Our cells have many different parts, and each one performs a very important function. The mitochondria is the energy, or power source, for the cell, and is what keeps the cells going and the body functioning how it should.

The mitochondria have their own set of DNA. The DNA in the mitochondria is made up of separate genes, or instructions, for how the mitochondria makes energy and keeps the cells going.

The DNA in our cell is what tells everything in our body how to work, from how tall we will be to the development of all of our organs and body systems. We inherit 50% of our cellular DNA from our mother, and 50% of our cellular DNA from our father. Our mitochondrial DNA is passed down only from our mothers. Therefore, a child can only inherit a mitochondrial condition from their mother.

Mitochondrial conditions are very complex. A specialist, such as your doctor or a genetic counselor, can provide more information and assessment if you are concerned about a mitochondrial condition running in the family.

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