

Brains On (APM) | Brains On! The meaning of mummification 01GK04EX0TVHV6ECFCRDDHVR7N

MALE SPEAKER: You're listening to *Brains On*, where we're serious about being curious.

FEMALE SPEAKER: *Brains On* is supported in part by a grant from the National Science Foundation.

NARRATOR: A long, long time ago, 3,000 years back in ancient Egypt, two friends sat and pondered the future.

[MAGICAL SOUND CRESCENDOS]

FRIEND 1: Hey pal, you ever wonder how we'll be remembered in the future?

FRIEND 2: You mean 3,000 years from now, at some way off, distant future date like, I don't know, 2022?

FRIEND 1: Yeah. Like, will people then look back at us and think, wow, those Egyptians sure were good dancers. If anyone knows one thing about ancient Egypt, it's that they were so funky fresh on the dance floor.

FRIEND 2: Obviously. I hope they remember that I had this cool haircut.

FRIEND 1: It's such a cool haircut.

FRIEND 2: I know, right?

FRIEND 1: I wonder if the pyramids will still be there. You know, in the future?

FRIEND 2: Buddy, those aren't going to go anywhere.

FRIEND 1: I just hope people know that we worked really hard on those. Like, it took generations. But we totally did it.

FRIEND 2: Of course they'll know that. What are they going to think? Some aliens from another planet landed here and built them for us?

FRIEND 1: [LAUGHTER] Good one. Aliens. Yeah, you're right. No one would believe something that silly. Hey, I bet in the future we'll have flying sandals.

FRIEND 2: The last pharaoh promised us flying sandals by 1,000 BC, and it still hasn't happened.

FRIEND 1: I know. Why is it so hard? Make a sandal, then make it fly. Boom. Million pounds of [? great ?] idea right there. Oh, what about carts that push themselves?

FRIEND 2: My lower back would love that.

FRIEND 1: OK, OK. What if-- what if one day we all have little boxes we can hold in our hands, and then the boxes beam messages up into the sky. And we can look at pictures of cats on the boxes. And even post our own pictures. Like, a cool picture of some stew. And other people can look at the stew and be like, whoa, that's some delicious-looking stew. And then if you post stew all the time, you can be famous for it, like a stew-fluencer. And you'll get sponsored by big stew companies, and-- and soon you'll have so much stew that you'd be, like, set for life.

FRIEND 2: That's the silliest thing I've ever heard.

FRIEND 1: Right? No way that'll ever happen. Like, ever.

FRIEND 2: I mean, who would want to look at pictures of other people's food?

FRIEND 1: Oh, so silly. But flying sandals, though.

FRIEND 2: I mean, come on. It's the footwear of the future. No question.

FRIEND 1: For real.

[MUSIC PLAYING]

MOLLY BLOOM: You're listening to *Brains On* from APM Studios. I'm your host, Molly Bloom, and my co-host today is Hania from Lake Forest, California. Hi, Hania.

HANIA: Hi, Molly.

MOLLY BLOOM: Hania recently co-hosted an episode of *Forever Ago*.

HANIA: It was about how Europeans took artifacts from ancient Egypt and brought them back to their own countries. That's how all different kinds of ancient Egyptian art, statues, and other treasures ended up in European museums instead of Egyptian museums.

MOLLY BLOOM: You can listen to that episode on the *Forever Ago* podcast. Today on this podcast, we're answering even more questions about ancient Egypt.

HANIA: Some listeners wanted to know about a special way that ancient Egyptians took care of their most powerful people after they died.

NORA: Hi. My name is Nora from West Hartford, Connecticut, and my question is, how are mummies made?

GIA: My name is [? Gia ?] from Cupertino, California, and my question is, what's under a mummy's bandages?

MOLLY BLOOM: We're going to answer these questions in a bit. But first, when we say ancient Egypt, what exactly are we talking about?

HANIA: Usually we mean a period of time that started about 5,000 years ago and lasted for thousands of years after that. So a long time that was a long time ago.

MOLLY BLOOM: Ancient Egypt was a rich culture that created lots of incredible things like a solar calendar and hieroglyphics.

HANIA: They also invented an early form of paper and ink to write those hieroglyphs with. They were famous for their dark eyeliner and their cool jewelry.

MOLLY BLOOM: And a lot of their amazing art and architecture is still around today, like the pyramids.

