

PETROS

Resilience for Life



Be Kind To Your Mind

Episode 4: The Physiology of Emotion

A Petros Production

With

Prof. Jo Clarke

Dr. Maxine Daniels

Di Gammage

Ed Simpson

Tracy Brookes

Mark Campion





Di



Ed



Maxine



Tracy



Mark



Laura





In addition to a whole host of tips and strategies to take care of your MindHealth, we will also be joined regularly by Tom Lininsh, a highly experienced Personal Trainer, who will be designing short, manageable exercises to complement each episode's theme, for example, exercises for resilience, exercises to improve mood, exercises that develop skills and so on.

Our Mission

To share the information and the skills we need to look after our minds in the same way we look after our bodies, so that no matter what life throws at us, we can (mostly) thrive!

The Episodes

Date	No:	Title	Facilitators
11.5.20	1	What is Resilience?	Jo and the team
18.5.20	2	Your brain and your mind – Not the same thing	Jo, Tracy and Ed
25.5.20	3	Emotion and Intuition	Jo and Maxine
1.6.20	4	The physiology of emotion	Jo, Ed and Mark
8.6.20	5	Emotional regulation and helping others	Jo and Di
15.6.20	6	Compassion and Mindfulness	Tracy, Mark and Jo
22.6.20	7	The four sights	Jo and Di
29.6.20	8	Cognitive Skills	Maxine, Tracy and Jo
6.7.20	9	Parents special – Helping your child with resilience	Jo and Di
13.7.20	10	A celebration of completion – Top Tips and moving forward	Jo and The Petros Team



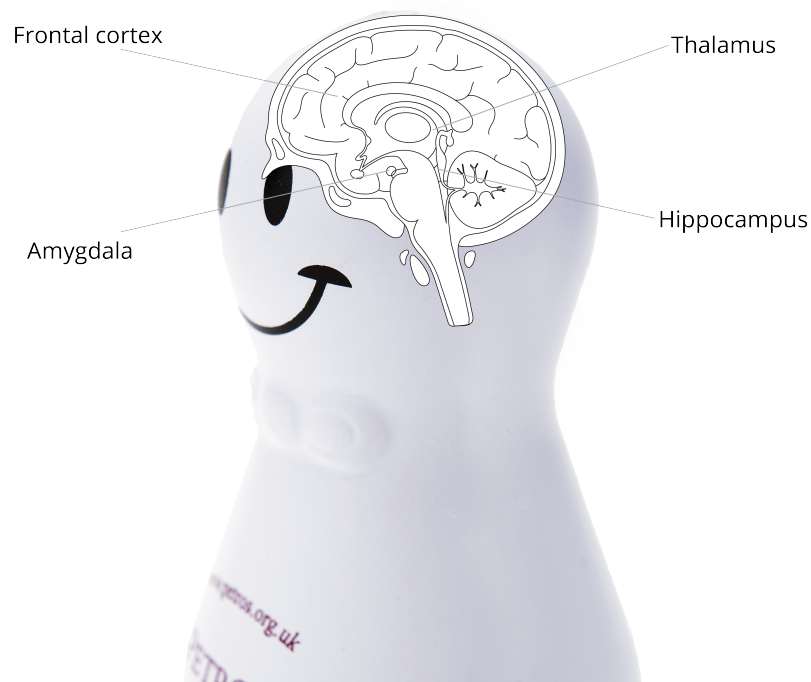
The BKYM – The Process

- Each episode has an associated workbook that will be downloadable from www.petros.org.uk/be-kind-to-your-mind-cummins
- Use it however suits you best
- The idea is for you to create your own resource to refer back to whenever you need
- If you miss an episode, a recording of it will be available for a short period (roughly a month) for you to view again from www.petros.org.uk/be-kind-to-your-mind-episode-4
- Please be aware that each episode is recorded!
- We will be using Mentimeter, an interactive software that allows you anonymously participate.



Principle

Understanding the relationship between our emotions and our brain chemistry can help us regulate both. This week, brain chemistry; next week emotional regulation!



Neurotransmitters (and Hormones)

There are 100+ Neurotransmitters and Hormones that all play a part in regulating our bodies and minds. We're going to look at five of them.

