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Braces

[Information in this handout can be applied to bracing of the back and neck, as well as the upper and lower extremities. Information in this document is in regards to "soft" braces often available over the counter, and is not a substitute for medical advice pertaining to prescription or "hard" orthopedic devices.]

A brace (also called orthosis) is an orthopedic appliance that supports or holds in correct position a part of the body and can allow motion at adjacent joints.

Braces can help reduce pain and prevent further injury if they are worn properly. For example, a lumbar corset can relieve back pain by relaxing muscles and taking pressure off of the lumbar disc. Tennis elbow braces relieve pain by creating a new insertion point for the forearm muscles, which gives a rest to the injured tendon. Some soft braces simply provide compression, which increases mechanoreceptive nerve signals to the brain which can in turn reduce pain (like rubbing your arm after someone has pinched it).

Typically, a brace needs to fit tight enough to restrict movement, but not so tight that it restricts circulation. Your doctor will help you determine if a brace is appropriate for your condition, and will help you get fitted for one correctly.

You may have heard that wearing a brace can be bad for you, that your body begins to "rely" on the brace and your muscles get weaker. The evidence for this is conflicting; however, most studies indicate that even with frequent use, bracing has no muscle wasting effect. With that being said, traditional advice is to use a brace "only when you need it." Orthopedic devices are of little benefit if you are inactive.

Research indicates that braces tend to be more effective during the acute and subacute phases of an injury, which can be anywhere from a few days up to several weeks, depending on the severity of the injury.

If you have any questions about using your brace, feel free to ask your doctor.

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Fayolle-Minon, Isabelle, and Paul Calmels. "Effect of Wearing a Lumbar Orthosis on Trunk Muscles: Study of the Muscle Strength after 21days of Use on Healthy Subjects." *Joint Bone Spine* 75.1 (2008): 58-63. Web.

[&]quot;An Update on Orthotic Devices for the Lumbar Spine Based on a Review of the Literature." *Revue Du Rhumatisme (English Ed.).* U.S. National Library of Medicine, n.d. Web. 26 Jan. 2017.