# For Your Health

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# **Learning Disabilities**

#### **Definition:**

The federal government in Public Law 94-142 (The Education of All Handicapped Children Act) has defined learning disabilities as follows:

"Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing or motor handicaps, of mental retardation, of emotional disturbance or of environmental, cultural, or economic disadvantage."

Dyslexia or Specific Language Difficulties is a term used to describe a subgroup of learning disabilities.

### Forms of Learning Disabilities:

Learning disabilities occur in many forms such as problems with seeing, speaking, hearing, body movement, communication, logic, etc. Each child or adult with a learning disability is unique; each shows a different combination and severity of problems. The learning disabled person is usually considered to have near average or above-average intelligence. There are, however, significant problems in the learning process.

#### Symptoms:

There are a range of characteristics which affect learning development and achievement. It is important to note that some of these characteristics will be found in all children as part of their normal development. For the learning disabled person, however, once he or she has symptoms, the symptoms do not disappear as they grow up.

Common symptoms include:

- Short attention span
- Poor memory
- Bizarre spelling errors
- Illegible handwriting
- Difficulty following directions
- Inadequate ability to discriminate between and among letters, numerals or sounds
- Poor reading ability
- Coordination problems
- Immature speech
- Difficulty telling time, and telling right from left
- Difficulty sounding out words
- Reverses letters or places them in incorrect sequence



#### Causes:

Although it is still being studied, it appears that learning disabilities are due to mild neurological disorders or a developmental delay in the brain. Inherited factors oftentimes are a cause too. There is little scientific evidence to support that poor vision, jerky eye movements, misaligned or crossed eyes, or poor hand-eye coordination cause learning disabilities.

Stated simply, the eyes function as a camera. After the eyes "take the picture," it is sent to the brain by the optic nerves. The eyes do not comprehend reading any more than a camera interprets a picture. The key to a child's ability to read and understand is based on the brain being able to understand and perceive what is seen by the eyes. Perception by the brain involves more than good vision and sight. Visual training, muscle exercises, perceptual training or hand-eye coordination exercises, therefore, do not improve a child's learning abilities.

This is not to say that eye or vision disorders do not need to be treated. If the camera cannot take a clear picture, it will be difficult for the brain to understand the information. However, eye defects do not cause learning disabilities and children with learning disabilities do not have any greater incidence of eye problems than the general population.

## **Feelings About Having Learning Disabilities:**

A child with learning disabilities oftentimes becomes frustrated and loses interest in schoolwork. Parents should be aware that these children often develop a poor self-image which may result in misbehavior or emotional problems such as withdrawal, anxiety, depression or aggression.

#### What to Do:

If parents suspect that their child has a learning disability, they should first contact the child's teacher or principal. Public Law 94-142 requires the school to evaluate any child who is thought to have a learning disability and to provide appropriate educational assistance. The parents should also contact the child's primary physician in pediatrics or family practice for a medical evaluation. If indicated, the primary physician will refer the child to the Optometry or Ophthalmology clinics for a vision evaluation or to the Ear, Nose and Throat clinic for a hearing test.

Kaiser Permanente Health Plan does not provide testing or treatment for learning disabilities. The testing is best left to learning disabilities specialists or educational psychologists who have special expertise in this area. The psychologists are available through the child's school district.

Once a learning disability has been diagnosed, specific *educational* assistance is the best treatment. There is no real evidence to demonstrate that diet, vision training, Irlen lens tints, etc., improve learning skills. We do not advocate these measures and we urge parents to seek remedial education through the child's school as soon as possible.

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