It's not easy being mammal

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Mammals are not born hard-wired with the habits of our ancestors. The mammal brain freed us to build survival skills from life experience instead.

But it's not easy being mammal. Living in groups promotes survival, but each brain perceives survival in its own way.

Before mammals, creatures had thousands of babies and few lived to puberty.

Reptiles leave their offspring at birth after pausing to eat any hatchlings that are under par.

Fish don’t even wait for their eggs to hatch. They swim off as soon as their eggs are fertilized.

Mammals developed the strategy of birthing few offspring and investing in each individual.

Mammals form attachments, and
guard their offspring constantly from predators.

It's not easy having your eggs in so few baskets.



When mammals live in groups, fewer young are lost to predators.

Natural selection produced a brain good at living in a herd.

It's not easy living in groups.

When you see something you want,
a bigger group mate wants it too.

A solitary reptile
can lunge at food without
worrying what others will think.

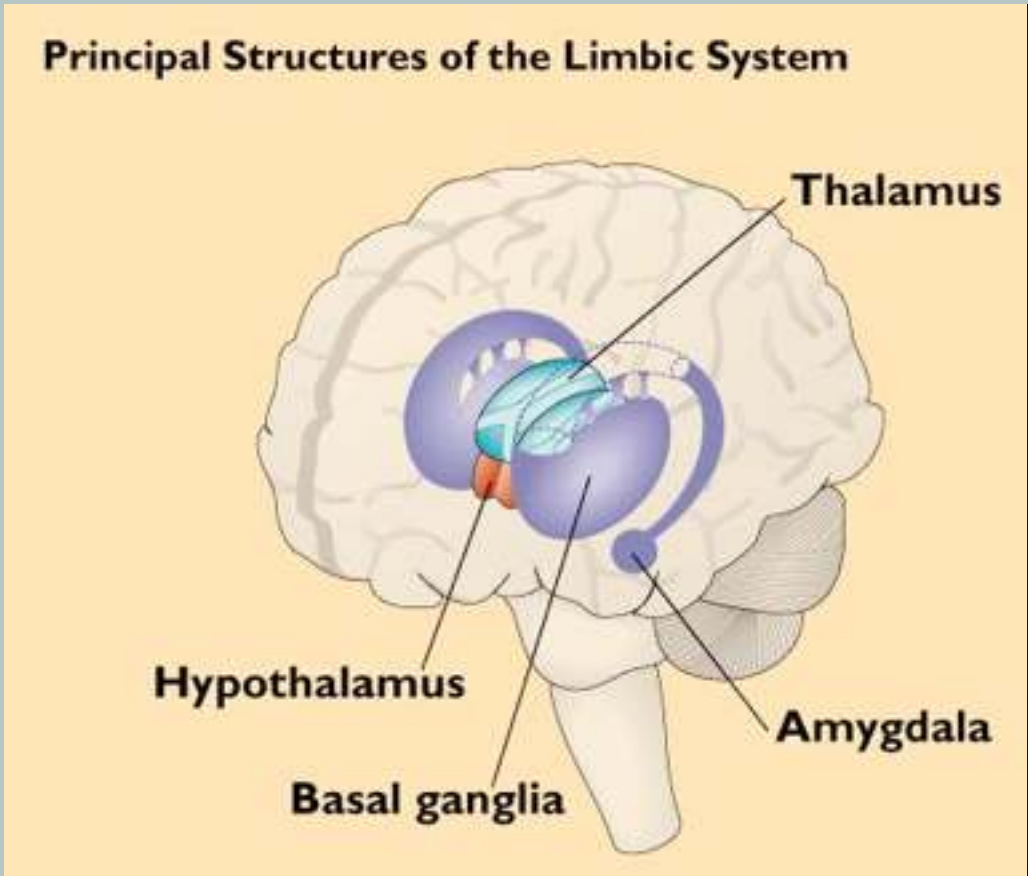
You can survive the loss of one meal
better than you can survive a nasty conflict.

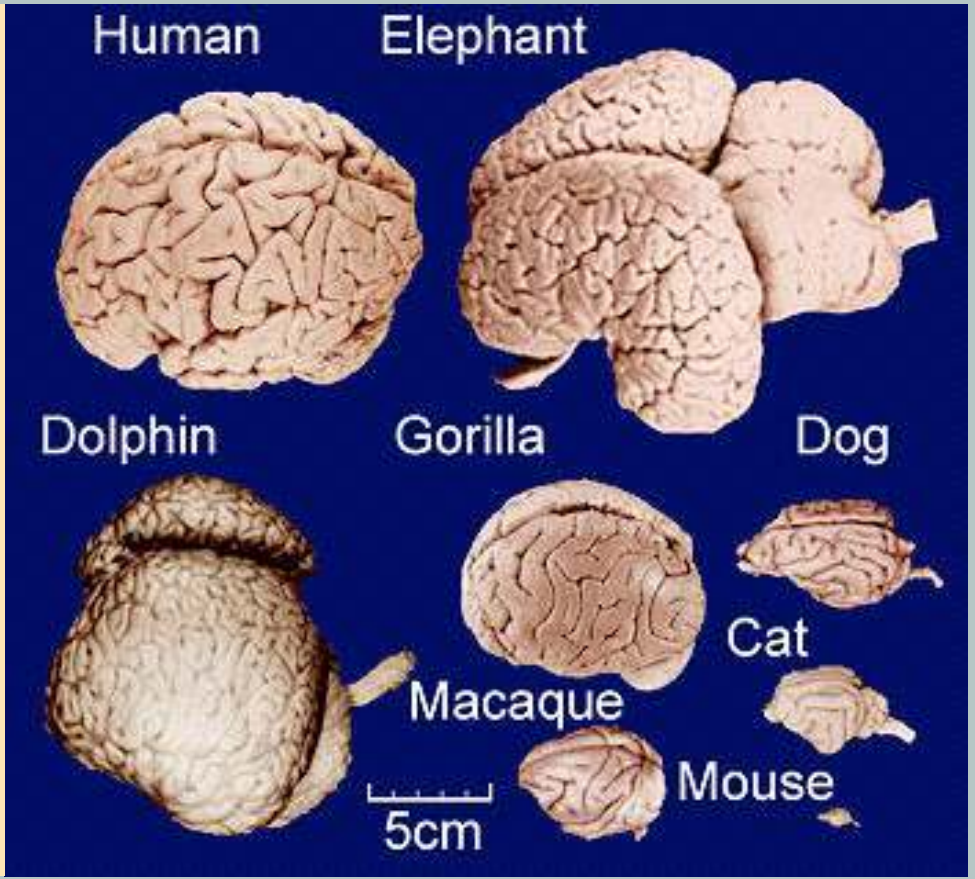
Natural selection produced a brain skilled at deciding when to seize something that meets its needs, and when to hold back to avoid injury.

