

The ABC of Stress Management



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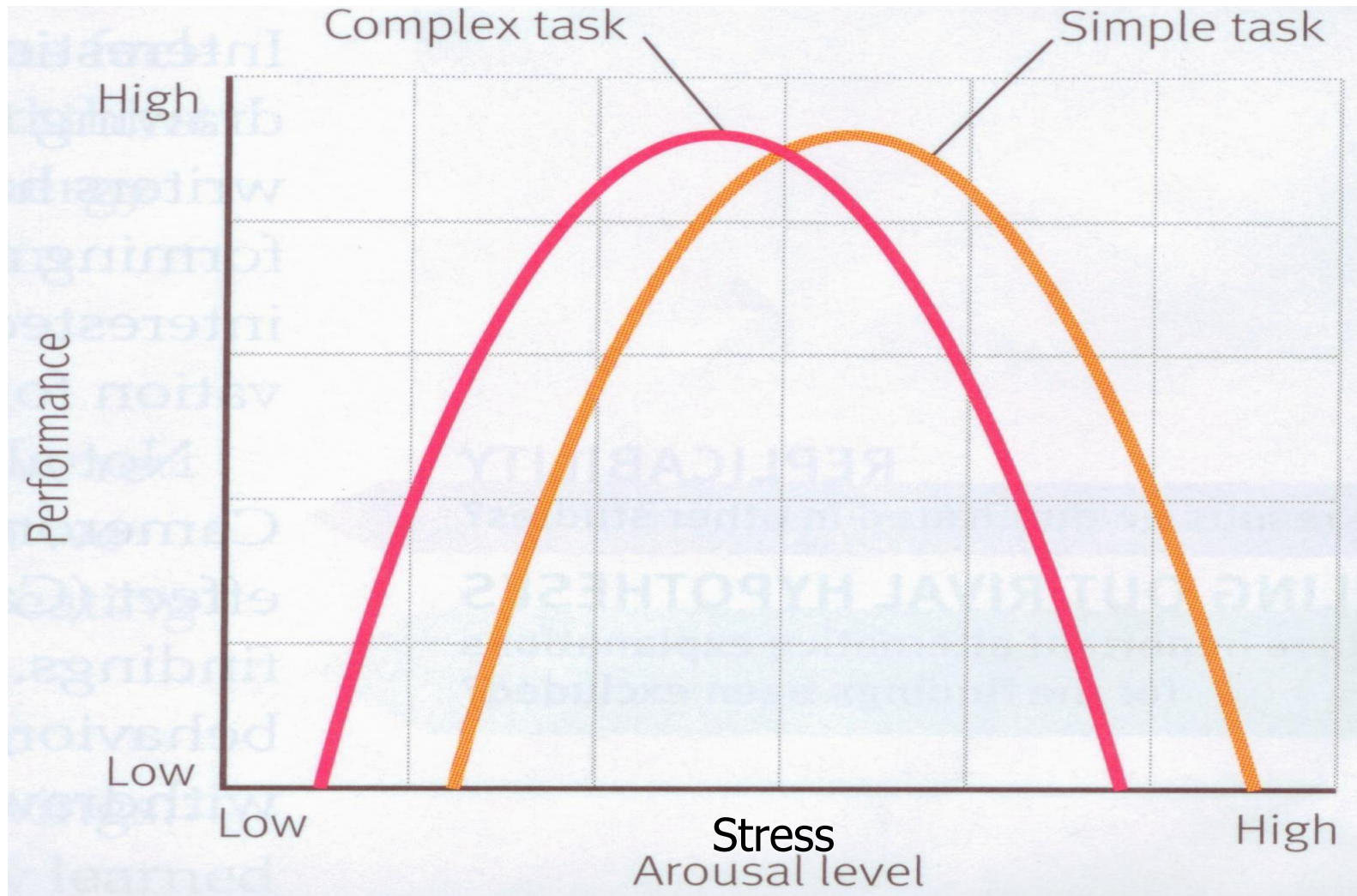


Sometimes, life is
really a bitch!

Life adjustment stress is
unavoidable !

No stress, no evolution !

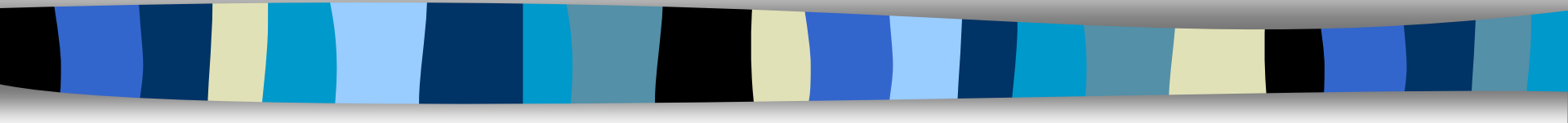
The inverted U-curve of stress and performance



Manageable stress help us
perform better !

Unmanageable toxic stress
causes physical and mental
problems !

How does stress affect body and mind?



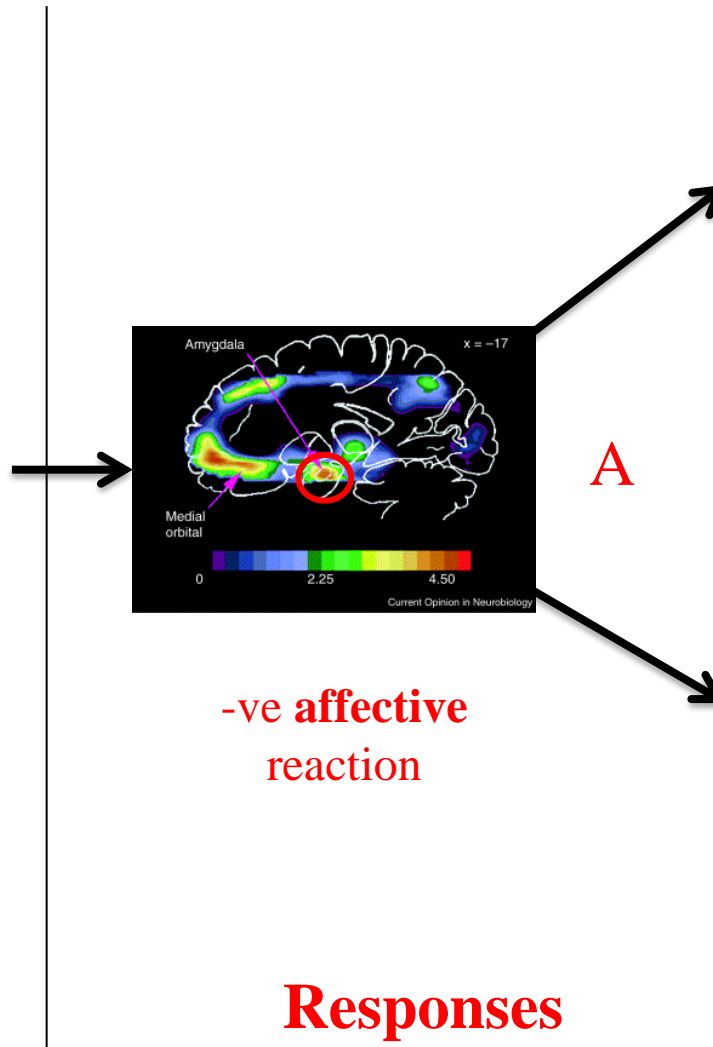
How does stress affect body and mind?

The S-ABC model

Stress-provoking situation



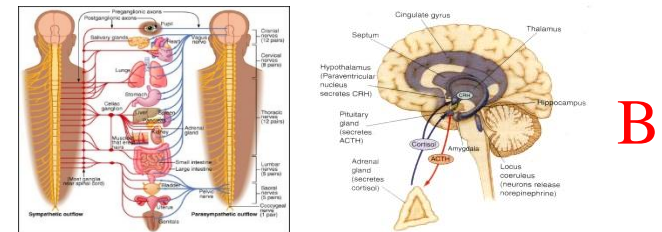
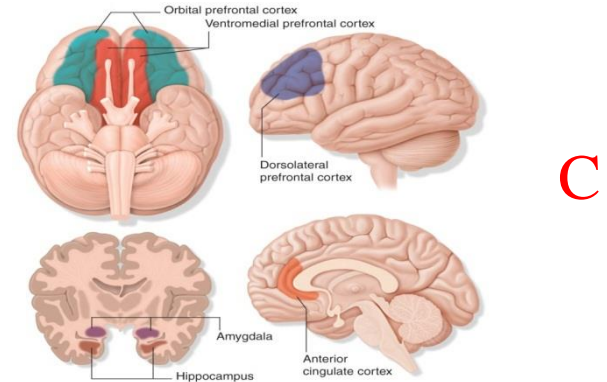
Situation



-ve affective reaction

Responses

-ve cognitive reactions



-ve bodily reactions

The **S-component**: stress-provoking situation



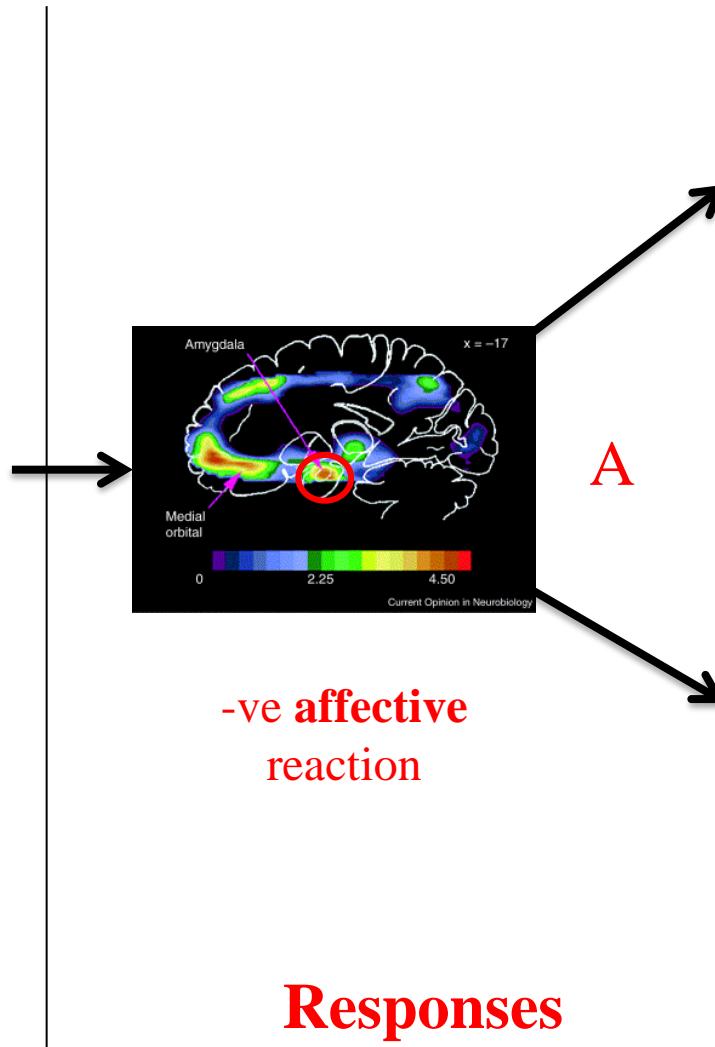
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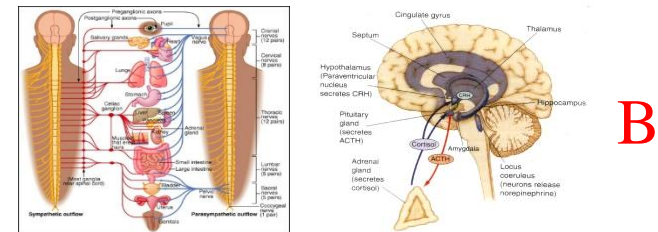
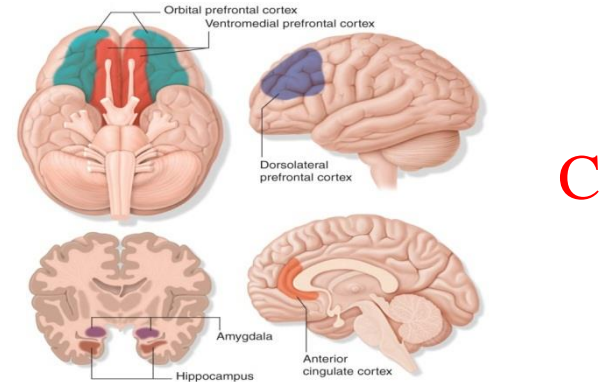
Situation



