



April Is National Foot Health Awareness Month!

**'As Eyeglasses Are to Eyes,
Custom Orthotics Are to Feet'**

According to the American Podiatric Medical Association, approximately 20% of Americans experience at least one foot problem annually. Some are related to misalignment and abnormal motion and spread their cheer to the ankles, knees, hips, and lower back. In these situations, custom orthotics can be beneficial.

Custom orthotics are prescriptive devices that fit inside your shoes to provide support, correct misalignment, improve function, and alleviate pain and pressure.

The first stop on the road to custom orthotics is a biomechanical assessment to evaluate alignment and function in your feet and legs, fluidity of movement, flexibility, and soft-tissue strength. Next, we'll recommend the best type of orthotic for your condition and lifestyle. Then we'll create a **custom-fitted** orthotic – every foot is unique.

Custom orthotics can be preventive in nature and also help alleviate a wide range of conditions, such as plantar fasciitis, bunions, arthritic conditions, and peripheral neuropathy, to name a few. They can also offload pressure to minimize the risk of diabetic foot ulcers.

Over-the-counter (OTC) inserts sometimes come in handy for minor issues – for instance, they can provide cushioning and support for people who are on their feet all day or who have flat feet. However, OTC inserts are mass-produced (no customization), utilize inferior materials, typically last only six to 12 months, and the wrong insert might worsen a condition. Custom orthotics' lifespan is two to five years, which, in addition to superior materials, customization, and podiatric oversight, accounts for their higher cost.

During National Foot Health Awareness Month, make a vow to never take your feet and ankles for granted. If you experience problems, our practice stands ready to help.

About the Doctor



Joseph Baker, DPM, FACFAS

Originally from Michigan, Dr. Baker has enjoyed calling Tucson his home since 2016. He has been in practice since then, helping to treat a wide range of patients of different ages and stages of life. His professional interests include the treatment of ankle arthritis, and instability, complex foot and ankle pathology, and sports medicine. He has advanced training in foot and ankle reconstruction, arthroscopic techniques, ankle replacement, and bunion correction. Outside of work, he enjoys spending time with his family and staying active.

Locations

Rosemont
Oro Valley

Evening the Score

The majority of people have legs of differing lengths. For most, the difference is so small, it doesn't cause any gait issues or secondary health effects. However, when the gap is bigger (approximately 1/4" or more), abnormalities and discomfort become more evident – a condition known as leg-length discrepancy (LLD).

Although more widespread among children, LLD can crop up later in life too. LLD messes with the body's alignment, balance, and center of gravity. In addition to gait issues, foot deformities may develop, susceptibility to stress fractures increases, overuse injuries become more common, and the risk of tripping and falling rises.

LLD can also cause knee, hip, and back pain and might lead to headaches, nerve damage, and arthritic conditions. LLD's symptoms can vary widely from person to person, even for those who leg-length discrepancy is equal.

LLD can be either "structural" or "functional." Structural LLD is a true difference in the length of the tibia (shin-bone) or femur (thighbone) from leg to leg. It can be hereditary or develop following a fracture or other trauma. Surgeries such as knee or hip replacement can cause structural LLD too.

Functional LLD doesn't involve unequal bone length. Instead, poor foot or body mechanics, weak core muscles and hips, or curvature of the spine, among other reasons, paves the way for functional LLD.

Upon a thorough examination, if we determine that you have LLD, treatment may include a doctor-approved heel lift or a customized insole. In more severe cases, leg-lengthening or -shortening surgery may be advised. In some situations, we may need to coordinate with other healthcare professionals to remedy your situation.

Mark Your Calendars

- Apr. 1** April Fools' Day: Scotland suffers fools gladly; they celebrate for two days!
- Apr. 5** Deep Dish Pizza Day: The cheese goes right on top of the crust and *beneath* the sauce.
- Apr. 12** Passover begins (sundown): Passover is to be celebrated for 7 days, per the Torah. The number "7" has significant meaning in the Bible.
- Apr. 13** Palm Sunday: John is the only Gospel writer who specifically mentions "palm" branches.
- Apr. 18** Good Friday: In 221 AD, Julius Africanus quoted non-Christian historian Thallus from 50 AD, who mentions darkness and an earthquake upon Jesus' death.
- Apr. 20** Easter: Ukraine is noted for *pysanky*, eggs decorated with complex geometric and floral designs.
- Apr. 22** Earth Day: The Earth isn't completely round. It bulges around the equator ... like many of us do.



Coming to Our Defense

The immune system is an amazingly complex network of organs, cells, and proteins that defend the body from harmful microbes and toxins. Immune system heavy hitters include the spleen, thymus, bone marrow, and overall lymphatic system, but lesser-knowns contribute too.

