

## What cells in the human body have the most mitochondria?

### Question:

What cells in the human body have the most mitochondria?

### Powerhouse of The Cell:

The mitochondria are organelles that are located within the cell. The mitochondria are sometimes called the "powerhouse" of the cell because they generate adenosine triphosphate, or ATP, which is the source of cellular energy for various metabolic processes.

### Answer and Explanation:

The cells in the human body that have the most mitochondria are the ones that do the most work, which are the fat and muscle cells. The cells of the liver have many mitochondria because they work so hard in metabolism and breakdown of wastes. The heart muscle has many mitochondria because of its pumping action. The muscle cells of the legs of an active person also have many mitochondria to provide the energy for movement.

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#### Mitochondria: Structure & Function

from  
Chapter 3 / Lesson 6

16K

Learn about mitochondria, the powerhouses of the cell. Explore mitochondria function, structure, and definition, and find out what exactly the mitochondria does.

### Related to this Question

- › Which type of cell is likely to have the most mitochondria?
- › What do mitochondria do for epithelial cells?
- › What are the two parts of the mitochondria?
- › How many mitochondria in human body?
- › Which part(s) of cellular respiration take(s) place in the mitochondria?
- › What are the main cells in the human body?
- › What organelle synthesizes most of the atp used by cells?
- › What is the largest cell in the body?
- › What do the nucleus and mitochondria have in common?
- › What energy molecules are produced in the mitochondria?
- › What organelle provides most of the cell's adenosine triphosphate (ATP)?
- › What organelles are the most numerous inside cells?
- › What part of a cell uses the most oxygen?
- › What part of a sperm cell contains mitochondria?
- › Do animal cells have mitochondria?
- › Which part of cellular respiration produces the most ATP?
- › What are the 3 main parts of a human cell?
- › How many mitochondria are in a stomach cell?
- › What organelles does the mitochondria work with?
- › What parts of a cell provide the cell with energy?
- › How many mitochondria are in a plant cell?
- › Which cellular organelle is the most prominent?
- › Which organelle is most abundant in cardiac muscle cells?
- › Which cell organelles produce energy in eukaryotic cells?
- › Why do some cells have more mitochondria?
- › What organelle is the powerhouse of the cell?
- › Which mitochondria membrane is highly convoluted?
- › Which is the largest organelle within a eukaryotic cell?
- › Do plant cells have mitochondria?
- › What chemical in the catabolism of glucose enters the mitochondria?
- › Which human cell type has no nucleus?
- › What organelle is known as the powerhouse of the cell?
- › What takes place in a cell's mitochondria?
- › What are the inner folds of the mitochondria called?
- › Where is H<sup>+</sup> highest in mitochondria?
- › What is the smallest cell in the human body?
- › Humans are composed of what cells?
- › Do endothelial cells have mitochondria?
- › Where are mitochondria found in plant cells?
- › Which organ uses the most oxygen in the human body?
- › What is the most important part of a cell?
- › What is the function of the mitochondria in the eukaryotic cell?
- › What organelles are abundant in endothelial cells?
- › What parts of a cell are involved in cellular respiration?
- › Which part of an animal cell is called a powerhouse?
- › What are the 2 major parts of the cell?
- › What is the function of ribosomes located within the mitochondria?
- › What part of the cell contains organelles?
- › What is the largest organelle in a plant cell?
- › What does blood carry to every cell in the body?
- › What role does the mitochondria play in cellular respiration?
- › What is the difference between mitochondria and mitochondrion?
- › What organelles are in animal cells, but not in plant cells?
- › What does the mitochondrion serve as in cellular respiration?
- › What is the most prominent organelle visible in most eukaryotic cells?
- › Where are the mitochondria located in the sperm?
- › What body system is the red blood cell part of?
- › Which organelle supplies the cell with energy?
- › What organelle produces ATP?
- › Which organelle is called the powerhouse of the cell?
- › Which organelle is most prominent in cells that make large amounts of protein?
- › Whats the powerhouse of the cell?
- › Which organelle carries substances to other parts of a cell?
- › What are the functions of cells in the human body?
- › How do red blood cells get energy without mitochondria?
- › Where does the highest proton concentration occur in mitochondria?
- › What is the most important organelle in a plant cell?
- › Where does most ATP production take place within a cell?
- › What are the major structural parts of a cell?
- › What is the part of a cell where catabolism primarily occurs?
- › What part of the blood cell carries oxygen?
- › What cells contain a nucleus and membrane-bound organelles?
- › What is the difference between mitochondria and chloroplast?
- › What part of the body makes red blood cells?
- › What is the cell's transport system to the nucleus?
- › What are the 3 main parts of a eukaryotic cell?
- › What are the three main parts of a eukaryotic cell?
- › What do Schwann cells do?
- › Which organs are the most dependent on glucose?
- › What is the purpose of the mitochondria? Explain.
- › Which cell part makes food for a plant cell?
- › What cells make up the skeletal system?
- › What does the nucleus of a human lymphocyte contain?
- › What are the Differences Between Chloroplasts and Mitochondria?
- › Which of a cell's organelles releases energy stored in food?
- › What part of s neuron is responsible for cell metabolism?
- › What do Schwann cells produce?
- › Which human cells are not somatic?
- › What does a nucleus do in a plant cell?
- › What organelle contains DNA in eukaryotic cells?
- › What is cell structure?
- › What structures do human epithelial cells have?
- › Are mitochondria and chloroplasts the sites of oxidative metabolism?
- › What organ system produces blood cells?
- › What part of the animal cell defines the cell's shape?
- › What are the parts of an animal and plant cell?
- › What stage of cellular respiration yields the most ATP?
- › Where is most of the energy produced in cellular respiration?
- › What types of cells undergo cellular respiration?
- › What is the cell body or soma of a neuron?

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