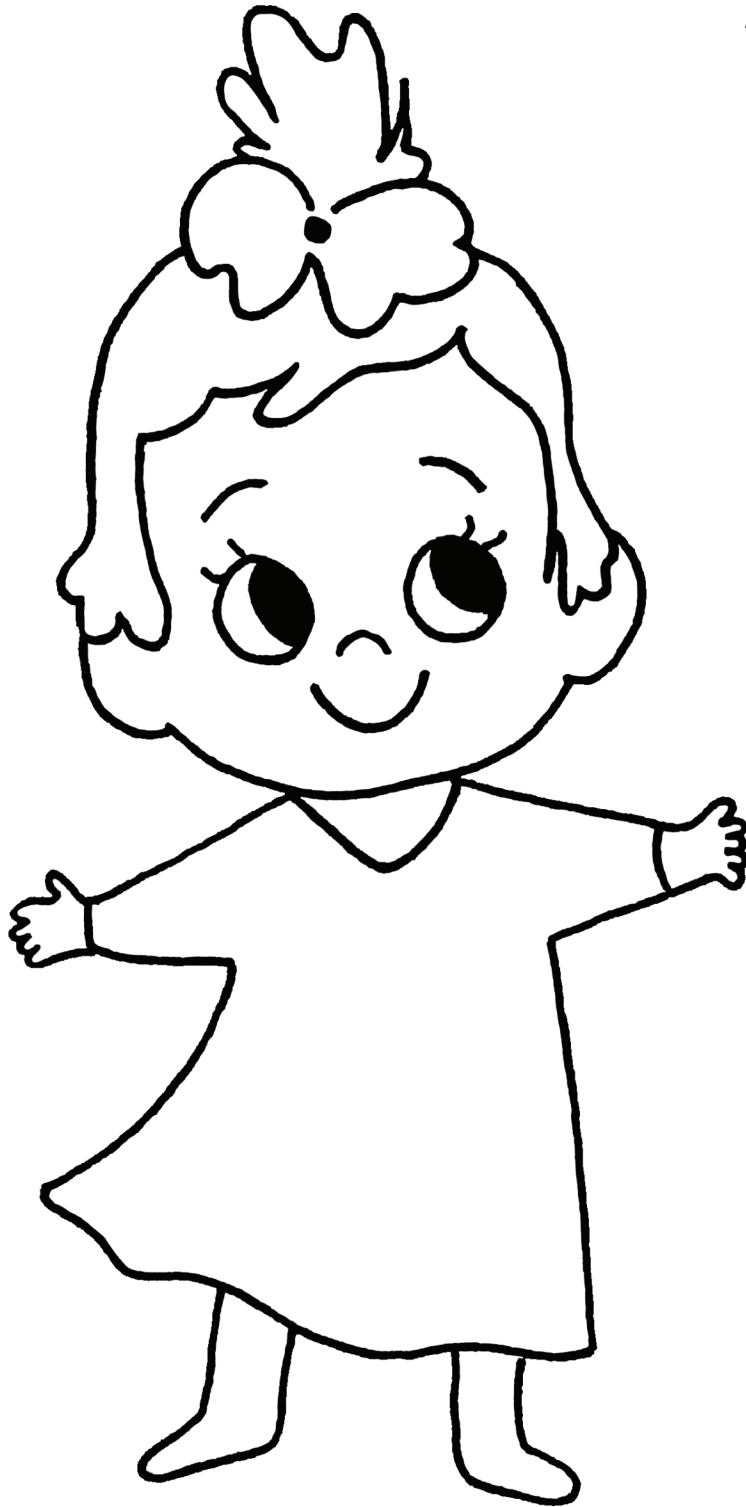


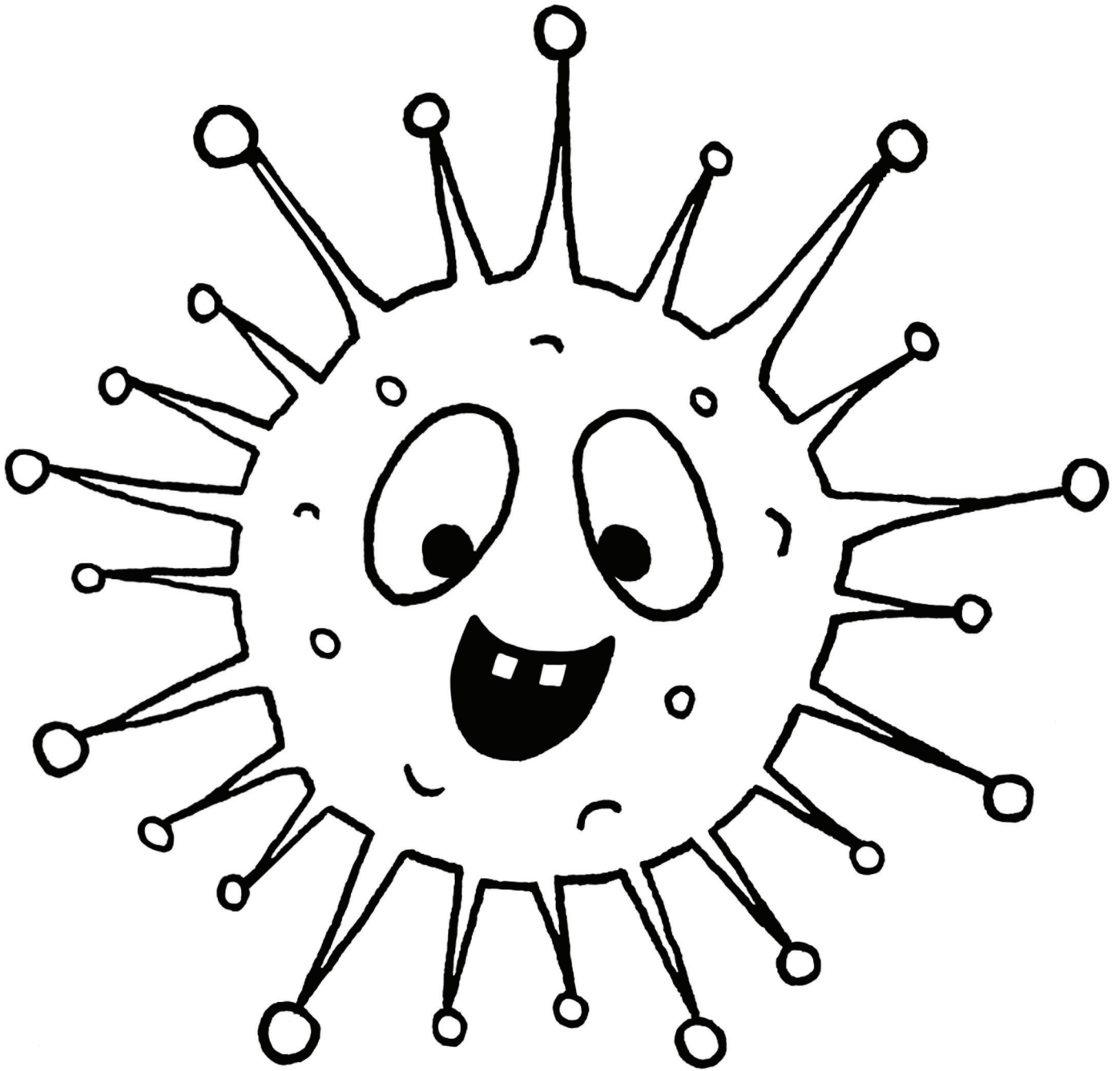
What Is a UCD?

