

## How orthotics help painful knees

Milton J. Stern, DPM



**Orthotics** can be beneficial in addressing painful knees by providing support, stability, and alignment to the feet and lower limbs. Here's how orthotics help with painful knees:

**Alignment and Biomechanics:** **Orthotics** can help improve the alignment and biomechanics of the feet and lower limbs, which can have a direct impact on knee alignment and function. By promoting proper foot and leg alignment, orthotics help reduce excessive pronation (inward rolling) or supination (outward rolling) of the feet, which can contribute to abnormal forces and stress on the knees.

**Shock Absorption:** **Orthotics** often incorporate cushioning materials that help absorb shock and impact during walking or other weight-bearing activities. By reducing the amount of force transmitted to the knees, orthotics can help alleviate pain and discomfort.

**Offloading Pressure:** In certain cases, knee pain may be caused by conditions such as osteoarthritis, patellofemoral pain syndrome, or meniscus injuries.

**Customized orthotics** can be designed to offload pressure from specific areas of the knee joint, redistributing forces and reducing pain.



**Stability and Control:** **Orthotics** can enhance stability and control of the lower limbs, reducing excessive movement or rotation that may contribute to knee pain. By providing additional support and stability, orthotics help optimize the alignment and function of the knee joint during weight-bearing activities.

**Redistribution of Forces:** **Orthotics** help distribute weight and forces more evenly across the feet, ankles, and lower limbs. By promoting better weight distribution and reducing excessive stress on specific areas, such as the knee joint, orthotics can help alleviate pain and minimize further damage.

**Correction of Biomechanical Issues: Orthotics** can address underlying biomechanical issues, such as overpronation or oversupination, that can contribute to knee pain. By correcting these issues and optimizing foot and lower limb function, orthotics help reduce abnormal forces and stress on the knee joint.

It's important to note that the effectiveness of orthotics in relieving knee pain may vary depending on the underlying cause and individual factors. Consulting with a healthcare professional, such as a podiatrist or orthotist, is recommended to assess your specific condition, determine the cause of knee pain, and recommend the most appropriate type of orthotic for your needs. Additionally, addressing knee pain may require a comprehensive approach that includes other treatments, such as physical therapy, exercises, or medications, orthotics as advised by your healthcare provider.