

GLANDULAR HIGH SCHOOL YEAR BOOK

Theodore Thyroid

About me ... I would like to thank TSH and calcium blood levels who have helped me maintain and stimulate metabolic processes throughout my years in the throat. Special thanks to the larynx, trachea, and epiglottis for being here for me all this time!

You might be surprised to know that ... I'm ruler of the Amine club and I'm so grateful for my significant other parathyroid hormone.

One thing that I can't live without is...
Due to my goiter condition I literally can't live without my iodine medication otherwise I swell like crazy!!!

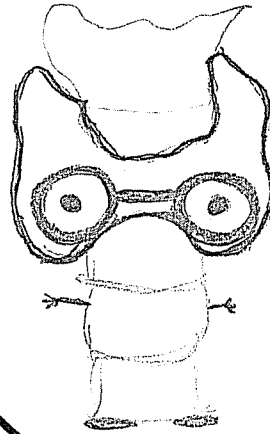
My greatest achievement is...
Helping everyone with metabolism!

Favourite song or quote ...
You Belong with Me - Taylor Swift

One word that sums me up...
Controlling

Most likely to...
End your life

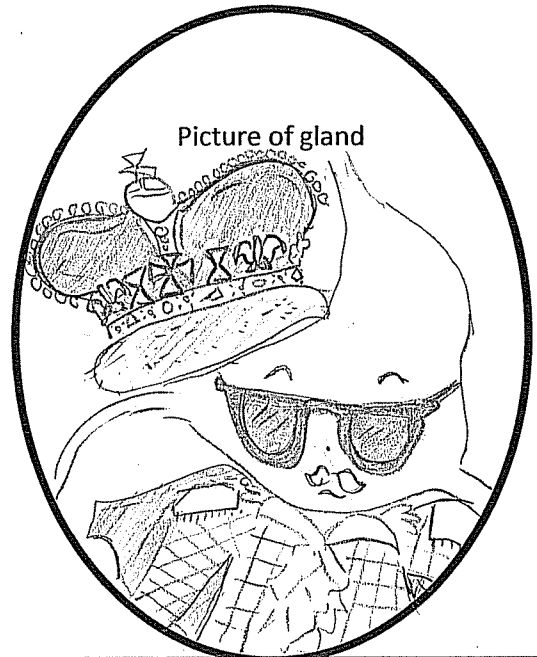
Picture of gland



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his majesty grand supreme

HAL **HYPOTHALAMUS**
About me ...
I **RULE** THE SCHOOL just call me the boss. I make the decisions around here & send off my hypothalamus hormones to the pituitary twins to do my bidding.



You might be surprised to know that ...

most of my work is actually carried out by my servants the anterior & posterior pituitary. I know, nobody is perfect

One thing that I can't live without is... well, myself of course, but also my close lackeys the posterior & anterior pituitaries. they do all the dirty work so I guess they are helpful. I guess.

My greatest achievement is... uh **KNOWING EVERYTHING! TELLING EVERYONE WHAT TO DO BECAUSE I'M BRILLIANT & A GREAT DELEGATOR!**

Favourite song or quote ...

→ **I don't care what you think unless its about me** - kurt Cobain

→ **"ME, MYSELF & I"** by de la soul // **"who gon stop me"** by kanye west & Jay-Z

One word that sums me up...
the

MASTER!

Most likely to... be your boss

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About me ...

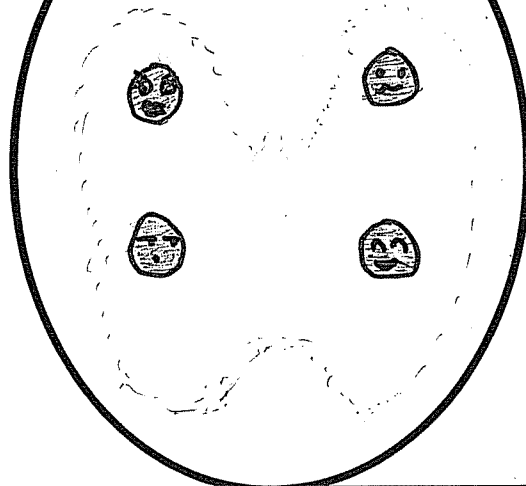
When calcium is low, I produce parathyroid hormone that raises the Ca^{2+} levels in the blood.

The PTH induce osteoclasts that decompose bone to release Ca^{2+} .

My PTH also tells the kidneys to reabsorb Ca^{2+} through the renal tubules.

