

Metabolic Disorders Information Sheet

Metabolism is the set of chemical reactions that the body uses to maintain life, including energy production, growth and waste removal. A metabolic disorder is anything that interferes with those processes, due to a hormone or enzyme deficiency.

There are hundreds of different metabolic diseases, the most common including phenylketonuria (PKU), mitochondrial disease, maple syrup disease and organic disorders. Each disease blocks the body's ability to change one chemical to another.

Metabolic disorders are rare, and even the most prevalent, PKU, affects less than one in 12,000 individuals.

Symptoms

Symptoms may include

- Muscle weakness and pain.
- Gastrointestinal disorders.
- Cardiac disease.
- Liver disease.
- Diabetes.
- Respiratory complications.
- Seizures.
- Visual/hearing issues.
- Migraines.
- Fatigue.
- Susceptibility to infection.

Treatment

Treatment depends on the type and severity of the metabolic disorder. It may include dietary restrictions, mega doses of a vitamin, medication or surgery.

Educational Implications

Metabolic disorders may result in neurological or cognitive impairments. Some students are susceptible to infection. If the student has growth or physical limitations, a modified physical education program, environmental adaptations and/or adaptive equipment may be beneficial.

Educational Options

Those students whose metabolic disorder adversely affects their educational performance may benefit from special education under the Individuals with Disabilities Education Act (IDEA). To qualify under IDEA, a student must meet eligibility criteria in one of thirteen specific disability categories. IDEA entitles a student with a disability to a free appropriate public education (FAPE) and an individualized education program, including individual goals, objectives, related services, accommodations and modifications.

Students that do not qualify for services under IDEA may qualify under Section 504 of the Rehabilitation Act. To qualify under Section 504, a student must have a physical or mental impairment that substantially limits one or more major life activities (for example learning, breathing, thinking, concentrating, walking, bodily functions). Under Section 504, a student is entitled to equal opportunity, and may qualify for a Section 504 plan that provides regular or special education and related aids and services.

A student with a health condition who does not require special instruction and related services can receive, as appropriate, a wide range of supports in the general education classroom, including accommodations, individualized health plans (IHP), emergency care plans (ECP) and local education agency supports.