A Coloring Book to Help You Learn About Urea Cycle Disorders

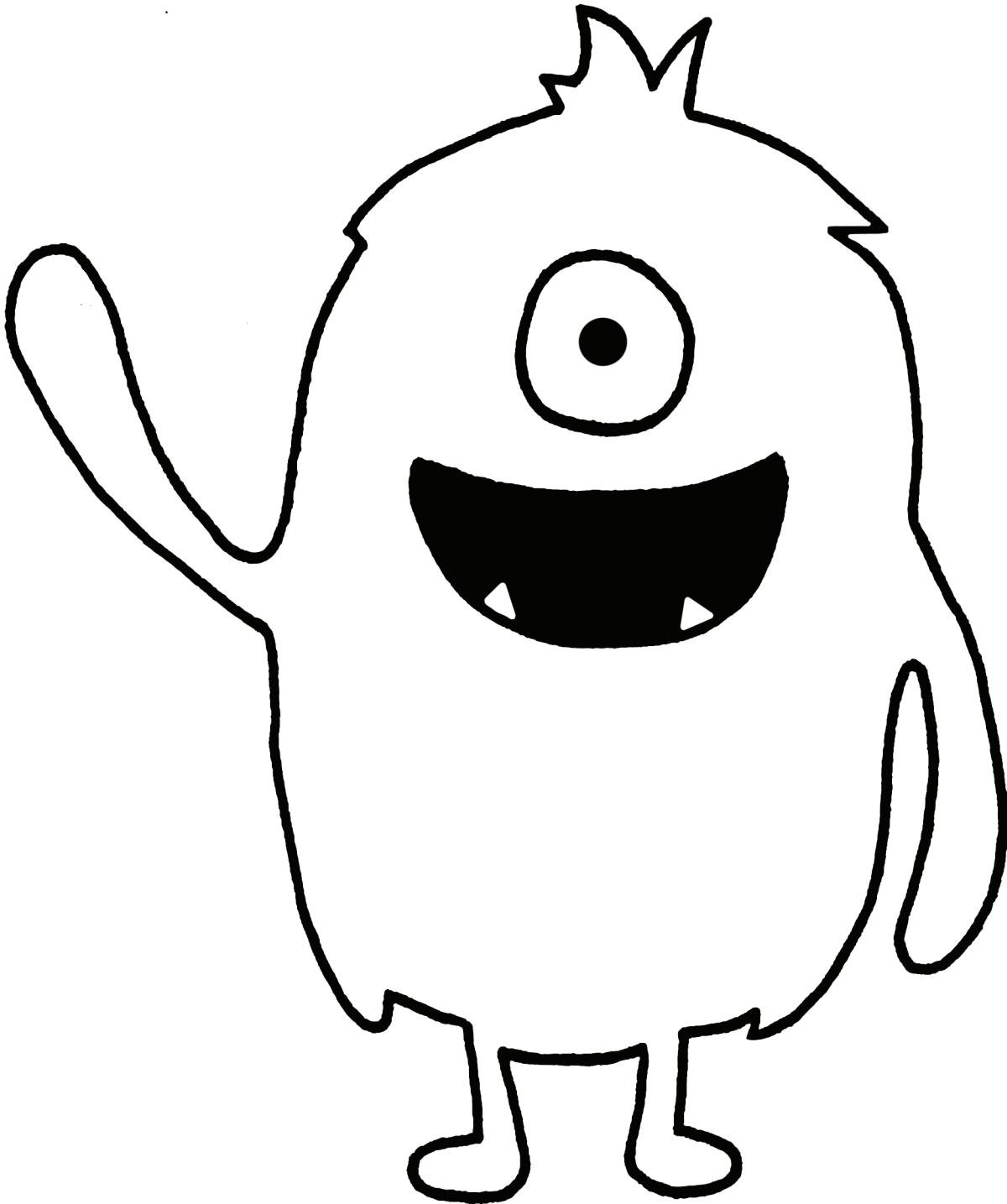




Inside all of our bodies, we have little workers
that each do their jobs to help us stay healthy.

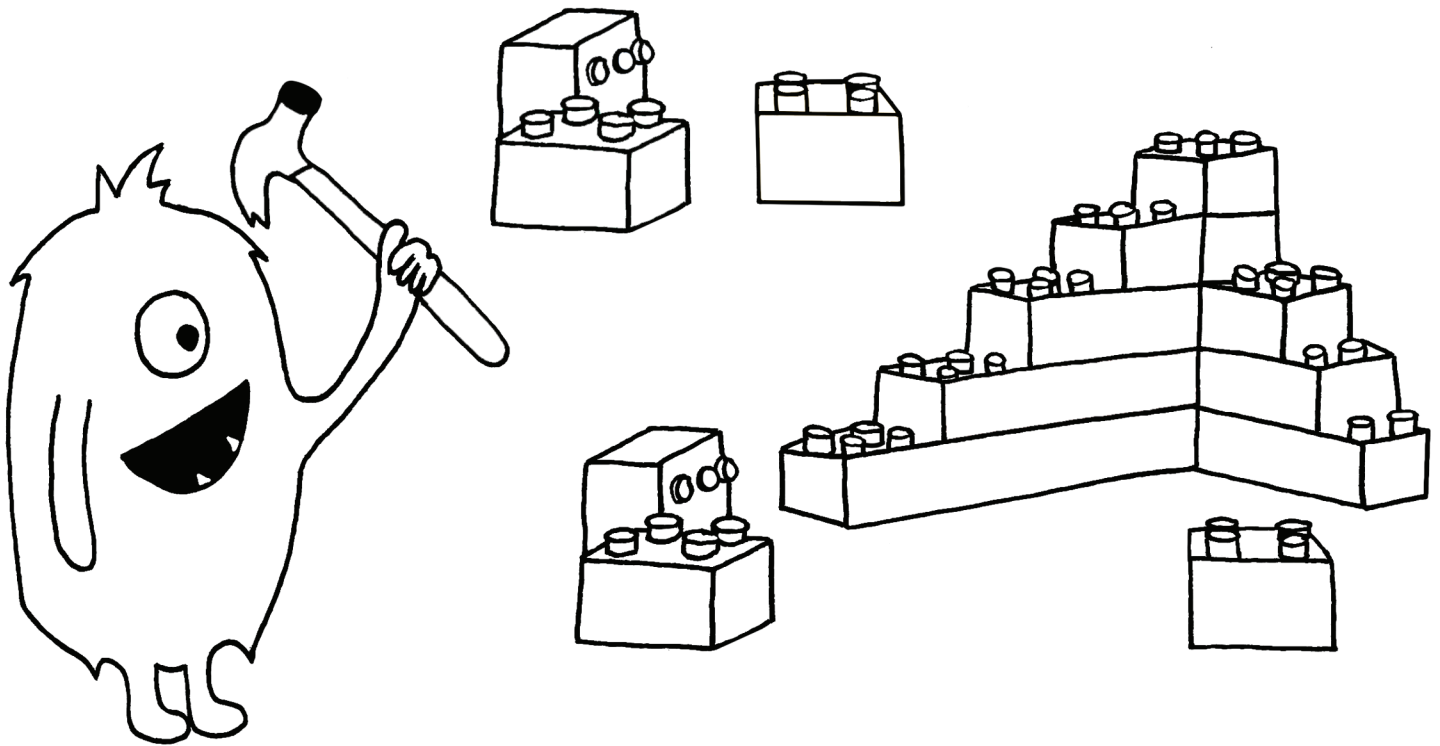


These little workers are cells!