PTH also promotes the conversion of vitamin D to a steroid-derived molecule. That molecule then stimulates the intestines to absorb Ca^{2+} from food!

Cara Parathyroid
and her three sisters
Tara, Larah and Sarah
Picture of gland



You might be surprised to know that ... I am both a giver and a taker.
Treat me nice and I'll take care of you.
I also am into team work!

One thing that I can't live without is...

My Best Gland Friend (BGF) the thyroid! We've always been so close! Sometimes I get too excited and produce too much PTH, so my BGF saves the day by secreting calcitonin!

My greatest achievement is...

when I saved the day by raising the calcium levels

Favourite song or quote ...

"Got milk?"

One word that sums me up...

Important

Most likely to...

Break your bones... if you don't get your 1200mg of calcium daily :)

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HOMEOSTASIS

High blood sugar → Beta cells release insulin → Insulin

Body cell take in more glucose

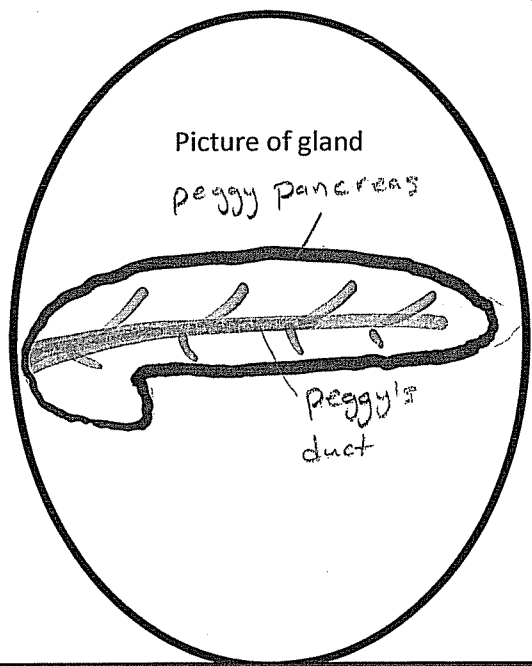
Stim. for glucagon release is gone

blood glucose levels rise to set point

Liver breaks down glycogen and releases glucose into the blood

GLUCAGON

About me ... Hi! I am peggy the pancreas.
 I secrete two hormones named Insulin and glucagon. Both of my hormones are in the protein chemical class. I regulate my hormone by checking the glucose level in the blood.



Liver takes up glucose and stores it as GLYCOGEN

Blood glucose level declines to set point

Stim for insulin release is gone

HOMEOSTASIS

You might be surprised to know that ...
 Because of me your blood stays at a blood glucose level of 90mg/100mL. I also give you diabetes sometimes if it is in our genetic or if you have a poor diet and exercise.

One thing that I can't live without is...
 Water, duh. But seriously I can't live without my homies, gale gall-bladder, danny duodenum, lisa liver, and stephane stomach.

My greatest achievement is...
 Regulating blood glucose levels! With insulin telling the liver cells and body cells to take up more glucose, the liver stores glucose as glycogen. And my glucagon telling the liver cells to breakdown glycogen, releasing glucose into the blood, raising blood glucose level back to about 90mg/100

Favourite song or quote ...
When times get hard and you are feeling run-down, take out some glucagon.

One word that sums me up...
SUGAR! !
 But not too much or else I'll give you diabetes... well I may give you diabetes if you are over weight.

Most likely to...
Have a candy stash in their bag.

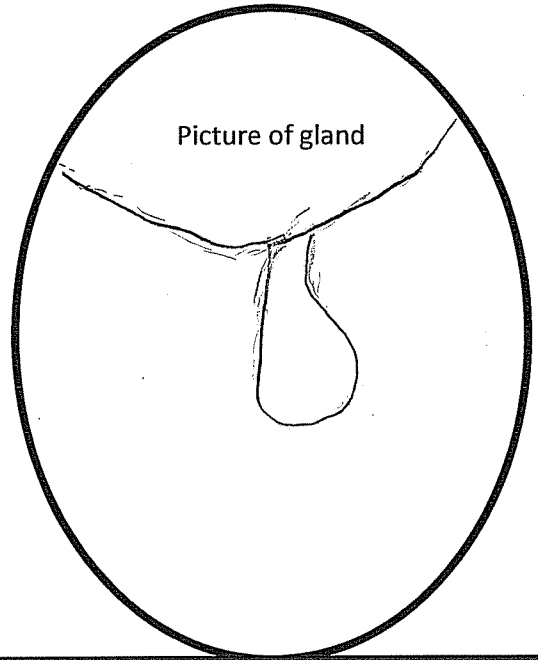
Jackie M.

