

# How to Help: HORMONES

For parents and leaders

Sometimes it may feel like interacting with teenagers, whether that's at home or at a youth group, is going disasterously wrong.

However, discovering what is going on with their brains and the hormones released may help to understand them better and reassure you that you're doing a great job!



## How can we help...?

Help the brain strengthen and grow by getting them to use it in lots of ways. Encourage them to not spend all their time on just one thing.

Physical activity helps the brain develop. Get them outside and moving.

Sleep is vital as it's when the brain releases the growth hormone.

'Why' questions can be hard to process. Ask 'what' questions instead.

Keep instructions simple and focus on one point.

**PREFRONTAL CORTEX:**  
Planning and reasoning, regulates behaviour and emotions

**PARIETAL LOBE:**  
Responsible for touch, sight and language

**VENTRAL STRIATUM:**  
Reward hub

**AMYGDALA:**  
Emotional core

**HIPPOCAMPUS:**  
Memory and Learning hub

So what does this actually mean....

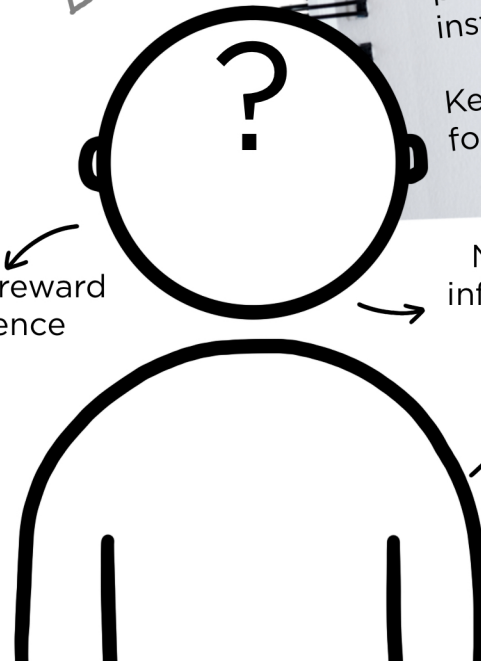
Here's the geeky stuff - our brains develop from back to front. The front bits (the prefrontal cortex and the parietal lobe) are still under construction in a teenager until they hit their mid-20's. So here's the thing: basically the ability to reason, manage emotions and process information is incredibly reduced because it hasn't fully developed yet!

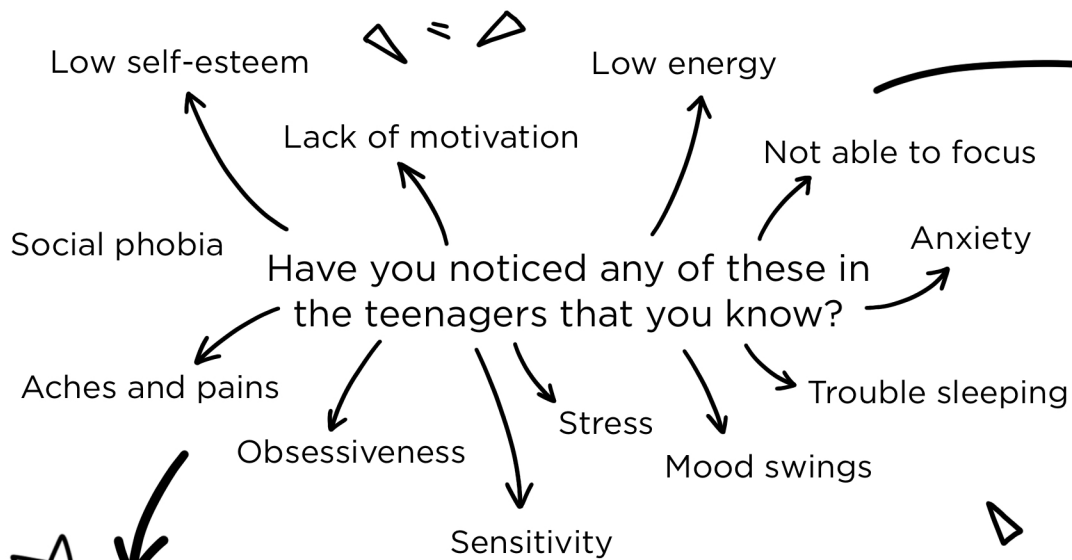
More excited by reward than consequence

Not able to process information effectively

More impulsive

High risk behaviour






If you've noticed any of these things in excess and are in any way concerned about the health of the teenagers around you, then you might want to consider asking for help or contacting a doctor or their school.

Understanding a bit about the brain helps to see why a teenager might struggle with some of these and it could be that the hormones the brain releases need a bit of a boost. Here are 4 of the important ones.


**How to help teenagers boost their brains:**


- Dopamine:** write a to do list, sleep
- Oxytocin:** listen to music, have a cold shower
- Serotonin:** get out into the sunlight! Eat foods like fish, chicken, tofu, milk, beans, cheese and nuts
- Endorphin:** create something, find someone to cry or laugh with

**All 4:** Exercise. Find something you enjoy as exercise releases all 4 chemicals!

 **DOPAMINE** → Energises, motivates learning and drives you to accomplish good stuff.

 **OXYTOCIN** → Generates feelings of trust and a desire to bond with other people

 **SEROTONIN** → Helps us feel valued and produces a sense that we're 'okay as we are'

 **ENDORPHIN** → Releases that 'wahooo' feeling that helps us overcome pain and stress

**A helpful hormone fact:** It's very normal for a teenager to go to bed later and struggle to wake up in the morning because in the teenage brain a hormone called melatonin, that helps us sleep, is released much later in the evening.

We're not promising this will make it any less annoying, but at least there's a reason for it!