Understanding Strabismus and Amblyopia

Good vision takes a team effort from the eye muscles, eyes, and brain. When the eyes don't work together, the brain has trouble interpreting what's being seen. This can cause vision problems.

How the Eyes Work Together
Each eye sees from a slightly different angle. This means that two different pictures are sent to the brain. The brain fuses (blends) these pictures into one 3-D image.

When There's a Problem
When the eyes don't work together, the brain receives pictures it can't fuse together. The brain suppresses (ignores) signals it can't use. In most cases, signals from only one eye are ignored. The signals from the other eye are interpreted as a flat image instead of one in 3-D. During suppression, normal vision can't develop in the eye that's being ignored. This is known as amblyopia.

Reasons Why the Eyes Don't Work Together
Alignment Problems (Strabismus): One eye looks in a different direction from what it's trying to see. This may be constant (all the time) or intermittent (some of the time).

Focusing Problems: One or both eyes have trouble focusing. The brain receives blurry pictures. Focusing problems include being nearsighted (distant objects appear blurry), being farsighted (nearby objects appear blurry), and having astigmatism (both nearby and distant objects are distorted). In some cases, focusing problems are worse in one eye than in the other.

Other Problems: Rarely, sight in one or both eyes can be blocked by a problem such as a cataract (cloudy lens). An eye doctor can tell you more about this.

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