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California-ACEs Academy

October 1, 2020

ADDICTION
BORN OUT OF ACEs
&
RETURN TO HOPE

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National Board Certifications

Adult Psychiatry

Child and Adolescent Psychiatry

Addiction Medicine

Disclaimers

I have no affiliations with any financially-interested company.

I have no known royalty, stock or financial interest in any industry-sponsored company.

I do not serve any position in any financially-interested company.



Educational Objectives

- 1) Neurobiology of balance and survival
 - stress management: *regulation pathway*
 - reinforcement: *reward pathway*

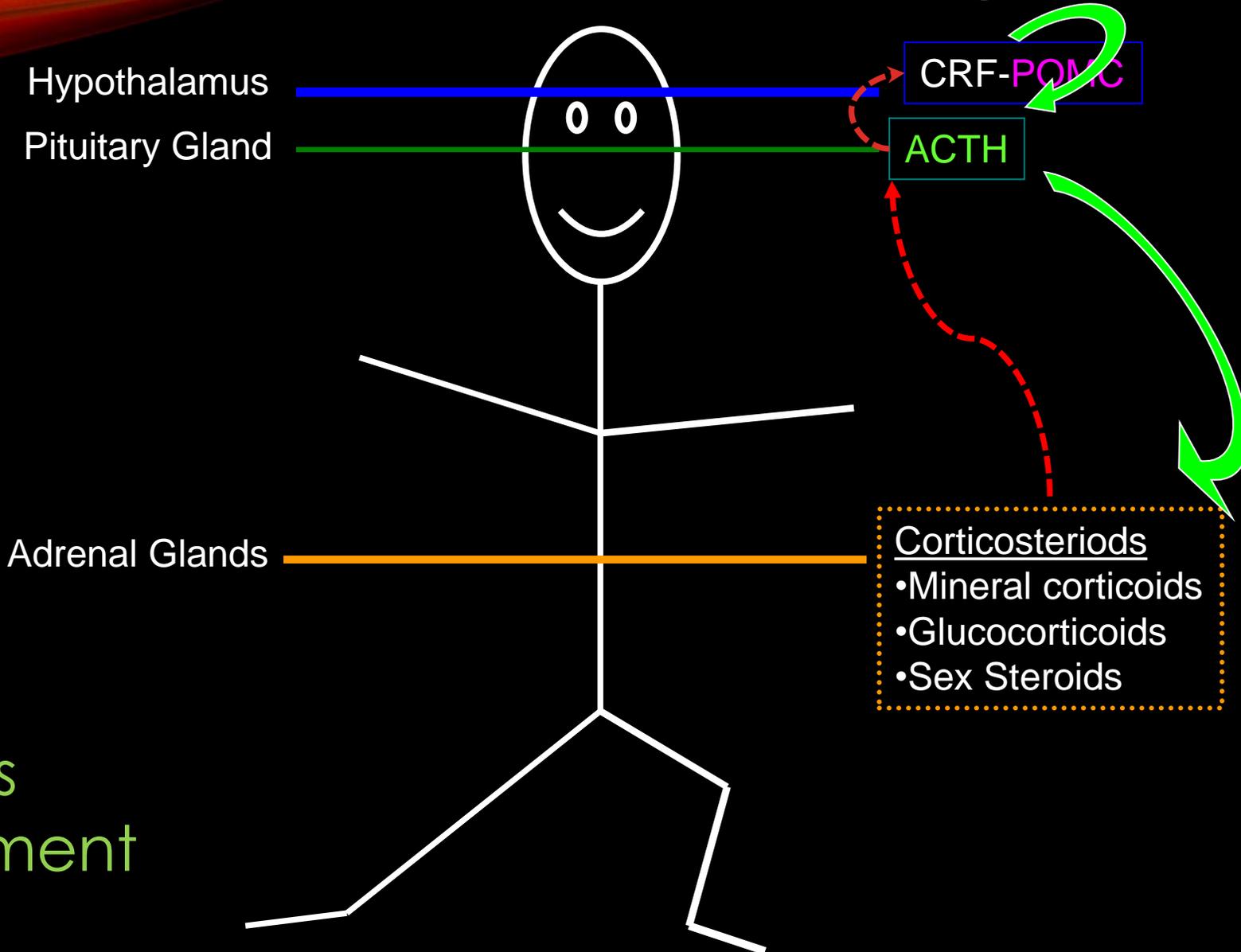
- 2) Neurobiology of distress and escape
 - chronic, toxic stress: *dysregulation pathway*
 - negative reinforcement: *addiction pathway*

- 3) Pathways to resolution and restoration
 - emotional mastery: *(re)regulation pathway*
 - resiliency: *recovery pathway*