The mammal brain sizes up others
based on past experience with them.

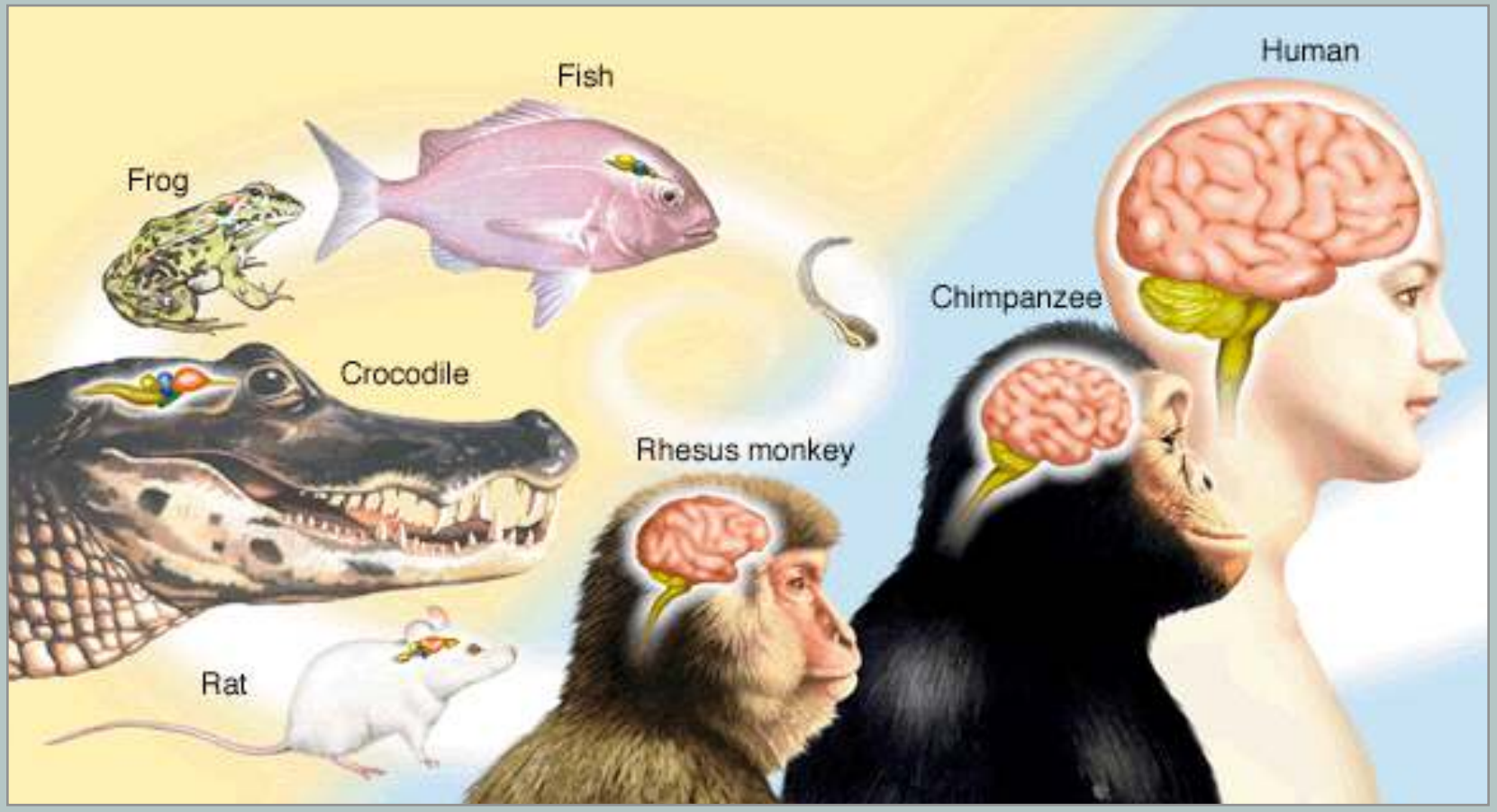
A mammal survives by comparing itself
to others and anticipating reactions.

All mammals have the same basic parts under their cortex.