HANIA: Or the famous sculpture of Queen Nefertiti.

MOLLY BLOOM: Or fancy pottery.

HANIA: Or the gold and blue face mask of King Tutankhamen.

MOLLY BLOOM: So Hania, what do you think of when someone says ancient Egypt?

HANIA: I think of a desert and, like, big pyramids and sculptures and museums that have all the artifacts from long time ago.

MOLLY BLOOM: Have you learned about ancient Egypt in school?

HANIA: Yeah. I used to go to a Muslim school, and we would learn about it. And also my Arabic teacher, [INAUDIBLE]-- she lives in Egypt. And she teaches me our religion and stuff, and about the past.

MOLLY BLOOM: That's really cool. And you are Egyptian, and a lot of your family lives in Egypt still, right?

HANIA: Yeah, all of them.

MOLLY BLOOM: So when you go to Egypt, do you see traces of that ancient culture around still?

HANIA: Yeah. My mom takes me and all my cousins to the pyramids and, like to Valley-- well, we're going to Valley of the Kings and museums.

MOLLY BLOOM: Can you explain what Valley of the Kings is?

HANIA: So it's basically like a valley. And most-- like, some of the most famous kings or queens-- some of them are buried there. And then also some of them are buried in museums in Cairo.

[MUSIC PLAYING]

MOLLY BLOOM: Even though all of these things happened way, way back in the super-duper past, Egypt is far from ancient history.

HANIA: Yeah. It's still a country. You can trace the story of those people from back then to present.

MOLLY BLOOM: That's something Egyptian scholar Heba Abd el Gawad thought about a lot as a kid growing up in the Egyptian city of Cairo and visiting museums there.

HEBA ABD EL GAWAD: I felt when I was very young that it was the ancient Egyptians who actually built the museum. That they made all these amazing things, and they put a group or a selection from them in the museum for people to go and visit and have a quick visit of everything that is Egypt.

HANIA: Today, Heba studies Egyptian heritage and how it's shown in museums.

MOLLY BLOOM: Like a lot of us, she's amazed by the things the ancient Egyptians did in the days way before electricity, or engines, or power tools, like building the pyramids.

HEBA ABD EL GAWAD: There are thousands of blocks, and when you look and see how huge each block is, you can never tell how they managed to make the shape. And my dad got me one of those LEGOs, and we were trying to use the LEGO to make the pyramids. We didn't-- we never managed to have the very same, exact perfection of shapes that we see live.

MOLLY BLOOM: Heba says even though the ancient Egyptians didn't build museums, they did leave behind a lot of writings, buildings, and tools that help us understand what their lives were like.

HANIA: And a lot of the information we know about mummification comes from artifacts like those.

MOLLY BLOOM: We'll hear more from Heba in a bit. But first, Hania, when you visit Egypt, do the cities feel older than California?

HANIA: Yeah, because they were made, like, long time ago.

MOLLY BLOOM: How would you describe how they feel different?

HANIA: Well, it feels like my home because all of my family lives there and none of them live here. So I like to go a lot and spend time with them.

MOLLY BLOOM: What are your favorite things to do when you visit Egypt?

HANIA: To see all of my cousins.

MOLLY BLOOM: Do you guys-- what do you guys do? Do you play, do you run around, do you visit places?

HANIA: Next to my mom's mom-- her house is right next to a mall, so we always walk there because it's right next to it. So we watch movies and stuff there.

MOLLY BLOOM: So are there favorite foods and desserts you love when you're in Egypt?

HANIA: Yeah, my grandma makes it so good. There's this dish called [? bena. ?] It's kind of like-- there's meat and a vegetable. I don't know how to-- I think it's okra, I'm pretty sure, with tomatoes and all this. It's really good.

[MUSIC PLAYING]

MOLLY BLOOM: We learn how people in the past lived by studying the things they left behind. This is called archaeology.

HANIA: And the people who do it are called archaeologists.

MOLLY BLOOM: One of the reasons archaeologists know so much about ancient Egypt is because a lot of things they made back then have lasted for thousands of years. And that's not the case for most ancient cultures. We don't have their clothes, and writings, and other artifacts.

HANIA: And you might be thinking, yeah, why is that? Where is all that other stuff? Are there secret warehouses full of hidden artifacts?

