Physical Therapist

Physical therapists work with people to help them be more active. Children who have been in an accident or have a condition that limits their movement might work with a physical therapist. The physical therapist will teach the child how to overcome their difficulties and move more freely.

Career Path

A licensed physical therapist must have a Bachelors of Science degree in Physical Therapy and pass a national exam. Many physical therapists also have a Masters Degree.

A good physical therapist (PT) must be an expert in how the bones and muscles of the human body work together to help you move. The PT acts as a teacher and a coach, first showing you how to move and then giving lots of encouragement. Some children need physical therapy for a short time after an accident or brief illness, while other children with conditions such as cerebral palsy, may need physical therapy for many years.

PT's work hard, but they know their patients work even harder. It can be frustrating when your muscles don't work the way you want them to! At the Cleveland Clinic, PT's are trying a new technique for helping patients in wheelchairs learn to sit up straighter and control their head and arm muscles better. This special technique rewards patients for using their muscles properly by playing their favorite video. If the patient moves incorrectly, the video stops playing until they correct their movement. In this way, the patient can learn which muscles to use to move in a certain way.

Technology Spotlight

The machine used in the technique, called *Surface Electromyelography* or sEMG, is shown in the picture below. With this special machine, small metal electrodes are taped to the surface of the patient's skin. These electrodes tell the EMG when the muscles underneath the skin are being used. The PT programs a computer within the machine to turn on a video only when the muscles are being used correctly. If the child stops using the muscles correctly, the video goes off. This technique has helped children learn to control their bodies in a very short amount of time. And best of all, it's fun! In the picture on the right, a boy prepares for the therapy he'll soon be receiving.

For more PT pictures, see "Peter's Physical Therapy Book" at:
www.clevelandclinic.org/therapy_book/therapy_05.htp