



Mitochondrial Disease

What's Mitochondrial Disease?

Mitochondrial Disease is probably the most common disease you've never heard of before. It actually claims more lives than all childhood cancers combined, yet so few people are aware of it, mainly because Mitochondrial Disease is often misdiagnosed and misunderstood.

Mitochondria are the tiny batteries in nearly every cell in our bodies. They convert the food we eat into the energy we need to survive.

When a person has Mitochondrial Disease, their mitochondria don't work properly so they can't make the right amount of energy. When this happens their cells stop performing and start to die, which can lead to a number of serious health issues, organ failure and ultimately causes death.

Mitochondrial Disease can be very difficult to diagnose because symptoms can arise in almost any part of the body. Often the first indications are problems with organs that need a lot of energy like the brain, heart, muscle and eyes. This means symptoms like seizures, heart problems, muscle weakness, movement disorders, and visual problems are common.

How do you get it?

You cannot catch Mitochondria Disease – you are born with it.

Mitochondrial Disease is a genetic condition which means it is caused by an error in your DNA. This error prevents a vital gene from doing the job it needs to do.

The error may have arisen for the first time in the affected person or it might have been passed down through the family.

Mitochondrial Disease can affect anyone at any age, but for young children with the disease it can be debilitating, and their lives can be cut tragically short.

There are still no effective treatments and no cure for Mitochondrial Disease.

How common is it?

One in 200 babies in the UK are born with genetic changes that can cause Mitochondrial Disease. Symptoms could appear in childhood or later in life. Globally, it is estimated that one baby born every 20 seconds will develop life limiting Mitochondrial Disease by the age of 16.

Links to other diseases

Research shows that faulty mitochondria are linked to a number of other conditions such as Cancer, Diabetes, Parkinson's, Alzheimer's, Autism, Epilepsy and could also be an explanation for Sudden Infant Death Syndrome or Cot Death.