MOLLY BLOOM: But if you're going to blame anyone, blame bacteria. You see, people throughout history made a lot of things from organic material. You've probably heard that word used for fruits and vegetables and other food. You know, like organic apples. But it also means material that was once part of a living thing.

HANIA: Like wood from trees.

MOLLY BLOOM: Yep. And anything from animals. That would be bone, hide-- which makes leather, hair, or feathers. These are all easily broken down by the hungry, hungry hippos of the microscopic world, bacteria.

BACTERIA 1: Oh, cotton [? thread. ?] My favorite.

BACTERIA 2: Are you kidding me? Paper?

BACTERIA 3: I love paper.

BACTERIA 4: Have you guys tried this grass basket? It's like I can taste the history as I devour it.

HANIA: I know about bacteria. Teeny, tiny living things we can only see with a microscope. But hold on, there's an ancient Egyptian sock in a museum that's 1,700 years old. If that's organic, why is it still here?

MOLLY BLOOM: Good question. It has to do with climate. I'm happiest in a cool climate where I can sip noodle soup under a blanket, and bacteria are happiest in a warm, wet climate with plenty of oxygen. Egypt is warm, but it's also so dry that many bacteria can't survive.

BACTERIA 1: Ugh, I'm drying out.

BACTERIA 2: Yeah, let's hop on some flying sandals and get out of here.

BACTERIA 3: Dude, that's not a thing.

BACTERIA 2: Well, I want them to be a thing.

MOLLY BLOOM: Now if you were looking for ancient artifacts in a rainforest, you wouldn't find a lot of organic objects from long ago because bacteria would have chomped them up.

BACTERIA 3: This is much better. Wet and warm. Let's eat everything that looks historic.

BACTERIA 1: Mmm. Any ancient socks around? I love those.

MOLLY BLOOM: But you might find buildings or artifacts made from clay or stone. That's not organic material. Bacteria can't eat it. So ancient artifacts can last for a long time in super-dry places like Egypt. Warm, wet places? Not so much.

HANIA: OK Molly, I have an idea. I'm going to make clay models of everything I've got. That way bacteria can't nosh it and future archaeologists will know exactly what my life is like. You're welcome, science.

MOLLY BLOOM: When you think about your life today, what would you want to save so future people could study it and learn about you?

HANIA: Maybe, like, all of my clothes. Maybe the clothes style change-- like, changes in the future. So they'll think it's weird or cool that it's different.

MOLLY BLOOM: I wonder if you had a T-shirt with a character from a movie, and they'd be like, is that a god? Is she wearing a photo of a god? Like, no. That's just Elsa from *Frozen*.

THEME SONG: Ba, *Brains On*.

MOLLY BLOOM: Speaking of things that last, let's get to those questions about mummification.

HANIA: Yeah. People are made of organic material, but these bodies have lasted thousands of years. Why is that?

MOLLY BLOOM: It all has to do with the mummification process.

CHRISTINA RIGGS: You're kind of turning the human into a statue in a way-- would be one way to think about it.

MOLLY BLOOM: That's Christina Riggs.

CHRISTINA RIGGS: And I've got a fancy-sounding title. I'm Professor of the History of Visual Culture in the Department of History at Durham University in the United Kingdom.

MOLLY BLOOM: Christina's done a lot of research on how humans were mummified. She says it was only done for really important, powerful people, like royalty.

CHRISTINA RIGGS: This was all a religious process. It's like a religious rite and ritual, everything that was done to the body. It was only seen by specially-trained priests.

MOLLY BLOOM: Those priests were there to help prepare the person's body for the afterlife. The exact process of how this was done changed over time, but it was common to start by taking out organs like the liver or the brain so they don't rot.

HANIA: Those things are wet, which means bacteria totally love to eat them.

MOLLY BLOOM: Exactly. The organs were stored in special jars inside the tomb, but the priests would leave the heart inside the body because they believed it was important to have in the afterlife. Next, the priests would dry out the rest of the body by packing it with a type of salt. Salt is great at pulling out the water from organic materials.

HANIA: This stops those hungry bacteria from taking over.

MOLLY BLOOM: The wrapping usually came next. Christina says they would use linen cloth, which was really valuable back then. So you had to be a big deal to be covered in it head to toe.