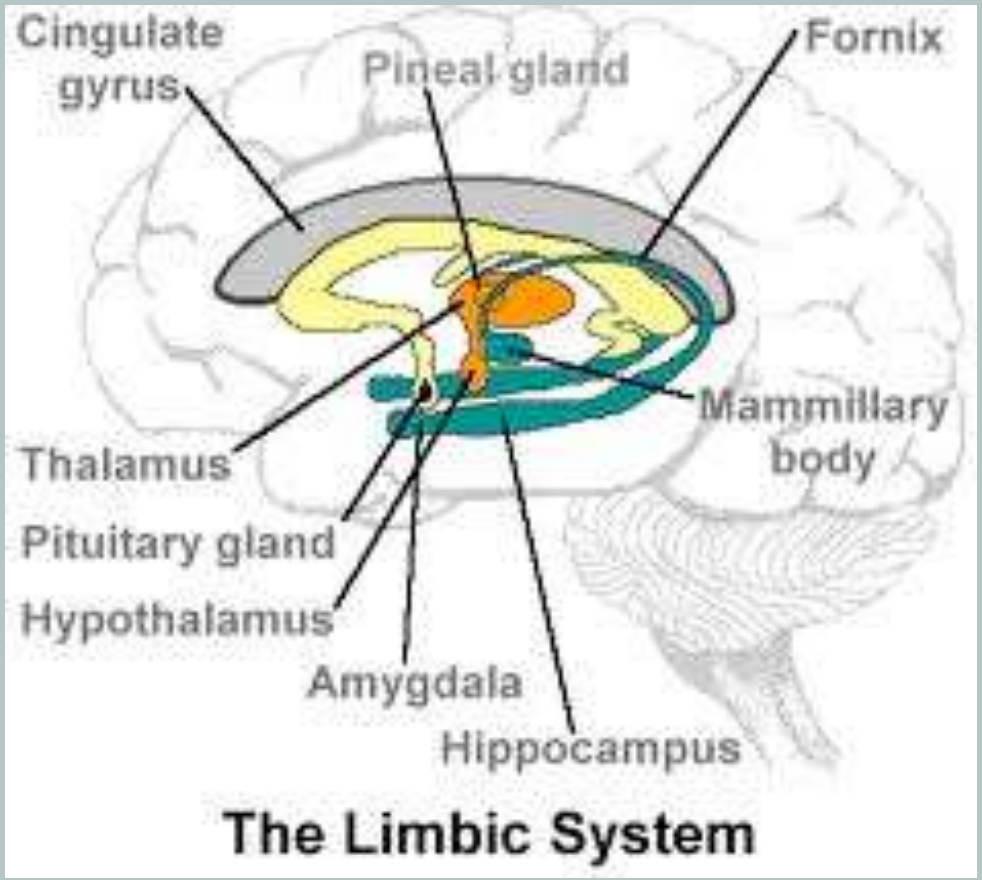




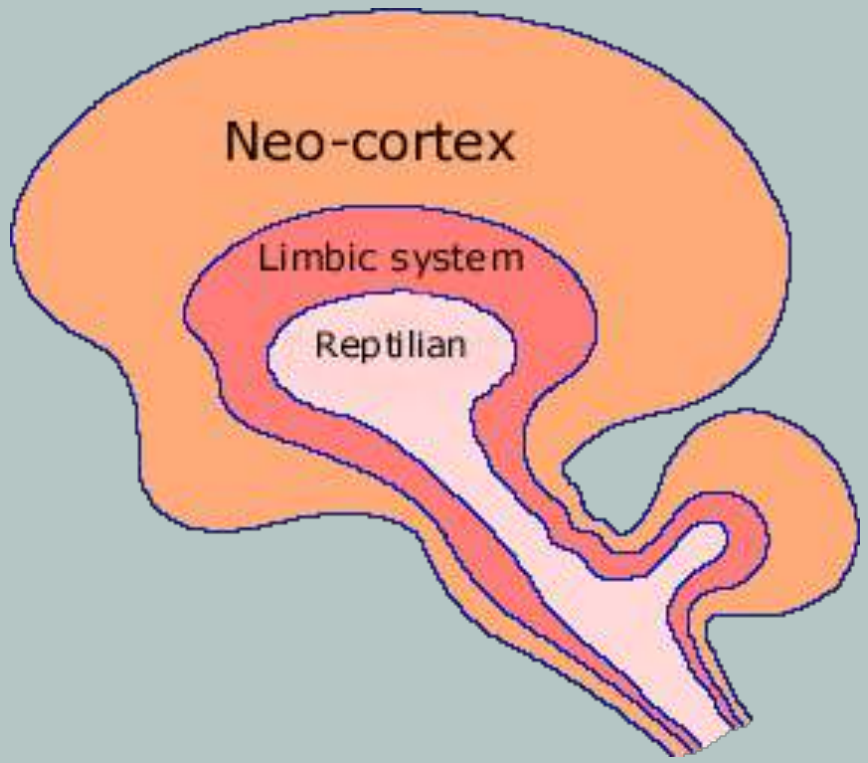
Mammals inherited reptile brains and added on.



Mammals evolved brain structures that manage social interactions with neurochemicals.

