



**KALAMAZOO  
PODIATRY**

News and Updates

*May 2025*

# Not All Broken Ankles Are the Same

A “broken ankle” is not a one-size-fits-all description. The ankle is composed of the talus, fibula, and tibia. A fracture might occur to one bone alone or a combination thereof.

The talus is the connector for your leg and foot and helps to transfer weight and pressure across the ankle joint. It is covered with articular cartilage, enabling it to glide along neighboring bones with minimal friction. Talus fractures are typically the result of high-impact events, such as a car accident or fall from height.

Lateral malleolus fractures involve a break of the knobby bone on the outside of the ankle (fibula). Medial malleolus fractures affect the bony knob to the inside of the ankle (tibia). Sometimes both bones are involved in a break (yikes!), which is called a bimalleolar fracture — as serious as it sounds.

Although direct trauma or falls from height sometimes account for these fractures, many times rotational forces that cause excessive twisting, turning, or rolling of the ankle from walking, running, or slipping (e.g., icy conditions) are to blame.

Osteoporosis, a disease that weakens one’s bones, makes a person more vulnerable to ankle fractures. Repetitive stress from activities such as long-distance running or ballet might lead to stress fractures.

Nondisplaced ankle fractures — the bone remains in correct alignment; no pieces broken off — typically respond well to conservative treatment. Displaced fractures (the bone is out of alignment) and fractures involving multiple bones will frequently require surgery to restore stability and may involve screws, plates, etc.

Sometimes a fractured bone pierces the skin, otherwise known as a compound fracture. Compound fractures heighten the risk of infection and other complications and require immediate surgery.

## About the Doctor

Terence D. Bredeweg, DPM



A West Michigan native, Dr. Terence Bredeweg was born and raised in the Grand Rapids area. He earned his bachelor’s degree in cell and molecular biology from Grand Valley State University, then moved to the Chicago area to earn his doctor of podiatric medicine from the William M. Scholl College of Podiatric Medicine at Rosalind Franklin University.

Dr. Bredeweg returned to Michigan for his podiatric surgical residency at Henry Ford Wyandotte Hospital. He then moved back to the west side to join Kalamazoo Podiatry, and later became a partner in the practice in January 2015. He became lead podiatrist in January 2016, after Dr. Redmond’s retirement from full-time practice.

Dr. Bredeweg believes that spending time with patients, educating them about their condition and treatment options, and helping them feel empowered to make decisions about their health care are key to providing the best outcomes.

In his free time, you might find Dr. Bredeweg reading a book or watching the game. He also enjoys outdoor activities, including golf, fishing, and skiing.



# Thyroid Conditions Cast a Wide Net

The thyroid gland is located at the front of the neck, below the Adam's apple. A healthy thyroid controls metabolism and releases and regulates hormones affecting our nervous system and heart rate, among other functions.

Two prominent forms of thyroid disease include hypothyroidism (underactive) and hyperthyroidism (overactive), with women being 10 times more susceptible to thyroid conditions than men. Hypothyroidism may have repercussions for feet and ankles.

Hypothyroidism can dry out skin. The skin on the soles of our feet may become rough and develop deep fissures, especially in the heel area, which can be painful and lead to infection. Dry, cracked skin can result from multiple factors — being on our feet all day, long-distance running, cold weather, etc. — but an underactive thyroid can't be excluded.

Because hypothyroidism slows the body's metabolism, food is not converted to energy as quickly as it should, and a person may gain weight and feel sluggish. Carrying excess pounds places more pressure on the feet and ankles and may result in foot or ankle pain.

Your feet (and hands) might feel cold all the time and develop a blueish or whitish hue too. Consistent swelling in the feet and ankles could be another sign of hypothyroidism.

Hypothyroidism is also associated with tarsal tunnel syndrome, a disorder in which the tibial nerve is compressed and produces a burning or numb sensation at the inside of the ankle.

If you notice any changes in your feet or ankles, give our office a call. An accurate diagnosis is imperative. If you have hypothyroidism, we will coordinate with your primary care physician or endocrinologist to properly manage it.

## Mark Your Calendars

- May 3** Kentucky Derby: Only three horses ran in 1892 and 1905 ... guaranteed to show!
- May 4** Star Wars Day: In early drafts of the Star Wars screenplay, Yoda was named "Buffy."
- May 11** Mother's Day: According to a 2020 study, pregnant women experience more morning sickness carrying girls than boys (insert your own punchline).
- May 13** Leprechaun Day: Mill Ends Park (Portland, OR) is officially recognized as the world's smallest park and home to a leprechaun colony (reportedly).
- May 18** World Baking Day: In 2014, the world's oldest oven (6,500+ years) was discovered in Croatia.
- May 20** Amelia Earhart Day: To stay awake during long flights, Earhart used smelling salts; she didn't like coffee or tea.
- May 26** Memorial Day: A national moment of remembrance (1 minute) is observed at 3:00 p.m.