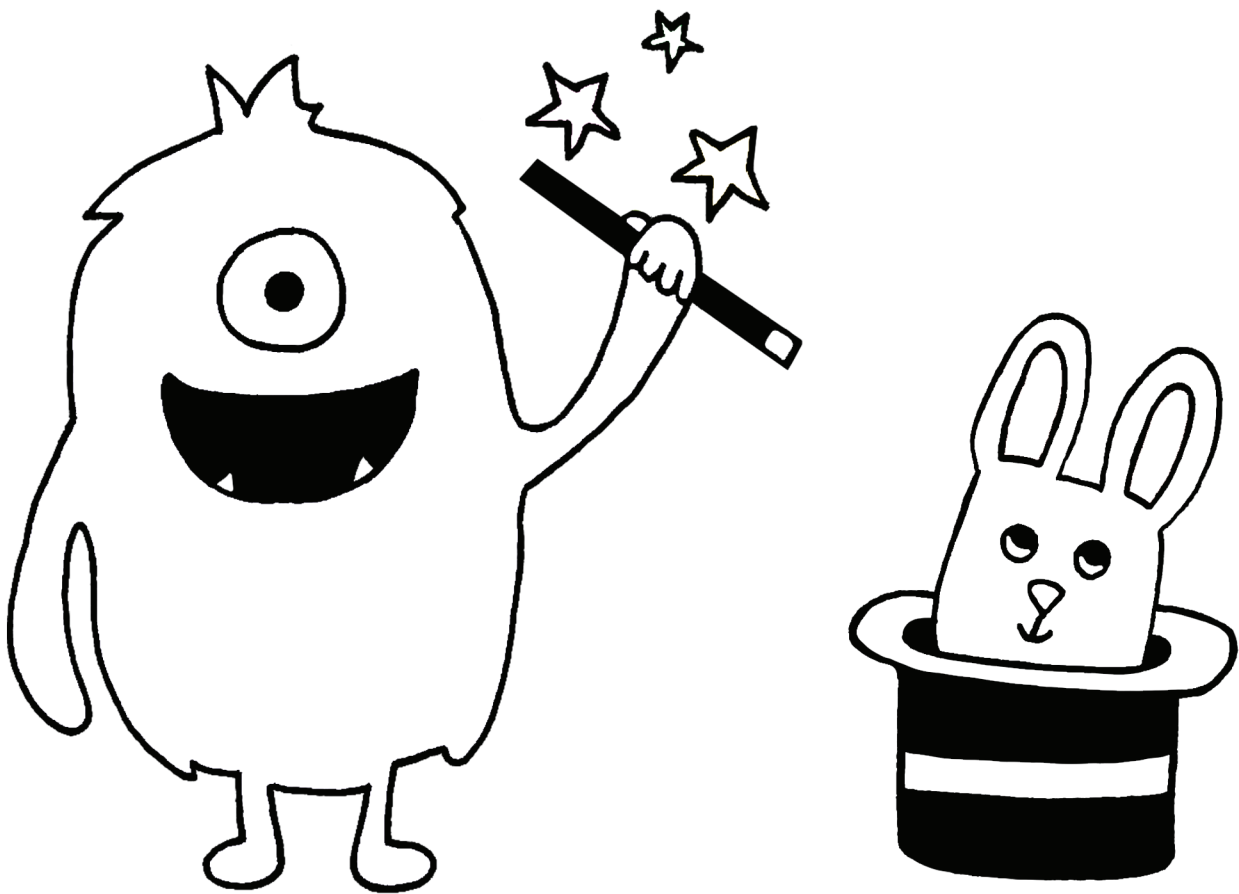


Our cells rely on enzymes to help them do their jobs.

Enzymes help our bodies break things into

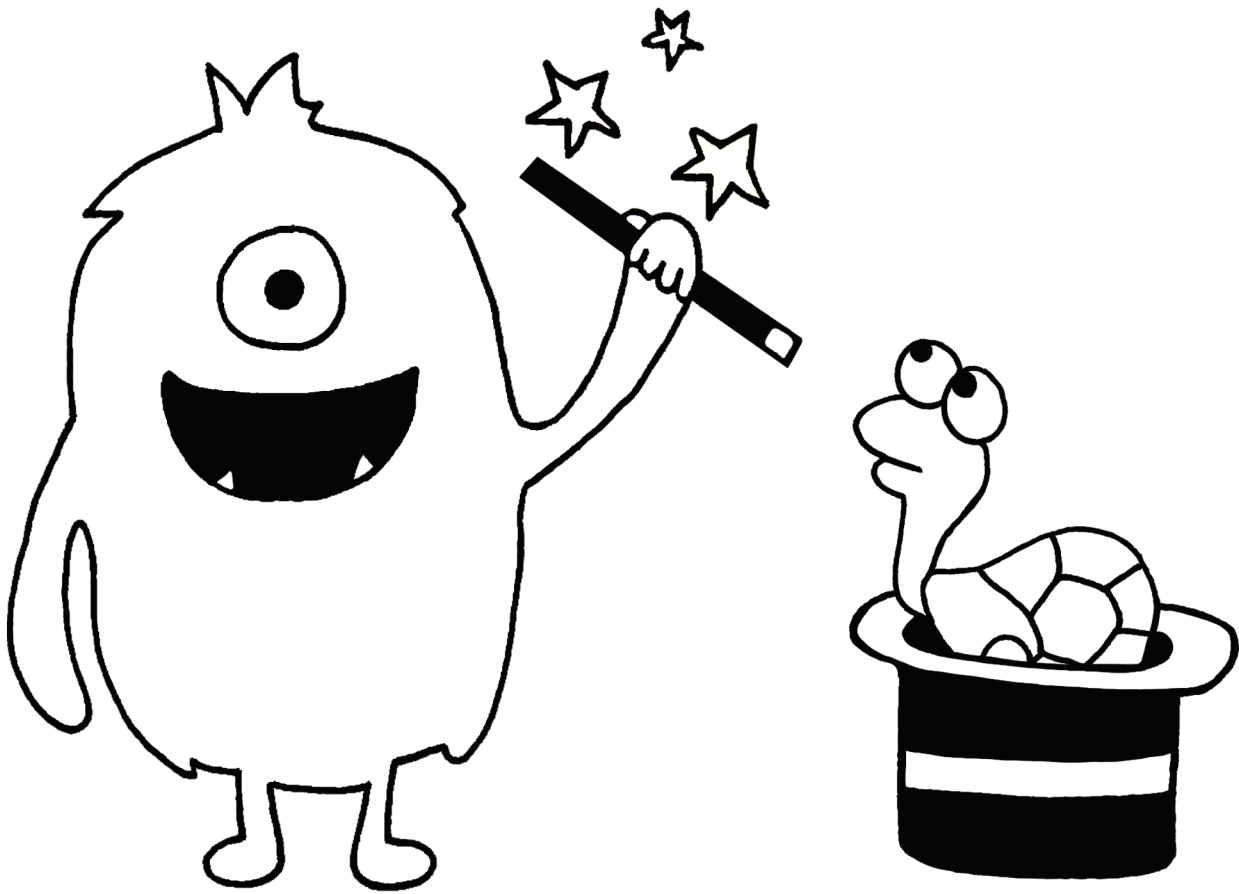


smaller pieces.

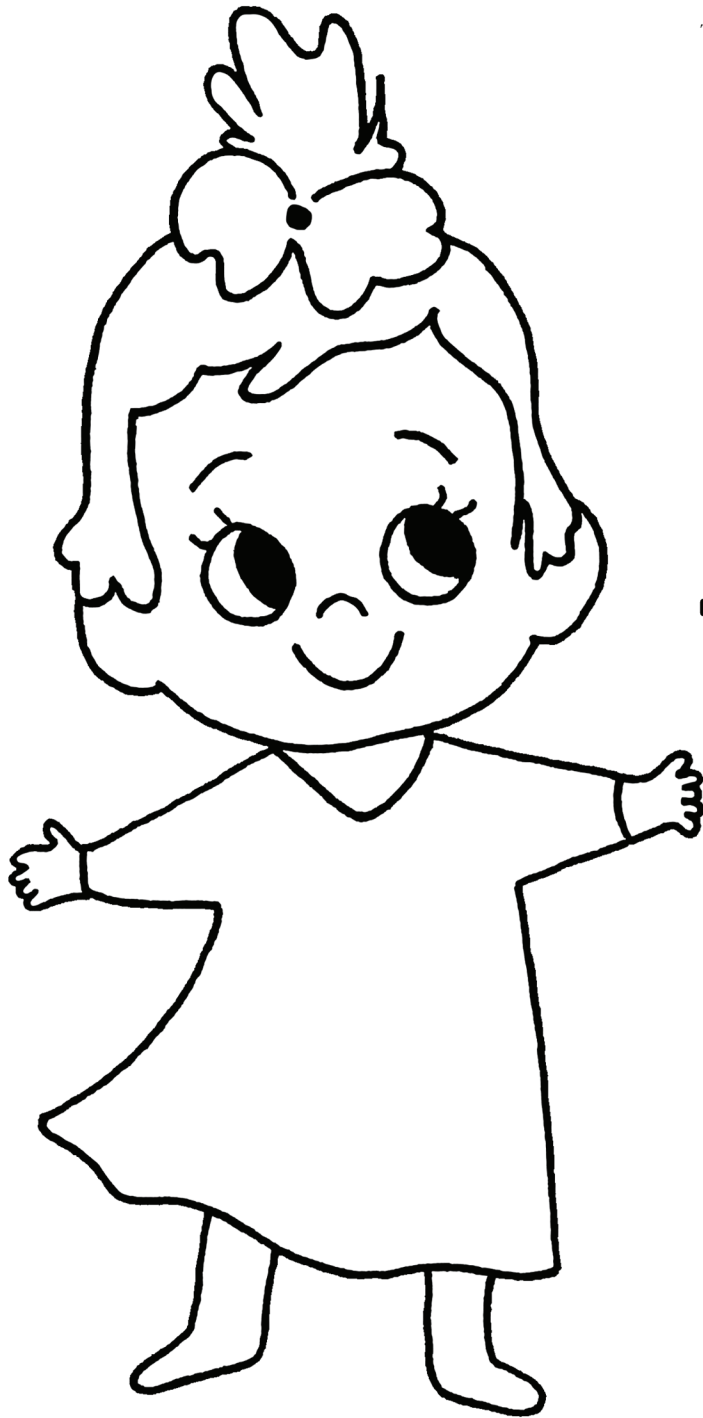


Enzymes also help our bodies change one thing...

