



## Mitochondrial Disease Fact Sheet

### **Who is MitoAction?**

MitoAction is a Boston-based 501(c)(3) charity incorporated in 2005 (tax ID 55-0899427) that is dedicated to empowering patients and families living with mitochondrial disease through free support, education, and advocacy programs. We believe help today is just as important as research for a cure tomorrow. Visit our website: [www.mitoaction.org](http://www.mitoaction.org).

### **What is mitochondrial disease?**

Mitochondrial disease is a chronic, genetic disorder that occurs when the mitochondria of the cell fail to produce enough energy for cell or organ function. Mitochondria are responsible for creating more than 90% of the energy needed by the body to sustain life and support growth. When they fail, less and less energy is generated within the cell. Whole systems begin to fail, and life is severely compromised.

### **How common are mitochondrial diseases?**

Estimates suggest that 1 in 2,000 people will face a diagnosis of mitochondrial disease. Mitochondrial dysfunction has also been implicated in autism, diabetes, Parkinson's disease, and Alzheimer's disease.

### **What are the symptoms of mitochondrial disease?**

Mito commonly manifests with devastating symptoms such as stroke, muscle pain, extreme fatigue, and organ failure. Depending on how severe the mitochondrial disease is, the illness can range in severity from mild to fatal.

### **How are mitochondrial diseases diagnosed and treated?**

There is no single laboratory or diagnostic test that confirms a diagnosis of mitochondrial disease. Blood DNA and/or muscle biopsies are the best means of diagnosing patients.

### **Is there a cure for mitochondrial disease?**

There are no cures, but treatment can help reduce symptoms, or delay or prevent the progression of the disease. Researchers internationally are working hard to better understand mitochondrial disease.

### **What is MitoAction's mission?**

- To improve quality of life for children and adults affected by the disease.
- To raise awareness about mitochondrial disorders, and their relationship to other diseases.
- To provide specific and practical materials that help patients manage their symptoms.
- To aggregate and connect the international mitochondrial disease community.
- To engage the pharmaceutical industry working toward therapeutic approaches to mitochondrial disorders.
- To create tools that empower patients and caregivers to be advocates for themselves or their children.