



Investigate Mummy-X (cont.)

Chemical/Embalming and X-Ray Specialists' Report

1. Chemical analysis shows that the bones of Mummy-X contain a very low percentage of lead. It appears that the content is roughly one-tenth what is normal in a modern human.
2. The body was preserved by a prolonged soaking over a period of months in a solution of juniper resin, camphor oil, and myrrh.
3. The body was carefully wrapped and mummified. Fingers were individually wrapped. The brain had also been carefully and completely removed. You observe that the resin did not dry too quickly and crack the skin.
4. X-rays show the pelvic region is greatly enlarged, indicating a recent birth. A smaller mummy is attached to the body.
5. A fracture line shows that the person broke a leg at one time. It appears that the leg was properly set by a trained physician, since it seems to have healed and grown correctly.
6. The skeleton indicates the person was about 35-40 years old at the time of death.
7. After x-raying the smaller mummy, you find that it is the remains of a baboon, not a baby.

Discuss the following questions and record your responses on the lines provided:

1. Lead is a deadly poison that seems to enter the body of all humans. How much lead was found in Mummy-X compared to humans today? _____

2. Was it was safer to live in Ancient Egypt than today? Why or why not?

3. What were the age and the sex of the person who is Mummy-X? How do you know?

4. What do the x-rays tell us about doctors in Ancient Egypt? _____

5. What might be a likely explanation for the attached baboon mummy?

6. What was the social class of this person? How do you know?

7. Did you find a possible cause of death? If so, what? _____

Investigate Mummy-X (cont.)

Bone and Heart Specialists' Report

1. The skeleton measures between five feet two inches (155 cm) and five feet three inches (157.5 cm), a height more common for females.
2. The bones show traces of Harris lines around the major leg and arm bones. This indicates that the bones stopped growing for several months during early development. This usually happens due to starvation.
3. The bones show early signs of arthritis, which normally occur between the ages of 35 and 40.
4. An examination of the pelvis confirms that the mummy is female.
5. The heart also shows signs of middle age. The main arteries leading into the heart indicate the beginnings of hardening as a result of the buildup of cholesterol. This usually occurs in a diet heavy in meat.

Discuss the following questions and record your responses on the lines provided:

1. What were the age and sex of the person at death? How do you know?

2. Is the mummy taller or shorter than the average person today? Why do you think this is the case?

3. Based on the bone reports, what can you say about the childhood of this individual?

4. Knowing that only the upper classes ate a lot of meat, how did this person's lifestyle change from childhood to adulthood? How do you know? _____

5. How did diet affect this person? Do you think it benefited the upper classes to have more meat than other people? Why or why not? _____

6. What diseases or ailments did this person suffer?

7. Did you find a possible cause of death? If so, what?

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Investigate Mummy-X (cont.)

Lung and Parasite Specialists' Report

1. After viewing the lungs under a microscope, you find that the person had suffered a minor case of tuberculosis sometime during their life.
2. The inside of the lungs are coated with carbon, an element in smoke.
3. You also note a high concentration of very fine silicone particles, most likely sand.
4. Inside the intestines are the mummified remains of worm eggs most commonly found in pork.
5. You also find schistosomiasis (schisto) eggs in the blood vessels of the mummy. These eggs are from very small snails that live in the Nile River and can cause disease.

Discuss the following questions and record your responses on the lines provided:

1. The signs from what disease was found in the mummy's lungs?

2. What do the lungs tell you about breathing hazards in Ancient Egypt?

3. Considering the pollution in the air we breathe today, how much different was the air of Ancient Egypt?

4. What did this person eat? What parasites were found because of this?

5. Why was this diet unusual? What does this tell you about the social status of this individual?

6. What other parasites were found? How do you think they got there?

7. Did you find a possible cause of death? If so, what?

Investigate Mummy-X (cont.)

Dental and Skull Specialists' Report

1. While examining the jaw region, you find the teeth very straight, with no apparent overlapping or overcrowding.
2. The teeth show no signs of cavities, but they are badly worn down. There is microscopic evidence of sand and grit embedded in the teeth.
3. The upper and lower jaws of this mummy are larger than those of modern Egyptians.
4. The mummy also appears to have more protruding cheekbones and larger eye sockets than those of modern Egyptians.
5. Based on the size of the skull, you conclude that this is an adult approximately 30-40 years old.

Discuss the following questions and record your responses on the lines provided:

1. If this mummy were alive today, would a dentist be impressed by its dental records? Why or why not?

2. What might be your explanation as to why this mummy did not have any cavities? What does this tell you about our diet compared to food eaten in Ancient Egypt?

3. What do the teeth tell you about the geography and climate in Ancient Egypt?

4. What do the teeth tell you about how food was prepared? (Think about how bread was made.)

5. Based on the skull report, how did this person differ from humans today?

6. From your information, can you tell the age and sex of the mummy? Why or why not?

7. Did you find a possible cause of death? If so, what?