-ve affective reaction

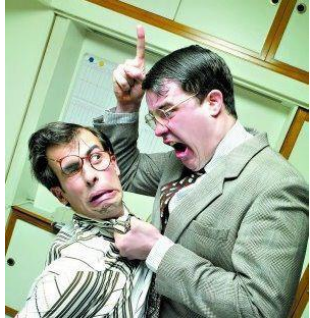
Responses

-ve cognitive reactions

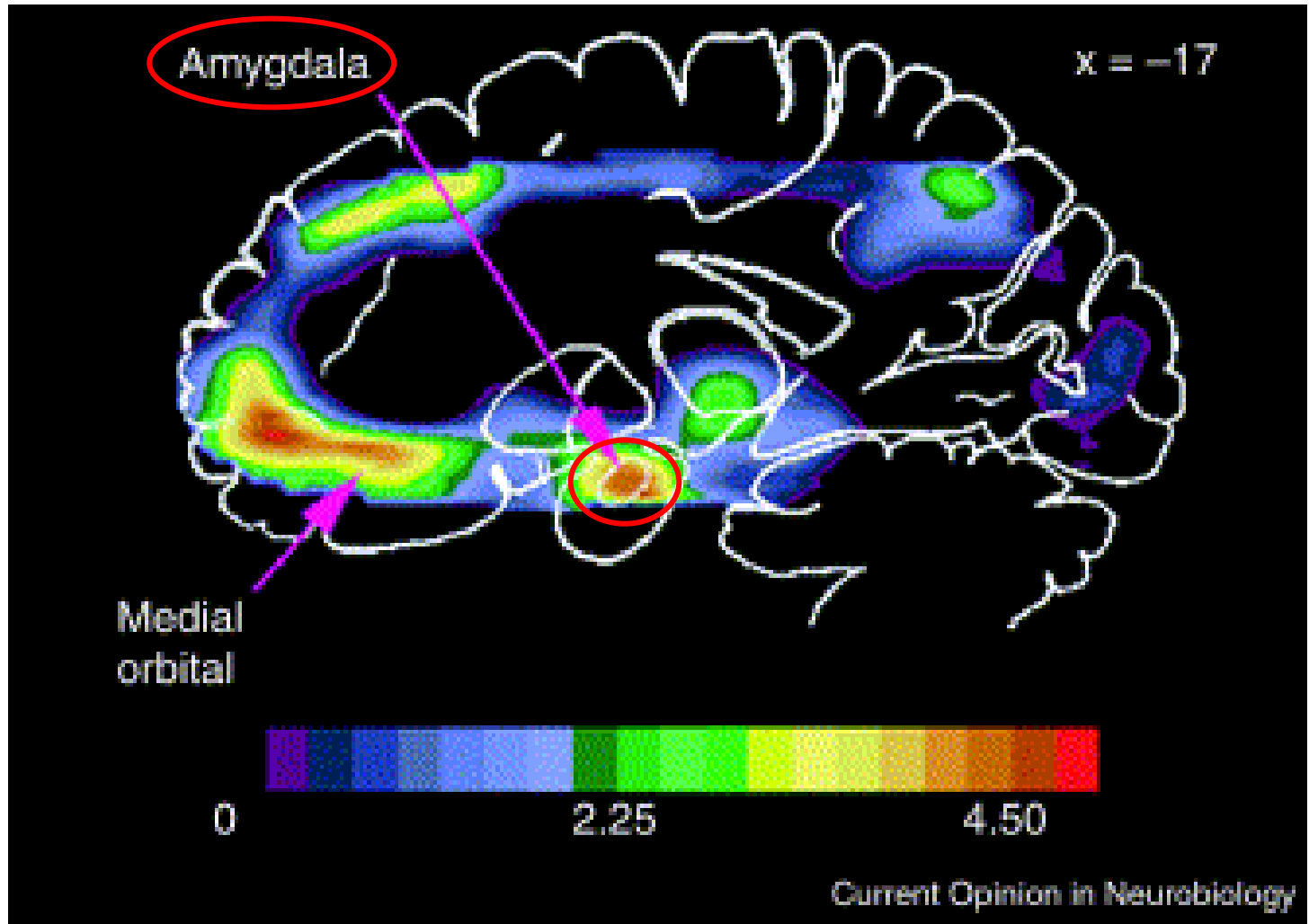


-ve bodily reactions

The A-component: Amygdala (AMY)



AMY has 3 possible reactions to any situation: -ve, +ve, or neutral.
-ve AMY reaction will activate the stress response.



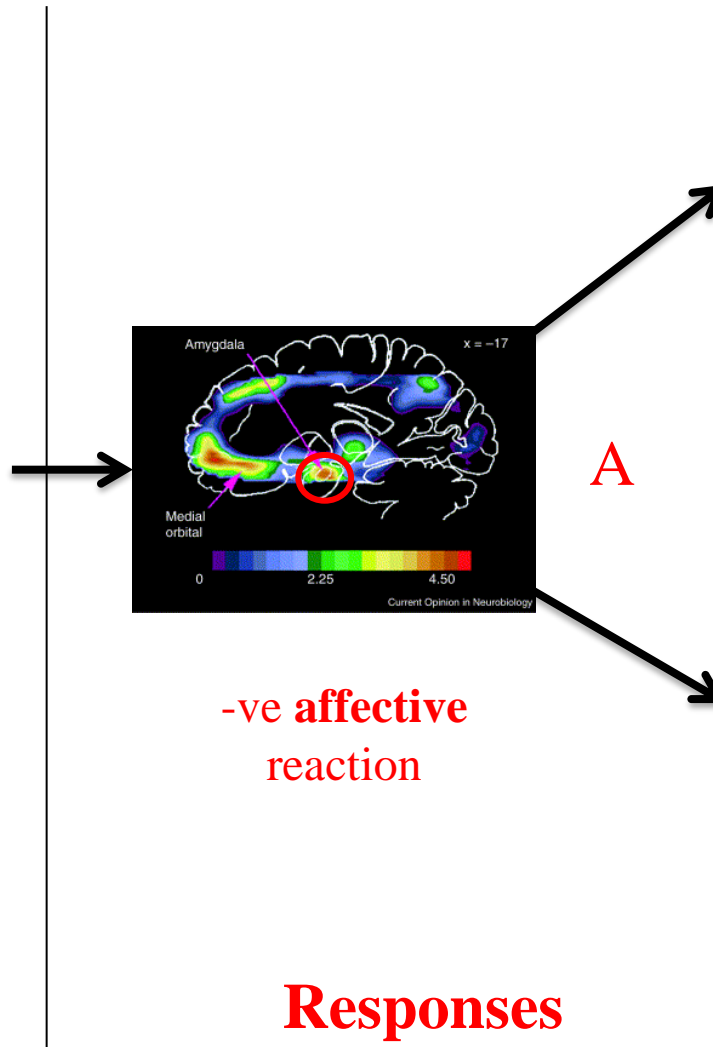
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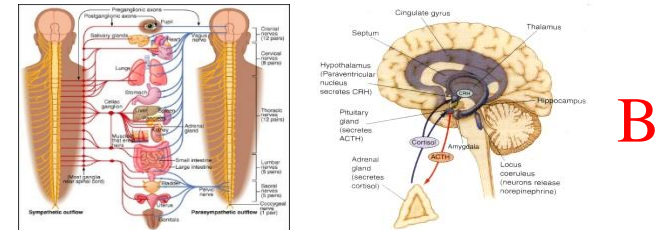
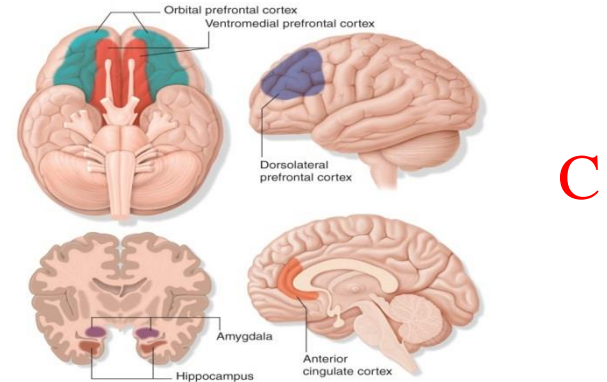
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-ve affective reaction