CHRISTINA RIGGS: Some of the most elaborate kinds-- they would wrap each individual finger, each individual toe. Then they'd wrap the whole hand, then they'd wrap the whole arm so that you build up what becomes the standard mummy shape, which is like-- I don't know, a bit like a Tootsie Roll.

MOLLY BLOOM: And while the priests were wrapping the body, they might also be saying prayers. They would sometimes tuck special jewelry called amulets under the cloth to protect the deceased. And they might cover the cloth in ointments called resin. These were made with the sap of trees.

CHRISTINA RIGGS: And would have a nice smell. A bit like frankincense and myrrh. If your family celebrates Christmas and you've got a Christmas-scented candle it, might have frankincense and myrrh in it. That's a little bit what those surfaces would smell like.

HANIA: It was a lot of work. The whole process took several months.

MOLLY BLOOM: But it was important to the ancient Egyptians. Christina says their religious ideas seemed to change over time, and we can't be 100% sure what they thought happened after death. But we do know they believed it was important for their spirits to have the body safe and protected.

CHRISTINA RIGGS: And that's why they're supposed to be wrapped up, sealed away, left in the dark in their tombs. By taking them out of their tombs and putting them in museums, we've clearly undone what they had expected.

MOLLY BLOOM: Still, that's exactly what happened. In the past, people from Europe were obsessed with digging up mummified remains. They would even have parties where they unwrapped a mummified person in front of a crowd.

HANIA: It was part of the long history of people taking things out of Egypt and showing them off elsewhere.

MOLLY BLOOM: If you want to learn more, check out that episode of *Forever Ago* that Hania co-hosted. All that history is a very good reminder that it's important to be thoughtful when studying other cultures.

HANIA: Yeah. We're all about respectful archaeology.

[MOTORCYCLE ENGINE REVVING]

BIKER 1: Did somebody say respectful archaeology?

HANIA: I did.

BIKER 1: Well kiddo, you're in luck, because you're crossing paths with the loudest, proudest, most respectful archaeology/motorcycle club to ever surf the concrete seas.

BIKER 2: We're Antiquities Angels.

[MOTORCYCLE ENGINE REVVING]

[ROCK MUSIC PLAYING]

MOLLY BLOOM: Um, OK. What are you doing in our studio?

BIKER 2: We're bikers who love three things. Leather vests, wind in our hair, and talking about the respectful study of people in the past.

BIKER 3: Also, I have to use the little bikers' room, so we're making a pee-pee pit stop.

MOLLY BLOOM: Down the hall, last door on the left.

BIKER 3: Thank you.

BIKER 1: Now remember, cultures from the past don't just burn rubber and disappear. There are plenty of people in the world today who are descended from these communities. That means they're the great-great-great-great-great-- several more greats-- grandchildren of the people that archaeologists are studying.

BIKER 2: Yeah. In the early days, archaeology was mostly Europeans and Americans collecting artifacts from elsewhere in the world. And usually, they didn't even consider the descendants of these cultures.

BIKER 1: That ain't right.

[ROCK MUSIC, MOTORCYCLE ENGINE REVVING]

There are still groups today whose ancestors' stuff was taken by archaeologists back in the day. This happened in Egypt, but also in places like South America and Africa.

BIKER 2: What would you think if some stranger took your meemaw's antique casserole dish with the blue bunnies and put it in a museum without your permission?

MOLLY BLOOM: Oh, I would not like that.

BIKER 4: I'd say that's downright disrespectful, and ain't nobody disrespects meemaw. Today, descendant communities all over the world are working to bring their ancestors' belongings back home, including people in Egypt.

BIKER 1: If you're an archaeologist--

BIKER 2: Like us.

BIKER 1: --and you want to be responsible about how you do your research--

BIKER 2: Like us.

BIKER 1: --then you're going to work with members of the descendant communities, listen to their stories, share tips about finding old artifacts, and learning from the past. And try to give back the precious treasures from their long-ago relatives.

BIKER 3: Otherwise, it ain't archaeology It's archaeolo-junk. Hi, I'm back now. And I washed my hands, too.

[ROCK MUSIC, MOTORCYCLE ENGINE REVVING]

MOLLY BLOOM: Wow, that is all great stuff to keep in mind. Thank you for sharing.

HANIA: Yeah, and good luck on your trip to wherever you're going.