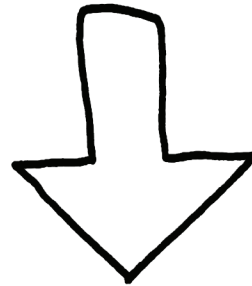




...into another!



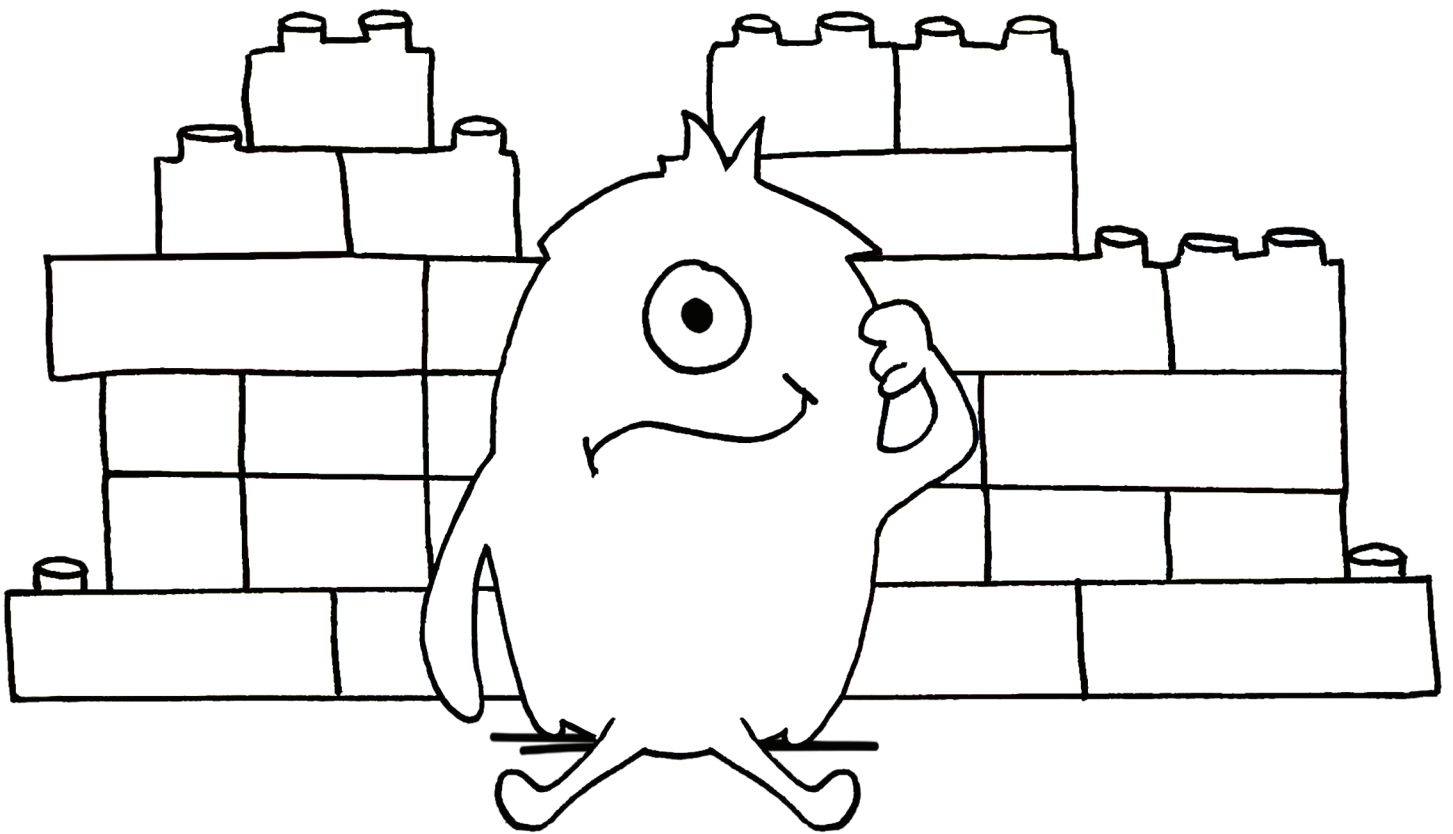
UREA
CYCLE
DISORDER



UCD

In someone who has a urea cycle disorder, or UCD...

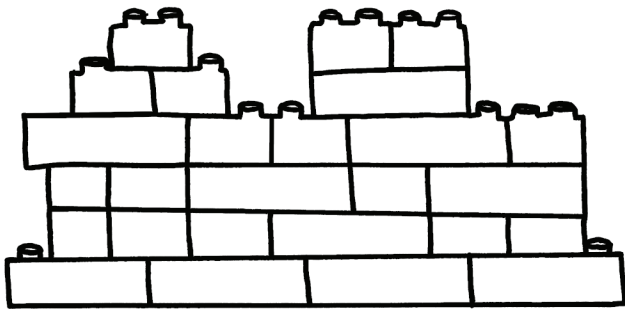
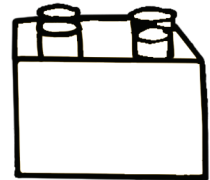
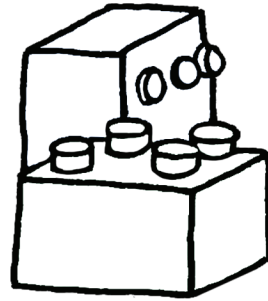
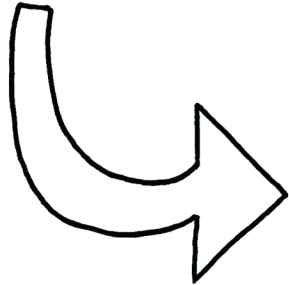
...the enzyme that helps the body



get rid of ammonia

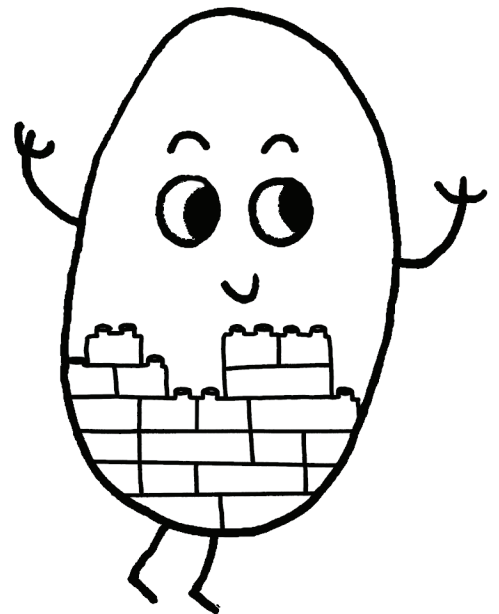
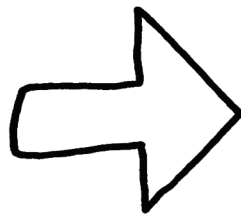
isn't working right.