Responses

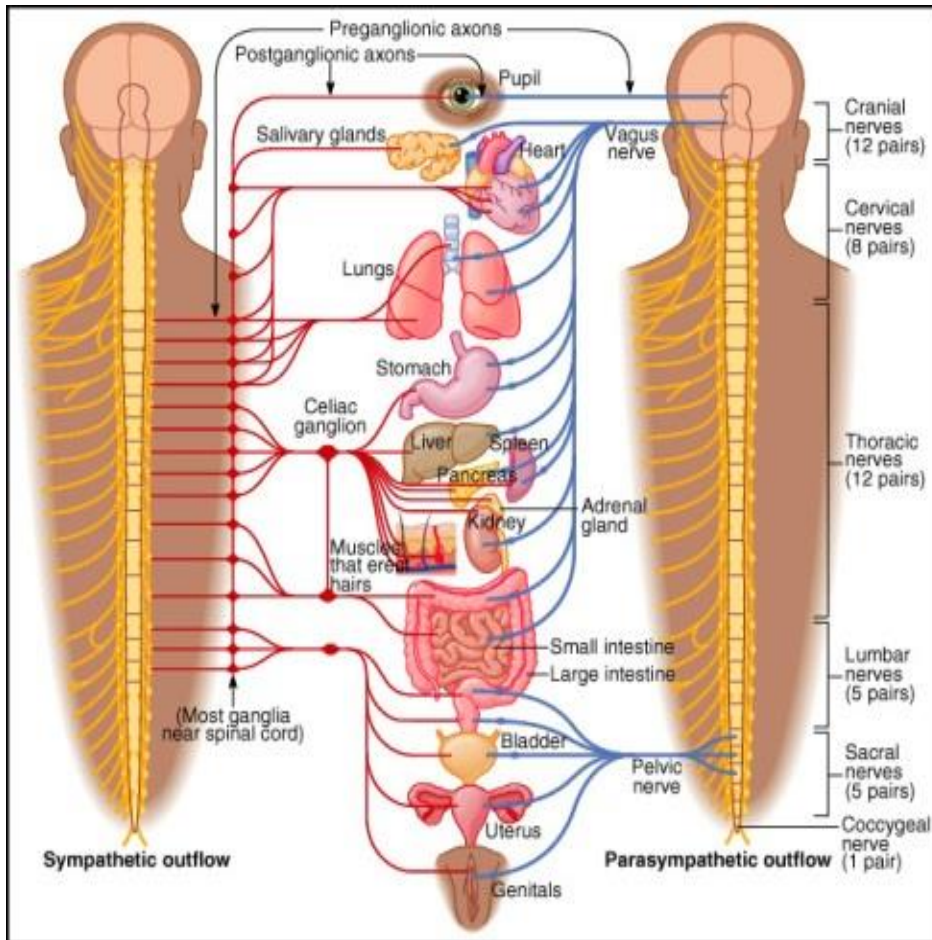
-ve cognitive reactions



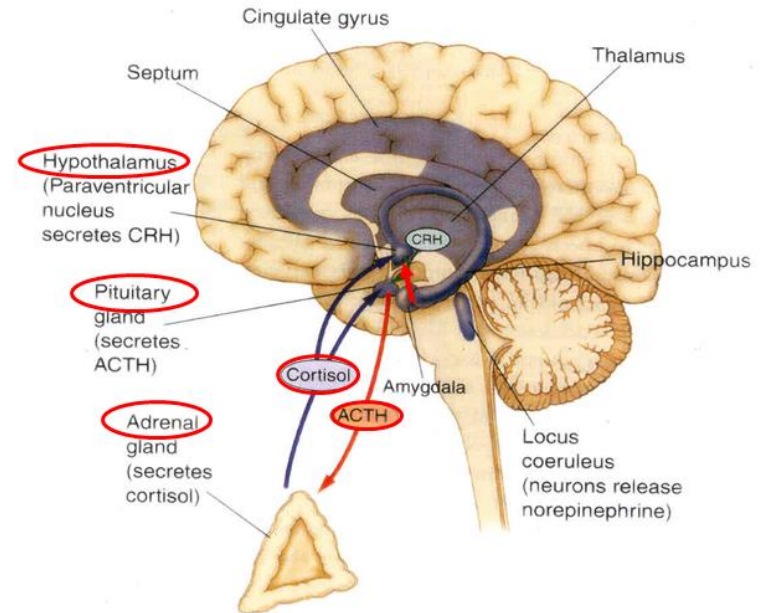
-ve bodily reactions

The B-component: bodily reactions

Sympathetic reactions



Hormonal reactions



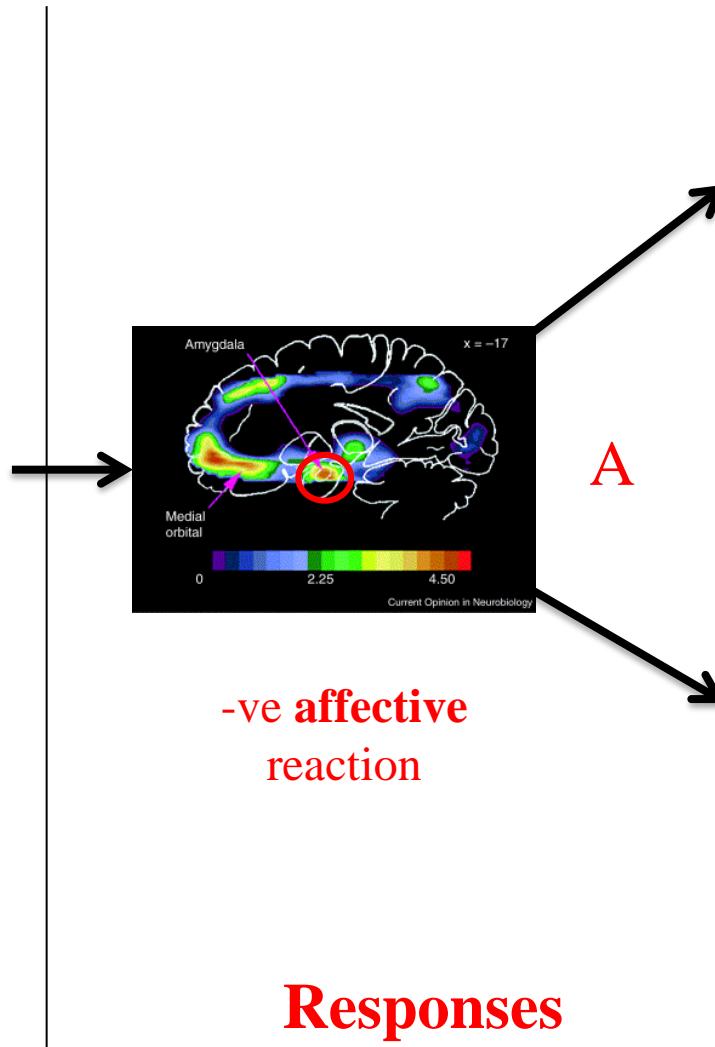
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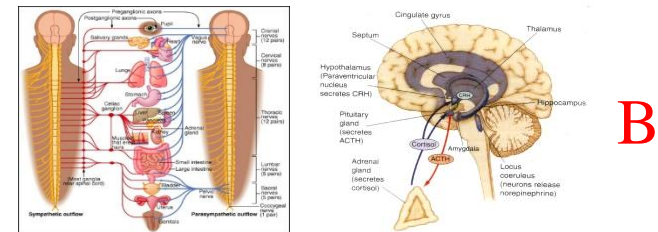
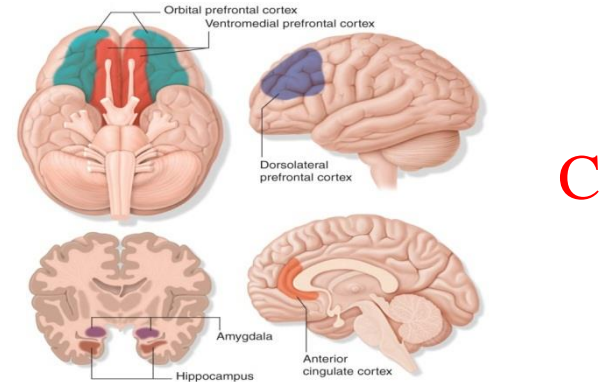
Situation



-ve affective reaction

Responses

-ve cognitive reactions



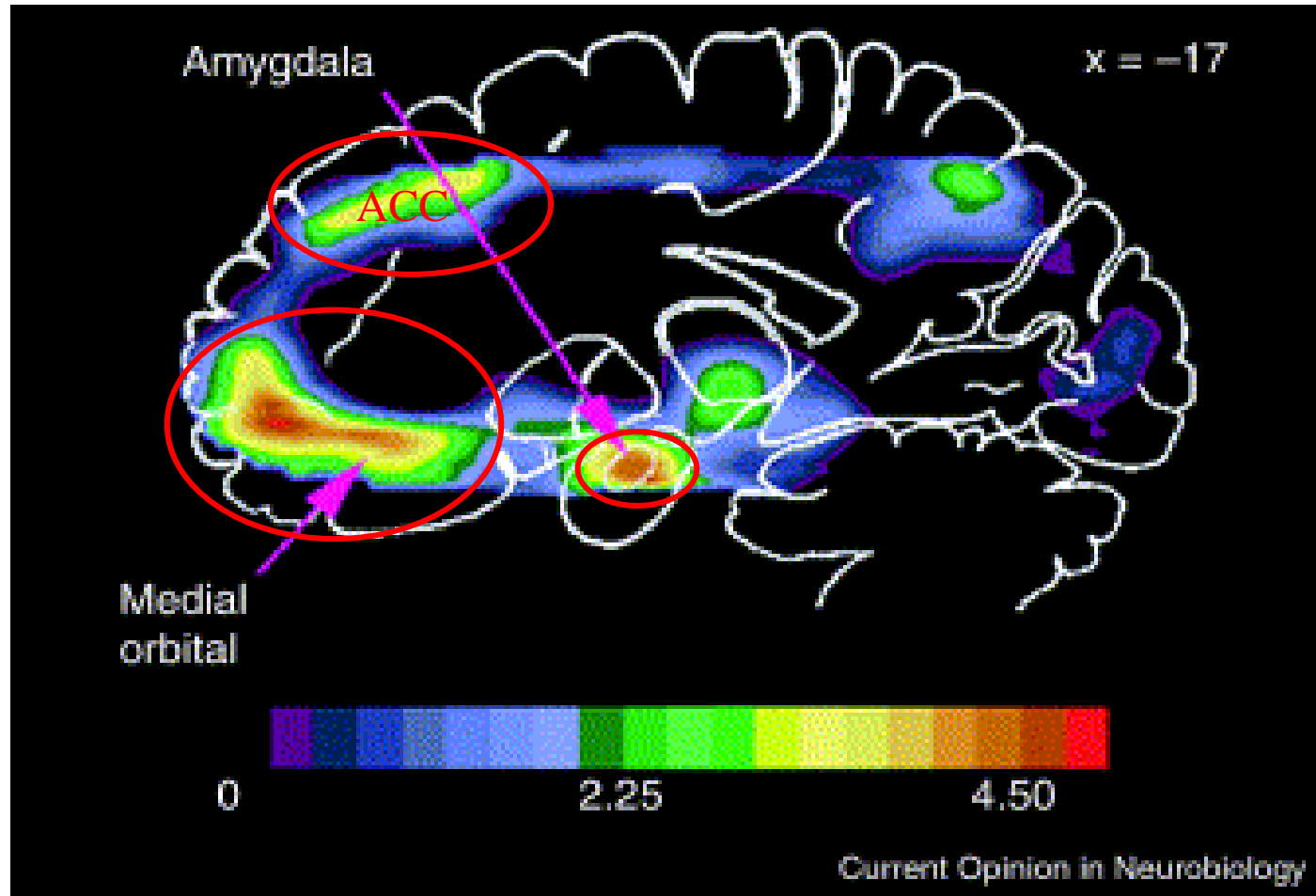
-ve bodily reactions

The C-component: negative cognitive reactions



Attention biases

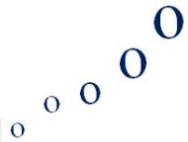
Interpretation biases



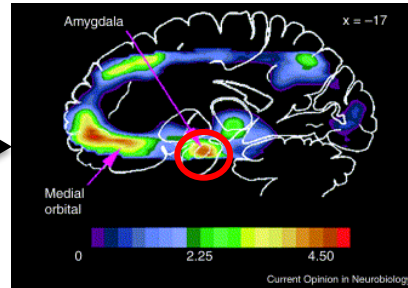
How does **stress** affect body and mind?

The **C-ABC** model

I'm a useless
person!



Situation

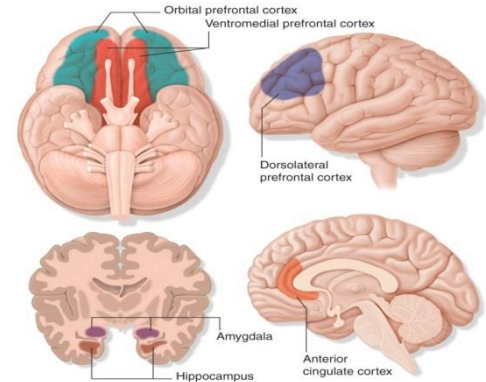


A

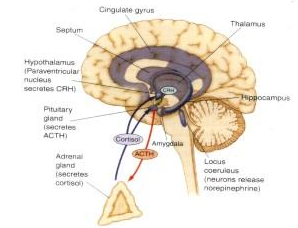
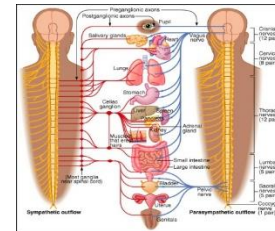
**-ve affective
reaction**

Responses

-ve cognitive reactions



C



B

-ve bodily reactions

Hans Selye: The father of stress response



General Adaptation Syndrome

Phase 1 – Alarm stage
(acute stress response)

Phase 2 – Resistance stage
(chronic stress response)

Phase 3 – Exhaustion stage
(anxiety, depression and other somatic symptoms)

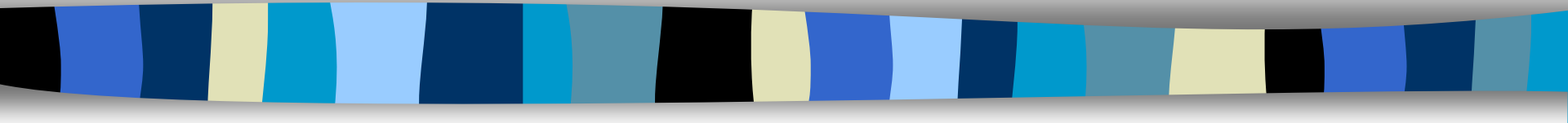
The most common presenting symptoms

- Adjustment stress problems
- Anxiety symptoms
- Depressive symptoms
- Somatic symptoms
- Sleep disturbances



Adjustment stress problem or medical problem?

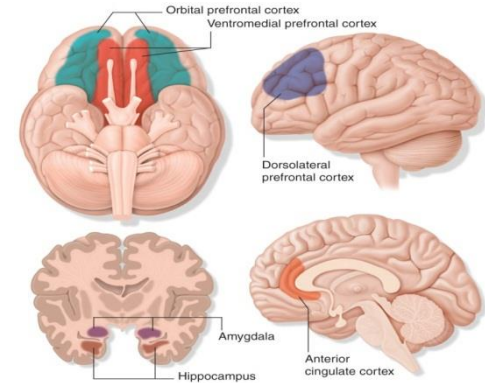
Stress management: The S-ABC model



Stress management: The S-ABC model

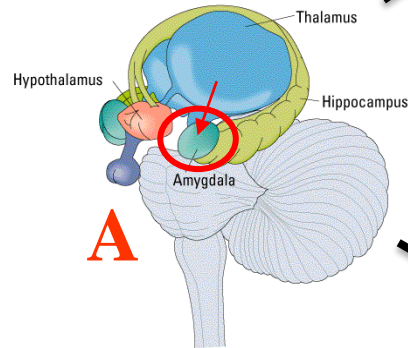
What can we do to change cognitions?