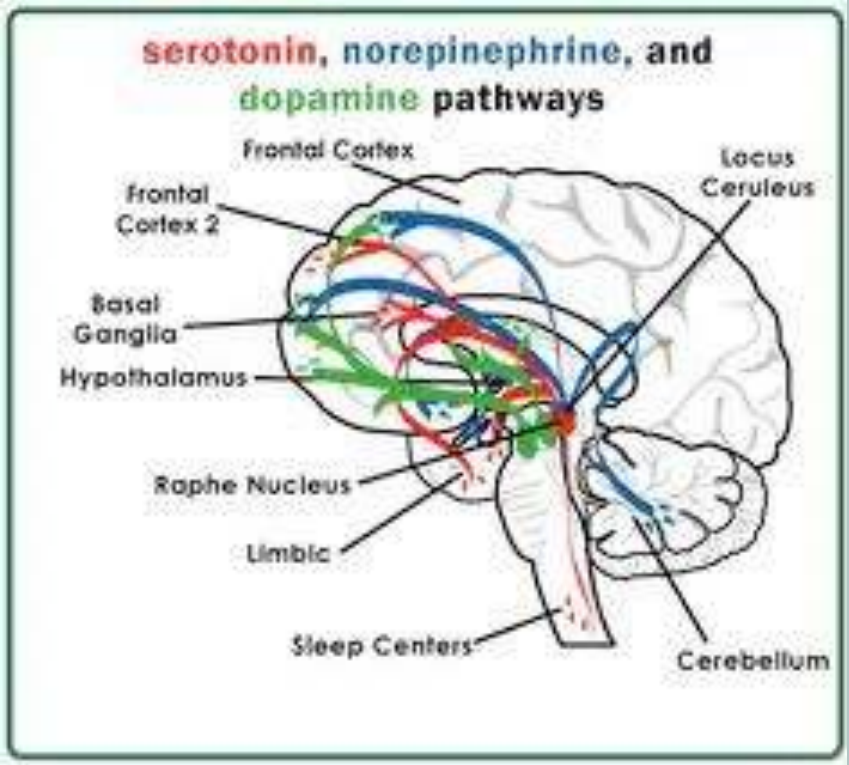


The mammal brain uses neurochemicals to interpret survival information.
"this input is good/bad for me"

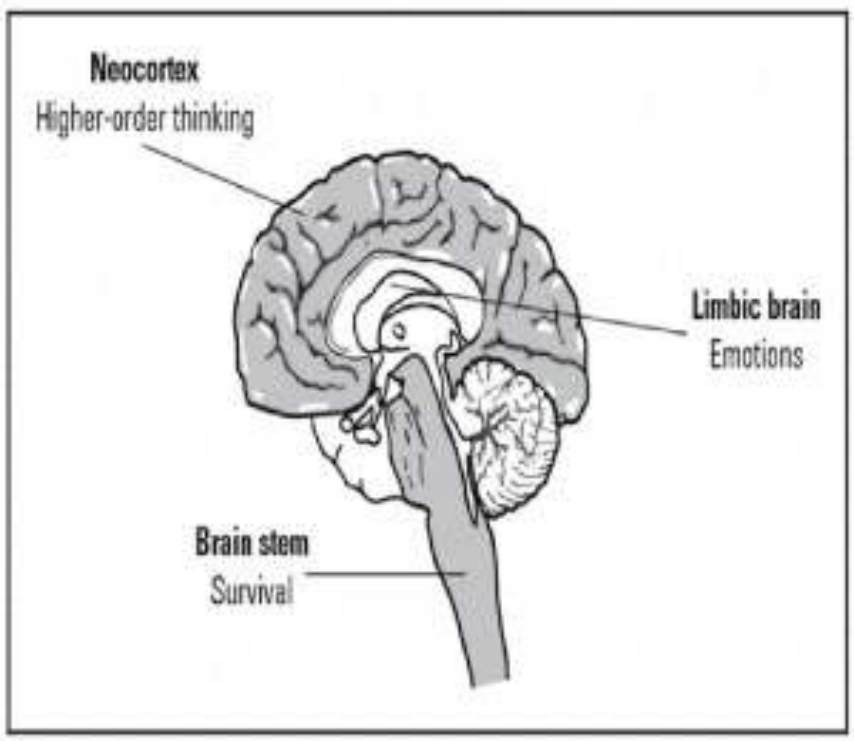


"this input is good/bad for me"

It releases "happy" neurochemicals (dopamine, serotonin, oxytocin, endorphin)when it sees something that promotes reproductive success.



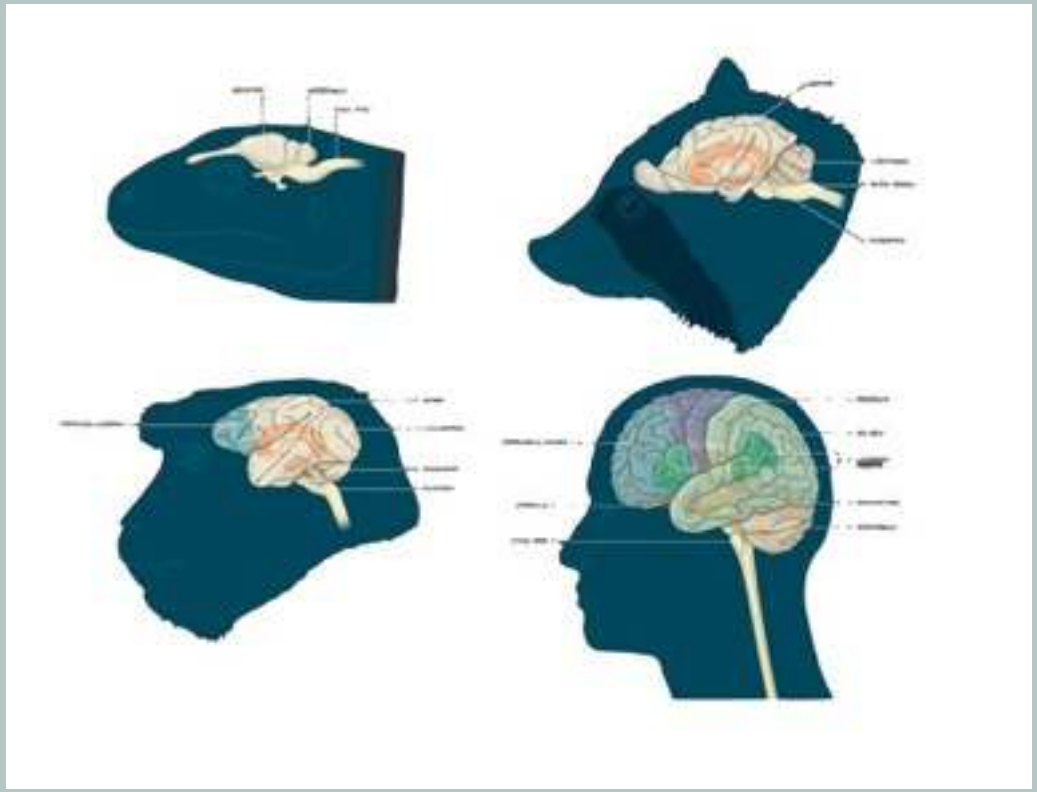
“Unhappy” neurochemicals (cortisol) flow when the brain sees a threat to reproductive success.