AMMONIA



PROTEIN

FOOD



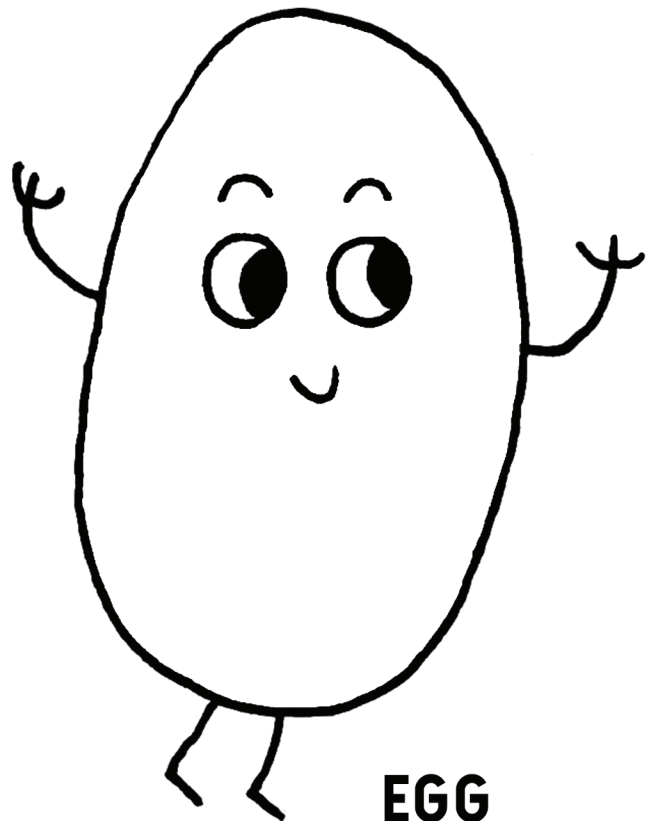
Ammonia is something that is in **protein**, which is in most food.

Some foods have

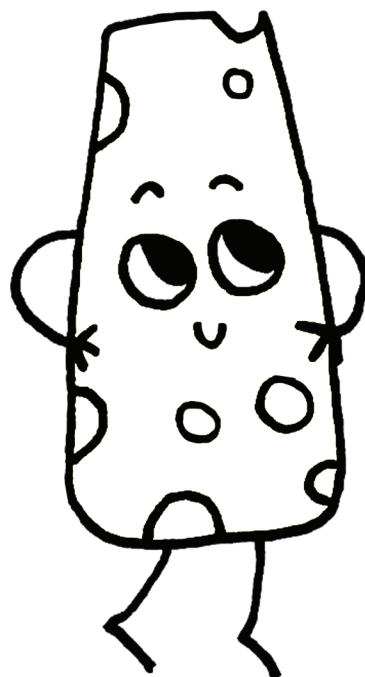
A LOT OF PROTEIN



HAMBURGER



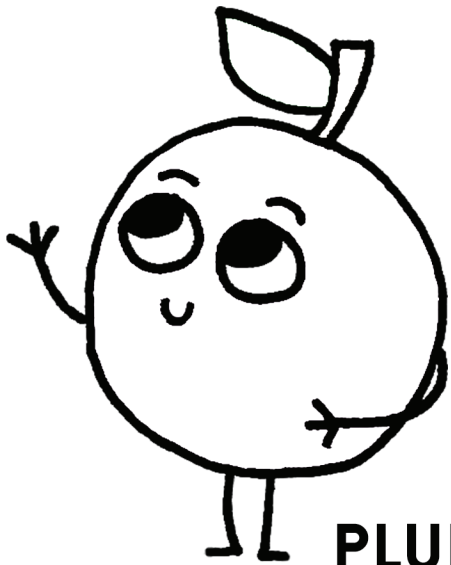
EGG



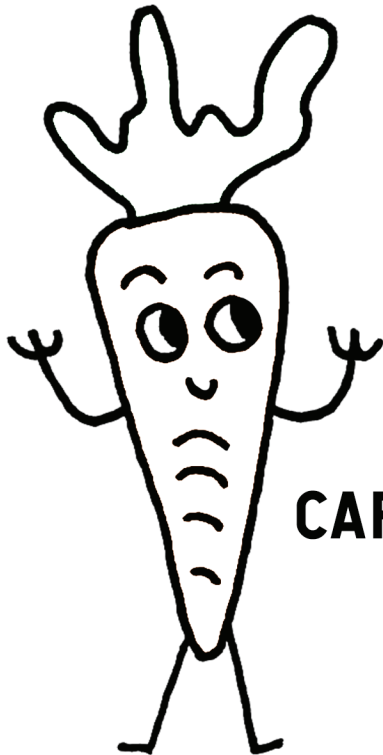
CHEESE

and some only have

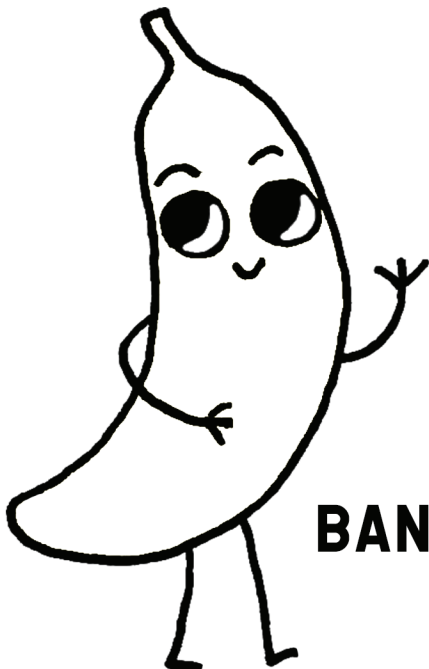
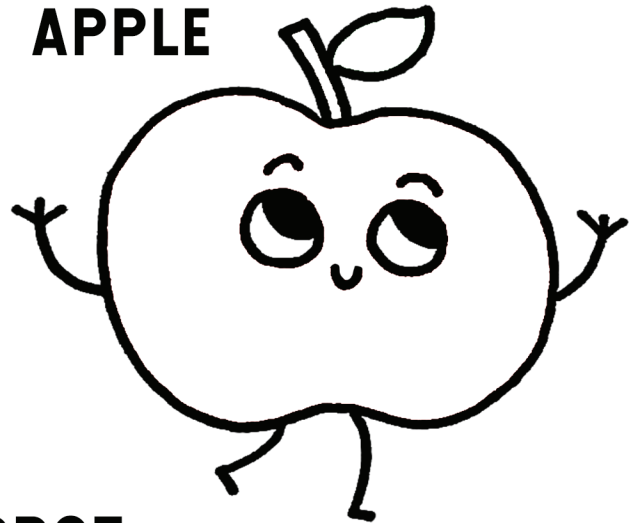
A LITTLE BIT OF PROTEIN