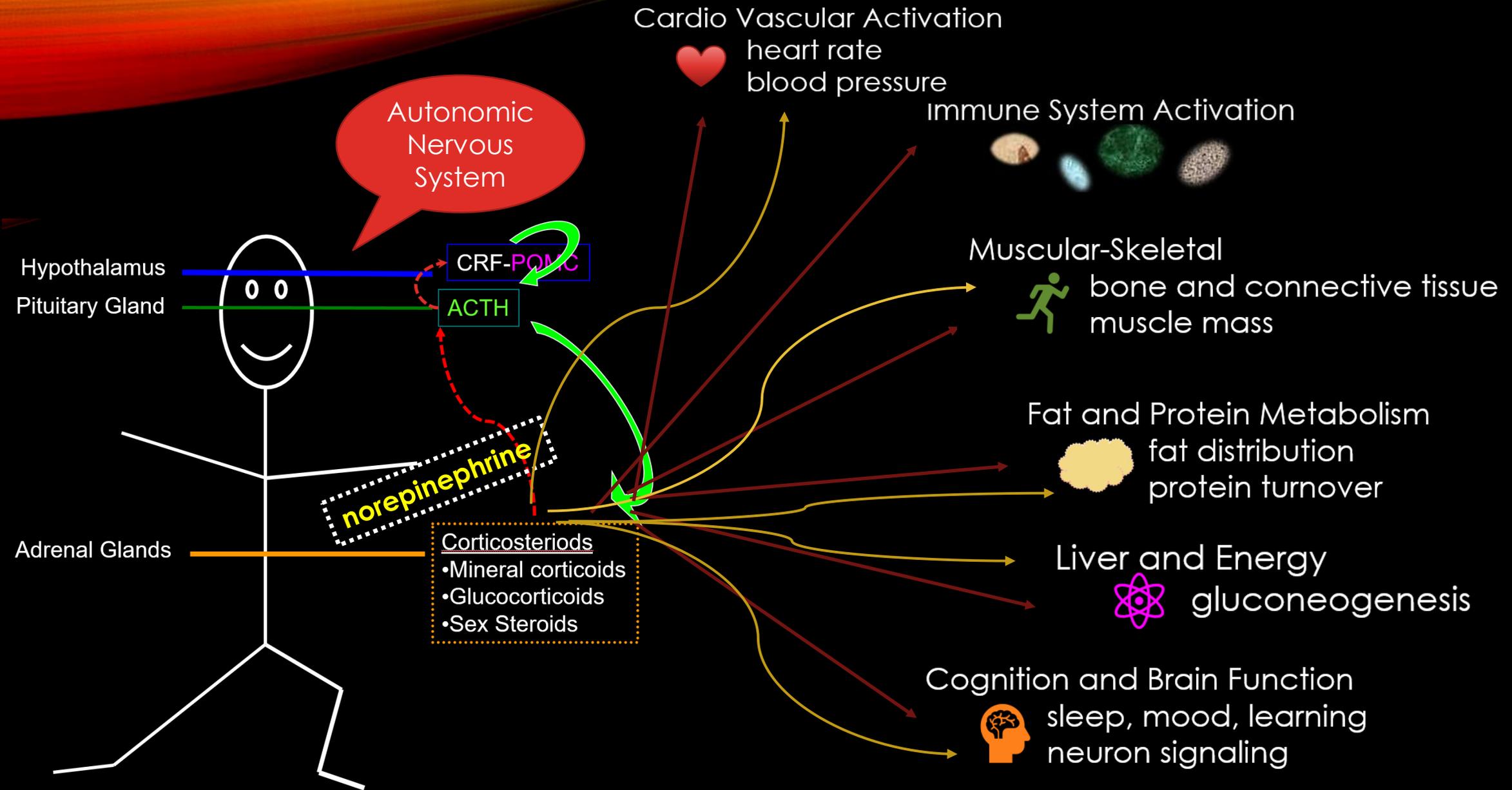
balance and survival

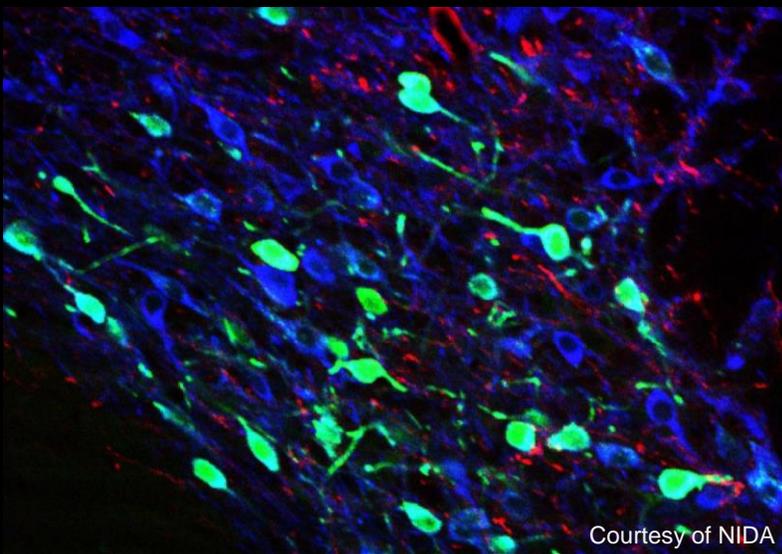
Neurobiology of balance



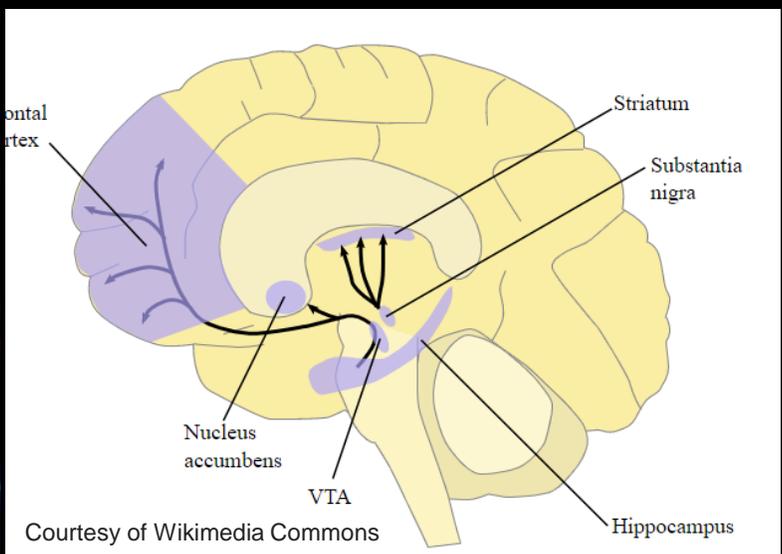
HPA Stress
Management

Neurobiology of balance



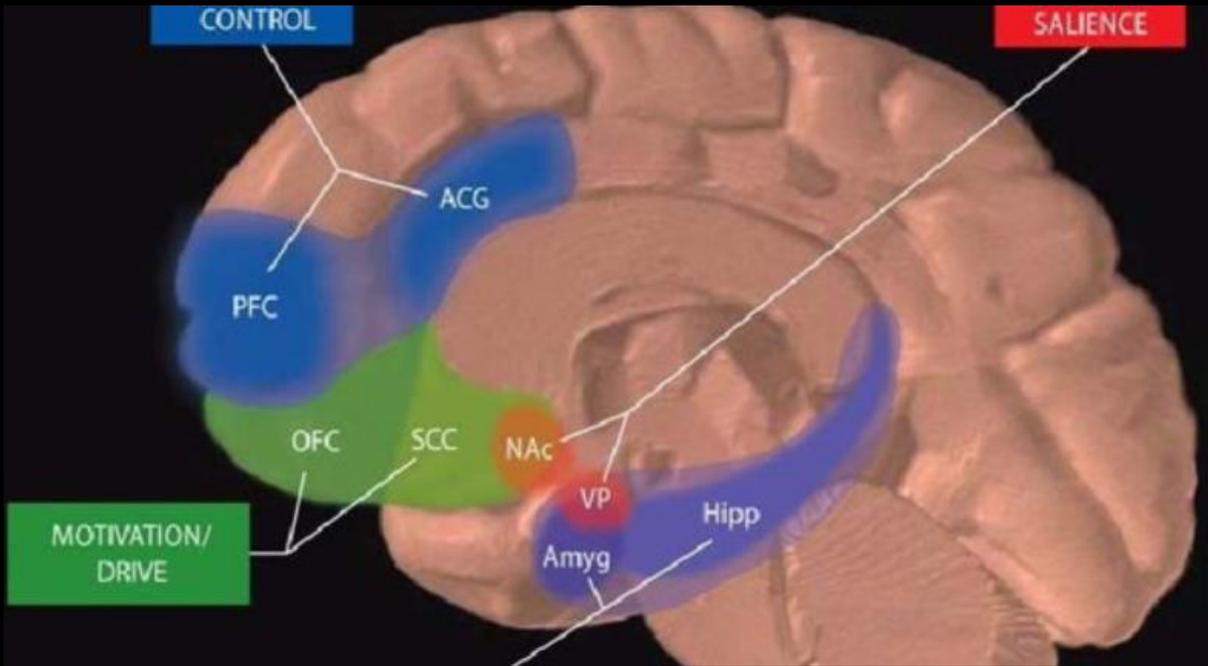


Courtesy of NIDA



Courtesy of Wikimedia Commons

Neurobiology of survival



Courtesy of NIDA

Neurobiology of balance and survival

Reward Pathway	STRUCTURE	Regulation Pathway
Evaluates affective value of stimulus	Cerebral Cortex	Higher-ordered thinking
Avoid consequences	Cingulate Gyrus	Cognitive flexibility, social adaptation
Links reward with context	Septal Area annex to corpus callosum	Inhibition of fear, enhancement of pleasure
Positive reinforcement of behavior	Ventral Pallidum Forebrain Substantia Innominata	
Emotional experience of behavior	Extended Amygdala Temporal Lobe Corticomедial Basolateral Bed Nucleus Stria Terminalis	Emotional tone, fight-or-flight, sociability
Learning and memory	Hippocampus Temporal Lobe	Short-term into long-term memory, navigation
	Olfactory Cortex Temporal Lobe (Uncus)	Identify odors, reception, awareness
Motivation and action, Reward perception	Striatum Forebrain Nucleus Accumbens (Ventral Striatum = core + olfactory tubercle); shell, core Dorsal Striatum (Globus pallidus + Putamen)	Cognitive processing of aversion
Maintain homeostasis	Hypothalamus Forebrain Mammillary Bodies Ventromedial Nucleus Lateral Hypothalamic Area	Maintain homeostasis
	Olfactory Bulb Forebrain	
Modulates mesolimbic system (feeding, energy, arousal, and metabolism)	Thalamus Forebrain	Motor control, sensory stimuli synthesis
Positive reinforcement for survival	Ventral Tegmental Area Midbrain	Positive reinforcement for survival
Primitive stress detection	Nucleus Incertus Pre-pontine Hindbrain (midline periventricular central gray)	Primitive stress detection, regulates hypothalamic tone
	Pituitary Gland Brain—Base	Regulate endocrine system
	Brain—Corpus Distinction	
	Autonomic Nervous System Sympathetic Parasympathetic	
	Adrenal Cortex	Mobilizes substrates needed by the body during stress

amygdala
REACTION
emotional tone

hypothalamus
HOMEOSTASIS
balance

ventral tegmental area
REINFORCEMENT
survival

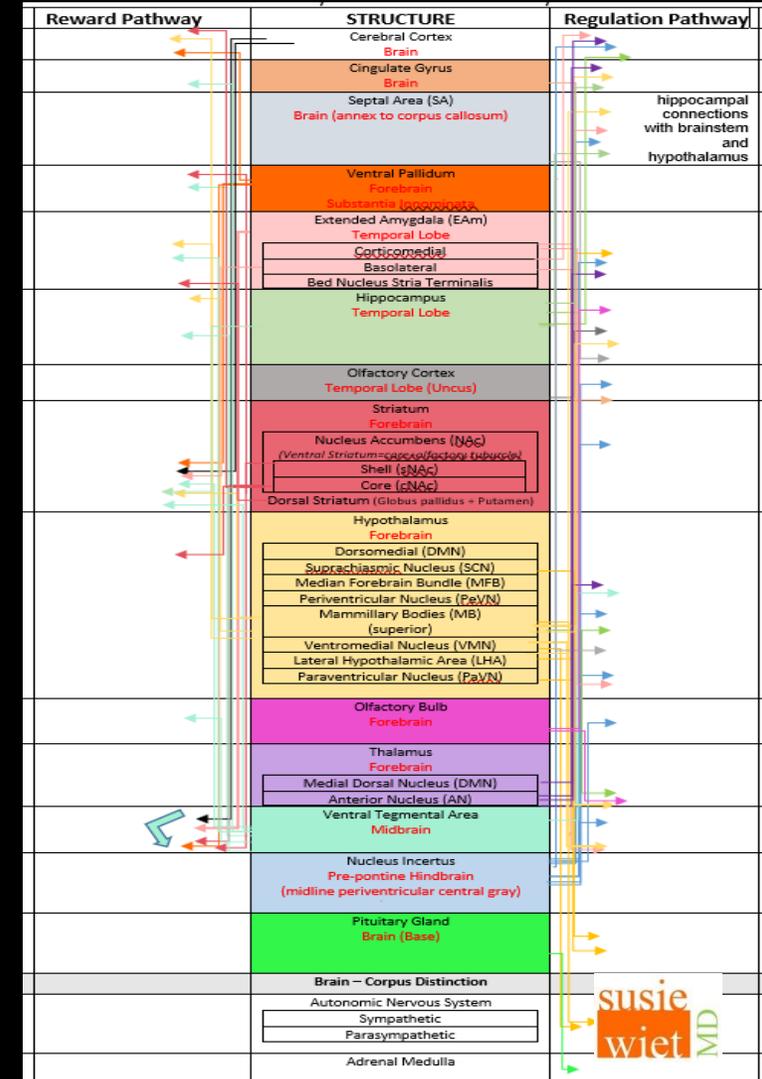
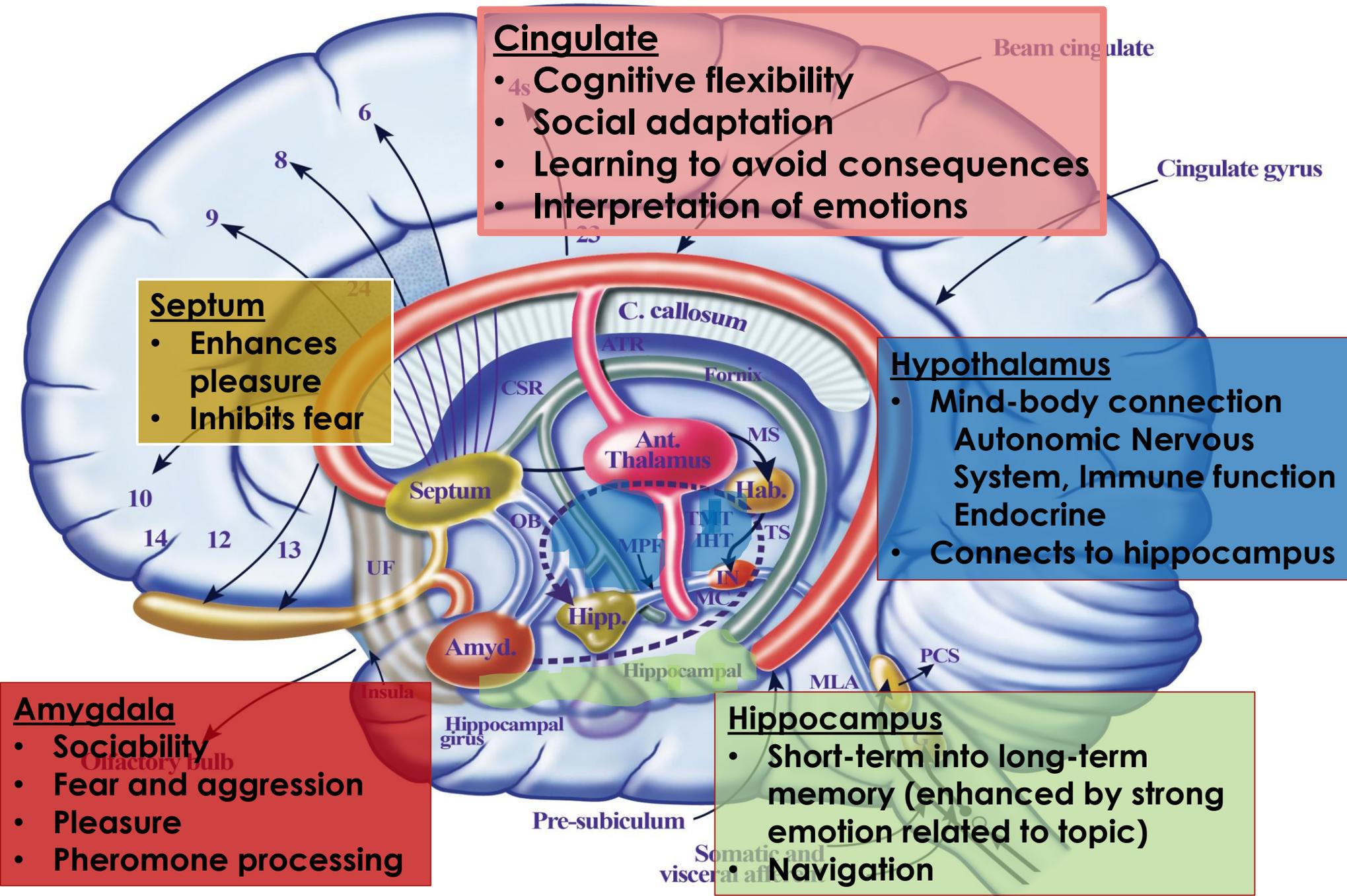


Fig. 1. Reward pathways and regulation pathways. Copyright © Susie Wiet, MD 2016.



Cingulate

- Cognitive flexibility
- Social adaptation
- Learning to avoid consequences
- Interpretation of emotions

Septum

- Enhances pleasure
- Inhibits fear

Hypothalamus

- Mind-body connection
Autonomic Nervous System, Immune function
Endocrine
- Connects to hippocampus

Amygdala

- Sociability
- Fear and aggression
- Pleasure
- Pheromone processing

Hippocampus

- Short-term into long-term memory (enhanced by strong emotion related to topic)
- Navigation

Neurobiology of balance and survival

STAGES OF PSYCHO-EMOTIONAL DEVELOPMENT THE FIRST 5

Trust Hope	Autonomy Will	Initiative Purpose	Industry Confidence	Identity Fidelity
Infant	Toddler	Pre-Schooler	School-Ager	Adolescent

...leading to Intimacy...