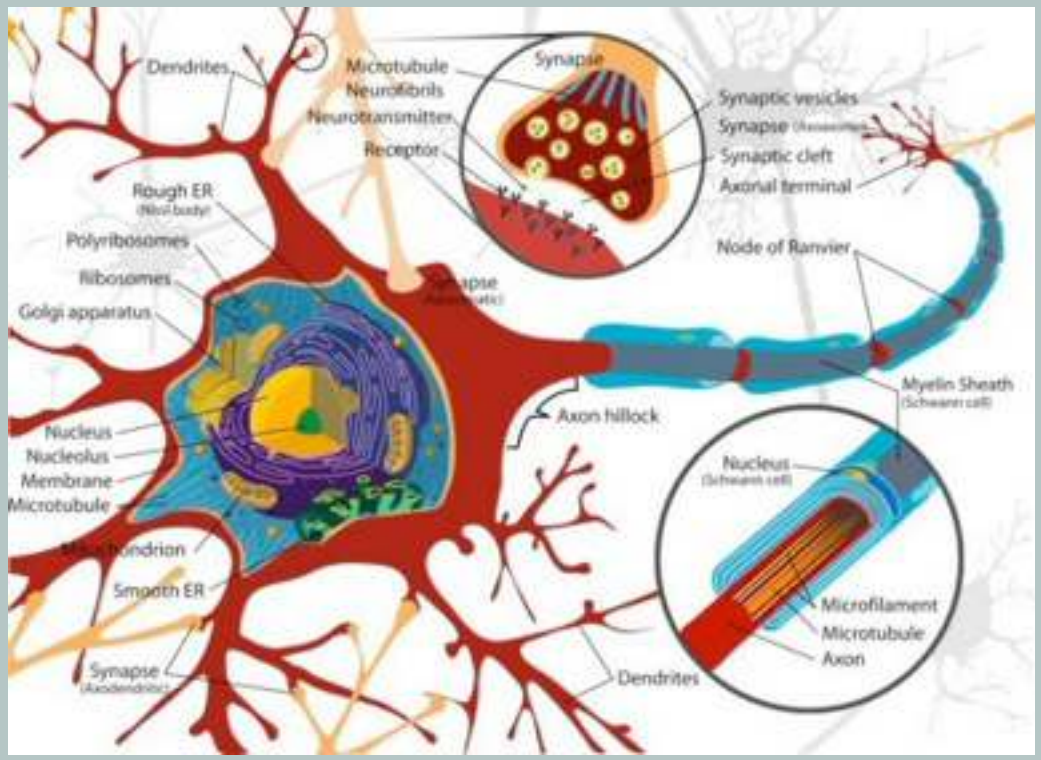
Social bonds promote reproductive success,
and the brain rewards them with "happy chemicals."

The chemical "oxytocin" rewards
a mammal for bonds of trust, like
social alliances and maternal-child bonding

Oxytocin is released at birth and on touch.
It produces a good feeling when a mammal trusts another.
Of course, trusting the wrong individual hurts survival prospects, so betrayed trust triggers cortisol.



The mammal brain learns when to trust from experience because neurochemicals stimulate connections between neurons.
Conscious analysis is not necessary.



The chemical "dopamine" produces a good feeling when a mammal finds a way to meet its needs.

The chemical “sertonin” rewards a mammal when it dominates.

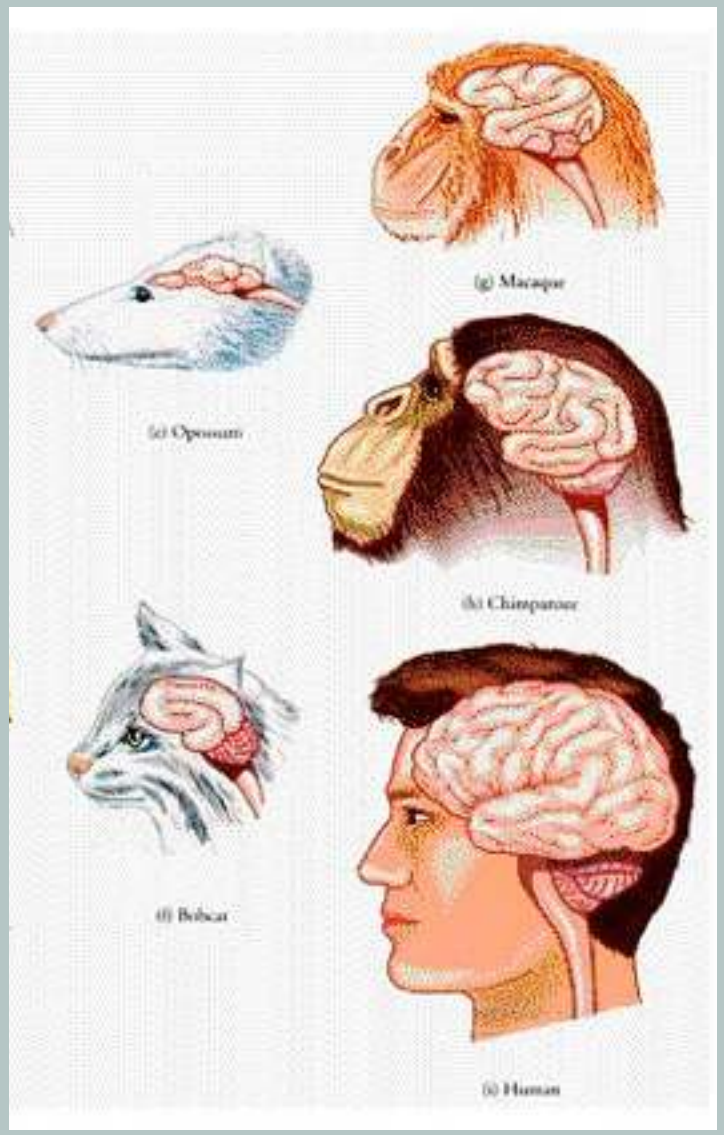
Social dominance promotes reproductive success and the mammal brain rewards it with serotonin.