Adrenaline (and Cortisol)

Dopamine

Oxytocin

Endorphins

Serotonin



Adrenaline (and Cortisol)

- Is the Fight or Flight Neurotransmitter
- Increases heart rate and blood flow
- Gives a physical boost
- Is produced when we are excited as well as scared
- Is always present in our systems
- Increases when the demand to perform increases
- Cortisol is an anti-inflammatory
- It suppresses non-vital functions at times of high demand (digestion, growth, immune response)

Notes

Dopamine

- Associated with motivation, success and reward (we get a rush of it when we achieve something)
- It has a role in wakefulness
- We tend to repeat behaviours that lead to dopamine release
- Dysfunction in the dopamine system is linked with depression, bipolar disorder, schizophrenia and ADHD

Notes



Endorphine

- Released during exercise, excitement and sex
- Produces a sense of wellbeing and euphoria
- Suppresses pain
- Also is a bit of a dis-inhibitor, suppressing feeling of shame, vigilance and self-criticism

Notes

Oxytocin

- Associated with love and bonding (social connectedness)
- Modulates social behaviours
 - Maternal and paternal care
 - Aggression
 - Pair bonding
 - Sexual behaviour
 - Social memory and support
 - Trust
- Most promising brain system for psychotherapy

Notes



Serotonin

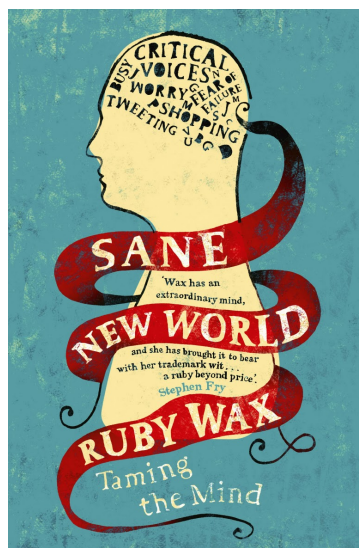
- Is thought to be involved in how we process emotion – increasing positive emotional processing
- Helps sleep and digestion
- Low levels of this are implicated in depression – but it's complicated
- Affected by light exposure and exercise
- 95% originated in the gut – (gut feelings)

Notes

Some things to think about

- If you are feeling out of sorts, see if you can identify anything you might be doing or telling yourself that is compounding the problem
- Identify things that you can do to help you get your balance back
- What other things can you do to support you mind and brain do the best job for you? (later episodes will help with this)

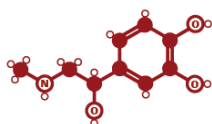




STRUCTURE KEY: ● Carbon atom ○ Hydrogen atom ○ Oxygen atom ● Nitrogen atom ● Rest of molecule

ADRENALINE

Fight or flight neurotransmitter



Produced in stressful or exciting situations. Increases heart rate & blood flow, leading to a physical boost & heightened awareness.

NORADRENALINE

Concentration neurotransmitter



Affects attention & responding actions in the brain, & involved in fight or flight response. Contracts blood vessels, increasing blood flow.

DOPAMINE

Pleasure neurotransmitter



Feelings of pleasure, and also addiction, movement, and motivation. People repeat behaviours that lead to dopamine release.

SEROTONIN

Mood neurotransmitter



Contributes to well-being & happiness; helps sleep cycle & digestive system regulation. Affected by exercise & light exposure.

GABA

Calming neurotransmitter



Calms firing nerves in CNS. High levels improve focus; low levels cause anxiety. Also contributes to motor control & vision.

ACETYLCHOLINE

Learning neurotransmitter



Involved in thought, learning, & memory. Activates muscle action in the body. Also associated with attention and awakening.

GLUTAMATE

Memory neurotransmitter



Most common brain neurotransmitter. Involved in learning & memory, regulates development & creation of nerve contacts.

ENDORPHINS

Euphoria neurotransmitters



Released during exercise, excitement, & sex, producing well-being & euphoria, reducing pain. Biologically active section shown.





PETROS

Resilience for Life

www.petros.org.uk

laura@petros.org.uk

jo@petros.org.uk

Tel: 07483 901527

