potential social threats and turns on the cortisol alarm.

**Cortisol creates a bad feeling that motivates you to "do something fast!" to make it stop. But it's metabolized in 20 minutes if you don't re-trigger.**



# You Have Power Over Your Brain

## #5 Your brain relies on pathways built from early experience

The electricity in your brain flows like water in a storm, finding the paths of least resistance.

The pathways built before age eight became the superhighways of your brain because they got paved with myelin.

Mirror neurons wire you to repeat behaviors observed in youth.

Whatever triggered your happy chemicals in youth connected neurons that turn on your happy chemicals today.

Puberty brings another myelin surge, which is why the experiences of puberty shape our ups and downs in surprising ways.

Your brain uses the pathways you have until you give your electricity a new place to flow. It takes lots of repetition after your myelin years.

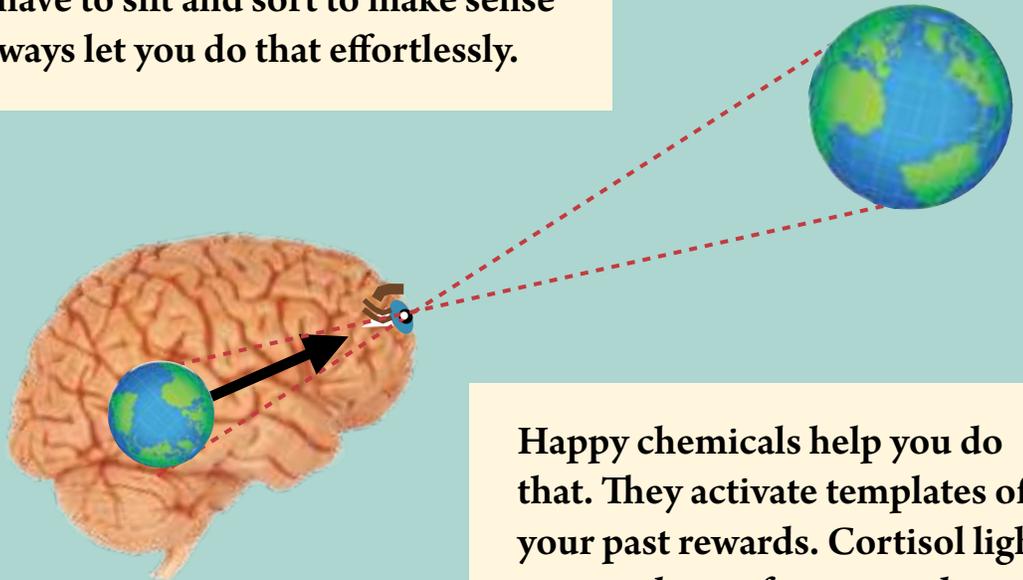


# You Have Power Over Your Brain

## #6 Your Pathways Give Meaning to the World Around You

The world constantly floods your senses with more detail than your brain can process. You have to sift and sort to make sense of things. Your existing pathways let you do that effortlessly.

You have ten times more neurons going **TO** your eyes than **FROM** your eyes. Your brain tells your eyes what to look for instead of just receiving.



Happy chemicals help you do that. They activate templates of your past rewards. Cortisol lights up templates of your past hurts.

Your brain chemicals are managed by structures that all mammals have in common (like the amygdala, hippocampus, hypothalamus). They help you respond to sensory inputs as “good” or “bad.”

Your mammalian limbic system and your cortex are always working together to interpret the world so you get rewards and avoid pain.



# You Have Power Over Your Brain

## #7 Repetition can build new pathways in your brain

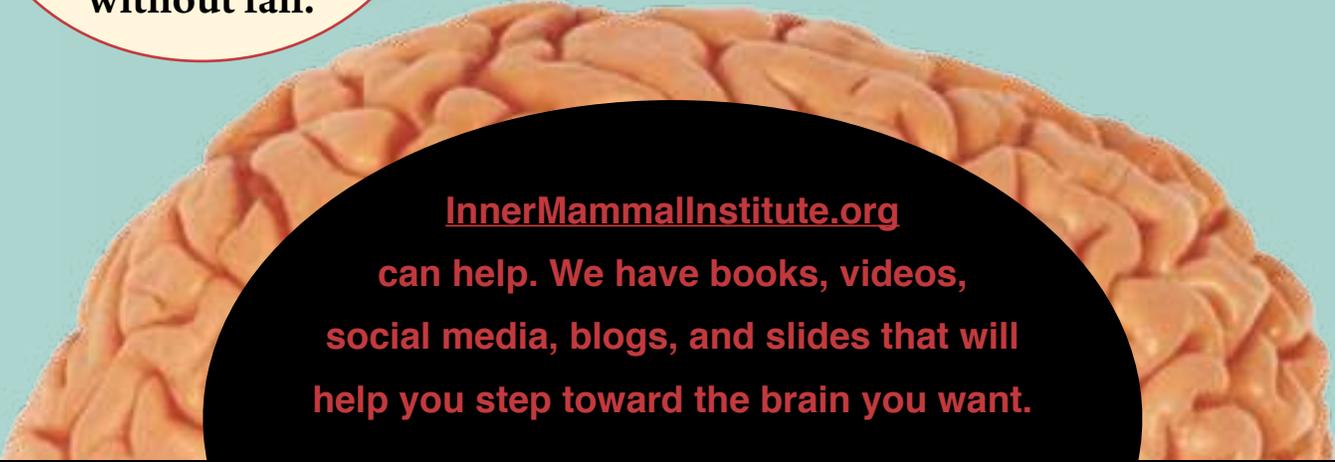
We all end up with some pathways that lead where we'd rather not go.

You can rewire your brain to feel good when you do things that are actually good for you.

Choose a new behavior or thought pattern and repeat it daily for 45 days.

But electricity will zip down a new path to your happy chemicals if you persist without fail.

It will feel unsafe at first because your brain linked your old path to survival.



[InnerMammalInstitute.org](http://InnerMammalInstitute.org) can help. We have books, videos, social media, blogs, and slides that will help you step toward the brain you want.