Females seek dominance as well as males, and more surviving offspring result.

Your mammal brain cares about status as if your life depended on it because from your DNA's perspective, it does.

Status threats are survival threats to the mammal brain, and trigger stress chemicals.

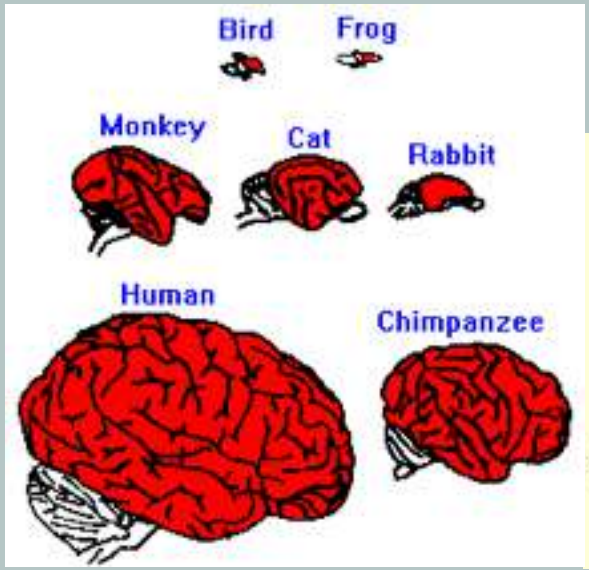
A cortex can restrain the urge to grab when a bigger group mate is watching.

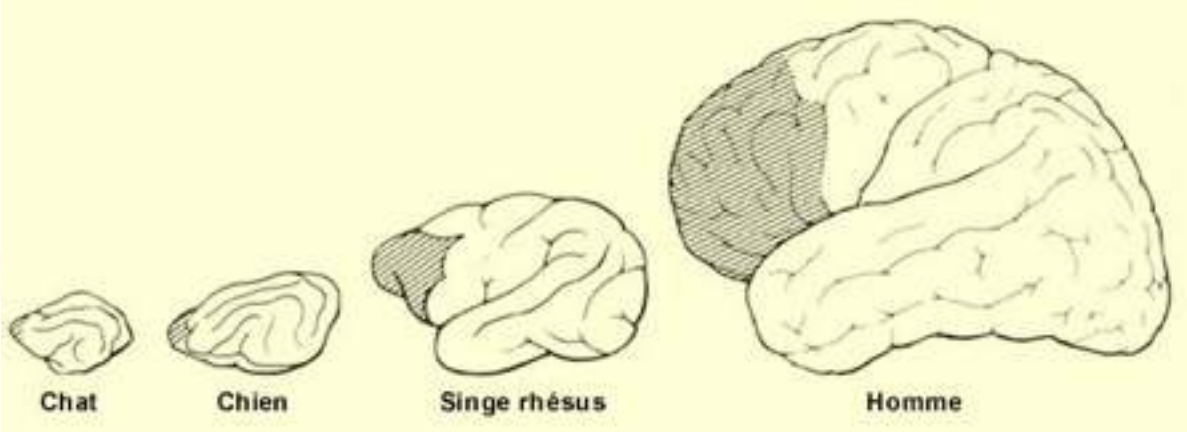


A mammal's cortex uses stored experience to restrain neurochemical impulses.

Mammals avoid conflict when that promotes survival, and they engage in conflict when that promotes survival.

Size matters
when it comes to the cortex.





A bigger cortex can store more experience with individual group mates.

A big cortex makes subtle judgements about when to seek dominance and when to submit to avoid harm.

A mammal may appear to "inherit" status from its mother.

But research shows that primates *learn* social dominance *skills* by mirroring elders.

A young mammal goes out and promotes its own genes with the brain it has built from its own experience.

Instead of being hard-wired to survive the way our ancestors survived,
we mammals are born to build neural pathways from early experience.

It's not easy
being
a social animal.