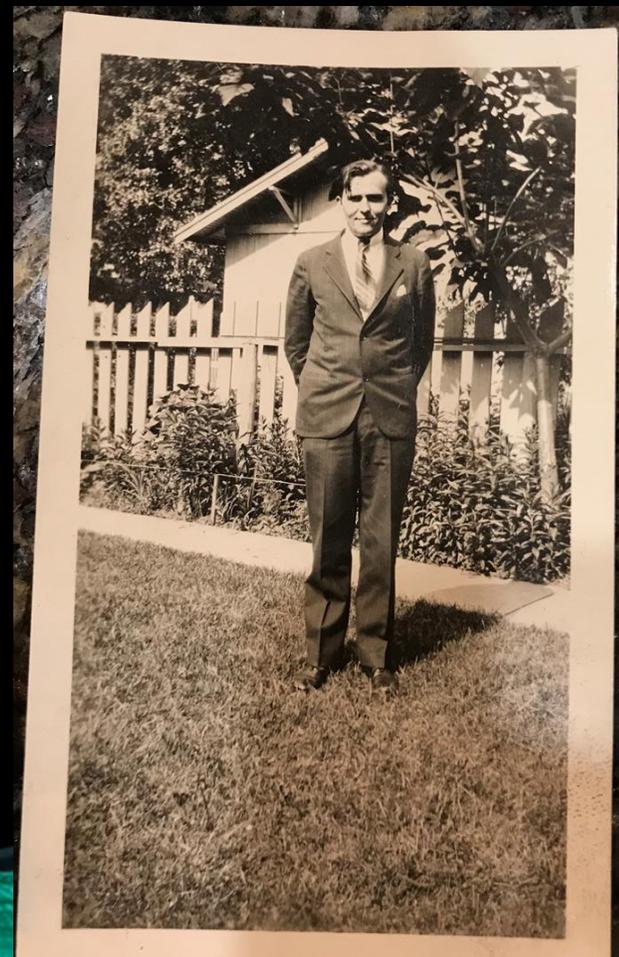


LOVE

The Life Cycle Completed, Eric and Joan Erikson

**PERCEPTION
AGE & STAGE
CONNECTION**

PROTECTIVE FACTORS



Neurobiology of distress and escape



balance and survival



distress and escape

Neurobiology of distress

Prolonged
or
Overwhelming
or
Unpredictable

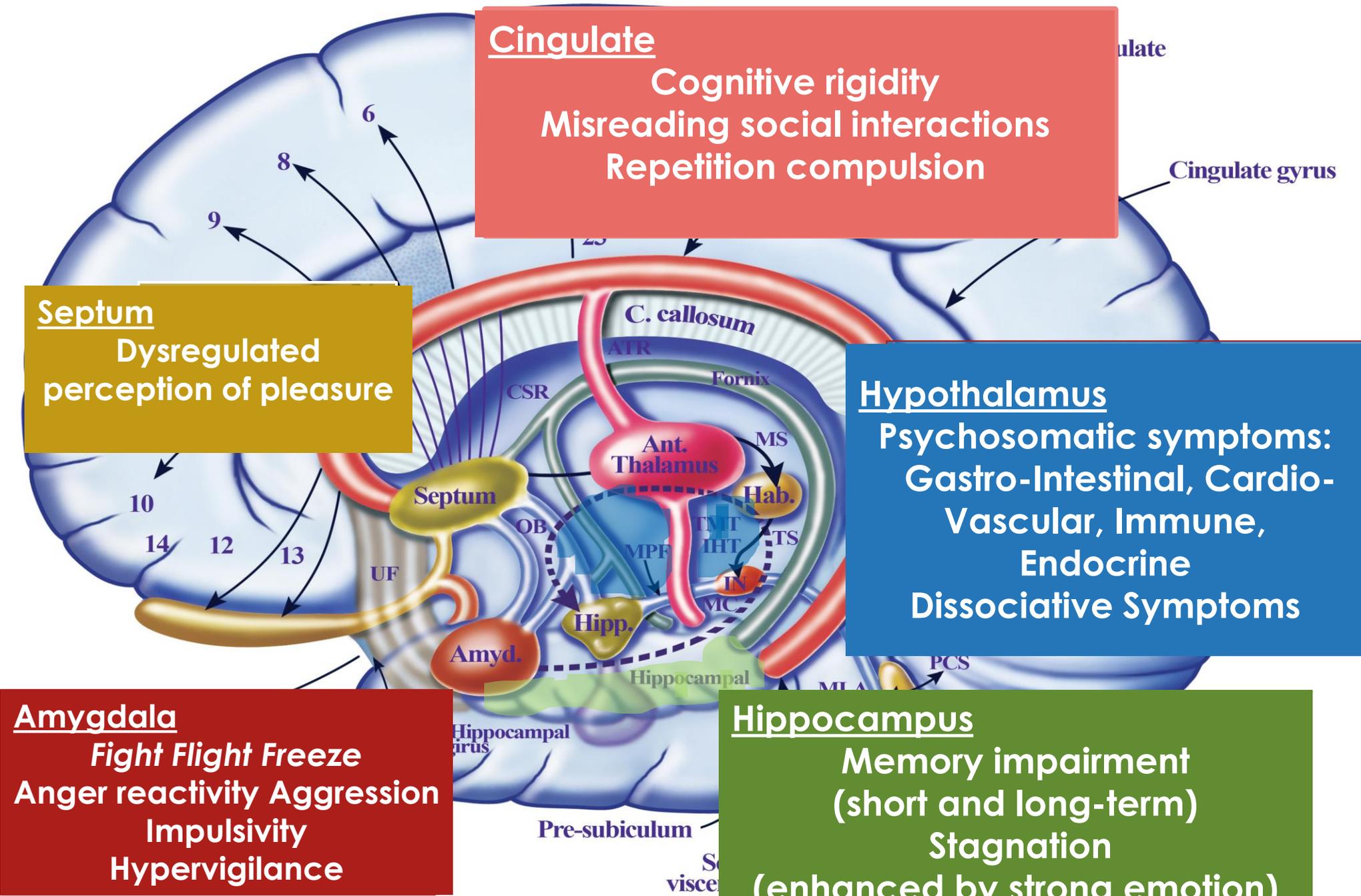
Neurobiology of distress

“The **loss** of the ability to **regulate** the intensity of **feelings** is the most far-reaching **effect** of early **trauma and neglect**.”

- Van der Kolk

“...must take into account the **behavioral repertoire** processes and changes occurring in **anatomical structures** and **physiological processes** of the brain, throughout the life course.”

- Cicchetti, 2000



Neurobiology distress

Hypothalamus

Pituitary Gland

Adrenal Glands

CRF/POMC

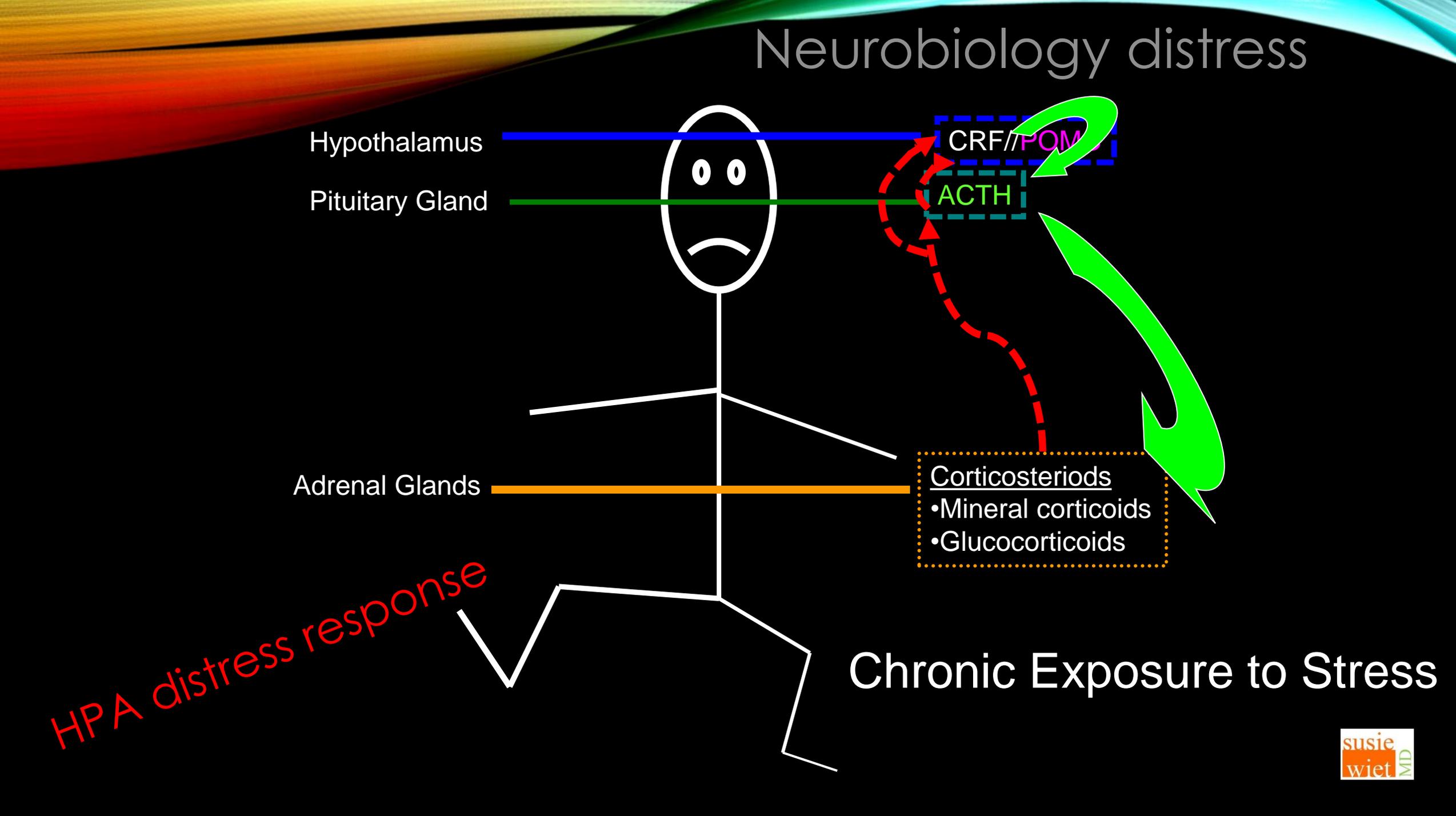
ACTH

Corticosteroids

- Mineral corticoids
- Glucocorticoids

HPA distress response

Chronic Exposure to Stress



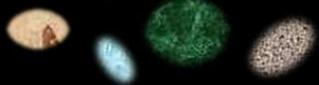
Neurobiology distress

Cardio Vascular Activation



heart rate
blood pressure

Immune System Activation



Muscular-Skeletal



bone and connective tissue
muscle mass

Fat and Protein Metabolism



fat distribution
protein turnover

Liver and Energy



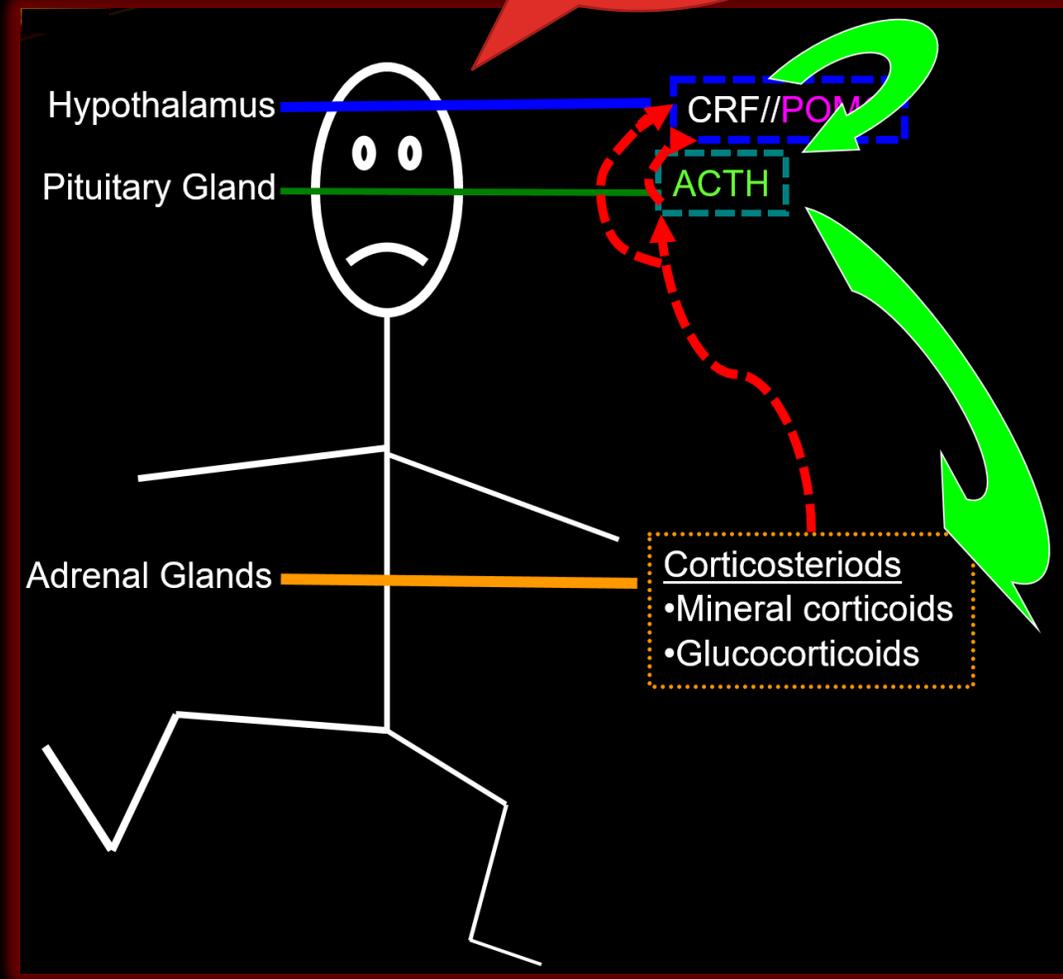
gluconeogenesis

Cognition and Brain Function



sleep, mood, learning
neuron signaling

My ANS is
messed-
up!