Cognition is out of control



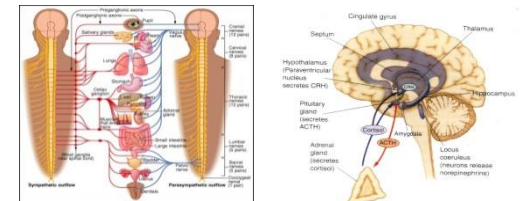
C

What can we do to lower AMY's hyper-sensitivity?



A

AMY is out of control



B

Body is out of control

What can we do to modify the bodily reactions?

Where does toxic stress come from?

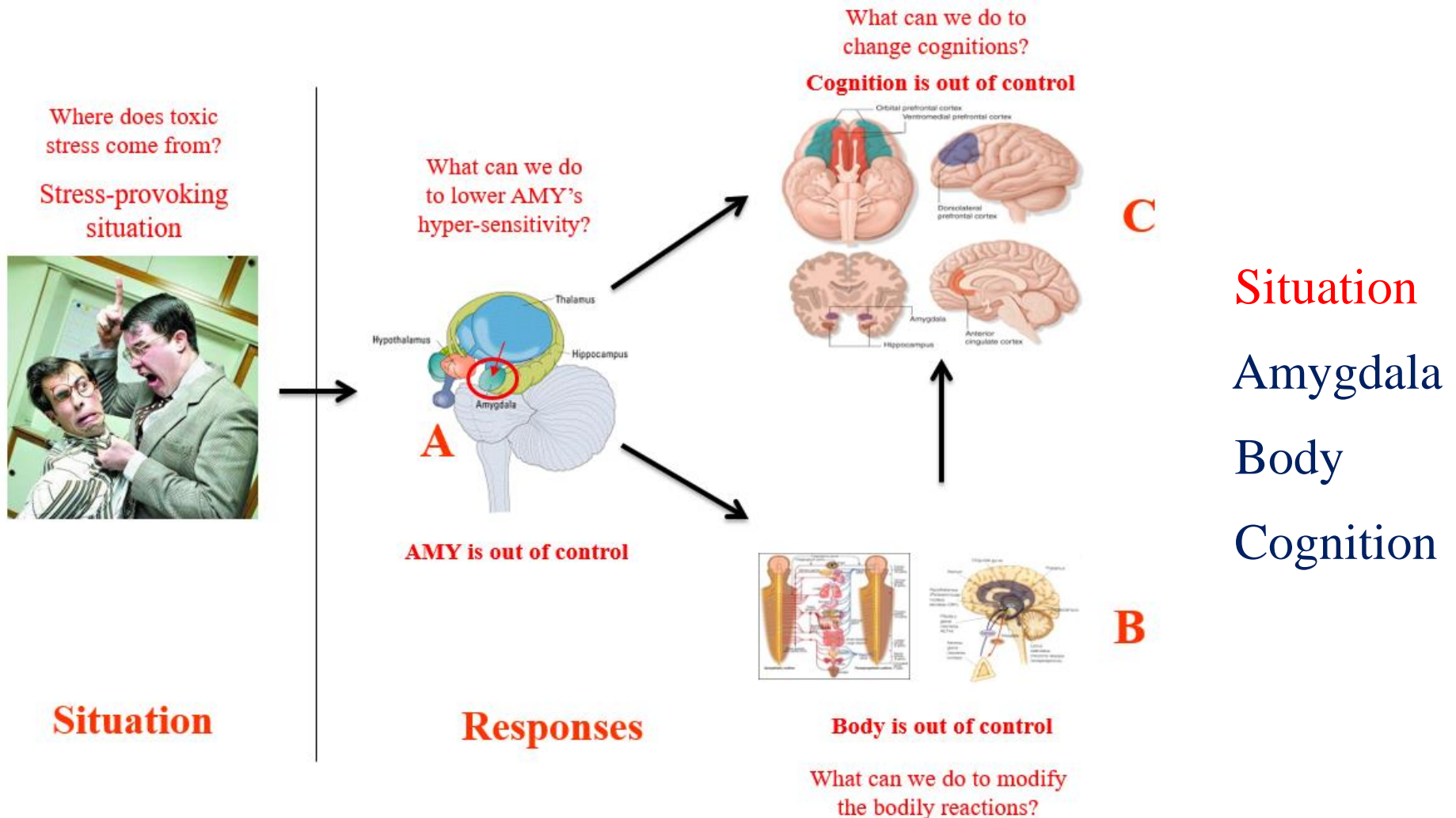
Stress-provoking situation



Situation

Responses

Stress management: identifying sources of toxic stress



Selye's wisdom about toxic stress



Hans Selye (1907–1982)

Father of stress response

1. “Do what you like and what you were made to do at your own rate!”
2. “Earn thy neighbour’s love and be a hoarder of good will to make your environment less stressful!”



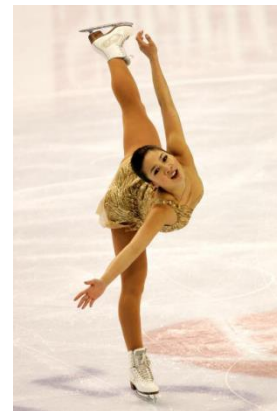
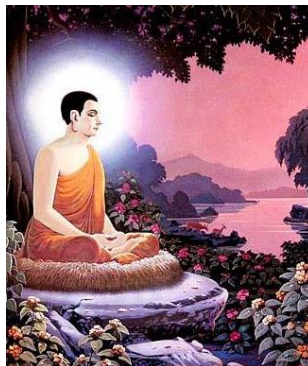
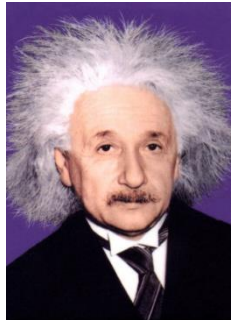
Good person-career match

- Match between **interest** and career
- Match between **personality** and career
- Match between **ability** and career



Gardner's “Multiple Intelligence Theory”

- 1) Linguistic
- 2) Logical-mathematical
- 3) Spatial
- 4) Naturalistic
- 5) Musical
- 6) Bodily-kinesthetic
- 7) Interpersonal
- 8) Intrapersonal



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Hostility & distrust activate stress hormones





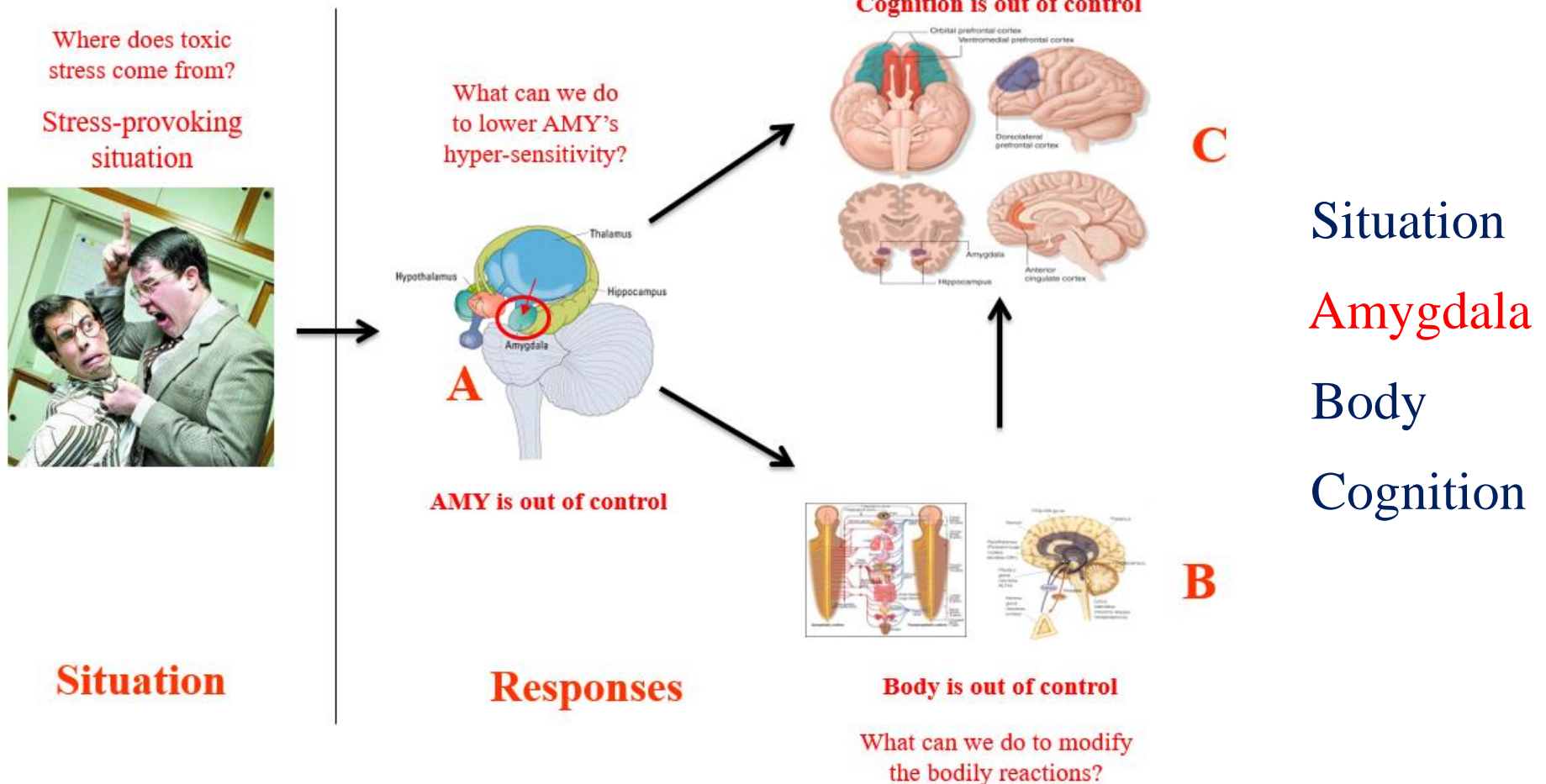
Close emotional bonding with others increases oxytocin and dopamine, enhances positive emotion, lowers stress hormone cortisol, and strengthens immune functions



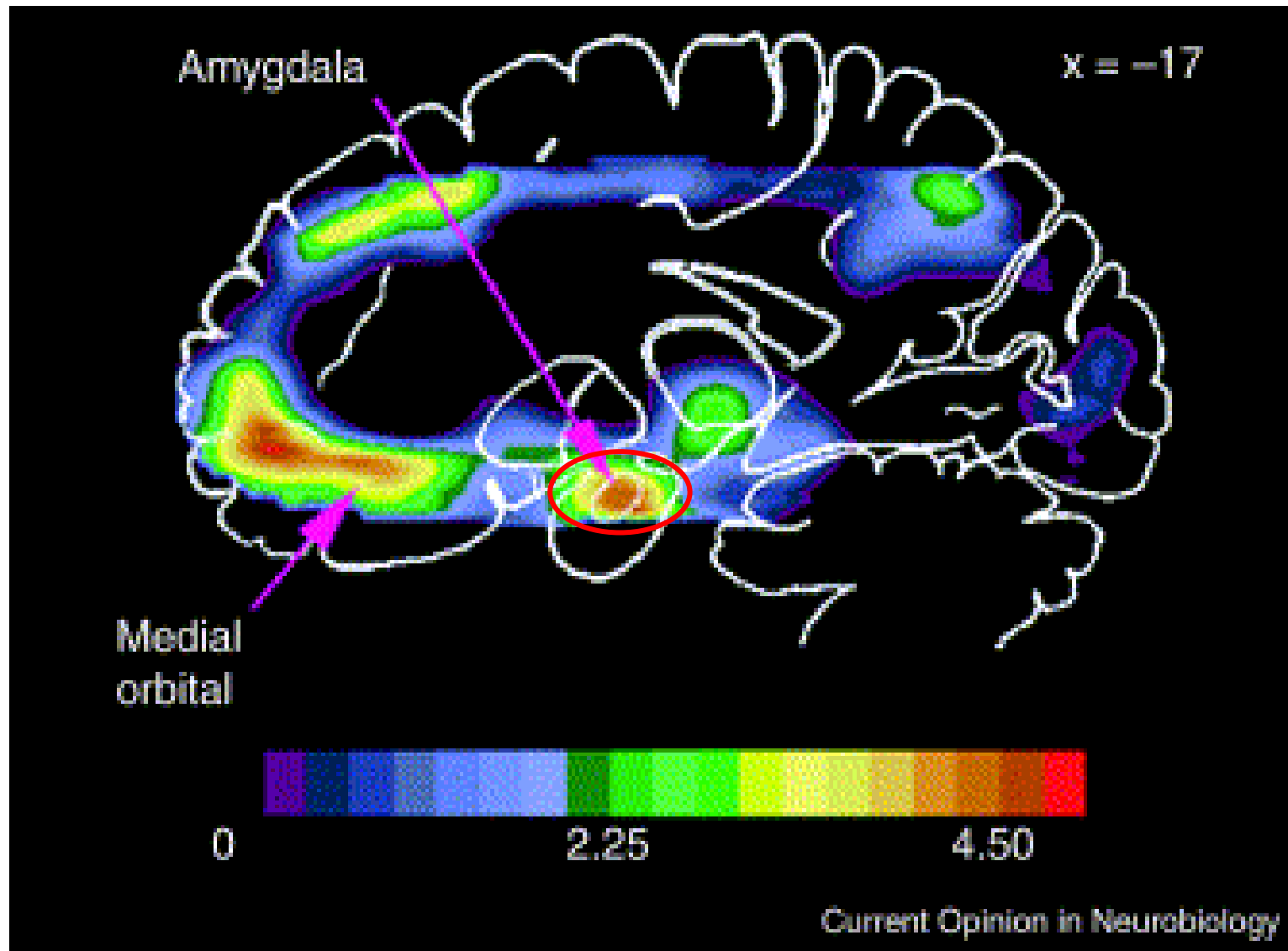
Establish close emotional bonding

- Establish good emotional bonding with others
- Bond to animals if you can't bond to people (pet therapy)
- Remember, no drug can replace love!