PLUM



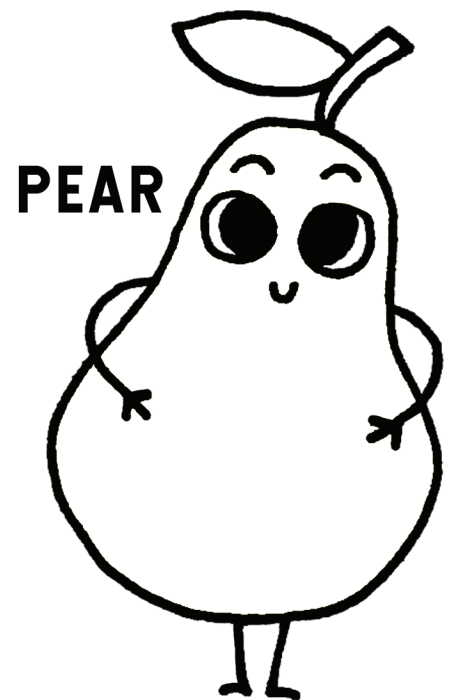
CARROT

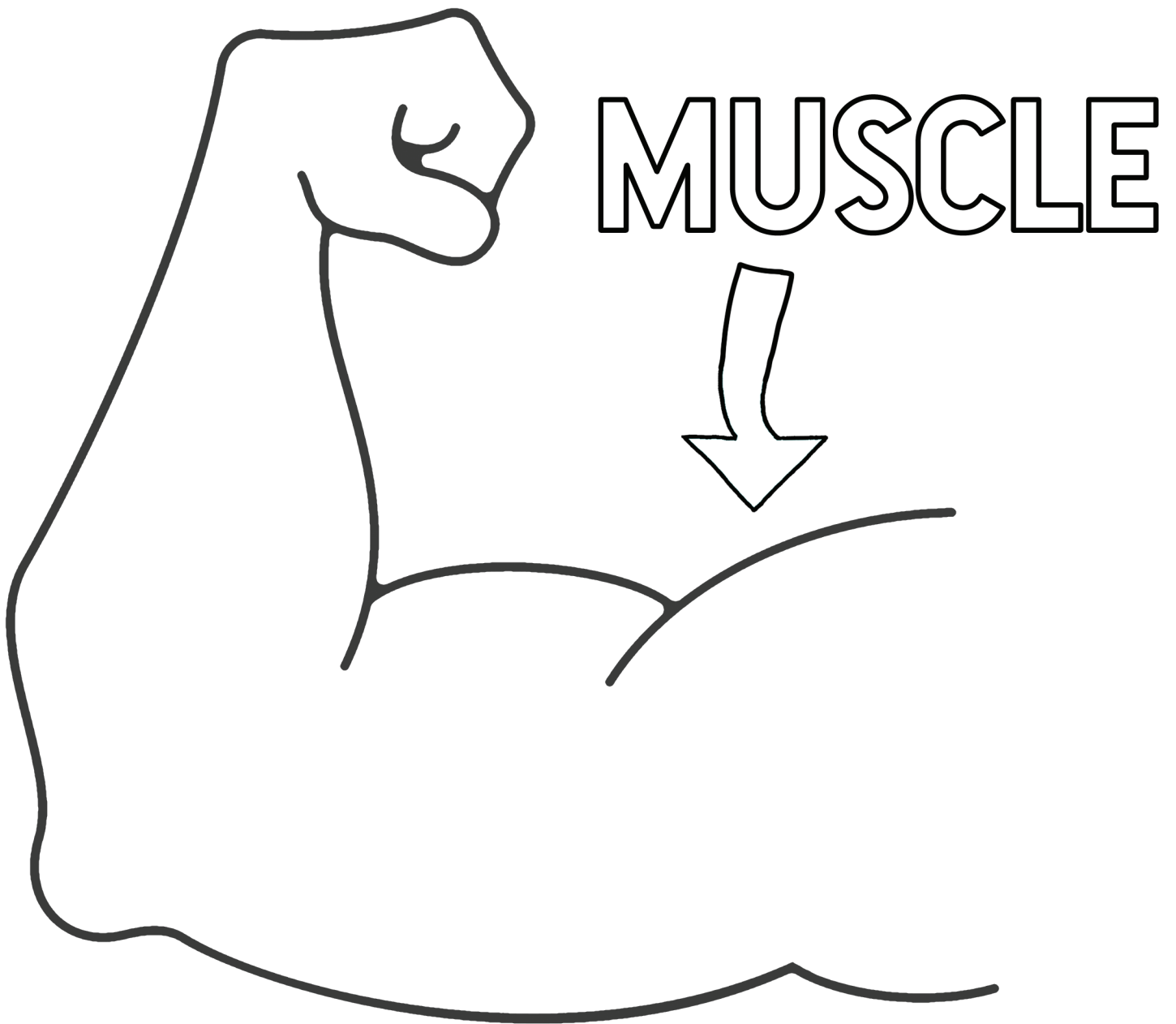


BANANA



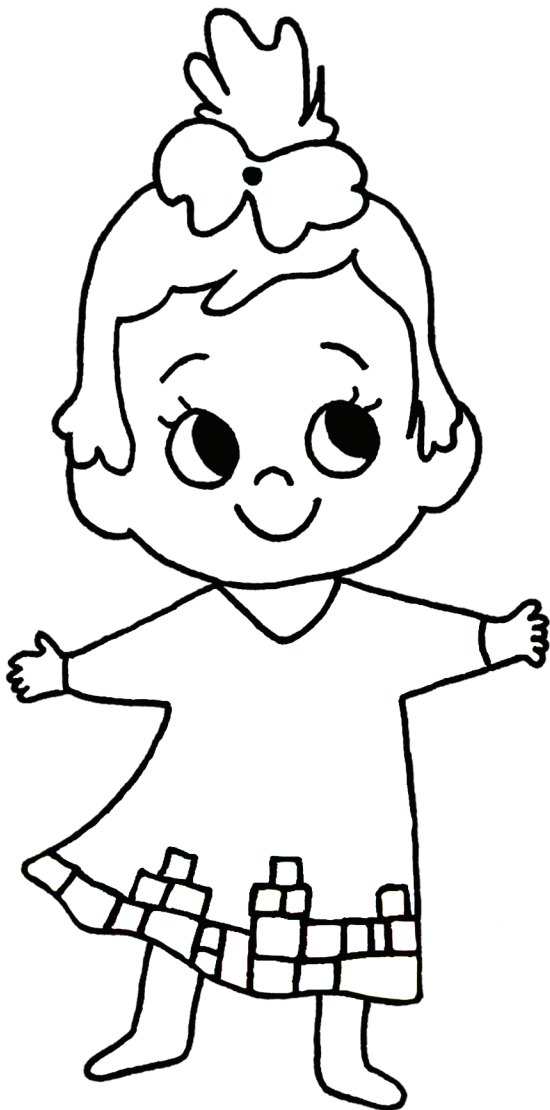
TOMATO



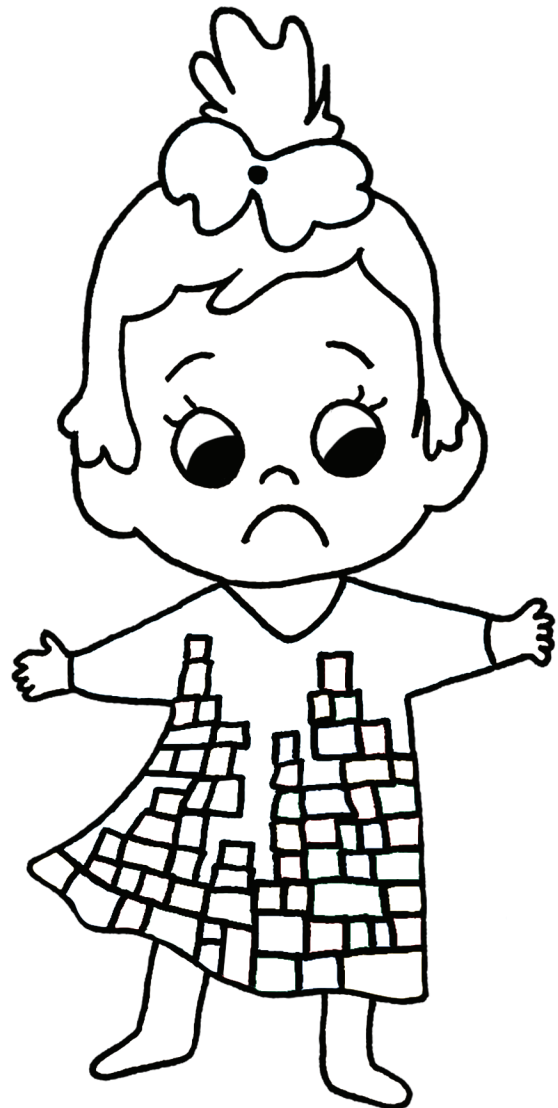


Protein can also be in **our muscles** if our bodies have stored it there for later.

OK!