Hypertension
Arterial plaque
C-V events

Infections
Cancer
Inflammation

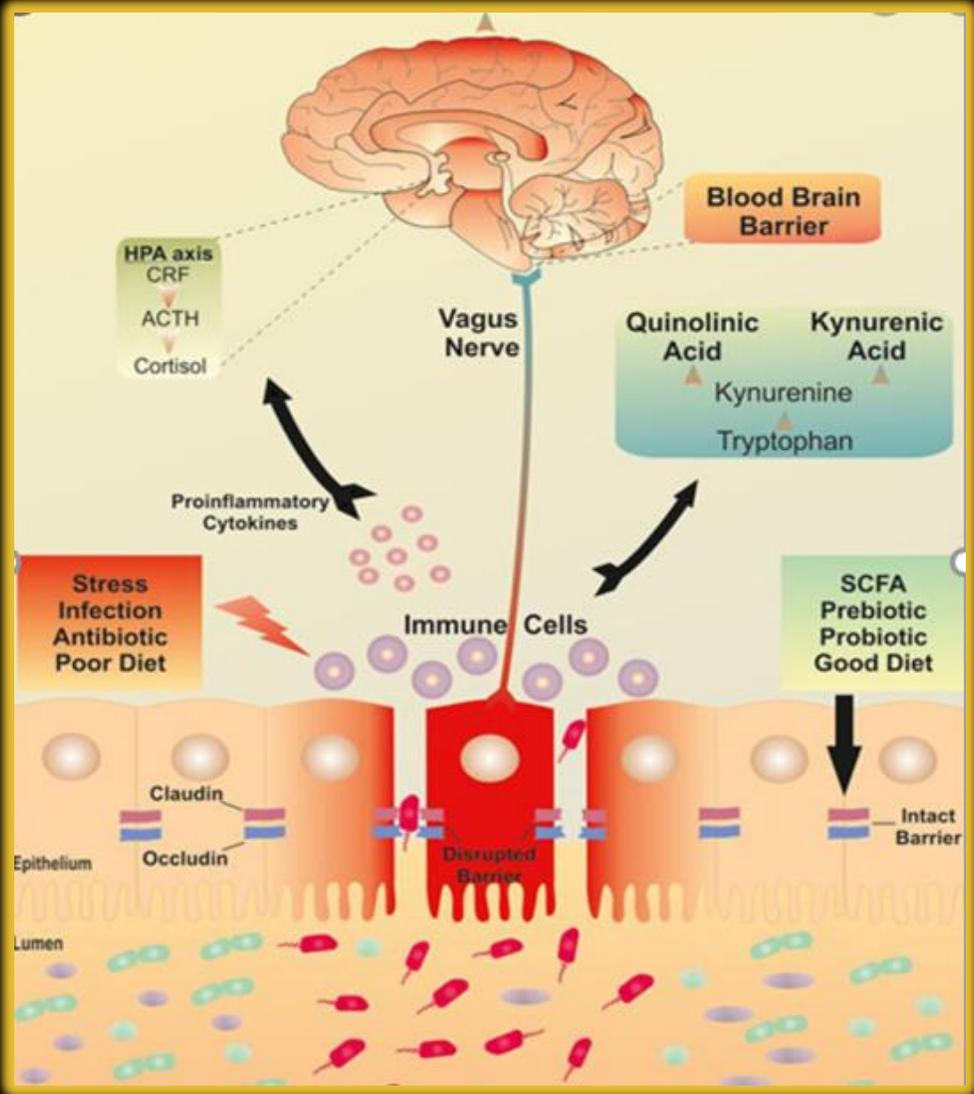
Weak joints/bones
Arthritis/arthralgia
Fatigue

Truncal obesity
Muscle break-down

Insulin resistance
Elevated cholesterols
Fatty liver

Insomnia
Anxiety, depression
Inattention

Neurobiology of distress



how early experiences alter gene expression and shape Development

Epigenetic changes are essential for normal development

- DNA methylation (e.g., stress, nutrition, toxins)
- histone modification
- non-coding RNA

Regulated by environmental stimuli

AND

Records “molecular memory”

translates past stressful events into changes in:

- gene expression
- the HPA
- neuronal circuitry
- future behaviors

Neuron (brain cell)

specific segment of a dna strand

3 gene regulatory proteins attract or repel enzymes that add or remove epigenetic markers

4 epigenetic “mArKers” control where and how much protein is made by a gene, effectively turning a gene “on” or “off,” thereby shaping how brains and bodies develop

DNA strands encircle histones that determine whether or not the gene is “readable” by the cell

chromosome—can pass on genes to next generation

Neurobiology of escape

Traumatic Experiences

Persistent impact of the *unthinkable and unspeakable*

Changed neuro-receptors, chemistry, pathways

Altered immune and hormone systems

Epigenetic changes and genetic damage

Dysfunction in relationships and life

Drugs

Disease

Death

Addiction is the **AVOIDANCE**
of SELF.

- Susie Wiet, MD

Cannabis isn't a gateway drug.
Alcohol isn't a gateway drug.
Nicotine isn't a gateway drug.
Caffeine isn't a gateway drug.

Trauma is the gateway. Childhood abuse is the gateway. Molestation is the gateway. Neglect is the gateway.

Drug abuse, violent behavior, hyper sexuality and self harm are often **symptoms** (not the cause) of much bigger **issues**. And it almost always stems from a **childhood** filled with **trauma**, absent parents, and an abusive family.

But most people are too busy laughing at the **homeless** and **drug addicts** to realize your own **children** could be in their shoes in **15 years**.

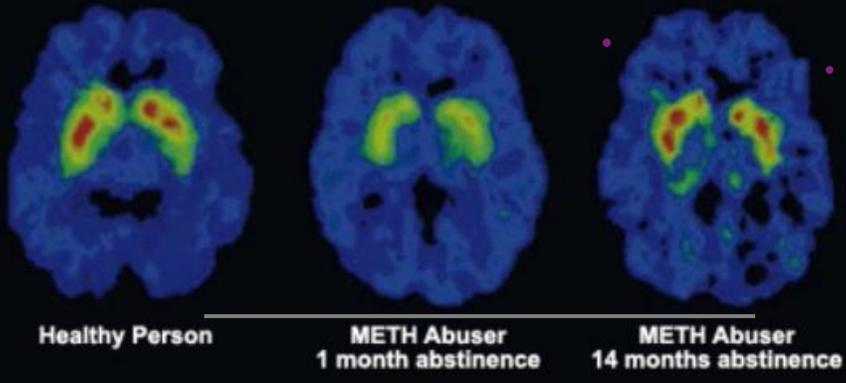
Communicate. Empathize. Rehabilitate.



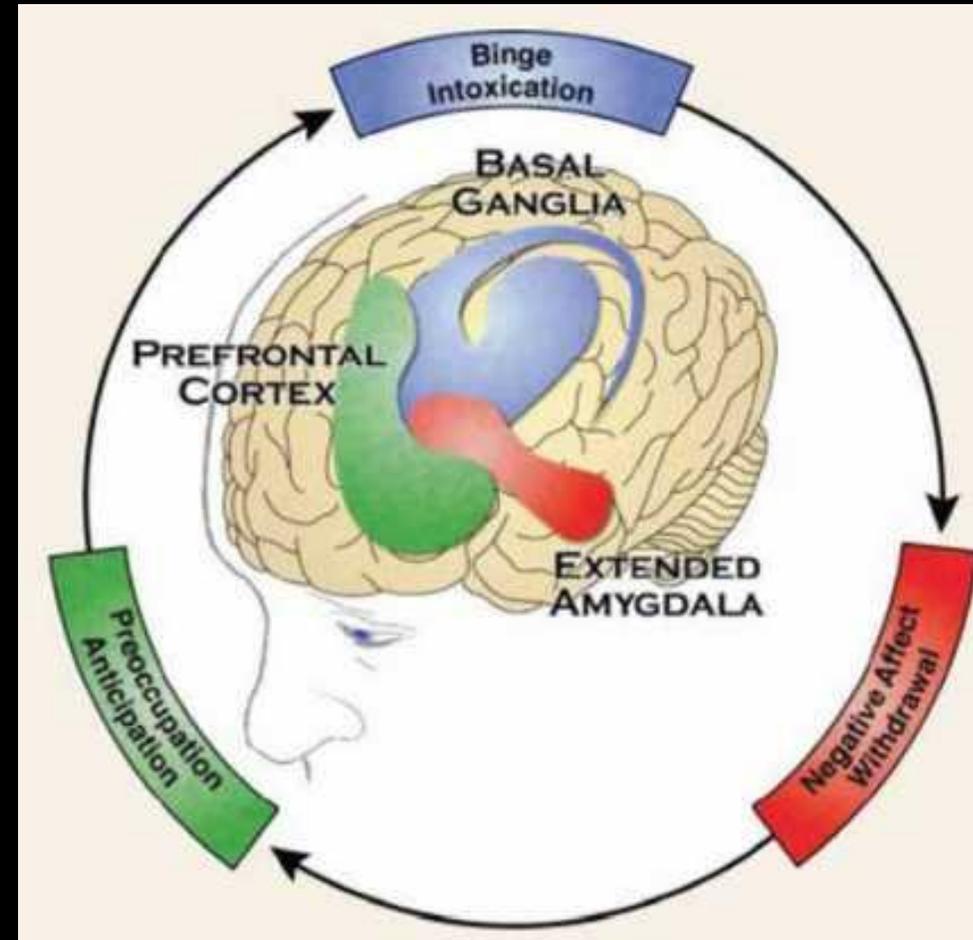
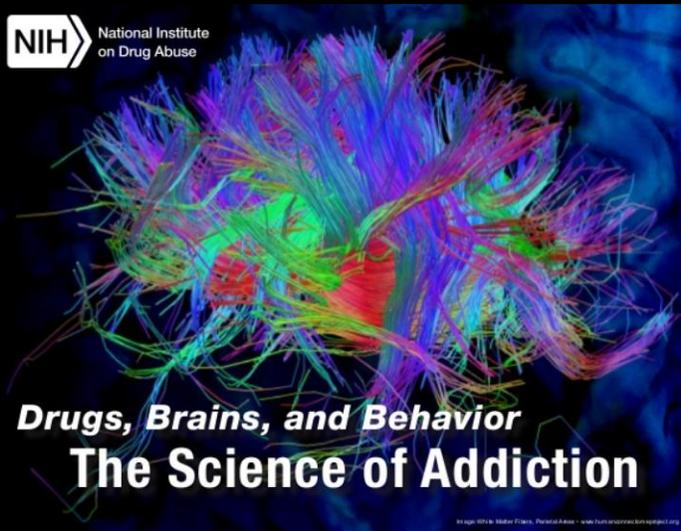
Russel Brand

Neurobiology of escape

BRAIN RECOVERY WITH PROLONGED ABSTINENCE



NIH National Institute on Drug Abuse



Neurobiology of escape

Types of Behavior Addictions



Neurobiology of distress and escape

Table XX: Interface of the Extended Reward Pathways and Extended Limbic System (Susie Wiet, MD ©1/2017)

Addiction Pathway	Reward Pathway	STRUCTURE	"Regulation Pathway"	Toxic Stress Pathway
Loss of empathy	Evaluates affective value of stimulus	Cerebral Cortex Brain		Irrational behavioral responses
Inhibition of control Preoccupation	Avoid consequences	Cingulate Gyrus Brain	Cognitive flexibility Social adaptation	Cognitive rigidity Repetition compulsion
Environmental cues as relapse?	Links reward with context	Septal Area (SA) Brain (annex to corpus callosum)	Inhibition of fear Enhancement of pleasure	Disinhibition of fear Blunted experiences of pleasure
		Ventral Pallidum Forebrain Substantia nigra		
Dysphoria (withdrawal) Hyper-excitability Depression Stress	Emotional learning Experience of behavior	Extended Amygdala (EAm) Temporal Lobe Cortico-medial Basolateral Bed Nucleus Stria Terminalis	Emotional tone Fight-or-flight	Dysphoria Anger-reactivity Fear Hypervigilance Anxiety
Isolation	Learning and Memory	Hippocampus Temporal Lobe	Short-term into long-term memory Navigation	Impaired learning and making new memory stagnation
Impaired learning and making new memory		Olfactory Cortex Temporal Lobe (Uncus)	Identify odors, reception, awareness	Aversions Heightened awareness
Stagnation		Striatum Forebrain Nucleus Accumbens (NAc) (Ventral Striatum=caudate/putamen/substantia nigra) Shell (sNAc) Core (cNAc) Dorsal Striatum (Globus pallidus + Putamen)	Cognitive processing Aversion	Automated (destructive) behaviors Anhedonia
Binge and Intoxication	motivational and action	Hypothalamus Forebrain Dorsomedial (DMN) Suprachiasmatic Nucleus (SCN) Median Forebrain Bundle (MFB) Periventricular Nucleus (PeVN) Mammillary Bodies (MB) (superior) Ventromedial Nucleus (VMN) Lateral Hypothalamic Area (LHA) Paraventricular Nucleus (PaVN)	Maintain homeostasis	Impaired immune, gastrointestinal, endocrine and cardiovascular, CNS and ANS function
Hedonic tone	reward perception (to PFC)	Olfactory Bulb Forebrain Thalamus (Forebrain) Paraventricular Nucleus (PVT) Dorsal Medial Nucleus (DMN) Anterior Nucleus (AN)	Motors control Sensory stimuli synthesis	
Impaired immune, gastrointestinal, endocrine and cardiovascular, CNS and ANS function	Maintain homeostasis	Ventral Tegmental Area Midbrain Nucleus Incertus Pre-pontine Hindbrain (midline periventricular central gray)	Positive reinforcement for survival Primitive stress detection Regulates hypothalamic tone Regulate endocrine system	Negative Reinforcement (numb-out emotions)
Dysregulated feeding energy, arousal and metabolism	Modulates Mesolimbic system (feeding, energy, arousal and metabolism)	Pituitary Gland Brain (Base)		
Relapse (negative reinforcement)	Positive reinforcement for survival	Brain - Corpus Distinction Autonomic Nervous System Sympathetic Parasympathetic		
	Primitive stress detection	Adrenal Medulla		Glucocorticoids Mineral corticoids