Stress management: regulating ABC responses



How to lower the sensitivity of AMY ?



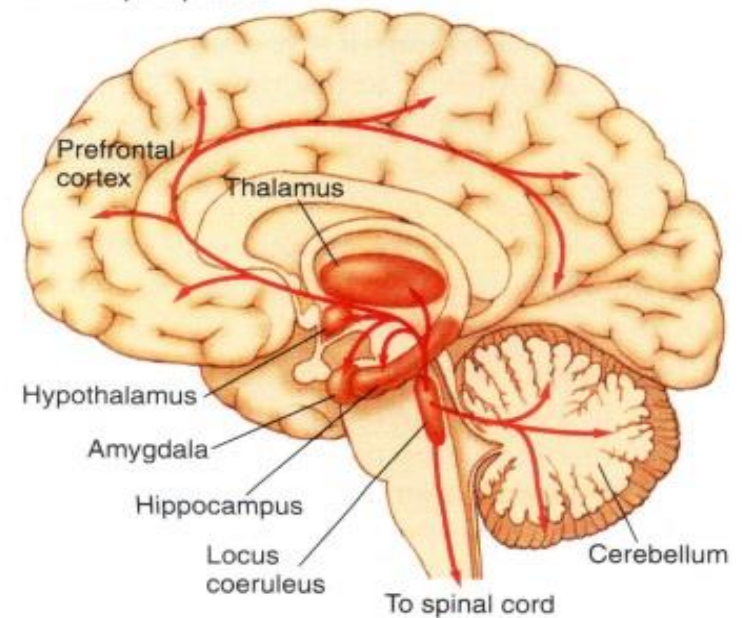
Cut down on caffeine intake if you have a sensitive temperament



caffeine enhances
norepinephrine release

去甲肾上腺素

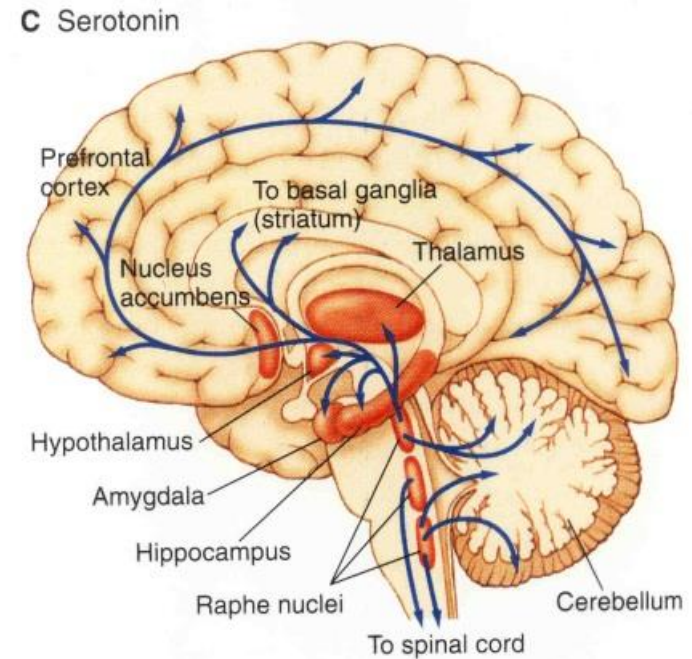
B Norepinephrine



Eat a balance diet and foods rich in tryptophan

Tryptophan

egg, white bean, crab,
tuna, lamb, turkey, tofu,
oats, bananas, pineapple,
spinach, cheese



Top 10 foods highest in tryptophan. YouTube (2014).

Neuro-chemical changes in stress

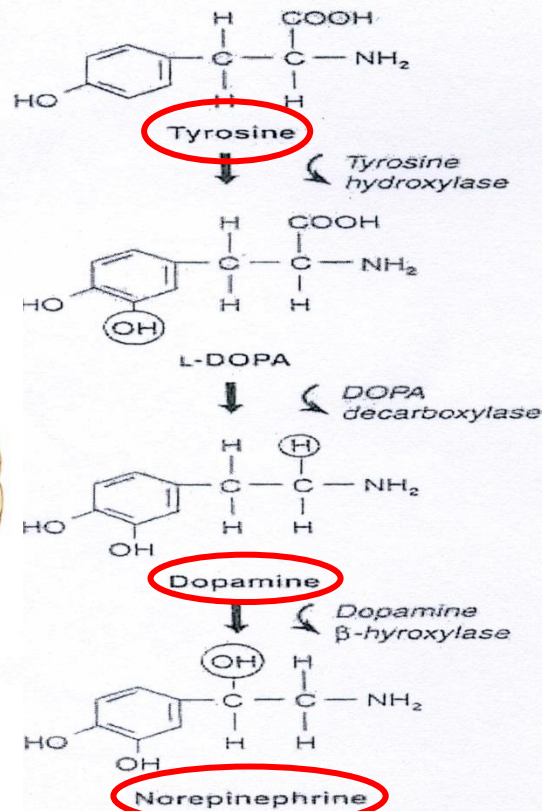
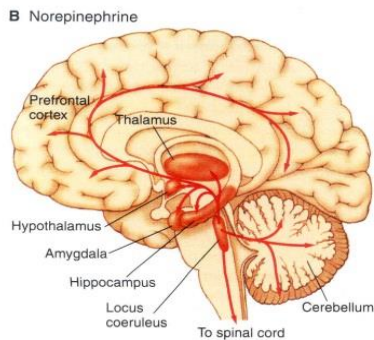
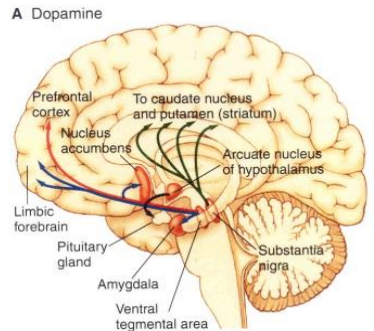


Figure 4.13
Biosynthesis of the catecholamines.

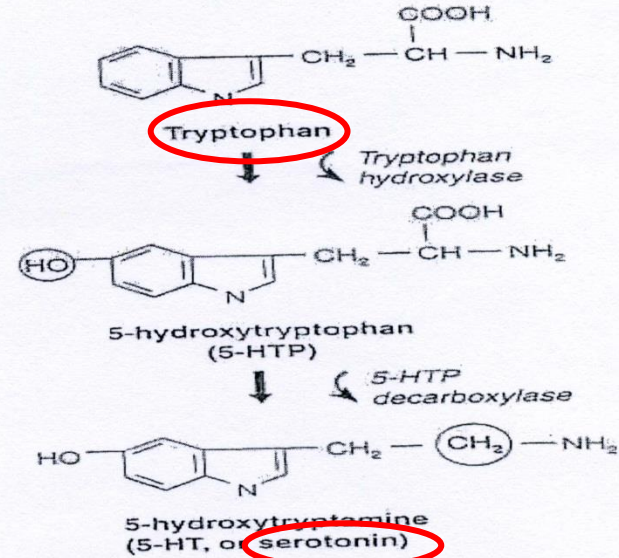
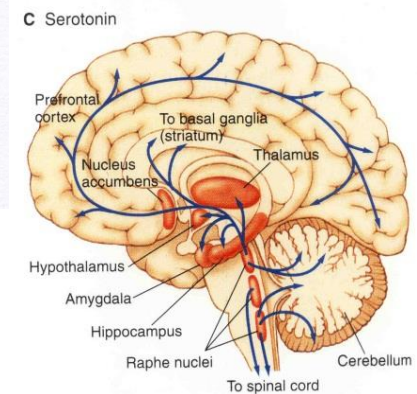


Figure 4.18
Biosynthesis of serotonin (5-hydroxytryptamine).