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# Canine Noses Know

Dogs' keen sense of smell can be attributed to their approximately 220 million scent receptors, compared to 5 million for our species. Their sense of smell is over 10,000 times more powerful than humans'.

Tests have demonstrated that some dogs can detect a chemical in a solution diluted to 1–2 parts per trillion. For context, it would be akin to one drop of a chemical added to a volume of water that could fill 20 Olympic-size swimming pools.

Dogs are also set up for olfactory success by inhaling roughly 300 times per minute, which constantly provides new odor particles (odorants) for dogs' brains to analyze. In addition, humans breathe and smell through the same airways in their noses. When we exhale, the spent air pushes out odor particles. Dogs, however, have a fold of skin inside their nostrils that divvies up duties. When dogs exhale, the air exits through slits in the sides of their noses. That enables odor particles to linger in the nose and not be swept away with each exhale.

Dogs' powerful sense of smell enables some breeds to be trained to excel at search-and-rescues, bomb detection, combatting drug trafficking, and other important operations. Others are proficient at sniffing out diseases. When we are sick, volatile organic compounds (VOCs) are emitted in breath, blood, sweat, and urine. VOCs often result in changes in body odor, which dogs can detect. Some diseases/conditions that dogs can help detect or manage include diabetes, epilepsy, and migraines. They also show great promise in detecting various cancers.

Researchers' ultimate goal is to eventually develop a device that can match a dog's smelling prowess, thereby bypassing dog training and the unpredictability of working with live creatures.



# Spanakopita Soufflé

*Include with  
Mother's Day Brunch!*

Servings: 2; prep time: 20 min.; cook time: 20 min.

## Ingredients

- 1/4 lb. crumbled Greek feta
- 1/2 cup ricotta or fresh Greek anothotyro cheese
- 4 whole eggs separated plus 4 whites
- 3 tbsp. very finely chopped scallion
- 1 cup finely chopped fresh spinach
- 1/4 cup finely chopped fresh dill
- Salt and pepper to taste
- Pinch of nutmeg

## Directions

1. Preheat the oven to 425°F. Mash the cheeses together in the bowl of an electric mixer. Add the four egg yolks, and whip at high speed with the whisk attachment until smooth and creamy. Remove.
2. Mix in the spinach and dill. Season to taste with salt, pepper, and nutmeg. Lightly butter a two-quart soufflé dish.
3. Wash and wipe the mixer bowl, and beat the egg whites at high speed until they turn into a stiff meringue. Fold the meringue into the spinach-cheese mixture, and pour the mixture into the soufflé dish. Bake for about 25–30 minutes, or until the soufflé puffs up in the dish and acquires a light golden color. Remove and serve immediately.

**Helpful tips:** You can bake a soufflé in anything that will go into the oven, but straight-sided soufflé dishes are recommended for the most even baking. The smaller the baking dish, the less time your soufflé will need to bake. Remember, too, that eggs like gentle cooking, so place the oven rack on the lower third of the oven, where the eggs can bake evenly without browning too much on top at the very start.

Recipe courtesy of [www.dianekochilas.com](http://www.dianekochilas.com).



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# Older Adults Love Pickleball!

Pickleball continues to surge in popularity, and according to the Association of Pickleball Professionals, the age group of 65 and over comprised the second-highest total of players in 2023 (15.4%), second only to the 25–34 age group (16.7%).

Pickleball provides low-impact exercise to improve overall health. The smaller court and playing doubles reduce the amount of running and pounding of foot and ankle joints, but there are still plenty of quick stops and starts, lunging, and twisting movements.

For older adults, strength and flexibility of muscles, ligaments, and tendons aren't what they used to be, and bones can be a bit more fragile. In turn, this can affect balance, coordination, and stability. These factors increase the risk of Achilles tendonitis, Achilles ruptures (partial and full), calf strains, ankle sprains, plantar fasciitis, and various foot and ankle fractures.

Reduce your chances of sustaining injury by staying consistently active. Weekend warriors — sedentary for five days, then full bore on the weekends — tend to incur a higher number of serious injuries.

Wear shoes that support start-and-stop lateral movement (e.g., running shoes won't cut it) and have good tread. Add variety to your exercise regimen, such as walking, bicycling, or Pilates. Stretch before and after play, and don't neglect your calf muscles.

A good exercise for foot and ankle strength is the "alphabet exercise." Check it out on YouTube. If you do injure yourself, don't rush back to the court too soon — as we age, healing times lengthen. Oh, and stay hydrated!

If you sustain a foot or ankle injury, we can expedite your healthy return to the court with a thorough exam, accurate diagnosis, and effective treatment.