REVIEW ARTICLE
 J Korean Acad Child Adolesc Psychiatry 2017;28(1):4-13
<https://doi.org/10.5765/jkacap.2017.28.1.4>
 pISSN 1225-729X / eISSN 2233-9183

Origins of Addiction Predictably Embedded in Childhood Trauma: A Neurobiological Review
 Susie Wiet
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 University of Utah-Adjunct Volunteer Faculty, Salt Lake City, UT, USA

Neurobiology of distress and escape

STAGES OF PSYCHO-EMOTIONAL DEVELOPMENT THE FIRST 5

Trust Hope	Autonomy Will	Initiative Purpose	Industry Confidence	Identity Fidelity
Infant	Toddler	Pre-Schooler	School-Ager	Adolescent
Mistrust	Shame	Guilt	Inferiority	Role Confusion

...leading to Isolation...unLOVed



balance and survival



distress and escape



resolution and restoration

Neurobiology of resolution and restoration

RESILIENCY & REGULATING the STRESS SYSTEM

The HPA (hypothalamic-pituitary-adrenal system)

PILLARS of SELF-REGULATION

SLEEP

Regular
Circadian rhythm
Restorative

RELAXATION

Play and fun
Mindful breathing
Meditation/prayer/reflection

NUTRITION

Regular mealtimes
Wholesome nutrition
Microbiome

EXERCISE

Moderate and regular
Stretching and alignment
Meditative movement

EMOTIONS

Awareness of feelings
Validation and acceptance
Regulating and balance

PROTECTIVE FACTORS

RELATIONSHIPS:

Supportive adult

Healthy friendships

Self-worth and efficacy

PERCEPTION:

Self-regulation

Adaptation

Hope for future

COMMUNITY:

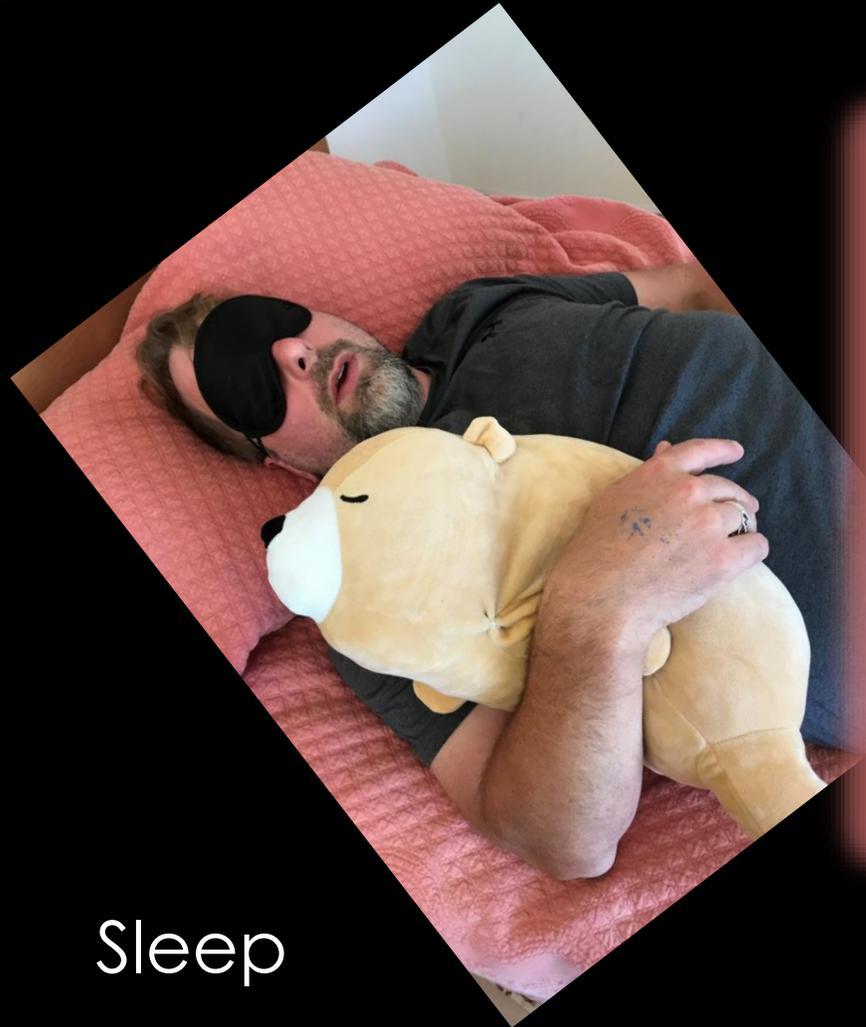
Cultural roots

Shared activities

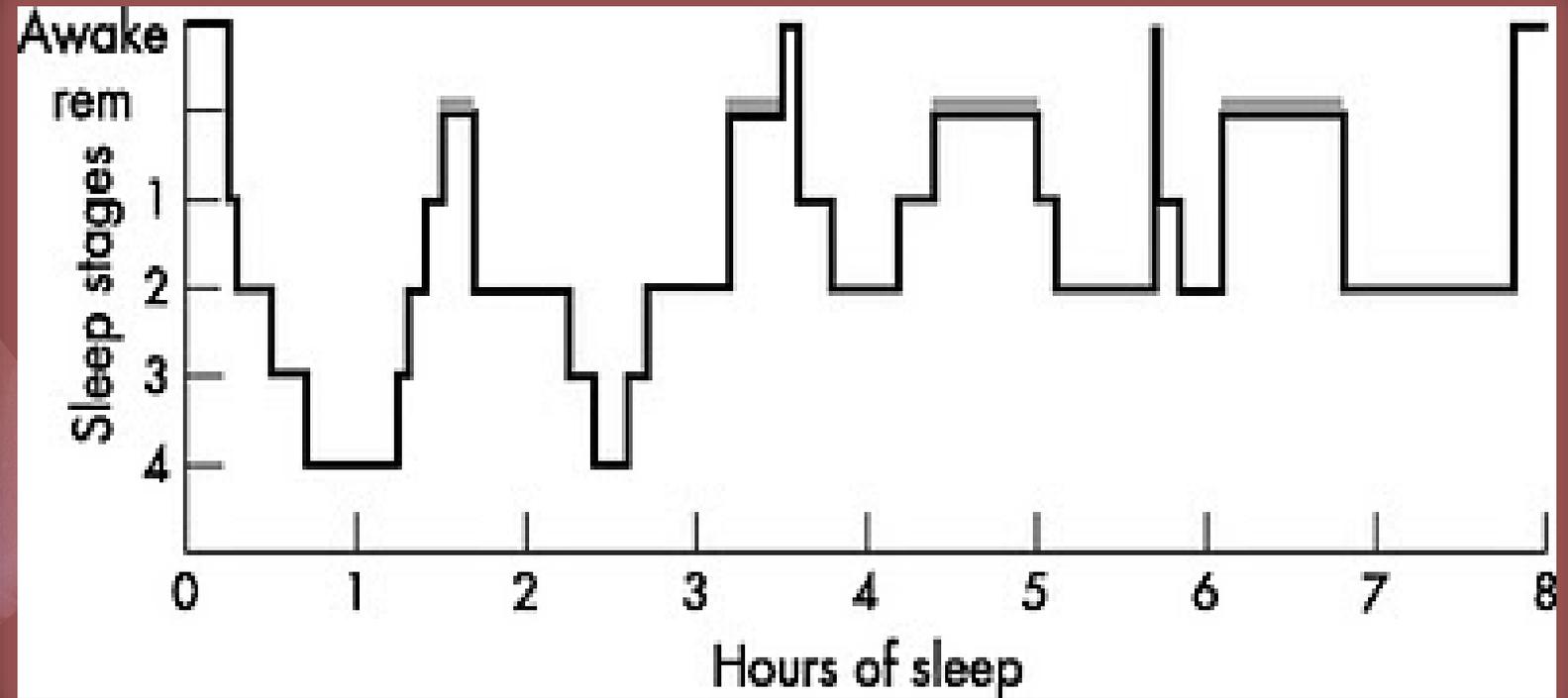
Faith structure

SAFETY and TRUST

Neurobiology of resolution and restoration



Sleep

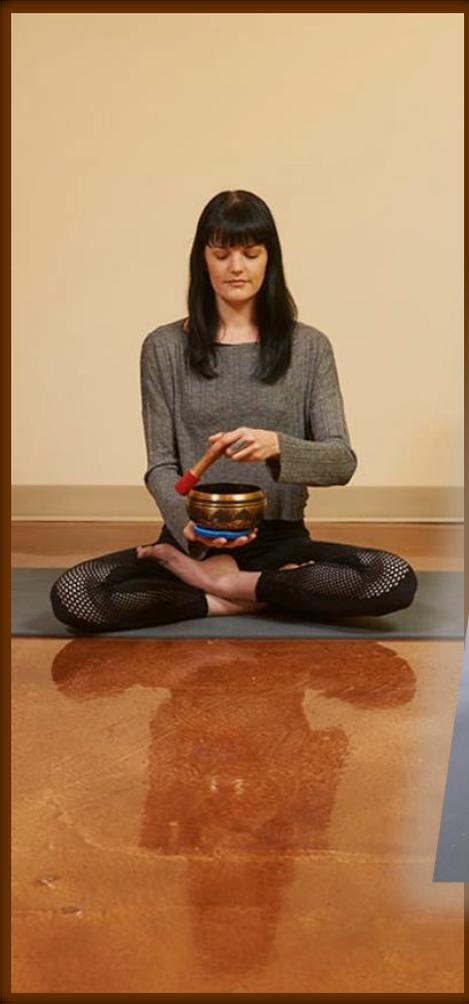


Neurobiology of resolution and restoration



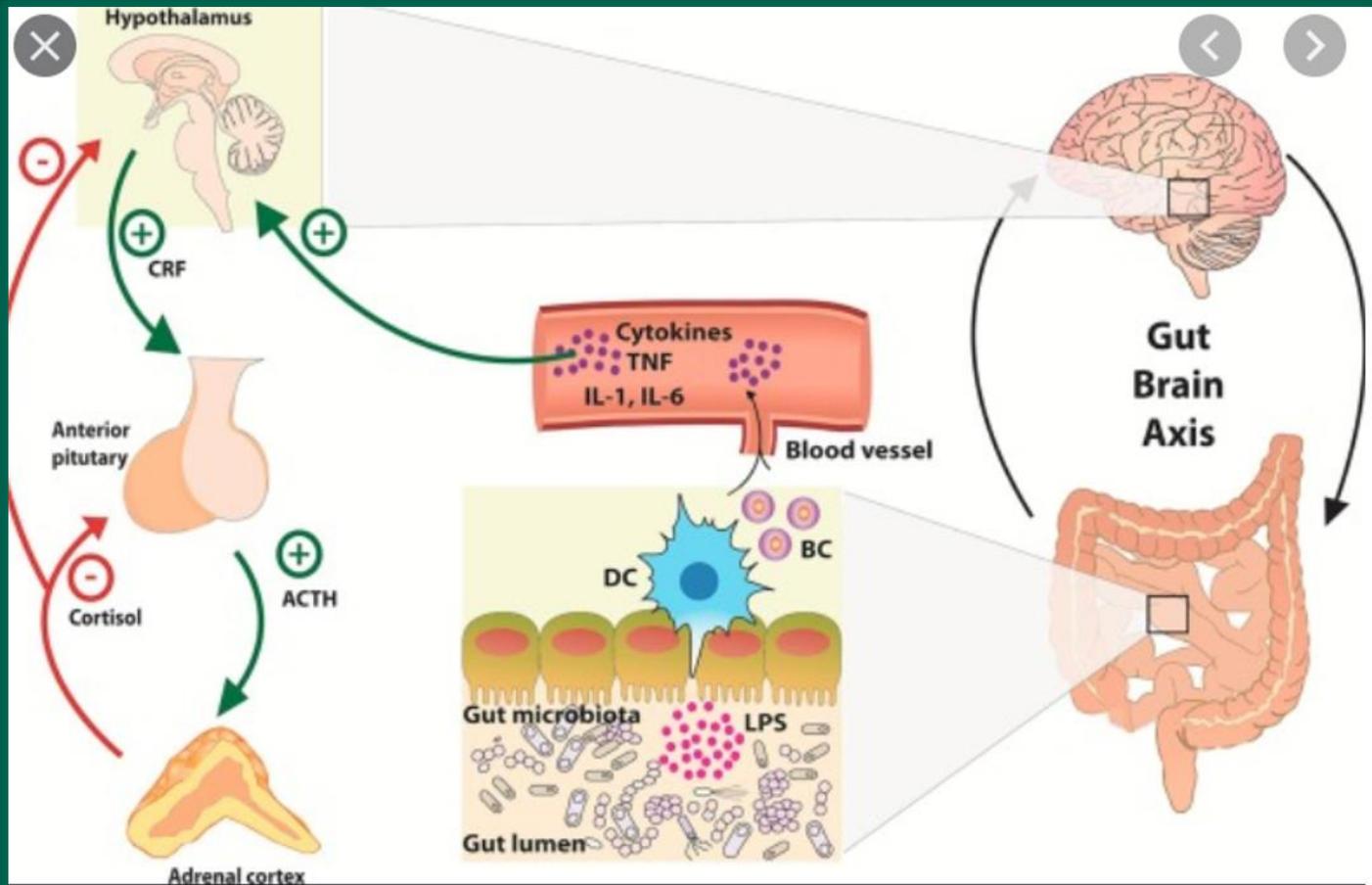
Neurobiology of resolution and restoration