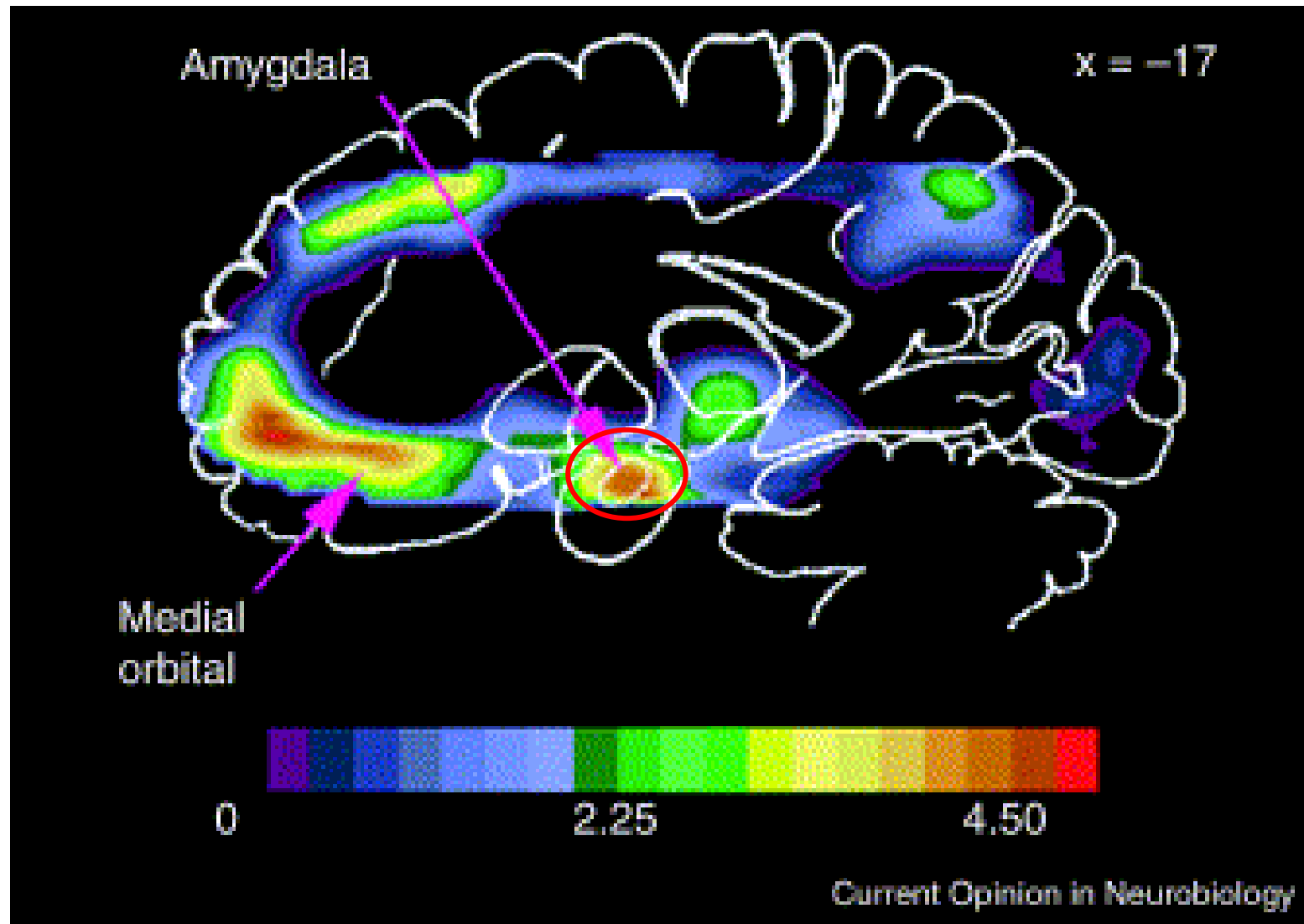




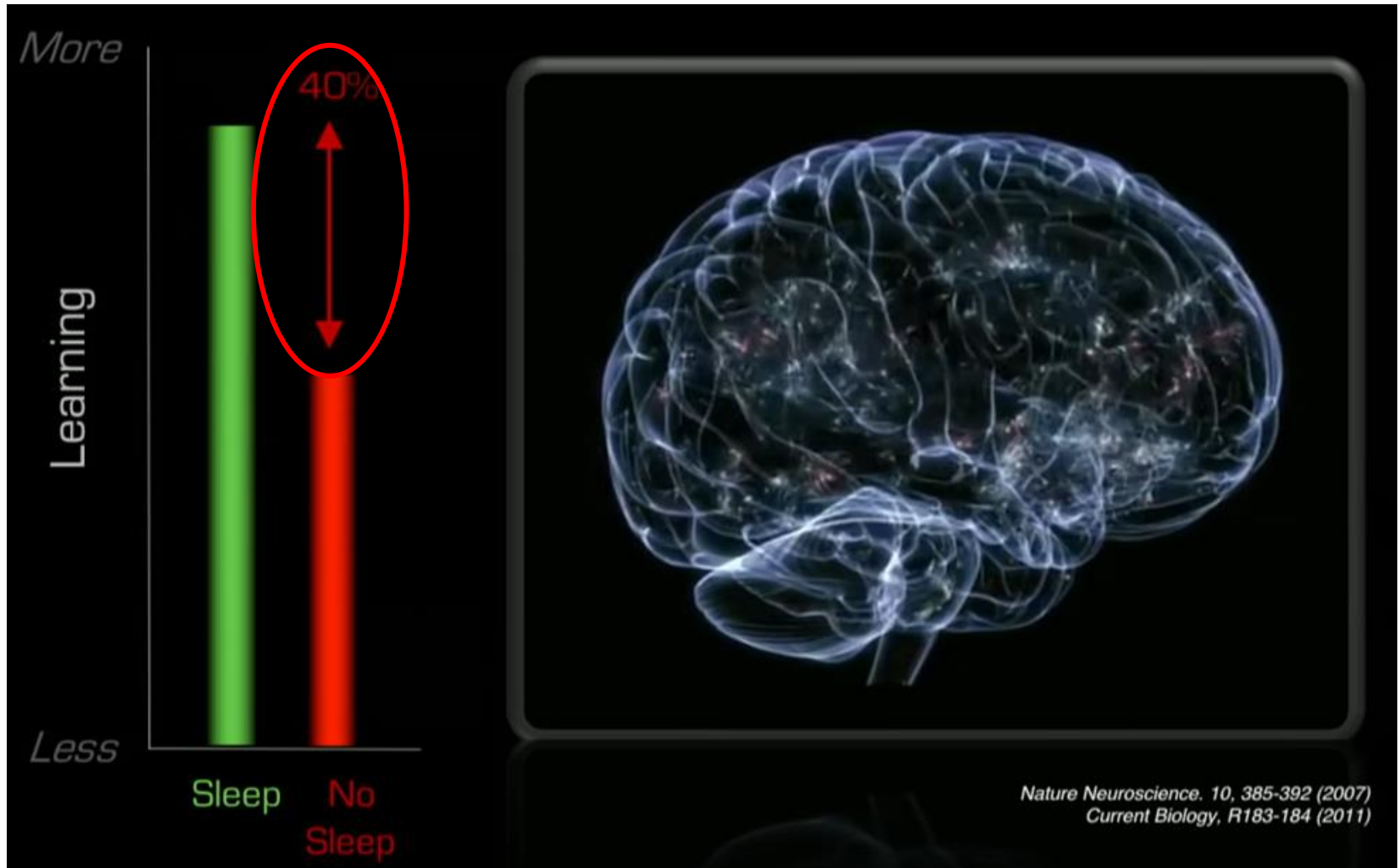
How to eat when you are under stress?

- Always eat a balance diet
- Eat a good portion of **proteins for breakfast**
- Eat a good portion of **carbohydrates for dinner**
- Eat **3 different fruits** plus **2 different vegetables** per day (**anti-oxidants**)
- Drink **2.5 - 3 litres of water daily** particularly when over-stressed
- If you are a sensitive person, **avoid caffeine** (dark tea, coffee, cola, etc)

Sleep deficit make AMY hyper-sensitive to stress

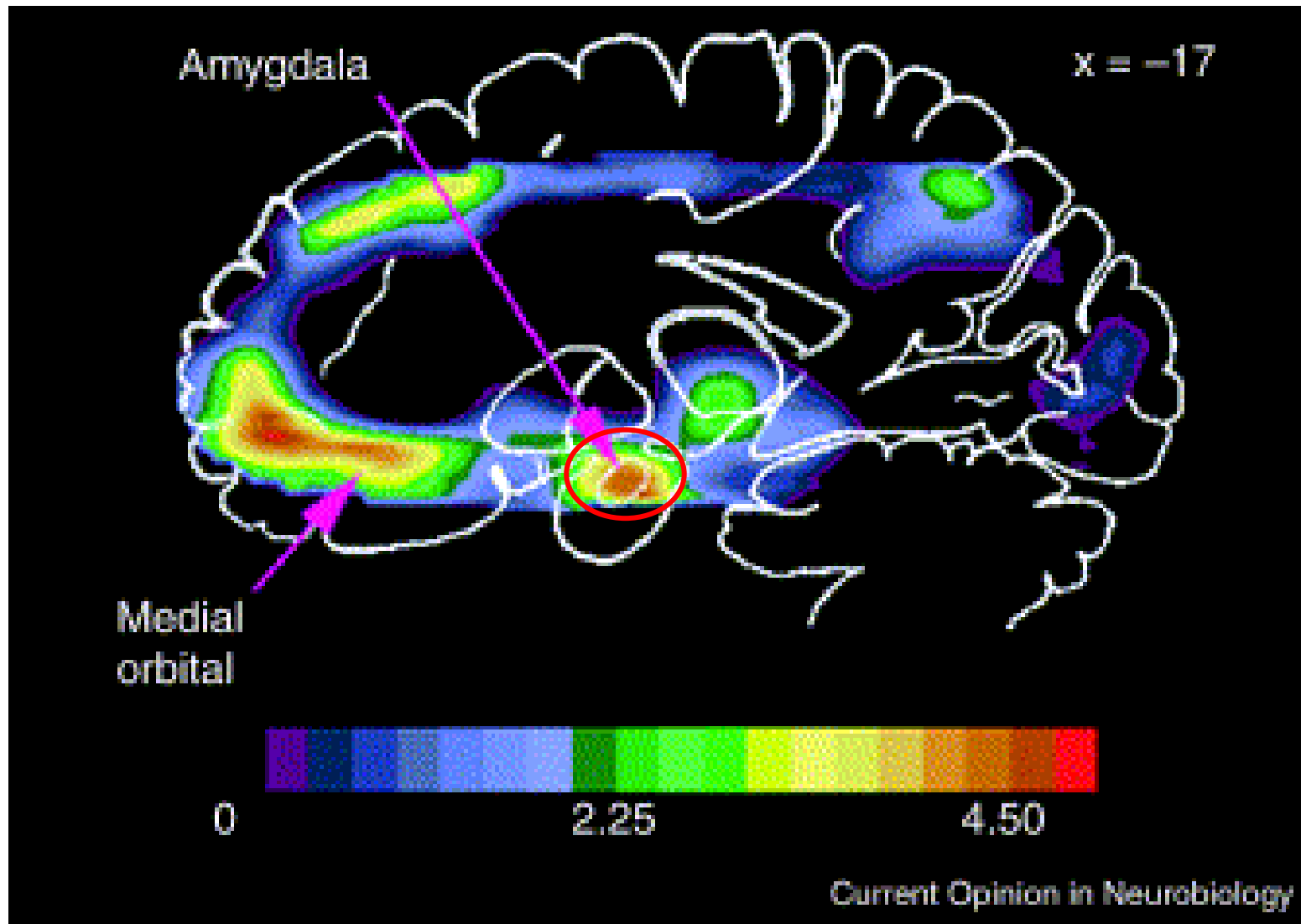


Sleep deficits **impair memory & learning by 40%**



Sleep is your superpower | Matt Walker

Sleep deficit raises depressive mood

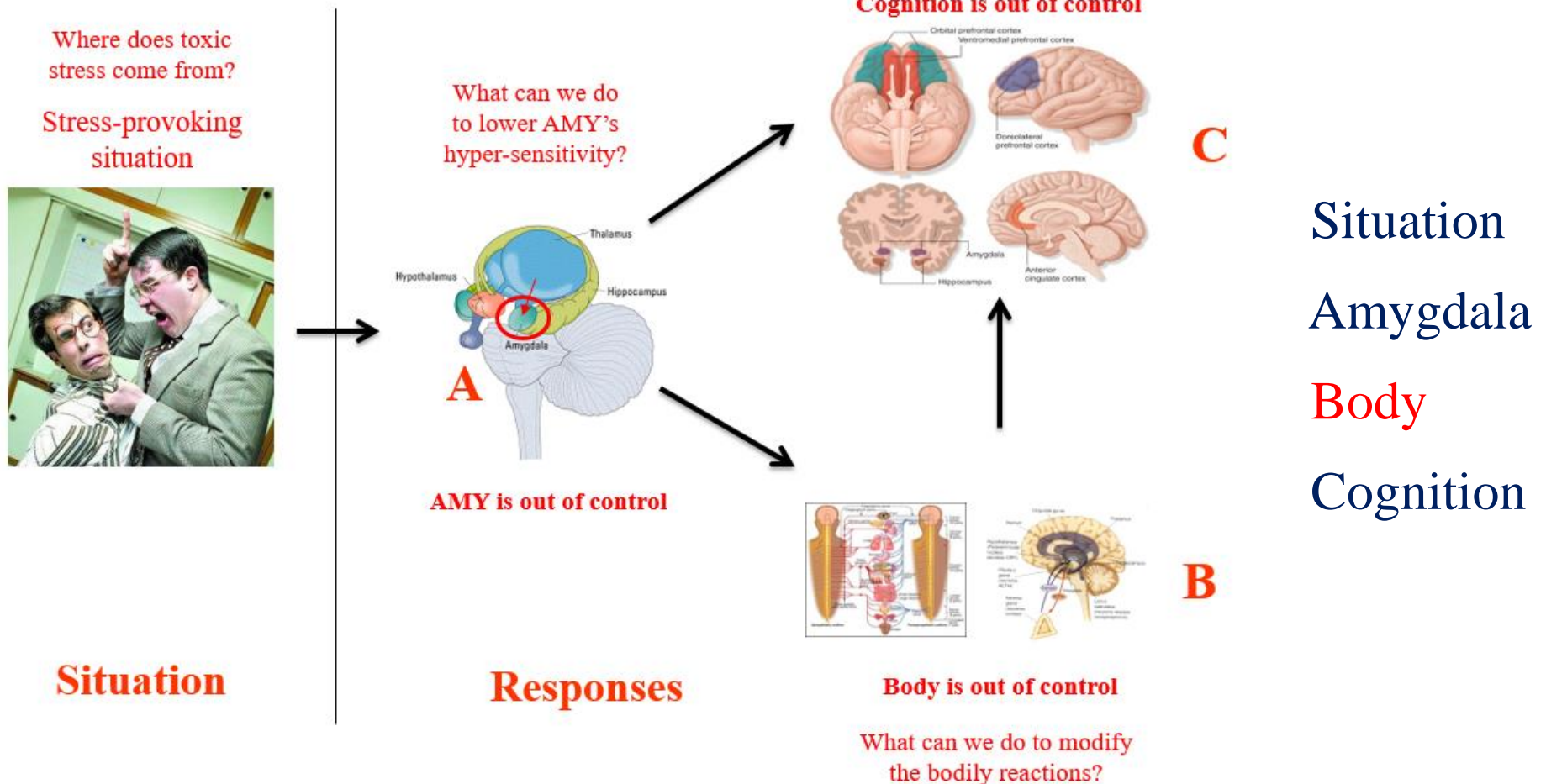




Always get sufficient sleep

- Always sleep sufficient hours (7-9 hours) according to your need
- Sleep sufficient hours particularly when under chronic stress
- **Compensate for sleep deficits** (naps before 5pm)
- If you are a sensitive person, **avoid caffeine**
- **Exercise** regularly during day time **improves sleep quality** at night
- **Avoid sleeping pills**