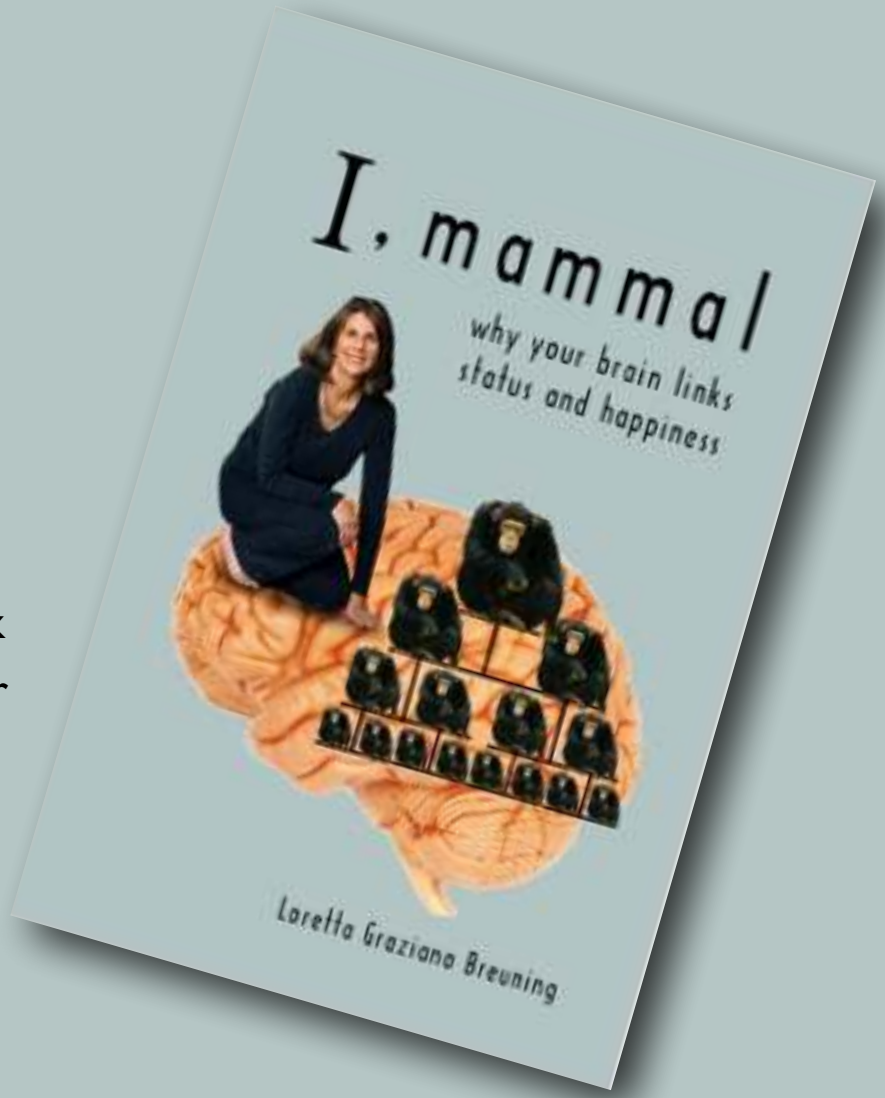
I, Mammal

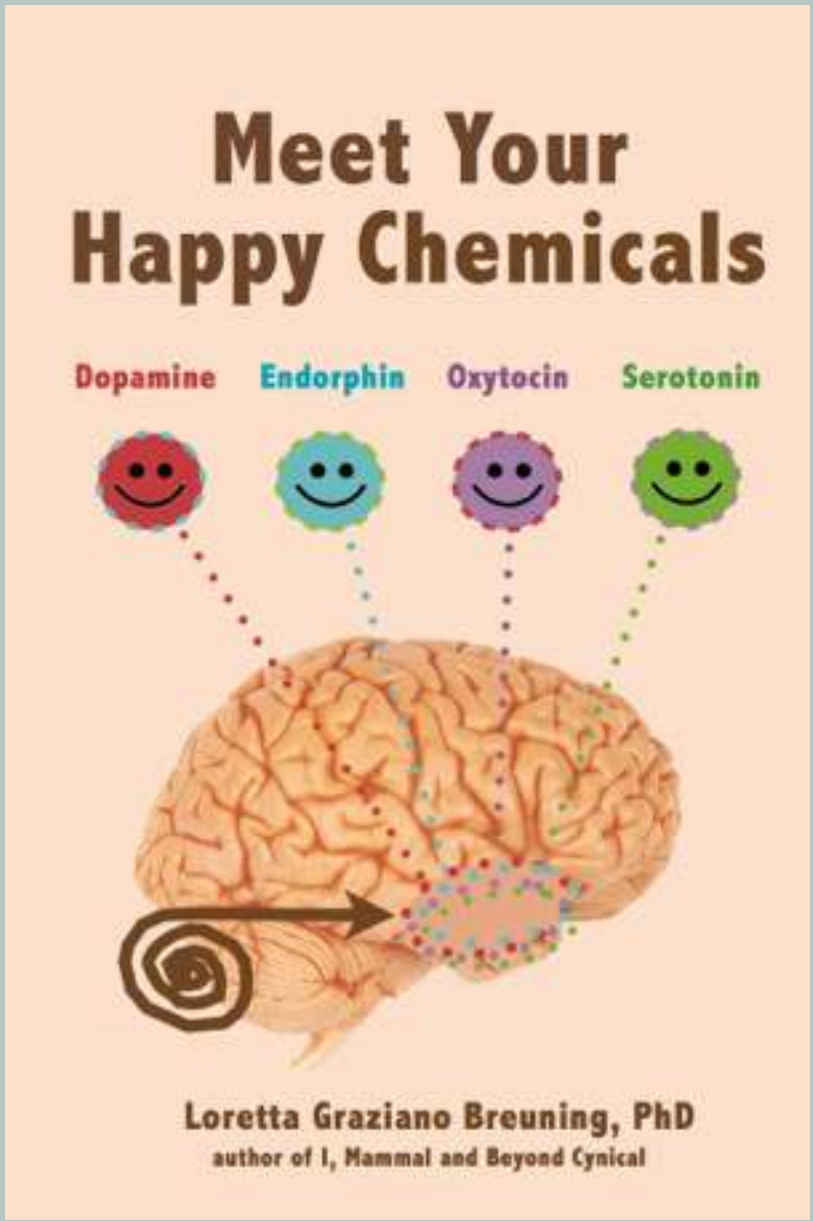
Why Your Brain Links Status and Happiness

by Loretta Graziano Breuning

$10.99 paper $4.99 ebook

It's not easy being a mammal. We live in groups for protection from predators, but group life can be frustrating. Mammals seek social dominance because it stimulates their serotonin. You can feel good without "junk status" if you understand your mammal brain. This book shows how.





