Name: _____ Date: _____

Why Your Stomach Does Not Digest Itself

Circle group

Your stomach holds a strong liquid called stomach acid. It helps break down your food. It also kills many germs that come in with a meal. But the stomach is made of living tissue, like the rest of you. So why does the acid not eat through it?

The stomach wears a thick coat. Cells in the stomach wall make a slippery layer of mucus. The mucus covers the whole inside of the stomach. This sticky coat keeps the acid away from the wall. It is like a raincoat that the stomach never takes off.

There is more. The cells in the stomach lining live a short time. New cells are always growing to take their place. If a few get worn out, fresh cells fill in fast. The stomach also has strong muscles. They squeeze and churn. They mix the food with the acid until it is a thick, soupy mush.

Every part helps. The acid works on the food. The mucus guards the wall. The new cells keep the lining in good shape. Together they let the stomach handle strong acid every day.

Questions

1. What are two jobs of stomach acid?

_____

_____

2. What do the cells in the stomach wall make to protect it?

_____

_____

3. Why is the mucus compared to a raincoat?

_____

_____

4. What happens when some lining cells get worn out?

_____

_____

5. What do the muscles in the stomach wall do?

_____

_____

6. What would probably happen if the stomach had no mucus?

_____

_____

Words to know

acid: a strong liquid that can break things down
tissue: a soft material that body parts are made of
mucus: a slippery, sticky coating made by the body
churn: to stir and mix again and again
lining: a layer that covers the inside of something

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Why Your Stomach Does Not Digest Itself

Triangle group

Inside your stomach is a strong liquid called stomach acid. It helps break down the food you eat, and it also kills many of the germs that sneak in with your meal. The stomach itself is made of living tissue, just like the rest of you. So why doesn't the acid eat right through it?

The answer is that your stomach wears a thick coat. Cells in the stomach wall make a slippery layer of mucus, and the mucus spreads over the whole inner surface. This sticky coat keeps the acid away from the wall. It acts like a raincoat that the stomach never takes off.

There is more. The cells that line the stomach live only a short time, and new ones are always growing to replace them. If a few get scraped or worn out, fresh cells fill in quickly. The stomach also has strong muscles in its walls. They squeeze and churn, mixing the food with the acid until it turns into a thick, soupy mush.

Every part of this teamwork matters. The acid does its job on the food, the mucus protects the wall, and the new cells keep the lining in good shape. Together they let the stomach handle strong chemicals every single day without harm.

Questions

1. What are two jobs of stomach acid?

_____

_____

2. What do cells in the stomach wall make to protect it?

_____

_____

3. Why does the writer compare the mucus to a raincoat?

_____

_____

4. What happens when some stomach lining cells get worn out?

_____

_____

5. What do the muscles in the stomach wall do?

_____

_____

6. What would probably happen if the stomach had no mucus coat?

_____

_____

Words to know

acid: a strong liquid that can break things down
tissue: a soft material that body parts are made of
mucus: a slippery, sticky coating made by the body
churn: to stir and mix again and again
lining: a layer that covers the inside of something

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Why Your Stomach Does Not Digest Itself

Square group

Deep inside your stomach is a powerful liquid known as stomach acid. It assists in breaking down the food you eat, and it also destroys many of the germs that sneak in alongside your meal. The stomach itself, however, is made of living tissue, just like the rest of your body. So why doesn't the acid simply eat straight through it?

The explanation is that your stomach wears a thick protective coat. Specialized cells in the stomach wall produce a slippery layer of mucus, and that mucus spreads across the entire inner surface. This sticky barrier keeps the acid away from the wall, acting like a raincoat that the stomach never removes.

There is even more to the story. The cells that line the stomach survive for only a short time, and new ones are constantly growing to replace them. If a few become scraped or worn out, fresh cells quickly fill in the gaps. The stomach also contains strong muscles in its walls, which squeeze and churn, blending the food with the acid until it becomes a thick, soupy mush.

Every part of this teamwork matters. The acid does its work on the food, the mucus shields the wall, and the new cells keep the lining in excellent condition. Together they allow the stomach to handle powerful chemicals every single day without being harmed.

Questions

1. What are two jobs that stomach acid performs?

_____

_____

2. What do specialized cells in the stomach wall produce to protect it?

_____

_____

3. Why does the writer compare the mucus to a raincoat?

_____

_____

4. What happens when some of the cells lining the stomach become worn out?

_____

_____

5. What do the muscles in the stomach wall do?

_____

_____

6. What would probably happen if the stomach produced no mucus at all?

_____

_____

Words to know

acid: a strong liquid that can break things down
tissue: a soft material that body parts are made of
mucus: a slippery, sticky coating made by the body
churn: to stir and mix again and again
lining: a layer that covers the inside of something

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Why Your Stomach Does Not Digest Itself

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Why Your Stomach Does Not Digest Itself

Easier · 185 words · Flesch-Kincaid grade 2.6

1. It breaks down food and it kills many germs.
2. A slippery layer of mucus.
3. It covers the stomach wall and keeps the acid away, like a raincoat keeps rain off.
4. New cells grow fast to take their place.
5. They squeeze and churn the food with the acid.
6. The acid could hurt the stomach wall.

Triangle: Why Your Stomach Does Not Digest Itself

This passage · 211 words · Flesch-Kincaid grade 4.8

1. It breaks down food and it kills many germs.
2. A slippery layer of mucus.
3. It covers the stomach wall and keeps the acid away, like a raincoat keeps rain off.
4. New cells grow quickly to replace them.
5. They squeeze and churn the food with the acid.
6. The acid could damage the stomach wall.

Square: Why Your Stomach Does Not Digest Itself

Harder · 225 words · Flesch-Kincaid grade 7.5

1. It helps break down food and it destroys many germs.
2. A slippery layer of mucus.
3. It spreads over the stomach wall and keeps the acid away, just as a raincoat keeps rain off.
4. Fresh cells quickly fill in the gaps.
5. They squeeze and churn, blending the food with the acid.
6. The acid could damage the stomach wall.