BIKER 2: We're going wherever the wind blows.

BIKER 3: I thought we were going to Peoria.

BIKER 2: Oh yeah. We're going to Peoria. Then wherever the wind blows.

BIKER 1: Antiquities Angels, move out.

[ROCK MUSIC, MOTORCYCLE ENGINE REVVING]

MOLLY BLOOM: Coming up, we're going to hear how one woman's life was changed after she spent time alone with a mummified person.

HANIA: So stay with us.

[MUSIC PLAYING]

MOLLY BLOOM: We love hearing from you. It brings us so much joy. And one of my favorite things is seeing the drawings you make, whether they're of *Brains On* headquarters, of characters on the show, or of things you've just imagined.

HANIA: Send us your drawings at brainson.org/contact.

MOLLY BLOOM: And while you're there, you can send us mystery sounds, and high fives, and questions.

HANIA: Like this one.

LISTENER: My question is, can you hear when you're asleep?

MOLLY BLOOM: You can find an answer to that on our *Moment of Um* podcast. It's a daily dose of fun and facts every weekday. You can find it wherever you listen to *Brains On*. Just search for *Moment of Um*.

HANIA: And keep listening.

[MUSIC PLAYING]

MOLLY BLOOM: You're listening to *Brains On*. I'm Molly.

HANIA: And I'm Hania.

MOLLY BLOOM: OK, Hania. Time to put your hearing to the test. Are you ready for the--

[EERIE MUSIC PLAYING]

SPEAKER: Mystery Sound.

MOLLY BLOOM: I do not know what it is either, so you and I are both in for a little surprise.

[CHEWING AND SLURPING]

MOLLY BLOOM: Huh. What do you think that was?

HANIA: I have no idea.

MOLLY BLOOM: I don't either. All right, let's think about it for a second. I heard something kind of squelchy. That's how I would describe it. What did you hear?

HANIA: Kind of like spitting sounds.

MOLLY BLOOM: Mhm, mhm. Should we hear it again?

HANIA: Yeah.

MOLLY BLOOM: OK, let's hear it again.

[CHEWING AND SLURPING]

MOLLY BLOOM: OK. It's kind of gross-sounding sometimes, but other times it doesn't sound gross at all.

HANIA: Yeah.

MOLLY BLOOM: What do you think-- like, what material do you think it is?

HANIA: I feel like it's kind of like a straw. Like it's blowing back and forth.

MOLLY BLOOM: That's a really good guess. And I almost thought at the beginning it was like a tin can, like, being scraped. But then all those squishy, squelchy, spitting noises. I have no idea. So I'm going to go with your idea, the straw. I like that. Well, we will hear it again, get another chance to guess, and hear the answer after the credits.

CHILDREN: *Brains On!*

[ROCK MUSIC, MOTORCYCLE ENGINE REVVING]

BIKER 1: Antiquities Angels back again. We're here to chew bubble gum, study artifacts, and respect other cultures. And we're all out of bubble gum.

BIKER 3: Also I left the directions in the bathroom. Whoopsie.

BIKER 2: We want to make something clear. Archaeology ain't just digging stuff up out of the ground. That destroys context like my iron pony here destroys the competition at the races.

BIKER 3: Not on our watch. Context is everything. Context is like the story around an object. So you can't just take a clay pot out of the ground and call it a day. Ain't nothing there. Just once upon a time, there was a pot. The end. Worst story ever.

BIKER 4: There are so many unanswered questions. How was the pot used? Was it in a house, was it next to a fireplace? Were there other pots nearby? How old is the pot?

BIKER 2: If you want to know how old an artifact is, you got to know where it was relative to other objects above and below it. An archaeological site is sort of like a layer cake. The bottom layers get put down first as you build upwards. So the lower the layers, the older the stuff in it is. Closer to the top, the newer it is.

BIKER 4: If you just yonk a pot out of a site without all that information, well, you ain't respecting the story there.

BIKER 2: Until next time, Angels out.

[ROCK MUSIC, MOTORCYCLE ENGINE REVVING]

MOLLY BLOOM: We're going to have a lot of tire tracks to clean up in the studio after this. Now that the Angels have rolled out, let's get back to your questions about mummification. Here's the next one.

LISTENER: What's under a mummy's bandages?