For instance, the skin is a waterproof barrier that secretes bacteria-killing oils. Saliva and tears contain antibacterial enzymes. Mucus in the lungs traps foreign particles, and small hairs (cilia) coax the particles upward to be coughed out.

The immune system is a coalition of the innate and adaptive immune systems. Your innate immune system is your first line of defense. It reacts quickly to threats but always in the same generalized way ("nonspecific response"). It also detects infection and dispatches immune cells to the scene that spur an inflammatory response: short-term mild pain, swelling, discoloration, and possibly fever.

When microbial intruders breach the innate system's defenses, the adaptive immune system kicks in. It is highly specific, precisely targeting the troublemaking microbes. It takes some time to gather intel on the intruders, resulting in a slower response than the innate system. But once gathered, the adaptive system's attacks will be more accurate and efficient, and it will never "forget." If the provocateur dares to show its face again, the adaptive immune system will pounce immediately.

An overreactive immune system, however, goes into hyperdrive against certain toxins or fails to distinguish between harmful microbes/particles and harmless ones, triggering reactions to various foods, pet dander, insect stings, medications, pollen, etc. that range from mildly annoying to life-threatening (e.g., anaphylaxis). In addition, for unknown reasons, sometimes a person's immune system attacks their own body. "Autoimmune" diseases such as rheumatoid arthritis and multiple sclerosis fall under this category.

Grilled Lamb with Pistachio-Olive Tapenade

Servings: 4; prep time: 5 min.; cook time: 20 min.

Grilled lamb and pistachio-olive tapenade – a marriage made in heaven!

Ingredients

- 1 lb. lamb loin chops
- 1/2 tsp. salt
- 1/2 tsp. pepper
- 1 large shallot, roughly chopped
- 1 clove garlic, roughly chopped
- 1 cup chopped Italian parsley
- 1/3 cup chopped mint
- 1/2 cup pistachios, shells removed
- 2 tbsp. fresh lemon juice
- 1/4 cup olives, pitted
- 1 tbsp. capers
- 1 tsp. red pepper flakes
- 1/2 cup extra virgin olive oil

Directions

1. Allow the lamb loin chops to come to room temperature, then evenly sprinkle them with the salt and pepper.
2. Heat a grill pan or heavy-duty skillet over medium-high heat.
3. While the lamb is coming to temperature and the pan is heating up, make the tapenade. In a food processor, combine the shallot, garlic, parsley, mint, pistachios, lemon juice, olives, capers, and red pepper flakes. Pulse until everything is finely chopped. With the food processor running, slowly add in the olive oil. Purée until the tapenade is well combined, similar to the consistency of a thick pesto. Set aside.
4. Grill your lamb for 4–5 minutes on each side. You can tell your lamb is done by lightly pressing on the surface. If it gives easily but is still firm to the touch, it is done and cooked to medium rare. If you prefer your lamb more well done, cook until the texture when pressed is more firm, with little to no give. Remove from the heat and allow to rest for 5–8 minutes.
5. Serve with the prepared tapenade.

Recipe courtesy of thedomesticdietitian.com and *The Mediterranean Diet Made Easy Cookbook*.



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APRIL IS
NATIONAL
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AWARENESS
MONTH!
SEE PAGE 1

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Second-Toe Woes

Metatarsophalangeal (MTP) joints connect your metatarsal bones – those five long bones toward the top of the foot – to the toe bones. Ligaments surround the MTP joint, forming a capsule to enable the joint to function properly. When these ligaments become inflamed, it's called capsulitis.

In the foot, the second toe is most susceptible to capsulitis, due to foot mechanics. If a capsule is damaged, an onset of pain in the ball of the foot, swelling, and a sensation of standing on a pebble come into play. Capsulitis is a progressive condition. If left untreated, the pain will intensify and ligaments may weaken, which can lead to eventual dislocation of the toe and its possible overlapping of the big toe (a.k.a. "crossover toe"). Because capsulitis pain can change a person's gait, it's not uncommon for bursitis, corns, and calluses to join the fray.

Faulty foot mechanics; narrow, unsupportive footwear (e.g., high heels); and going too hard or too long with physical activity place excessive pressure on the ball of the foot, making capsulitis more likely. Other risk factors include having a bunion, tight calf muscles, an unstable arch, direct trauma, and a second toe that's longer than the big toe. Women between the ages of 30 and 60 are most likely to experience MTP joint capsulitis.

Conservative treatments are highly effective for capsulitis in the early stages. However, in advanced stages involving persistent pain or crossover toe, surgery might be the only option to find relief.

Lingering foot or ankle pain is never normal. Schedule an exam at our office to address the issue and improve your quality of life.