relaxation

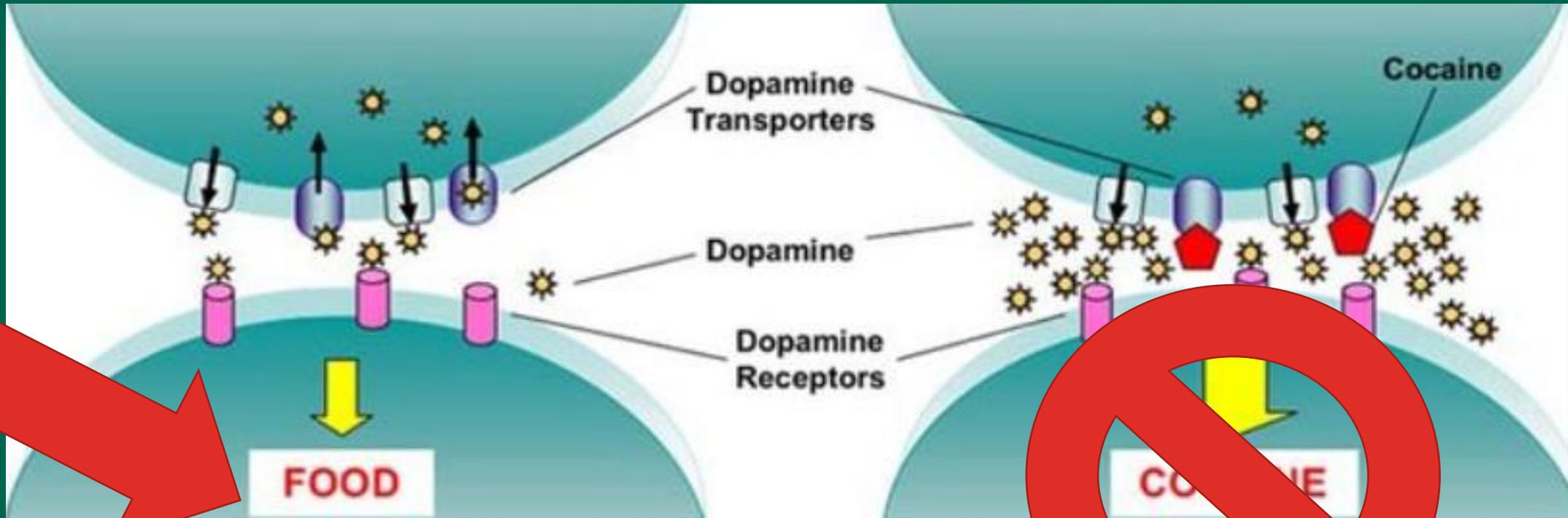


Neurobiology of resolution and restoration

Nutrition



Neurobiology of resolution and restoration



nutrition as prescription

Neurobiology of resolution and restoration

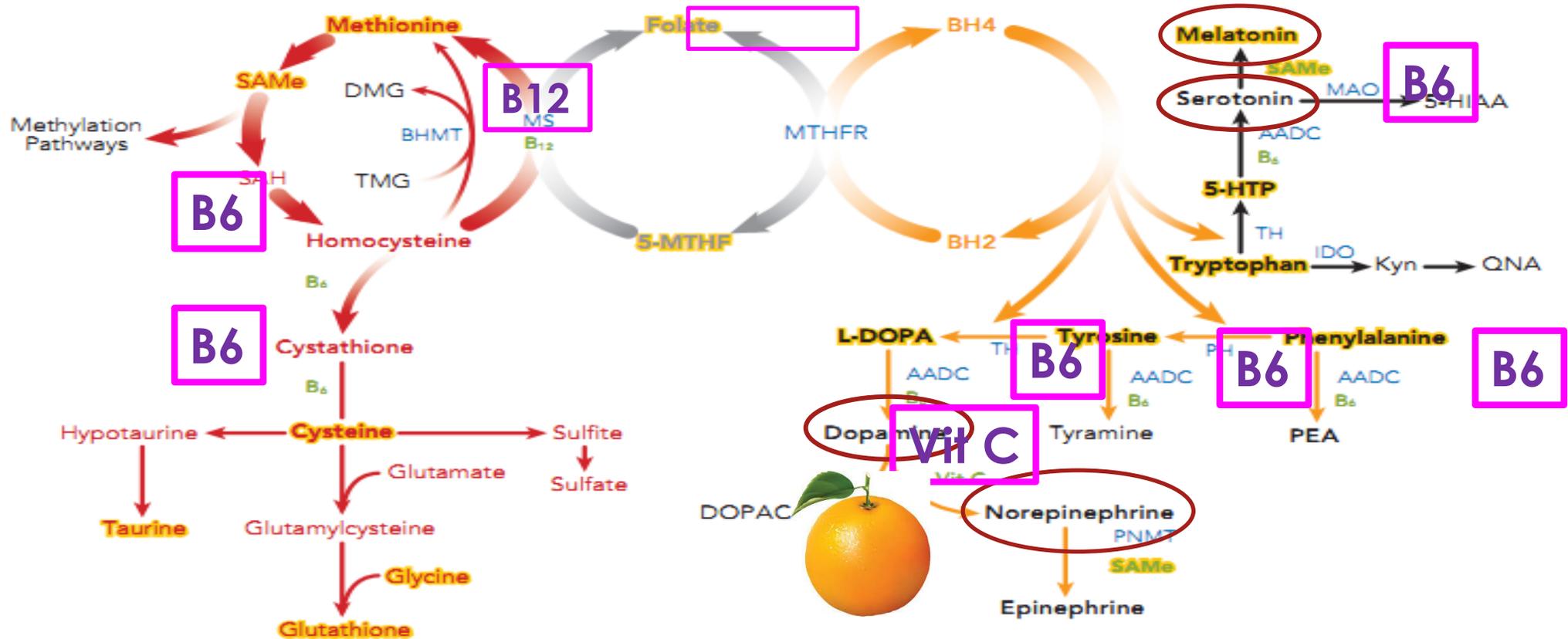
Methylation Biochemistry

Methionine Cycle

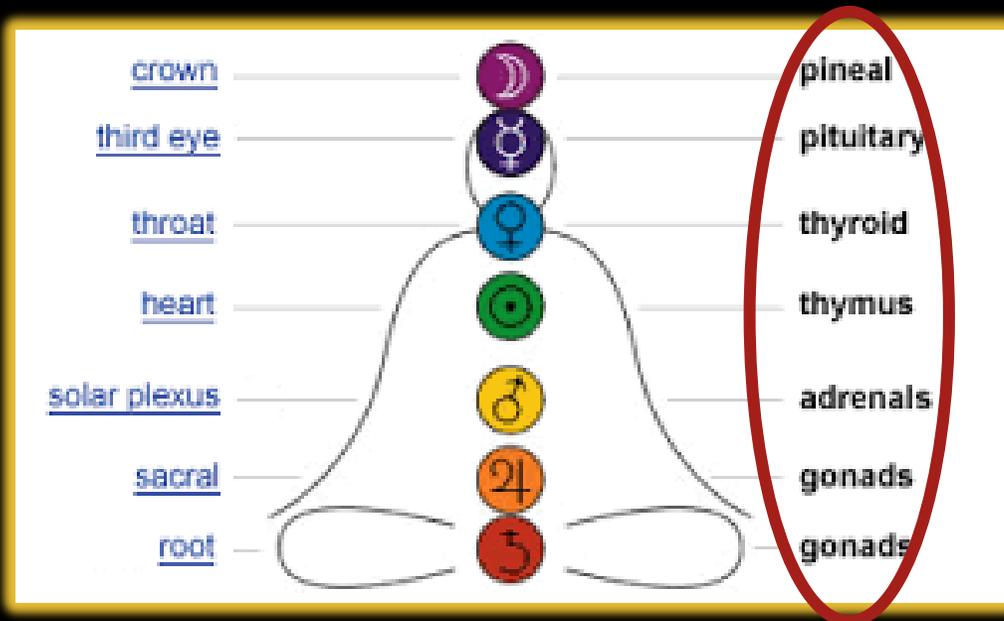
Folate Cycle

Biopterin Cycle

NT Metabolism



Neurobiology of resolution and restoration



Exercise

feeling

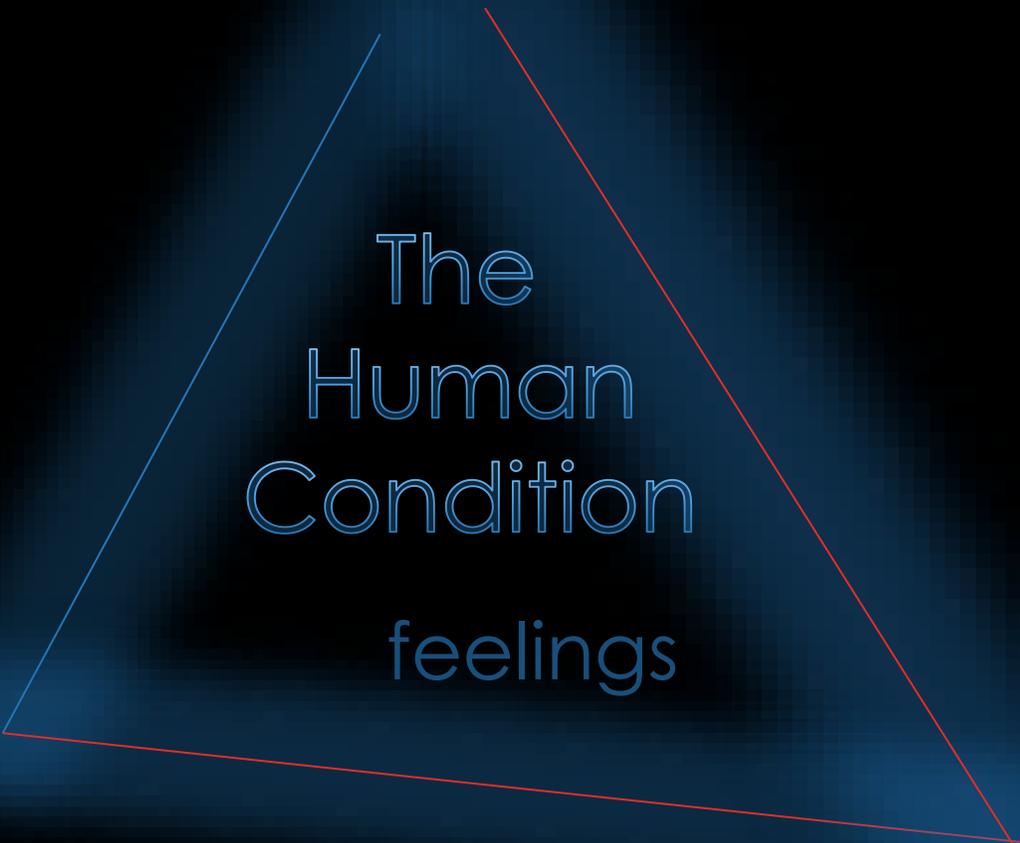
Neurobiology of
resolution and
restoration
Emotions