MOLLY BLOOM: This is a great question, and there are a lot of ways to answer it.

HANIA: We know now that under the linen wraps there are sometimes special jewels called amulets and nice smelling resins made from stuff like tree sap.

MOLLY BLOOM: And all the way under the cloth wrappings, you'd find a preserved body. But there's another way to think about this. For Sanchita Balachandran, under the wraps there is--

SANCHITA A real person.

BALACHANDRAN:

MOLLY BLOOM: Sanchita is a museum curator and conservator at the Johns Hopkins Archaeological Museum in Baltimore, Maryland. That means she not only helps pick what goes into a museum exhibit, but she's responsible for taking care of all the things in a museum.

HANIA: Sanchita says her feelings about mummified people changed a few years back.

MOLLY BLOOM: She was asked to take care of a mummified Egyptian woman whose body was over 2,000 years old.

SANCHITA Her mummified wrappings had kind of fallen apart, and so I ended up spending several weeks actually trying to
BALACHANDRAN: stabilize all of these wrappings and these fragments that were otherwise starting to fall off of her.

HANIA: Like a lot of researchers, Sanchita believed there was a lot to learn by studying mummified people.

MOLLY BLOOM: For years, archaeologists had studied mummified people to understand how ancient Egyptian people lived, how they died, what diseases they had, and how they thought about death.

HANIA: It's one of the reasons we know so much about Egypt's past.

MOLLY BLOOM: But Sanchita noticed that when people tried to study this woman over the past 100 years, they ended up damaging her body and her wrappings.

SANCHITA For me, as I was trying to put these wrappings back in place, it was really clear that evidence of someone
BALACHANDRAN: pulling these wrappings off. In fact, we have newspaper reports talking about the attempt to see whether she had a noble face. And so her face is uncovered, and then there are parts of her body that are uncovered.

MOLLY BLOOM: Some of that was done about 100 years ago by a man named Dr. John Goucher. He tried to pry open the bandages to see the woman's body. When some of them wouldn't come off, he used a pair of shears, which is like a pair of big scissors, before giving up.

SANCHITA It was very hard to revisit and witness that-- the violence really that was part of that scientific investigation.
BALACHANDRAN:

HANIA: Sanchita worked with this woman's body day after day, helping repair the wraps and sewing things in place.

MOLLY BLOOM: She thought about how the last people to care for this woman were probably her friends and family. It was a special honor to care for someone's remains like this. It made her feel more connected to the

SANCHITA When your hands are on this person, it's very hard to describe how that makes you very, very aware of them as
BALACHANDRAN: a real being in whose presence you are. And I have to say probably after noticing just how those wrappings had been removed-- I mean, I feel like I started addressing her differently, you know?

I think it's probably strange for a lot of people to imagine, but I felt like it was an important ritual for me to say good morning or good night when we put the lid back on her case. I feel like it really changed the way that I needed to interact, because she became more and more human to me.

HANIA: Over time Sanchita started to wonder, should we still be studying these mummified bodies the same way we studied them in the past? Like, what do we learn from unwrapping them?

MOLLY BLOOM: And she wondered, should they still be put on display in museums?

HEBA ABD EL For all cultures, respecting the body and respecting the human that is in the body is important.
GAWAN:

MOLLY BLOOM: That's Egyptian heritage specialist Heba Abd el Gawad again. She says cultures around the world have different ways of honoring the dead. Some cultures bury them, others cremate them.

HEBA ABD EL GAWAN: But the core point is always accepting the wishes of the dead. This is what we all have in common. This is where we should all start from, is accepting the wishes of the dead.

MOLLY BLOOM: This hasn't been the case for many ancient Egyptians. For a long time, archaeologists-- especially ones from Europe and America-- have treated these bodies more like things than people.

HANIA: It's one reason Heba and others don't like to use the word "mummy," and why we've been saying "mummified person" instead.

HEBA ABD EL GAWAN: Because the moment that we say the word "mummies," you immediately-- what immediately comes to mind is an object that is displayed in a museum. An object of display, not a human being. So I think one turning point would be re-humanizing, making a point that these are human beings just like all of us. And this could be one of my family members, one of your family members. For me, they are my ancestors.

MOLLY BLOOM: Heba says people are finding other ways to study ancient Egyptians. Instead of unwrapping bodies, some people use technology like a CT scan, which is kind of like an X-ray.