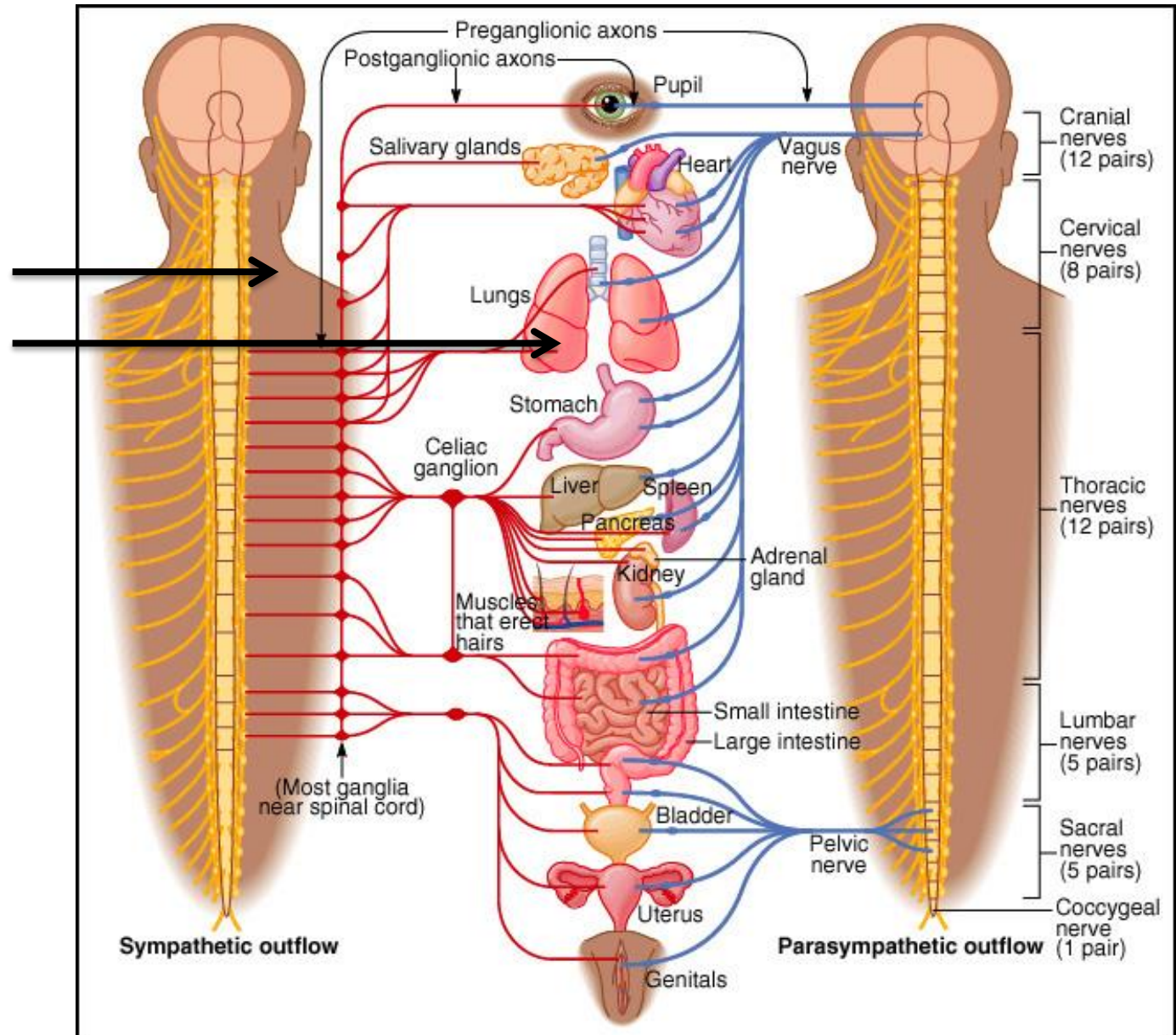
Stress management: regulating ABC responses



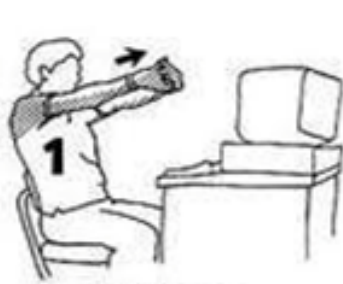
What can we do to calm our bodily reactions?

Muscle tension

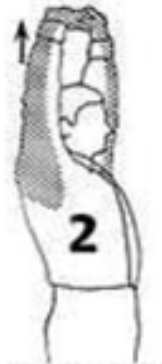
Breathing



Stretching exercises relax body and calm mind



10-20 seconds
2 times



10-15 seconds



8-10 seconds
each side



3-5 seconds
3 times



10-12 seconds
each arm



8-10 seconds



8-10 seconds



10-15 seconds

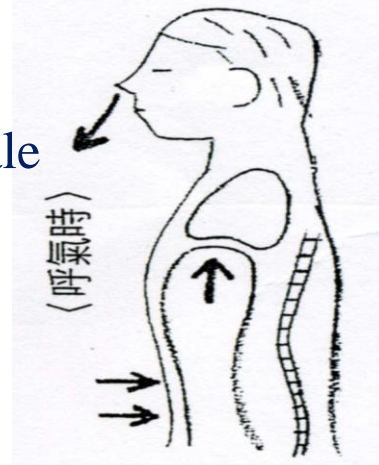
Slow-deep diaphragmatic breathing calms mind

6 breaths or less
per minutes!

inhale



exhale

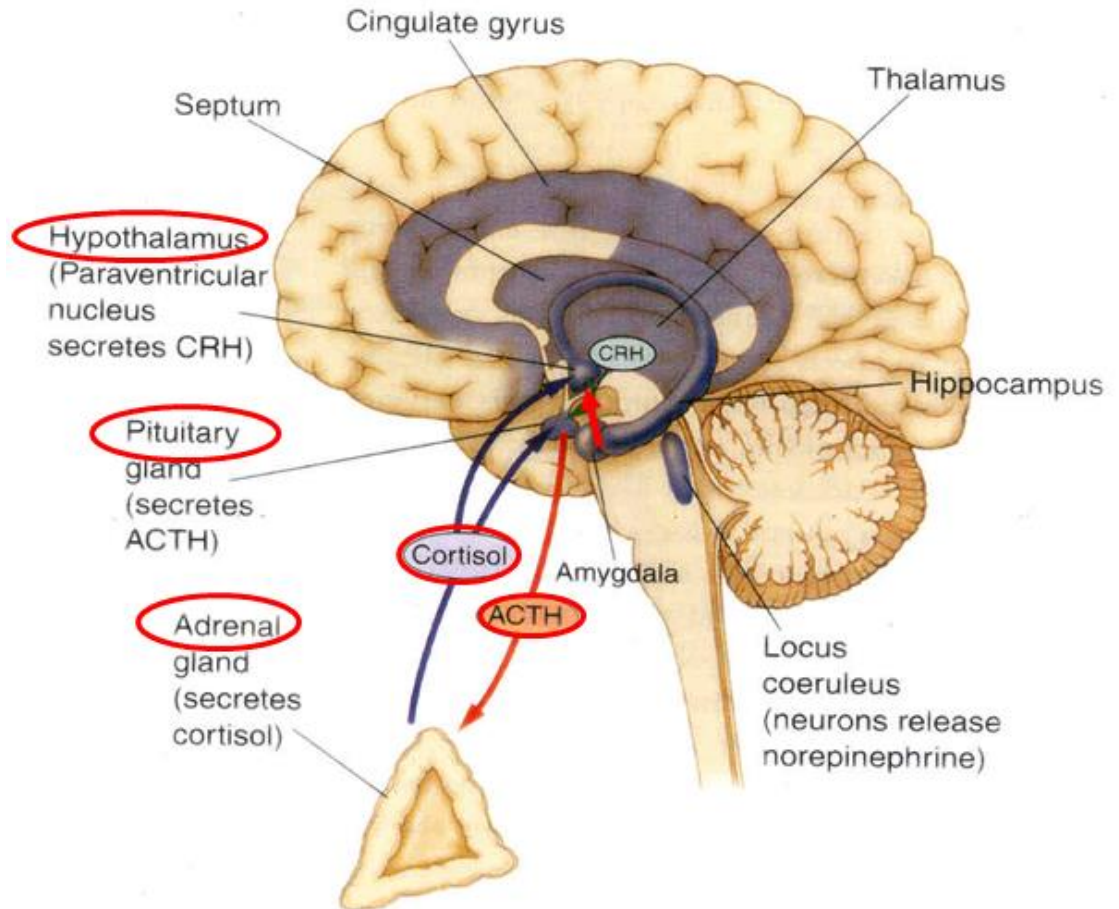


Toxic stress, ACTH and cortisol

The toxic stress responses

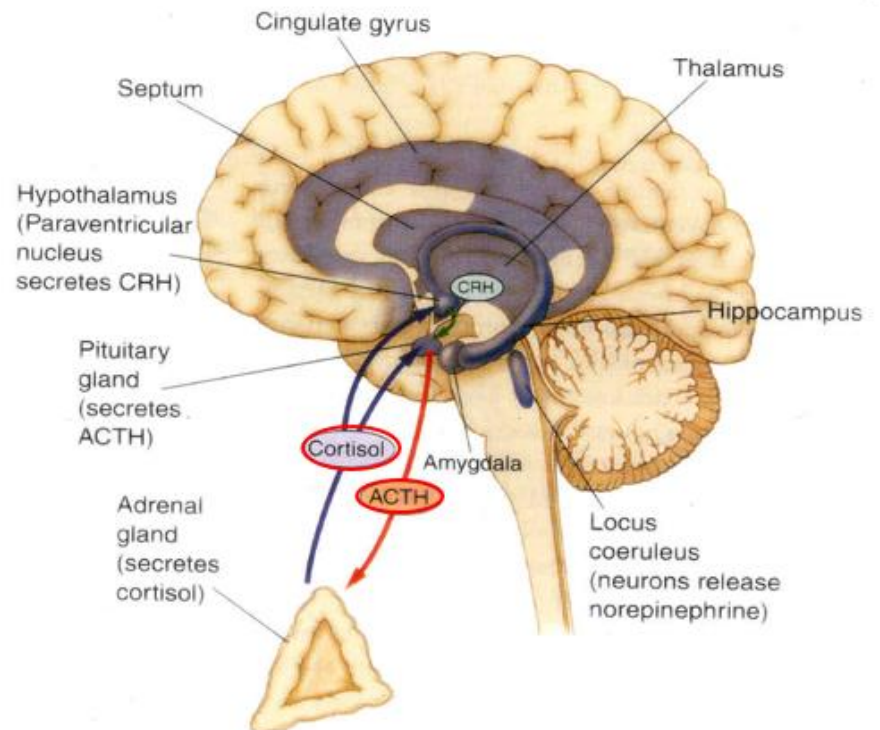
Adrenal cortex releases cortisol

Cortisol breakdowns amino acids, proteins, and body fat into glucose (gluconeogenesis) to guarantee long term supply of energy in our body when stress persists.