The
Human
Condition

thinking

doing

Neurobiology of resolution and restoration

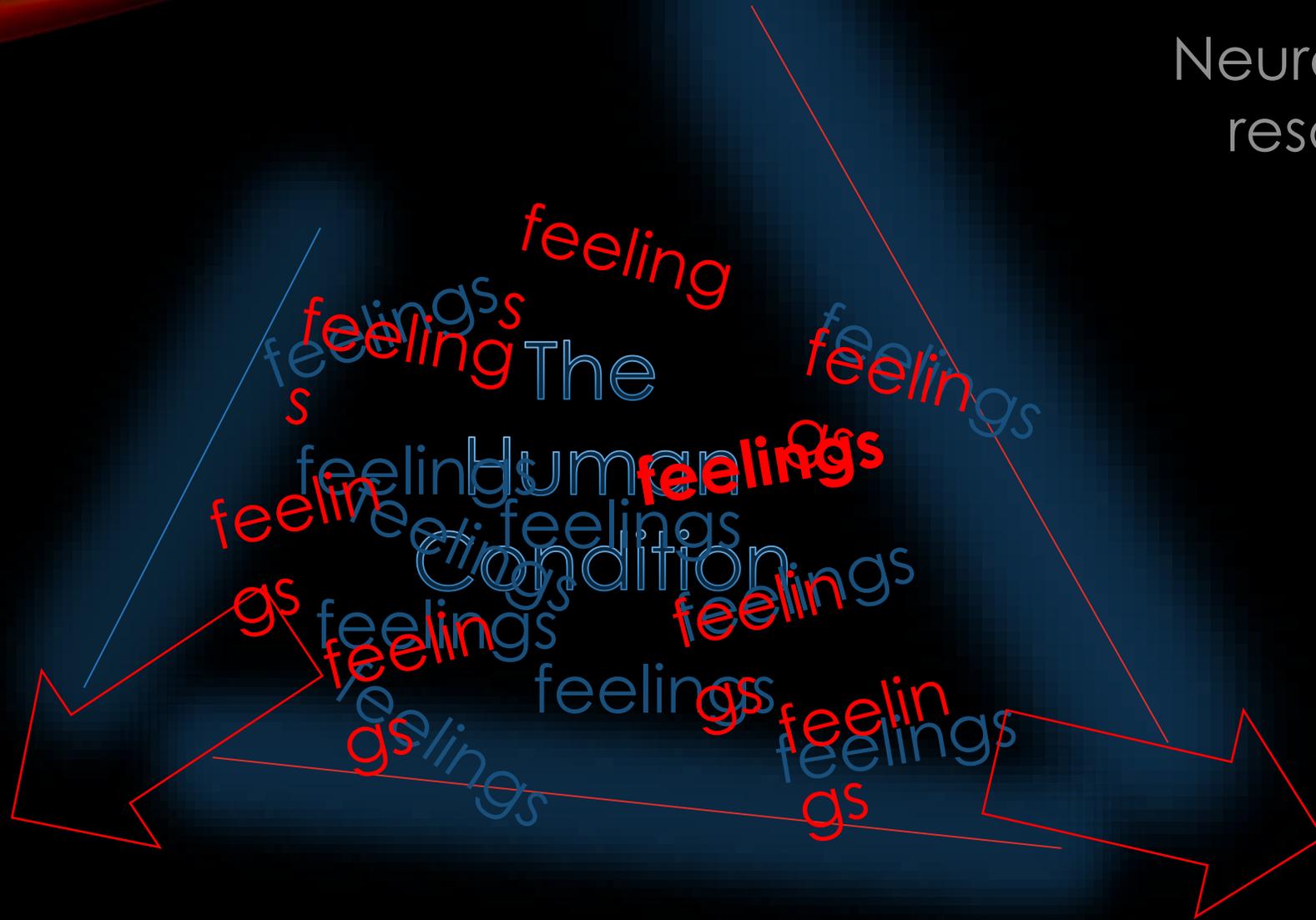


The
Human
Condition
feelings

Neurobiology of resolution and restoration



Neurobiology of resolution and restoration



Neurobiology of balance

Hypothalamus
Pituitary Gland

CRF-POMC

ACTH

Effective behavior

Raise awareness

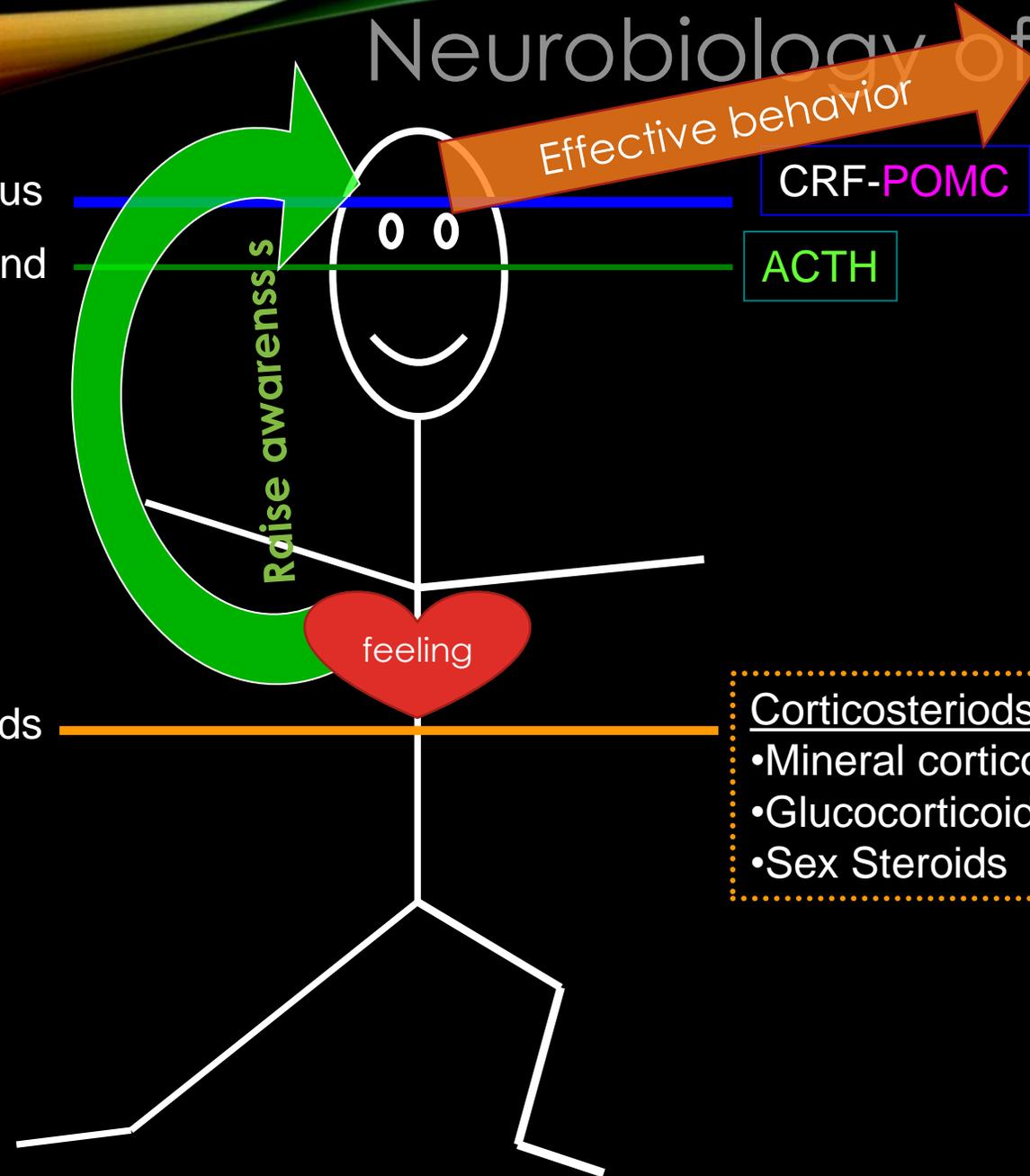
feeling

Adrenal Glands

Corticosteroids

- Mineral corticoids
- Glucocorticoids
- Sex Steroids

Emotional
Regulation

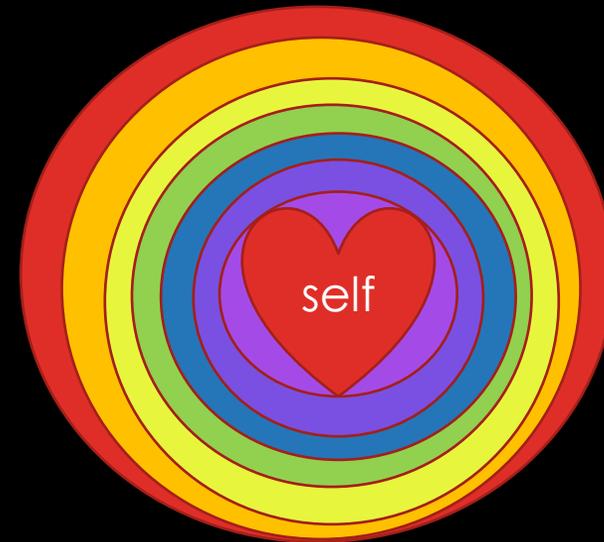


PROTECTIVE FACTORS

PERCEPTION

AGE & STAGE

CONNECTION



Infomercial

No cost or obligation involved.

CHANGE THE EQUATION

for risk of mental and physical illness

Start:

... a conversation with your patient

Ask:

... about adverse childhood experiences (ACEs) and other traumatic experiences, and protective factors.

Validate:

"Things you have experienced should have never happened to you or to any person."

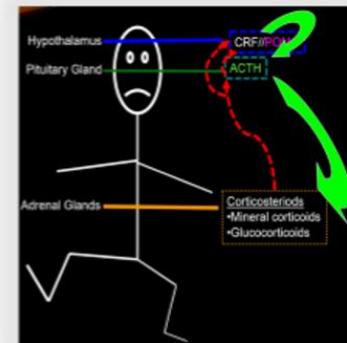
"Please know if you should ever experience or recall something traumatic in the future, this is a safe place to talk about those things."

Empower:

"Your mind and body may have been affected by what you experienced. But, there is a lot you can do to improve your health, now."

"SAVE"

TOXIC STRESS ON THE BODY



High blood pressure, artery plaques, cardiovascular clots



Infection, cancer, inflammation, insulin resistance



Weak joints/bones, painful joints/muscles, muscle breakdown



Insomnia, anxiety, depression, inattention



Obesity, fatty liver



Addiction, high-risk behavior



Elevated cholesterols and triglycerides, fatigue

© 5/2107

susie wiet MD

HEALTH RESILIENCY STRESS QUESTIONNAIRE (HRSQ)

Health-Resiliency-Stress Questionnaire (HRSQ)

Name: _____ Age: _____ Gender: Female Male Other
 Clinic or Provider: _____ Date: _____ Zip Code: _____

PART A

We each have our own ways to cope in life and get through difficult times.

PLEASE CIRCLE THE ANSWER THAT SHOWS HOW TRUE EACH STATEMENT IS FOR YOU:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1) I tend to bounce back quickly after hard times.	1	2	3	4	5
2) I have a hard time making it through stressful events.	5	4	3	2	1
3) It does not take me long to recover from a stressful event.	1	2	3	4	5
4) It is hard for me to snap back when something bad happens.	5	4	3	2	1
5) I usually come through difficult times with little trouble.	1	2	3	4	5
6) I tend to take a long time to get over set-backs in my life.	5	4	3	2	1

PLEASE CIRCLE THE ANSWER THAT SHOWS HOW TRUE EACH STATEMENT IS FOR YOU:

	Not true at all	Rarely true	Sometimes true	Often true	True nearly all the time
1) I stay hopeful, even during stressful times.	1	2	3	4	5
2) I feel loved and supported.	1	2	3	4	5
3) I ask for help when I need it.	1	2	3	4	5
4) I have healthy, trusting relationship(s).	1	2	3	4	5
5) I choose healthy activities to decrease stress.	1	2	3	4	5
6) I can find positive solutions to life's problems.	1	2	3	4	5
7) I like who I am.	1	2	3	4	5
8) I feel optimistic about my future.	1	2	3	4	5

PART B

Some physical health problems can make it difficult to function or feel well.