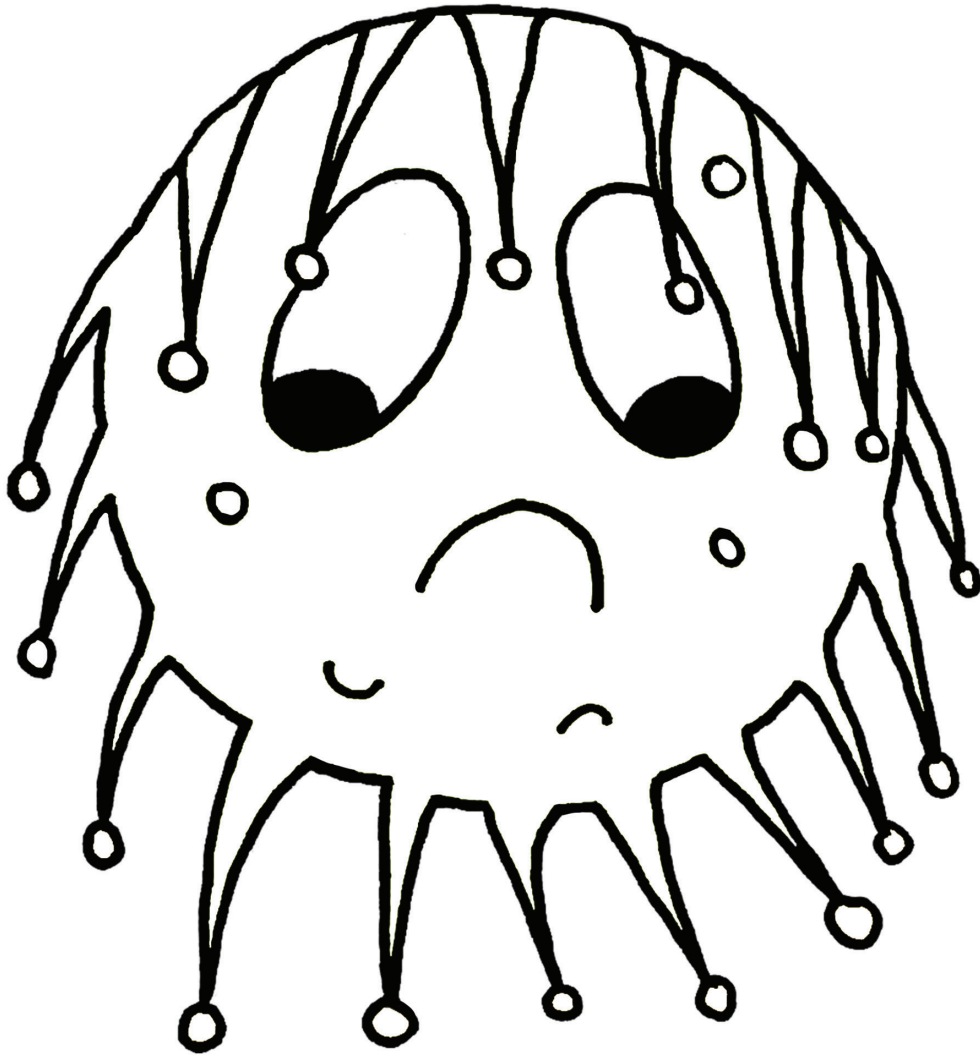


NOT OK!

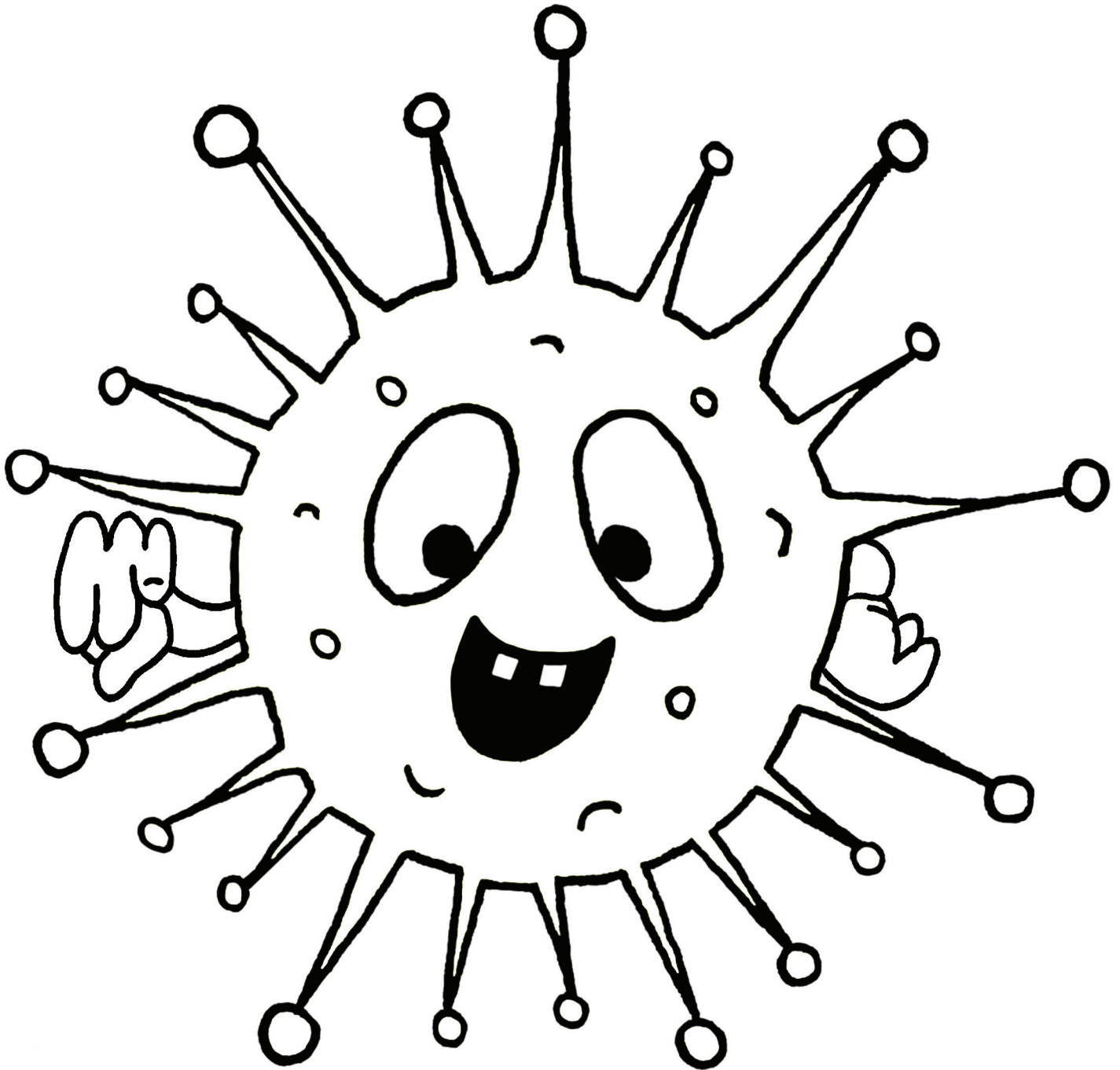


Ammonia from protein is okay in the body if there's just a little bit, but too much ammonia can hurt the body.

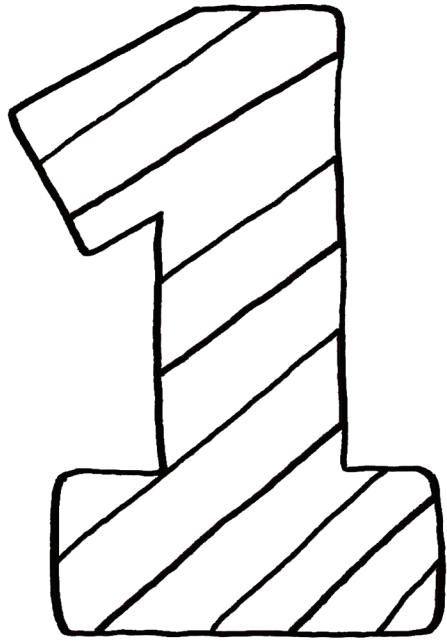
Ammonia can hurt our cells.



