



The UMDF offers Hope. Energy. Life.

UMDF's mission is to promote research and education for the diagnosis, treatment and cure of mitochondrial disease, and to provide support to affected individuals and families.

UMDF is about **coordination, communication and collaboration** bringing information, patients, medical professionals and resources together to make progress on therapies and cures.

UMDF is impactful. Since 1996, we have made significant progress in raising awareness of primary mitochondrial disease, empowering those affected and those providing treatments. Our impact is leading to a quicker diagnosis, improved treatments and better coordinated research efforts.

Your support of UMDF's mission can transform medicine for millions by unlocking treatments and cures for those affected with primary mitochondrial disease, as well as many other conditions.

UMDF MISSION

To promote research and education for the diagnosis, treatment and cure of mitochondrial disorders and to provide support to affected individuals and families.



Get involved!

Help us raise awareness and crucial dollars for research. **Participate in an Energy for Life Walkathon** in your community: www.energyforlifewalk.org.

Become part of the cure and make a tax-deductible donation to the UMDF.
Make your donation online at www.umdf.org/donate.

Advocate on behalf of UMDF.
Write to your elected officials and ask them to support funding for mitochondrial medicine research. For details, visit www.umdf.org/legislation or call us at 888.317.8633.



**UNITED
MITOCHONDRIAL
DISEASE
FOUNDATION.**

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ABOUT MITOCHONDRIAL DISEASE



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We all have mitochondria.



The mitochondria in the cells throughout our bodies are responsible for creating 90% of the energy needed to sustain life and support organ function. When mitochondria malfunction, organs start to fail - people get sick, and even die.

The parts of the body that need the most energy are the most affected.

The heart, brain, muscles, and lungs are often the most affected by mitochondrial disease. It's a difficult disease to diagnose, because it affects every person differently. Children and adults can have seizures, strokes, severe developmental delays, and the inability to walk, talk, see, digest food and a host of other complications. If three or more organ systems are involved, mitochondrial disease should be suspected.

Every 30 minutes, a child is born with a mitochondrial disease.

Mitochondrial medical experts believe that number is closer to one in 2,000. Research tells us that every 30 minutes a child is born who will develop a mitochondrial disease by age 10. Further research indicates that one in 200 people carry a mutation that could develop into a mitochondrial disease in their lifetime. For many, mitochondrial disease is an inherited genetic condition. In some cases, the body's mitochondria have been affected by environmental factors. In other cases, mitochondrial disease seems to be a random occurrence.

What is the prognosis of a mitochondrial disease patient?

This is a tough question to answer. The prognosis depends upon the severity of the disease and other criteria. In some cases, patients are living fairly normal lives with the disease. In other cases, patients may not be able to see, hear, walk, or talk. Affected children may not survive beyond their teenage years. Adult onset can result in drastic changes from an active lifestyle to a debilitating illness in a short amount of time.

Is there a cure for mitochondrial disease?

At this time, **there is no known cure for mitochondrial disease**, but there is hope. We need our breakthrough! Like the enormous impact on mortality that a stem cell transplant has had on those suffering blood cancers... like the life-sustaining maintenance medications that have changed the course for AIDS patients... mitochondrial disease patients need a breakthrough that leads to treatments that alleviate symptoms, slow down progression, and, ultimately, A CURE!

Why should I want to learn more about mitochondrial disease?

Science has linked mitochondrial dysfunction with major diseases like Alzheimer's, Parkinson's, diabetes, autism and even the aging process.

Imagine if we unlock the secrets to prevention and a mitochondrial disease cure! It would truly be a game-changer for millions suffering from other major diseases associated with mitochondrial dysfunction.

Learn more about mitochondrial disease.

Visit www.umdf.org