PLEASE CIRCLE THE ANSWER THAT FITS BEST:

	Poor	Fair	Good	Very Good	Excellent
1) My overall physical health is...	1	2	3	4	5
2) My physical ability to do the tasks of everyday life is...	1	2	3	4	5
3) My ability to function when I have physical pain is...	1	2	3	4	5
4) My overall mental health is...	1	2	3	4	5
5) My ability to stay positive when I am not feeling well is...	1	2	3	4	5
6) My ability to function when I am feeling sad or blue is...	1	2	3	4	5

PART C

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:

	Yes	No	Don't Know
1) Had nightmares or thought about it when you did not want to?	Yes	No	Don't Know
2) Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?	Yes	No	Don't Know
3) Were constantly on guard, watchful, or easily startled?	Yes	No	Don't Know
4) Felt numb from your feelings or detached from others, activities or your surroundings?	Yes	No	Don't Know

Name: _____ Date: _____

PART D

The following questions are about childhood experiences that may have happened before you were 18 years old

PLEASE CIRCLE THE ANSWER THAT BEST DESCRIBES YOUR EXPERIENCES (OR write in your total score if you prefer:)

	Yes	No	Don't Know
1) Did you live with anyone who was depressed, mentally ill, or suicidal?	Yes	No	Don't Know
2) Did you live with anyone who was a problem drinker or alcoholic?	Yes	No	Don't Know
3) Did you live with anyone who used illegal drugs or who abused prescription medications?	Yes	No	Don't Know
4) Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?	Yes	No	Don't Know
5) Were your parents separated, divorced, one parent never involved OR lose a parent to death or abandonment?	Yes	No	Don't Know
6) Did you often feel that you did not have enough to eat, had to wear dirty clothes, had no one to protect you OR that your parents were not able to care for you due to their own struggles?	Yes	No	Don't Know
7) Did you often feel that no one in your family loved you, thought that you were important or special OR that your family didn't look out for each other, feel close or support each other?	Yes	No	Don't Know
8) In your home, did you ever see or hear domestic abuse (such as physical assaults or verbal threats) or were afraid to go home?	Yes	No	Don't Know
9) In your home, were you ever physically hurt, injured or threatened by anyone? (Do not include light spanking)	Yes	No	Don't Know
10) In your home, did anyone swear at you, insult you, or put you down?	Yes	No	Don't Know
11) Did anyone ever touch you inappropriately (sexually) OR watch you bathe/undress that made you feel uncomfortable, embarrassed, or ashamed?	Yes	No	Don't Know
12) Did anyone ever make you watch sexual acts (including pornography) OR try to make you touch them sexually?	Yes	No	Don't Know
13) Did anyone ever coerce or force you into having sex?	Yes	No	Don't Know
14) Were you bullied at school and felt unprotected?	Yes	No	Don't Know
15) Were you or your family ever homeless?	Yes	No	Don't Know
16) Were you often afraid to be outside because of violence in your community?	Yes	No	Don't Know

Do you ever wonder if any of the experiences listed above have affected your health today?	Yes	No	Don't Know
Do you want help to address any of the experiences listed above?	Yes	No	Don't Know
Were the questions on this form easy to understand? (If not, circle the questions that were not.)	Yes	No	Don't Know
I feel it is appropriate for my care provider to know about my answers to these questions.	Yes	No	Don't Know

Please answer the following. (OPTIONAL)

What is your race? (circle all that apply) Asian Black Native American Pacific Islander White

What is your ethnicity? Latino non-Hispanic Latino

How many mental health and physical health care providers do you currently have? _____

What is your yearly household income? < \$15,000 \$15,000-40,000 \$40,000-65,000 \$65,000-90,000 >\$90,000

How many current physical health-related diagnoses do you have? _____

How many medications are you currently prescribed? _____

As an adult, how many times have you been hospitalized for your physical health? _____

As an adult, how many times have you been hospitalized for your mental health? _____

As an adult, how many times do you go to the emergency room for medical or psychiatric care in a usual year? _____

COMMENTS: _____



The Health Resiliency Stress Questionnaire® (HRSQ) provides a quick overview of a person's ability to tolerate and cope with stress, which is known to significantly affect their health. This tool was designed for busy primary care health clinics and is also valued by therapists, treatment centers, medical specialists, naturopaths, and other providers. The HRSQ identifies and quantifies resiliency skills (strengths), tolerance to stress, expanded Adverse Childhood Experiences (ACEs) and other experiences of trauma and/or violence. We know that such toxic stresses are highly associated with pro-inflammatory illnesses, which makes the HRSQ a very important tool for any practice. The HRSQ is an efficient (4-5 min), self-administered tool that can be completed in a waiting room, exam room, or at home. It can be used repeatedly to monitor improvement, in response to healing from the effects of ACEs and other toxic experiences. The future goal is to assist providers with treatment recommendations by stratifying which person may need what treatment recommendations with regard to the effects of trauma. Providers can register for the e-HRSQ and will receive an automated email with full description of their patient/client's responses. The data entered will be pooled and used to study the utility of this instrument. The data set and email responses are HIPAA compliant; only the numerical answer-scores, race, gender, and zip code are recorded, and none are required (all optional). This is an IRB-approved study.



HRSQ-Provider Registration: Provider Registration-HRSQ

- Register on the [Provider Registration-HRSQ](#) database (30 seconds)
- Provide each patient/client with a code that is internal to the clinic (e.g., Clt#1 or Dr.S's#2, chocolate3, etc.).
- Provider receives automated results by email; then provider/staff match the clinic-generated code present on the upper left corner of the HRSQ result to the correct chart

PROVIDER REGISTRATION

HRSQ Versions:

- Paper version - [HRSQ \(without instructions\)](#)
- Paper version - [HRSQ \(with instructions\)](#)
- Electronic version - [e-HRSQ](#) (HIPAA compliant)

E-HRSQ

Scoring and Suggestions

Click here for details on how to score the pdf versions. This same information will be attached to the e-HRSQ result that is sent to the provider's designated email.

SCORING AND SUGGESTIONS

HRSQ informed consent (simplified) for patients/clients

Feel free to use our simplified patient/client [informed consent \(simplified\)](#) to introduce your client/patient to the HRSQ.

ACEsConnection Blog Article on HRSQ

If you would like to learn more about the history and development of the HRSQ, click the button below. You will see how this instrument is the result of a truly collaborative effort and without funding.

ACES CONNECTION ARTICLE: HRSQ



<https://trcutah.org/hrsq>

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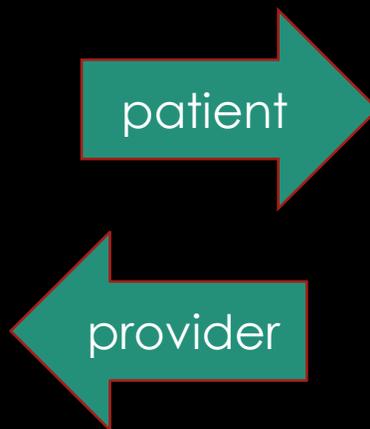
ACES CONNECTION ARTICLE: HRSQ

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e-HRSQ



HRSQ Score	Risk Category	Pilot Study Suggestions for the Provider
		<p>The following are suggestions to help providers simply start a clinically relevant and emotionally validating conversation with a client/patient.</p> <p>These suggestions are NOT meant or intended to replace other pertinent clinical judgment, clinical monitoring, or clinical treatment. These suggestions are aligned with known disease process or pathology that can arise from unresolved states of traumatic experiences, which has been well-documented in scientific literature.</p> <p>The provider may want to review these recommendations to make a good-fit treatment plans for clients/patients. Providers may add to or delete from this list, as they see fit for their practice.</p> <p>Any provider making use of this list, whether that includes the care provider or the patient/client, shall hold harmless the author and collaborators of the Health Resiliency Stress Questionnaire (HRSQ). This list was compiled in good faith for the betterment of health for humanity and to provide information about the deleterious health risks that are correlated with a history of adversity and how resiliency can mitigate such effects.</p>
7-10	Extreme	<p>SUGGESTED RESPONSE: <i>"I can see from your answers that you have really gone through a lot that no one should have to experience. And I also see that you are really struggling right now. Thank you for being so honest, which helps me to better understand you and things to consider about your health."</i></p> <p>UNIVERSAL SCREENING CONSIDERATIONS</p> <ul style="list-style-type: none"> Screen for suicide <ul style="list-style-type: none"> Safety plan agreement or referral to higher level of care, if unable to contract for safety Screen for addiction and safety/reduction plan agreement PRN <ul style="list-style-type: none"> AUDIT-C: https://www.integration.samhsa.gov/image/s/res/tool_auditc.pdf DAST-10: http://www.sbirthoregon.org/wp-content/uploads/DAST-English-pdf.pdf <p>MEDICAL CONSIDERATIONS</p> <ul style="list-style-type: none"> Office follow-up visit: within 1 week (for Extreme) and 1-2 weeks (for High), or sooner PRN if no access to mental health provider <ul style="list-style-type: none"> if available: introduce patient to the primary integration team during visit or refer to treatment with a mental health provider or case management further assessment for PTSD and/or other mental health disorders further assessment for addiction <ul style="list-style-type: none"> SBIRT: https://www.integration.samhsa.gov/clinical-practice/sbirt consult with psychiatrist or APRN PRN <p>RESILIENCY SKILL-BUILDING See <i>Self-Help Suggestions</i> and provide information to resources accordingly</p>
5-6	High	<p>SUGGESTED RESPONSE <i>"I can see from your answers that you have gone through a lot that no one should have to experience. And, I also see that you are having some struggles right now. Thank you for being so honest, which helps me to better understand you and things to consider about your health."</i></p>
3-4	Moderate	<p>SUGGESTED RESPONSE <i>"I can see from how you answered this that you have some really good ways to cope with stress. I also see that you are having some struggles now that may be related to things that happened to you that should never happen to anyone. Thank you for being so honest, which helps me to better understand you and things to consider about your health."</i></p>
1-2	Low	<p>SUGGESTED RESPONSE <i>"I can see from how you answered this questionnaire that you have some really excellent ways to cope with stress and that you are not having too many struggles about your health. I do see that you've had some (minor, <u>really significant</u>) experiences in life that don't seem to cause grief for you now. Thank you for being upfront, which helps me to better understand you and things to consider about your health."</i></p>



The following are simply a place to start with resources for educating patients/clients about how they may be able to take a more active role in their health. *These are NOT medical interventions and are NOT meant or intended to replace clinical judgment, clinical monitoring, or clinical treatment. Empowering the patient/client typically enhances commitment to health, wellness and recovery from any disease process or pathology, which has been well-documented in scientific literature.* The provider may want to explore these links to make a good-fit recommendation to clients/patients. Providers may add to or delete from this list, as they see fit for their practice.

Any person using this list, whether that includes the referring provider or the person who received the referral, shall hold harmless the author and collaborators of the Health Resiliency Stress Questionnaire (HRSQ). This list was compiled in good faith for the betterment of health for humanity.

- Education: why building resiliency is important and possible, even in the face of trauma**
- ACES too high: [ACEsTooHigh Blog](#)
 - ACES video (3 min, Academy on Violence and Abuse) [ACEs-Health Video](#)
 - American Academy of Pediatrics (Toxic Stress and Resiliency Project): [Toxic Stress-Resiliency \(Am Acad Peds\)](#)
 - CDC's website on ACES: [ACES-CDC](#)
- Improving resiliency: helps to give structure about how to improve resiliency skills**
- [StopStress.com](#)
 - [Resiliency Skill-Set \(In the Face of Adversity\)](#)
 - [Affirmations - Resiliency Skills \(Mayo Clinic\)](#)
 - [Road to Resilience \(APA\)](#)
- Positive affirmations: helps to reshape pathways in the brain associated with health and well-being**
- [Positive Affirmations List \(Life-Huffington Post\)](#)
 - [Positive Affirmations Resource \(Louise Hay\)](#)
- Trauma-focused guided meditation: can help to shift thoughts into a more peaceful state**
- [Guided Meditation - Letting Go of Grief \(Bellaruth Naperstek\)](#)
 - [Guided Meditation - Healing Trauma Recovery](#)
 - [Guided Meditation - Mindful Peace](#)
- Building mindfulness, health and wellness: skills that increase the mind-body connection are associated with improving overall health**
- [Positive Affirmations \(Louise Hay\)](#)
 - [Nutrition for Recovery \(Alliance for Addiction Solutions\)](#)
 - [Movement - Tai Chi and Qi Gong \(NCCIH-NIH\)](#)
 - [Sleep Meditation \(Renegade Pharmacist\)](#)
- Emotional regulation: grounding skills are associated with improving overall health**
- [Grounding Techniques - self-help for PTSD \(Anxiety BC\)](#)
 - Start an emotions journal
- Connection**
- [Connection to others \(Net Family News\)](#)
 - [Make Stress Your Friend \(TED Talk-Kelly McGonigal\)](#)
- Deep restorative breathing**
- [Breathing for relaxation \(Yoga Journal\)](#)
 - [Breathing techniques \(J Shakeshaft\)](#)
- Tapping:**
- [Tapping graphic \(Therapeutic Grace\)](#)
 - [Tapping demonstration \(The Tapping Solution\)](#)
- Crisis hot-lines and links:**
- Suicide prevention (Utah): 1-800-273-8255 (also chat available): [Suicide Prevention Resources](#)
 - Suicide Prevention CHAT: [CHAT](#)
 - Domestic violence shelters: 1-800-799-7233 or [The National Domestic Violence Hotline](#)
 - UTAH "warm-lines" for mental health crises (UTAH ONLY): 801-587-3000
- National Alliance for Mental Illness (NAMI) contact information**
- Local: 801-323-9900
 - Toll-free: 877-230-6264
 - UTAH Peer support groups by NAMI (for mental illness): [UTAH resources \(NAMI\)](#)
- Addiction-Recovery meetings (e.g. 12-Step, Rational Recovery, Refuge Recovery, ect.)**
- Local: [Community Recovery Meetings Locator](#)
 - National (on-line meetings): [On-Line 12-Step](#)
 - UTAH ONLY: [Meeting Schedule at USARA](#)



WRAP-UP

- 1) Neurobiology of balance and survival
 - *regulation and reward pathways*
- 2) Neurobiology of distress and escape
 - *Dysregulation and addiction pathways*
- 3) Pathways to resolution and restoration
 - emotional mastery through restoration of the *regulation pathway*
 - resiliency through the recovery pathway



There is no
greater agony than
bearing an
untold story
inside
you.

-Maya Angelou

THANK YOU