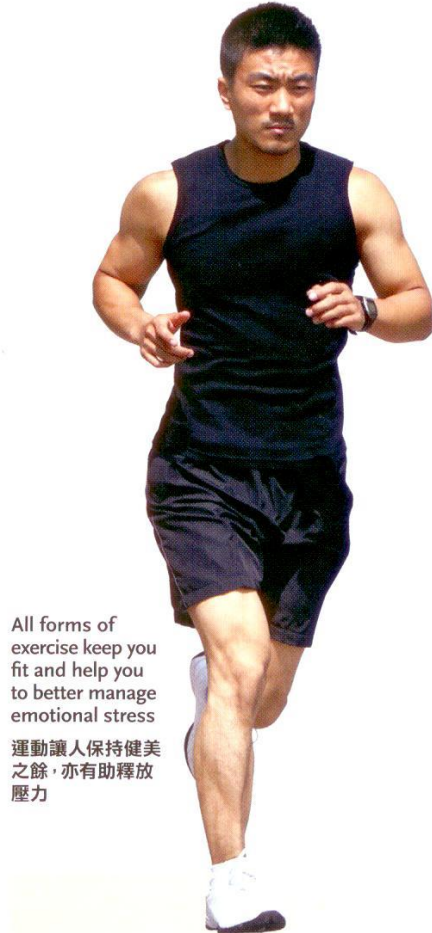


The Science of Stress Physiology Emotions Fight-flight. YouTube (2008).

Crying lowers ACTH



Develop a regular exercise habit



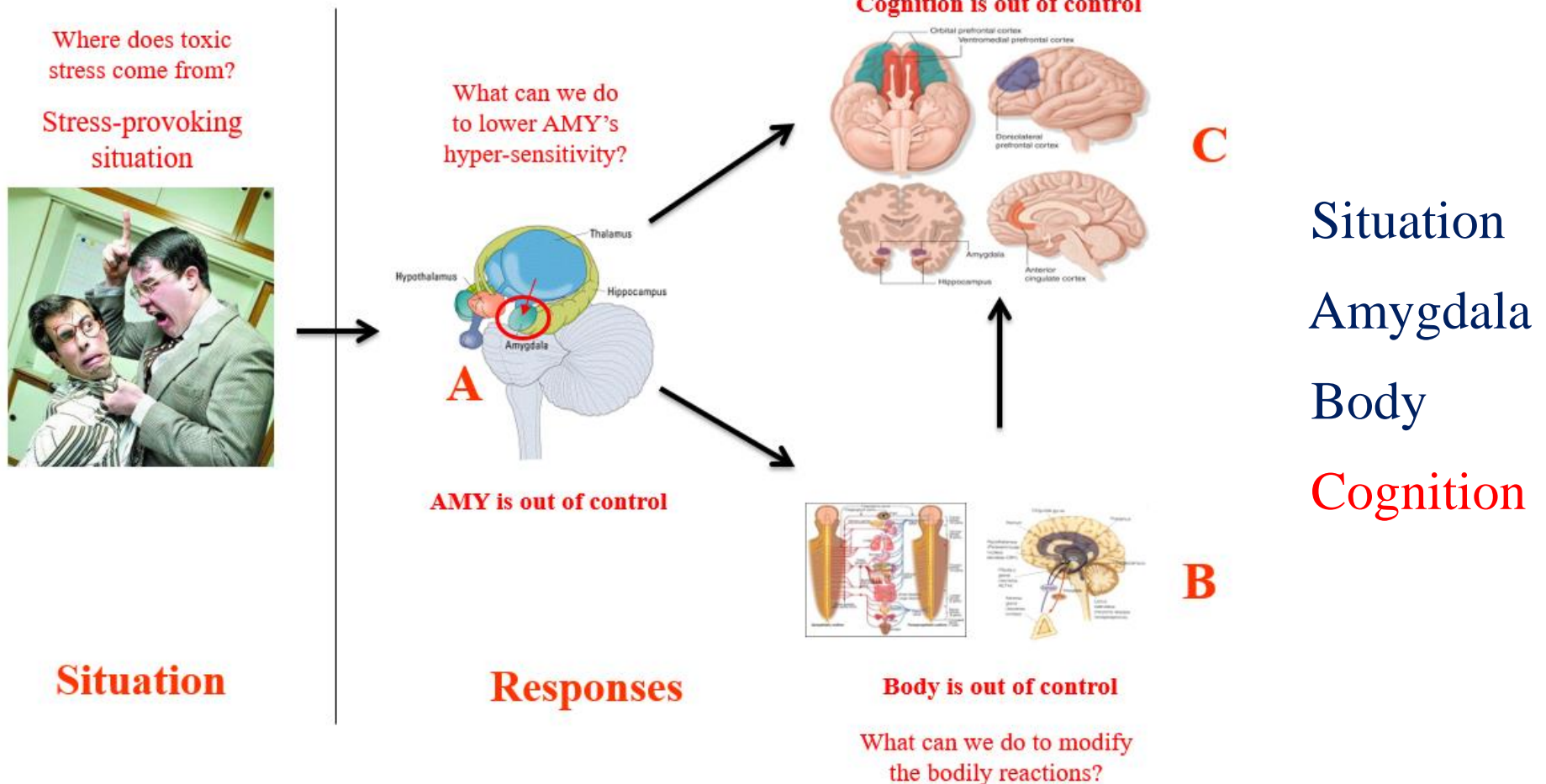
All forms of exercise keep you fit and help you to better manage emotional stress
運動讓人保持健美之餘，亦有助釋放壓力

Aerobic exercise:

1. burns out excessive stress hormones
2. helps eliminate biochemical metabolites in the body
3. increases oxygen and glucose supply to cells and neurons
4. releases endorphin in our brain which alleviates physical pain and calm negative emotions
5. increases brain-derived-neurotropic-factors (BDNF)

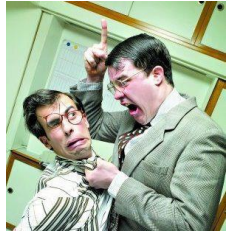
Stathopoulou, G., et al. (2006). Exercise interventions for mental health: A quantitative and qualitative review. *Clinical Psychology: Science and Practice*, 13, 179-193.

Stress management: regulating ABC responses

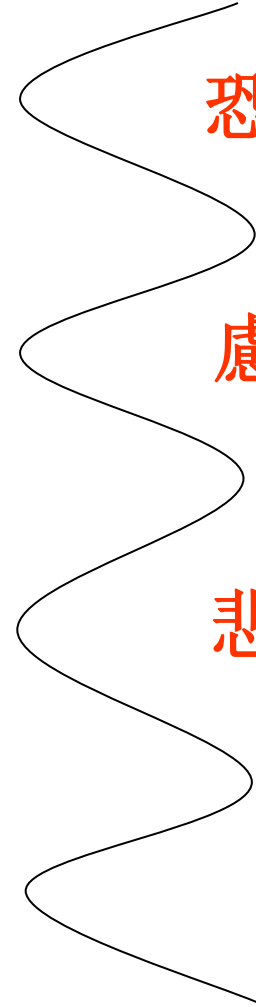
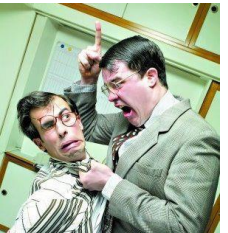


A calm mind

A twisted mind



悟



恐

慮

悲



迷



Mindfulness meditation calms mind

1. Sit comfortably with your eyes closed, relax your whole body, and breathe with your nostrils.
2. Inhale, focus your attention on the in-breath, and say quietly to yourself ..“in”..
3. Next, exhale slowly, focus your attention on the out-breath, and say quietly to yourself ..“out”..
4. **Just focus on the in-and-out of your breath.** If distracting thoughts appear, be aware of them, and gently refocus on your breathe.



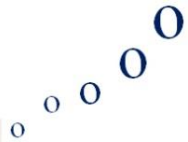
The mind will do what
it wants to do.

Observe gently.

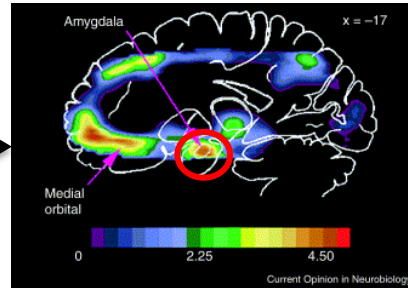
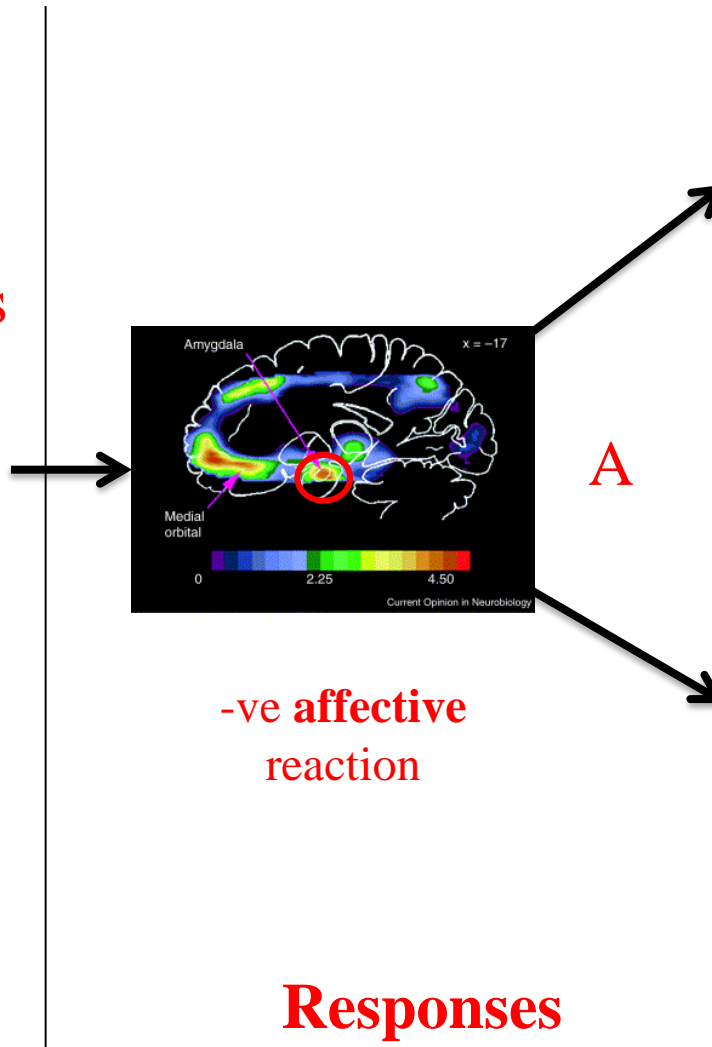
How does **stress** affect body and mind?

The **C-ABC** model

I'm a useless
person!



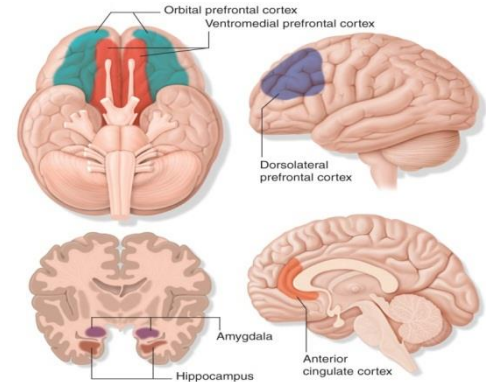
Situation



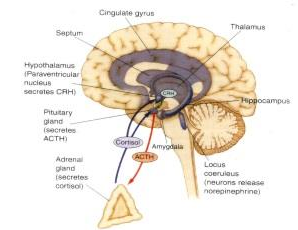
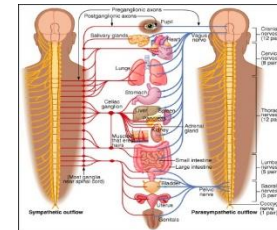
A

**-ve affective
reaction**

-ve cognitive reactions



C



B

-ve bodily reactions

Responses

Modify negative self-cognition

I'm a useless person!

Vs.

**Nobody is perfect, but we
all have some great parts!**

Use the **checklist approach** to establish a **healthy life style and self-cognition**

1. ☐ Sleep 7-9 hours each night according to your need
2. ☐ Eat food rich in tryptophan
3. ☐ Avoid caffeine if you have a nervous personality
4. ☐ Practice 5-minute of deep breathing exercise every 90 minutes
5. ☐ Do 30-45 minutes aerobic exercise every other day
6. ☐ Be kind to others
7. ☐ Share your feelings with loved ones
8. ☐ Remind yourself “Nobody is perfect, but we all have some great parts!”
9. ☐ Practice 15-minutes of mindful meditation daily before bed

