

Name: _____

Date: _____

Notes: Feedback Mechanisms

Define **homeostasis**: _____

What does *steady balance* mean? _____

Which two systems interact with all others to maintain homeostasis in the body?

What system does the **hypothalamus** belong to? _____

What system does the **pituitary gland** belong to? _____

How is homeostasis often achieved? _____

Define **stimulate**: _____

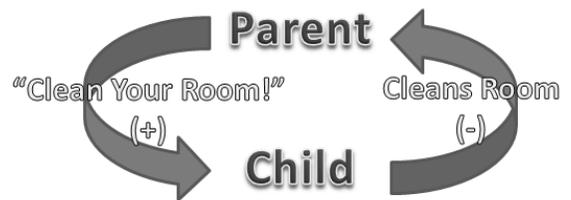
Define **inhibit**: _____

What sign symbolizes *stimulation*: _____ What sign symbolizes *inhibition*: _____

What do we call the chemical signals *endocrine* glands make? _____

What does a parent *stimulate* his/her child to do?

How does a child cleaning the room affect the parent?

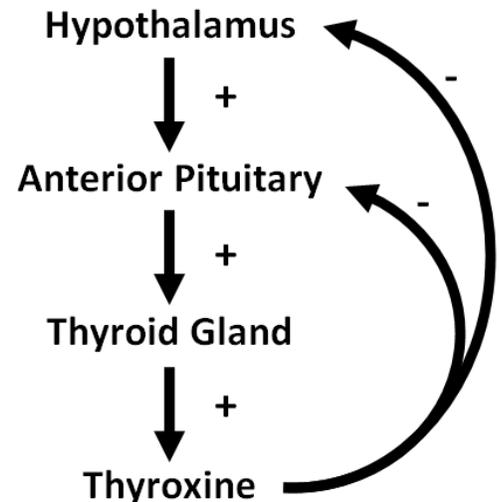


What does the feedback loop between the parent and child ensure happens?

What does thyroxine stimulate?

Why does the thyroid gland make thyroxine hormones?

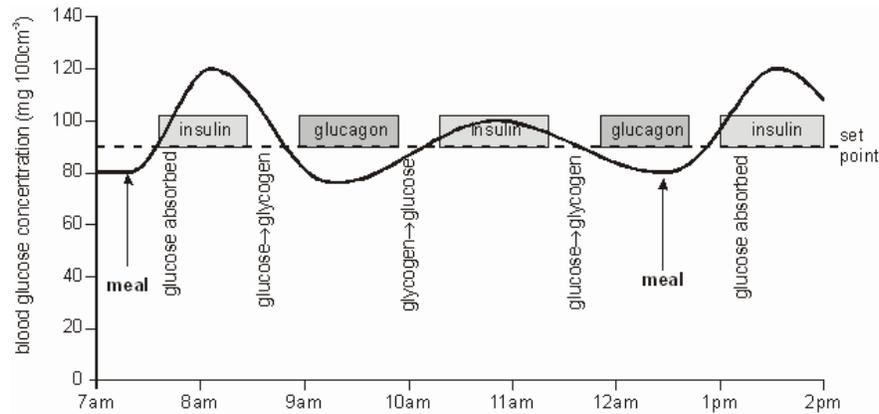
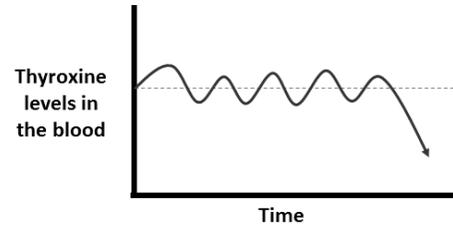
What happens when thyroxine levels are high?



What can *disrupt* thyroxine production in the body?

How is the pituitary affected by the lack of thyroxine?

How does this disruption affect the thyroid gland?



<http://www.mrothery.co.uk/module4/webnotes/image14.gif>

What two hormones regulate **blood sugar**?

What specific *sugar* is affected by these hormones?

Does *insulin* raise or lower blood glucose levels?

Does *glucagon* raise or lower blood glucose levels?

What disease causes increased glucose levels in the blood?

Where are the cells that make insulin found?

How could someone that can no longer make insulin still maintain homeostasis?

What part of the body detects that the blood is too warm?

A signal is sent to what organ in response to this heat?

What causes the hypothalamus to send a signal to the sweat glands to stop sweating?

What stimulates the fight or flight response in humans?

What hormone is released during this response?

How would increasing the breathing and heart rates help you defend yourself or run away?