



**PARTY TIME > LITTLE HORRORS >**

## **MUMMIES**

### **What is a mummy?**

A mummy is simply a human being whose soft tissue has been preserved long after death. Ordinarily, when a person dies, the decomposition process reduces the body to a bare skeleton in a matter of months. The rate of decomposition is dependent on a number of factors, chiefly the nature of the surrounding environment.

In most environments, the first stages of decomposition begin within a few hours. In this initial stage, called autolysis, organs that contain digestive enzymes (the intestines, for example) begin to digest themselves.

Autolysis is followed by putrefaction, the breakdown of organic matter by bacteria. In normal, temperate circumstances, putrefaction gets going about three days after death. Within a few months, the body is reduced to a skeleton.

The term "mummy" was applied by early Arabic travellers visiting Egypt. When the outsiders saw some mummies that had been coated with black resin material, they assumed the Egyptian embalming process involved dipping the bodies in bitumen, a dark, sticky component of tar. Based on this misconception, they dubbed the preserved bodies "mummies," after mummiya, the Arabic word for bitumen.

### **Why mummify?**

The ancient Egyptians paid a lot of attention to the afterlife. If a person was prepared, the three spirits that compose a person -- the Ka, the Ba and the Akh -- would pass on to that world after death. In order to be comfortable in the afterlife, the spirits would need all the comforts of daily life, including food, clothing and furniture.

They would also need their old body to be preserved on Earth. The Ka, the spirit that accompanied the physical body in life, was inexorably linked to the person's corpse. If the corpse were destroyed, the spirit was destroyed along with it. Unlike the first death, this second death was final. Consequently, immortality depended on the mummification of the physical body.

## **How? (This is the yucky bit)**

Initially the embalmers spent a lot of time ensuring the body was bandaged properly as they needed to protect it from the outside environment. Although these mummies looked impressive, the bandages did little to stop the effects of bacteria that built up inside the body. They soon realised that the damage was done from the inside out and in order to mummify properly they would need to take out the internal organs.

**And here's how:** Look away now if you're feeling squeamish...

To get into the cranium, the embalmers had to hammer a chisel through the bone of the nose. Then they inserted a long, iron hook into the skull and slowly pulled out the brain matter. Once they had removed most of the brain with the hook, they used a long spoon to scoop out any remaining bits. Finally, they rinsed the skull with water. Surprisingly, the brain was one of the few organs the Egyptians did not try to preserve. They weren't sure what it was for but they assumed you wouldn't need it in the next world (!). After they had removed the brain, the embalmers took a special blade made from obsidian (a sacred stone) and made a small incision along the left side of the body. They carefully removed the abdominal organs through this slit, setting each one aside (with the exception of the kidneys, which the Egyptians did not hold as important). After removing these organs, the embalmers cut open the diaphragm to remove the lungs. The Egyptians believed that the heart was the core of a person, the seat of emotion and the mind, so they almost always left it in the body. The other organs were washed, coated with resin, wrapped in linen strips and stored in decorative pottery. These vessels, which Egyptologists dubbed canopic jars, protected the organs for passage to the next world.

Once they removed the organs, the embalmers rinsed the empty chest cavity with **palm wine**, in order to purify it. Then, to maintain the body's life-like form, they filled the cavity with incense and other material. This kept the skin from shrinking down inside the cavity when the body was dried out.

After the organs were removed the body was covered in Natron (a mixture of sodium compounds) for 40 days to preserve it and dry it out. It was then coated in resin (to seal it and make it airtight and moisture-resistant) and wrapped in a shroud. Then it was time for the bandaging. Typically, they started with the hands and feet, wrapping all of the fingers and toes individually, and then moved on to the head, arms, legs and torso. Once all the parts of the body were wrapped, the embalmers began wrapping the body as a whole. As they applied new layers, the embalmers coated the linen with hot resin material to glue the bandages in place. During this entire process, the embalmers uttered spells and laid protective amulets on the body (for protection in the next world), wrapping them up at different layers. Pass the parcel, anyone?

## **Curse of the Mummy?**

In the early 1900s, when tomb excavation had reached a fever pitch, people were fascinated with these ancient curses. The events surrounding Howard Carter's 1922 excavation of King Tutankhamen's tomb played a major part in this fascination. Supposedly, when the crew first entered the tomb, a cobra swallowed Carter's lucky canary. Within seven years, 11 members of his team had died, apparently doomed by the mummy's curse.

The **German microbiologist Gotthard Kramer** thinks there may be some truth to the ancient curses. Mummies were buried with food for the next world, and over time this food produced loads of **mold spores**. When archeologists or tomb raiders open up a tomb, these spores kick up into the air and the intruders breathe them in. Kramer discovered that some of these ancient mold spores can cause illness or even death, effectively inflicting the promised punishment inscribed on the tomb door.

## **Modern day mummies?**

The most famous modern mummies are Vladimir Ilyich Lenin, the Russian revolutionist, and Eva Peron, the revered wife of Argentinean president Juan Peron. Lenin died in 1924, soon after the discovery of King Tutankhamen's tomb, which influenced the decision to preserve Lenin's body and display it at the Kremlin. The exact chemicals and procedure that keep his body perfectly preserved are a Russian secret, but we do know that the mummification is an ongoing process. The Russians periodically immerse him in a preservative bath and then dress him in a waterproof suit to hold the fluids inside.

More on Mummies? Try our mummy room in the Goth House! It's on the second floor....if you haven't died of fright before you've got there!  
[http://www.planet-science.com/outthere/planet\\_goth/index.html](http://www.planet-science.com/outthere/planet_goth/index.html)

***What is a mummy's favourite type of music? Wrap!***