Alpha cell of the pancreas release glucagon → Low blood sugar

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About me ... I grow upward towards the brain from the mouth
And I produce 60 different hormones
with 5 different sized and secreted myself.

Picture of gland



You might be surprised to know that ... I have no relation to the posterior pituitary gland - we developed in different ways

One thing that I can't live without is... The control the hypothalamus has over me.
There isn't anyway I could control myself

My greatest achievement is... Causing the growth of 15 billions of people

Favourite song or quote ...

"Growth is as important as change"

One word that sums me up...

Growing

Most likely to... Grow out of control

Grow as a person

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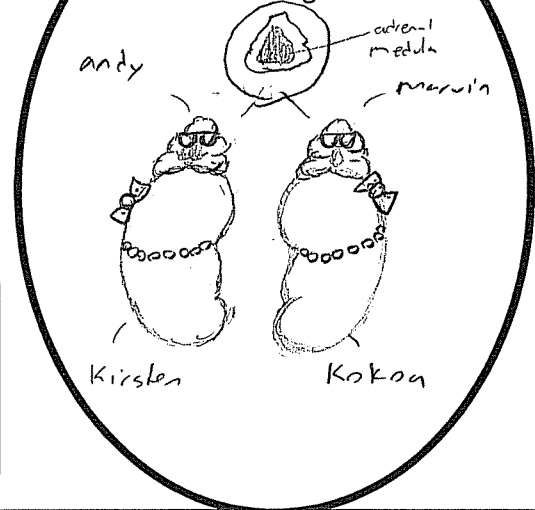
About me... Adrenal medulla

- Central portion of adrenal gland
- release/produce epinephrine & norepinephrine (catechol amines)
- these hormones function to
 - breakdown glycogen ↑ blood glucose level
 - increase blood pressure, breathing rate, metabolic rate
 - increase blood flow to skeletal muscles
 - decrease blood flow to digestive system

You might be surprised to know that...

- Involved in short term stress response
- receive signals from nerve cell triggering release of hormones
- I have a twin brother
- my hormones are the amine chemical class (they are "a-mean" group of hormones)

Picture of gland



One thing that I can't live without is...

- my best friends Kirsten and kokon the twin kidneys

My greatest achievement is...

- Helping others during stressful situations

Favourite song or quote ...

"you got to be kidney-ing me"

One word that sums me up...

STRESSED

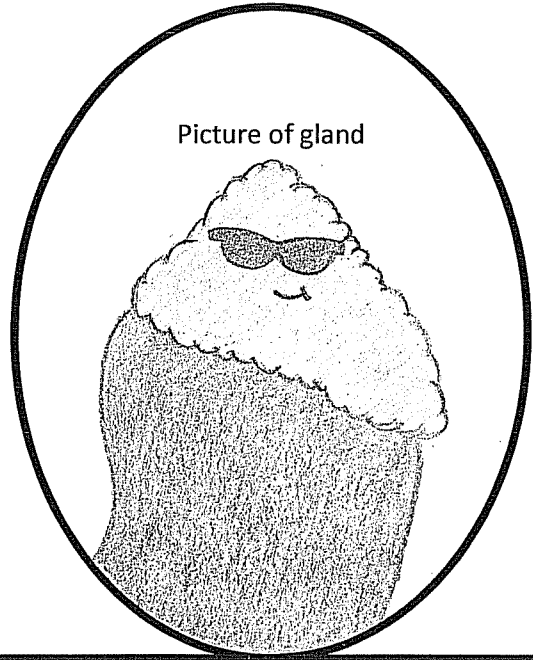
Most likely to... get stoned.

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About me ...

I raise the blood glucose levels and promote the reabsorption of Na^+ and the excretion of K^+ in the kidneys; through my hormones

Picture of gland



You might be surprised to know that ...

I work closely with hypothalamas Harry and pituitary Gland Peter to ensure safe use of hormonal greatness

One thing that I can't live without is...

Sugar!

My greatest achievement is...

Me and my "hormies" (glucocorticoids and mineralocorticoids) won the endocrine Games last year. #topathletes

Favourite song or quote ...

Sugar - Maroon 5

One word that sums me up...

Control-freak

Most likely to...

Be 25 and still living on the kidneys