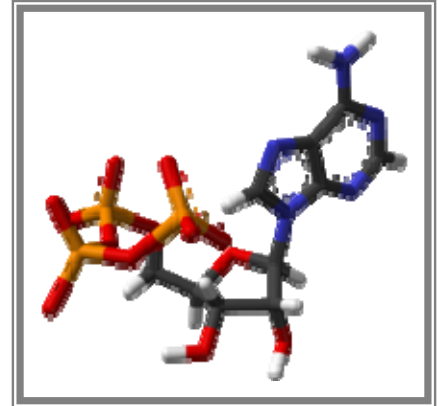


MITOCHONDRIAL DISORDERS:

WHAT HAPPENS WHEN THE CELL'S BATTERIES RUN DOWN?

Mitochondrial disorders are complex inherited disorders that affect the body's ability to adequately produce energy. These disorders affect 1 in 5,000 - 8,000 individuals and are difficult to diagnose and are often overlooked. Many patients are left for months or years to struggle with no answers, numerous difficulties, and with little support from the medical community.

Additionally, recent research indicates that mitochondrial dysfunction contributes to a number of well-known disorders including Parkinson's, Alzheimer's, Huntington's disease, ALS and Muscular Dystrophy as well as deafness, diabetes and heart failure.



When the mitochondria fail to function properly and the energy production inside of our body cells decrease, it is similar to a major city's power plant failing causing either isolated or wide spread problems. Normally, the human body breaks down foods to form energy packets known as ATP that are needed to perform all of its bodily functions. This ATP is created in the electron transport chain of the mitochondria or batteries of our body's cells.

Disorders affecting mitochondria result in decreased energy production that causes impairment of various body functions or even death. Affected individuals can show a wide range of symptoms including any combination of growth difficulties, developmental delays, seizures, vision and hearing problems, problems with temperature stability and irregular heart, kidney and liver function. Muscle weakness and muscle breakdown plague others.

The presentation and prognosis of a particular mitochondrial disorder can vary widely, even among affected individuals within the same family. However, in general, these diseases are progressive and usually result in significant disabilities and early death for affected individuals.

Unfortunately, there is no cure for mitochondrial disorders and treatment is limited and primarily focused on dealing with the problems that already exist.

Virtual Medical Practice's (VMP) mission is to advance the care and treatment of mitochondrial disease and other related disorders. VMP's President, Dr. Fran Dougherty Kendall, brings over 20 years of experience and expertise to mitochondrial disease research and clinical care. She has published extensively in this field and is highly regarded both national and internationally for her work. She is dedicated to promoting awareness and improving the lives of the patients affected with these disorders.