## Torn ACL not the end of activity for athletes

## By Robert Rupp

An anterior cruciate ligament (ACL) tear is a common injury. The ACL is one of the major stabilizing ligaments of the knee, and it controls movement of the shinbone and thighbone.

Many activities, such as skiing, soccer, and volleyball, require the ACL to stabilize the knee for safe playing. An unstable knee that "gives out" or "shifts" can cause damage to the other knee structures, including cartilage.

A cartilage injury can be painful, and sometimes lead to arthritis. A knee injury that causes swelling and the sensation of a "pop" could indicate an ACL tear.

An ACL injury will not heal once it tears, so orthopedic surgeons highly recommend the ACL be replaced to avoid instability and cartilage injury. If you're concerned about how ACL surgery might affect your athletic performance, rest assured that many active people with a new ACL may safely return to the activities they once enjoyed, including mountain biking or skiing.

ACL surgery has typically involved replacing or reconstructing the torn ligament with a new bundle of tissue, which then heals as a new ligament. The tissue may come from a different part of the knee, such as the kneecap, or donor tissue.

The ACL is composed of two distinct tissue bundles and, until recently, surgeons only recognized and reconstructed one of the bundles. Today, a double-bundle reconstruction is used to fully restore the function of the ACL. A single-bundle reconstruction increases knee stability, but does not fully restore the rotational stability of the ACL like that of a

double bundle reconstruction.

Plus, studies show that the double-bundle reconstruction is a more natural fit for the knee.

The double-bundle approach is a more complex procedure and should be performed only by experienced orthopedic surgeons. The procedure should be considered by those trying to regain a strong and completely structural ACL with stable knee function.

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