



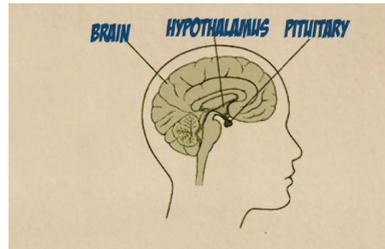
# THINKING & RELATING TO OTHERS



## HUMAN CHEMISTRY

### Our bodies produce many different types of chemicals

Many of the chemicals that our bodies produce are hormones that help the body grow and develop during certain stages of our lives. The pituitary gland, which is about the size of a pea, produces growth hormones which determine our height, bone length and muscle growth.



The limbic system (part of the brain that help to deal with emotions and emotional behaviour as well as memories) produces chemicals too.

Some of the chemicals that make us feel good are:

- Endorphins - help people to deal with pain and lift mood
- Oxytocin - helps people to bond with others
- Serotonin - helps to even out people's moods and keeps them balanced
- Dopamine - helps people to feel pleasure and motivates them

But the body needs a helping hand. We can help our bodies to regularly produce the chemicals that make us feel good by ...

- Getting outside and enjoying the sunshine (But be sun smart!)
- Getting at least 8 hours' sleep a night
- Exercising regularly
- Keeping a balance by finding time to relax when we feel stressed

Can you think of any other ideas?

CONNECT  
& REVEAL!

## In pairs or groups read Jason's story and answer the questions



Jason loved playing basketball. He had just been chosen to play in the rep team as well as for the school. He had also agreed to play for his friend Andy's team. Playing basketball made Jason feel great! He knew that physical activity helped to produce endorphins - chemicals in his brain - that left him feeling relaxed and happy. This meant he usually got a great night's sleep.

Jason trained every day after school and all day on Sundays. On Friday nights he played a game for his school. On Saturday mornings he played two rep games and then one for Andy's team in the afternoons. Sport took up a lot of his time! He would often stay up late to catch up on his homework or watch TV. There was hardly any time left to spend with his sister or do his chores.

After a couple of months Jason was feeling worn out and stressed. It was harder and harder to get up in the mornings. Jason knew he wasn't his usual happy self - but didn't know what to do about it. He started skipping meals so he could get more sleep in the mornings, hoping this would help. But it didn't. He was finding it harder to stay focused in class. And he didn't always feel great after playing basketball. What had happened to him and how his endorphins were working?

His teacher noticed the change in Jason and asked if he wanted to talk about how things were going. Jason shared how he was feeling even though he didn't think she would be able to help. To his surprise, just talking about what was going on made him feel a little better.

The teacher suggested that he talk about this with his family and see if they could help him to make the changes he needed to put his life back in balance.

- If you were a member of Jason's family, what would you suggest?
- What does Jason need more of?
- What does he need less of?
- Who might be able to support Jason to get balance in his life?
- How could they support him?

Now think about yourself. How balanced are you?

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*Learning with Harold*

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