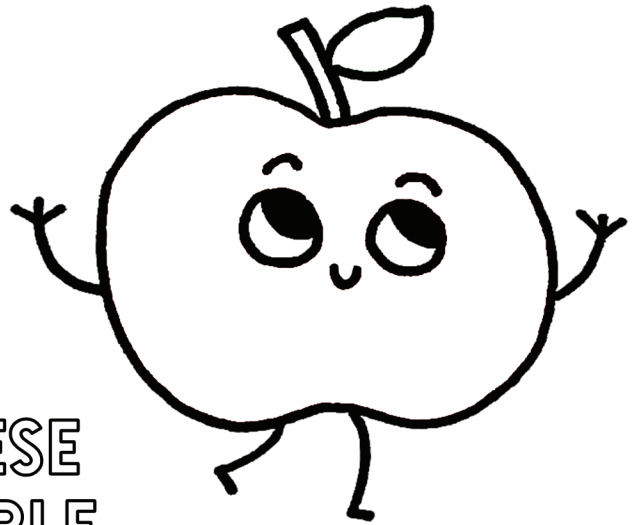
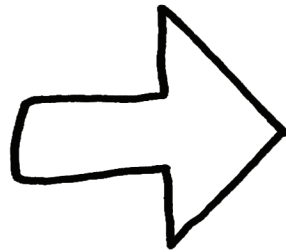
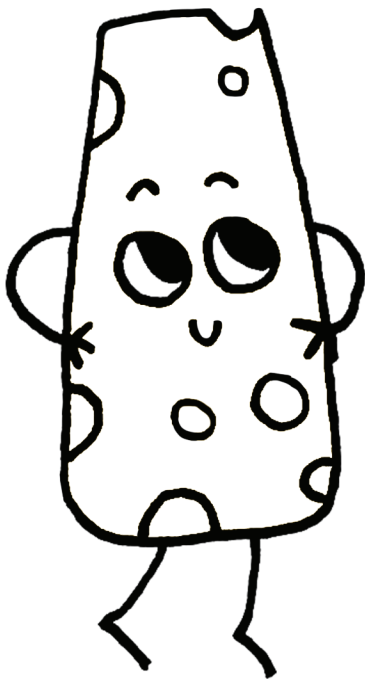
That's why the body needs to get rid of it.



There are ways that someone with a UCD can help keep his or her cells and body healthy.



EATING A SPECIAL DIET



SWAP CHEESE
FOR AN APPLE

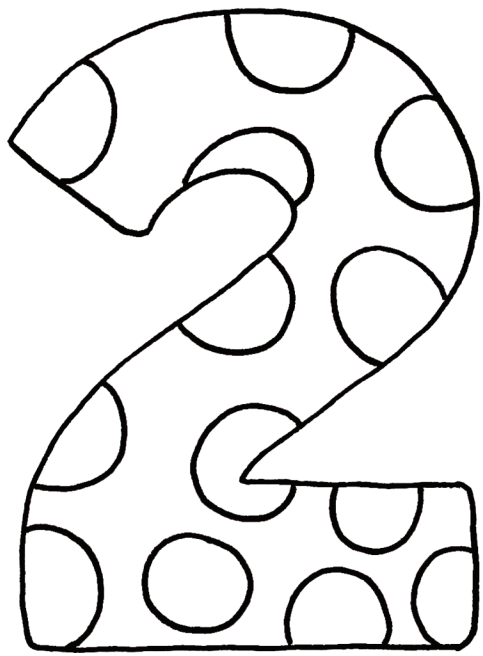
The first way is by **eating a special diet**. Remember, ammonia is in protein, and protein is in most food. If someone eats less protein, there will be less ammonia in his or her body to get rid of.



Someone with a UCD may also
need to drink something called
supplements



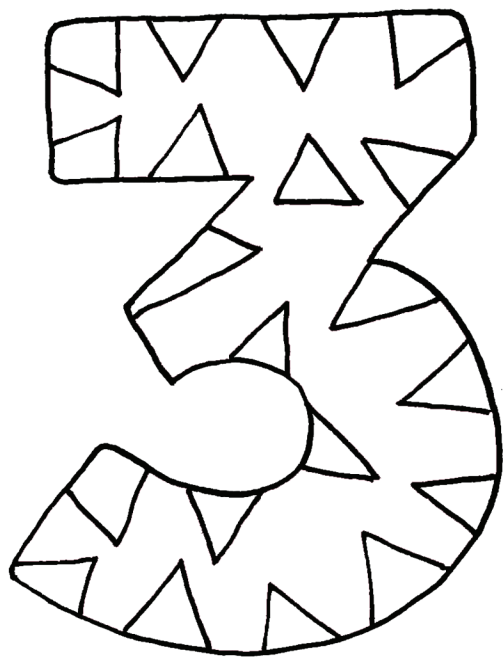
to make sure he or she can grow big and strong
on this special diet!



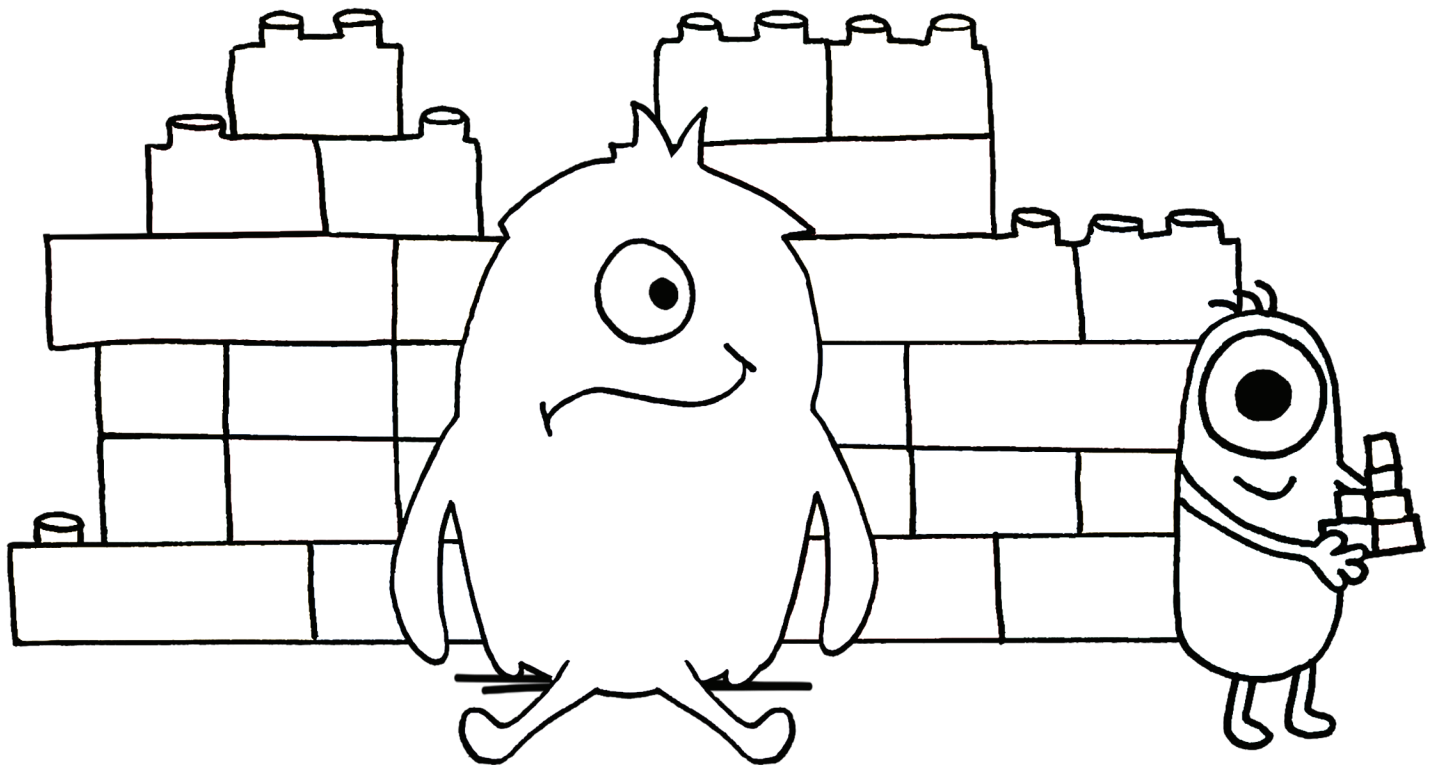
BEING CAREFUL ABOUT ACTIVITIES



Another thing people with UCDs can do to stay healthy is to be careful about activities. It's important that they don't get too hot or too tired from exercise or playing. This means staying out of the heat and choosing light activities, like swimming or yoga.



TAKING MEDICINE TO HELP GET RID OF AMMONIA



A third way to stay healthy with a UCD is to take medicine that helps the body get rid of ammonia. The medicine helps get rid of ammonia without the body needing help from enzymes.



Having a UCD means someone has to be careful about what they eat and the kinds of activities they do. But remember, we all have things that make us

unique and special!