HANIA: That lets you see under wraps without disturbing the body.

MOLLY BLOOM: But she says researchers are still debating whether or not this is respecting the wishes of the dead. Another idea is to study the body, then put it back in its tomb rather than in a museum. But Heba thinks maybe we don't need to be openly displaying these people in museums at all anymore.

HEBA ABD EL GAWAN: I don't think for the advancement of science or for our knowledge, seeing mummified human remains with the linen wrapping out and exposed would make any difference for how we can imagine or we can get close to ancient Egypt. We believe it's so important, but in reality it's not as important as we think. Because the bodies are exactly the same bodies that we possess today.

MOLLY BLOOM: Plus, Heba says, there's so many other artifacts from Egypt, like writings and artwork. We can learn from those without disturbing buried bodies.

HANIA: For Sanchita, working with that mummified woman changed her. She no longer feels OK displaying her in the museum.

MOLLY BLOOM: She still loves studying ancient cultures, but she's not sure how or if we can study mummified bodies in a respectful way.

SANCHITA
BALACHANDRAN: This is the thing with all of this work. It is incredible to witness these ancient people from a really long time ago, while at the same time being uncomfortable with that experience. And learning often comes at someone else's cost, and I don't think we talk about that enough.

MOLLY BLOOM: She says for now, maybe it's time to just let them rest.

[MUSIC PLAYING]

Lots of things from ancient Egypt were well-preserved, which has helped us learn a lot about that culture.

HANIA: Like, we know that powerful people were mummified.

MOLLY BLOOM: That means their bodies were dried out and wrapped in linen.

HANIA: And we know that mummification was an important religious ceremony.

MOLLY BLOOM: When studying ancient cultures, we need to be respectful of the people from the past and their descendants who are living today. That's it for this episode of *Brains On*.

HANIA: This episode was produced by Molly Bloom, Rosie DuPont, Anna Goldfield, Ruby Guthrie, Nico Gonzalez Wisler, and Marc Sanchez.

MOLLY BLOOM: Our editors are Shahla Farzan and Sanden Totten. This episode was sound designed by Rachel Brees. Beth Pearlman is our executive producer, and the executive charge of APM Studios are Chandra Kavati, Alex Shaffer, and Joanne Griffith. Special thanks to Anna Weggel, Aron Woldeslassie, Brant Miller, Ezra [? Noir, ?] and Michael Castaneda.

HANIA: *Brains On* is a nonprofit public radio program.

MOLLY BLOOM: There are lots of ways to support the show. You can subscribe to our Smarty Pass, buy our books, or tell your friends about us. Head to brainson.org. All right, Hania. Are you ready to go back to that mystery sound?

HANIA: Yeah.

MOLLY BLOOM: It's a real stumper. Let's hear it again.

[CHEWING AND SLURPING]

HANIA: I can hear a baby in the background.

MOLLY BLOOM: Hm.

HANIA: I think it's, like, snorting and stuff.

MOLLY BLOOM: The baby's snorting?

HANIA: I don't know. Someone's snorting.

MOLLY BLOOM: Is someone snorting to entertain the baby?

HANIA: Yeah.

MOLLY BLOOM: You know, people need to entertain babies. They really do things that can be very silly, almost desperate, just to make the baby smile. I thought for a second it might be one of those little tubes that suck the spit and water out of your mouth when you're at the dentist. But--

HANIA: Oh yeah.

MOLLY BLOOM: But that would be more like a consistent sound, not just off and on like that. Ooh, it's a tough one. OK, so either a straw, maybe a baby's involved. Maybe a dentist's office. Should we hear the answer?

HANIA: Yeah.

MOLLY BLOOM: All right, here it is.

FINLEY: Hi. My name is Finley, and that was me sucking Jell-o out of a straw.

[SLURPING]

MOLLY BLOOM: Hey.

HANIA: What?

[LAUGHTER]

MOLLY BLOOM: You were totally right the first time. It was a straw.

[SLURPING, SUCKING]

Now it's time for the Brain's Honor Roll. This is how we thank the incredible kids who send us their questions, ideas, mystery sounds, drawings, and high fives.

[MUSIC PLAYING]

[LISTING HONOR ROLL]

We'll be back soon with more answers to your questions.

HANIA: Thanks for listening.