Meet Your Happy Chemicals

by Loretta Graziano Breuning, PhD

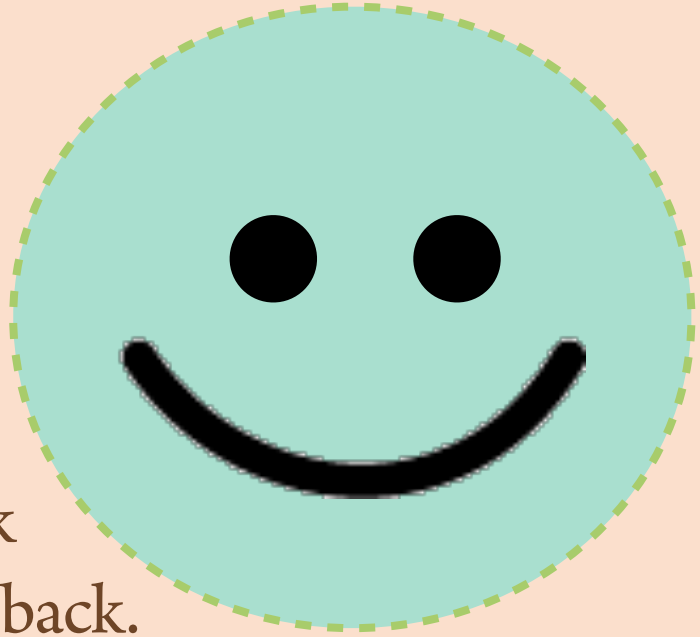
$9.99 paper $4.99 ebook

Happiness is caused by brain chemicals we've inherited from earlier mammals. When you know the job these chemicals do in animals, your emotional ups and downs make sense. You can build new neural circuits that trigger more well-being and fewer unwanted behaviors. This book shows how!

Dopamine

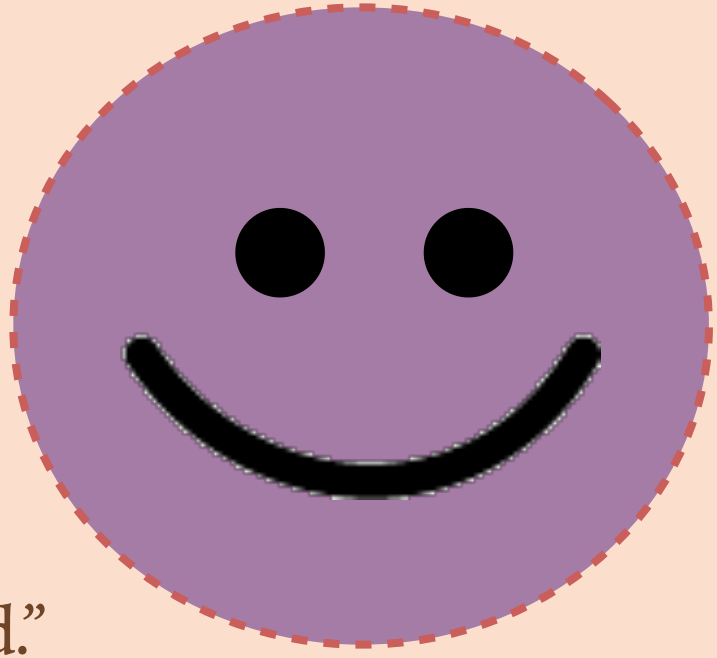
Dopamine makes you jump for joy
when you reach a goal or get a toy.
In nature, it helps find food when you need it.
“Eureka, I got it!” A memory gets created.
Dopamine causes expectations.
Correct predictions bring good sensations.
Dopamine feels great so you try to get more.
It rewarded our ancestors trudging through gore.
Cocaine triggers dopamine. Caution to all:
Joy without goal-seeking leads to a fall.
Dopamine flows when you feel like “I’ve done it.”
When others do it for you, your dopamine will shun it.

Endorphin



Endorphin helps you mask the pain
Of injuries that you sustain.
Your ancestors escaped from predator attack
'Cause endorphin felt good while they ran back.
Endorphin feels great when it eases your pains.
But only real pain makes it flow in your veins.
Exercise triggers it, experts alert you.
But first you must do it 'til body parts hurt you.
Endorphin receptors let opium in.
So you feel like you're safe without lifting a shin.
Laughing and crying can trigger it too.
But just for a moment– then the job's through.

Oxytocin



Oxytocin makes you trust your mates.
We love the bonds that it creates.
Oxytocin flows when you stick with the herd.
"Not me!" you may say, "I'm no bovine or bird."
But without social bonds, your brain feels alarm.
This protected our ancestors from all kinds of harm.
Though the herd will annoy you, the pack hurt you so.
When you run with a pack, oxytocin will flow.
"My pack is great and the other is nuts."
This thinking prevailed since the first mammal struts.
You're above all this foolishness, obviously.
But it feels good when I trust you and you trust me.

Serotonin

Serotonin swells your chest with pride
When you get respect and needn't hide.
Your brain feels good when you boost yourself higher.
But when others do this, it provokes your ire.
"I don't care about status. It's other who do."
But you spurt serotonin when the limelight's on you.
You are quite modest and don't like to boast.
But no serotonin flows when you coast.
Status doesn't depend on money.
You can be clever or helpful or funny.
But when others one-up you, your mind agitates.
'Cause serotonin droops 'til you lift your own weights.