

ACTIVE P.T. SOLUTIONS
...BECAUSE LIFE
SHOULD BE ACTIVE

APTS Monthly



VOLUME X, ISSUE IV

APRIL 2020

NEW Office

Hours:

Monday - 8:00am -
5:30pm

Tuesday - 8:00am -
7:00pm

Wednesday - 8:00am
- 6:00pm

Thursday - 8:00am -
7:00pm

Friday - 8:00am -
5:00pm

Saturday - 8:00am -
1:00pm

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If The Shoe Fits...

A common question asked to healthcare providers almost daily is, "Which sneakers should I buy?" Most patients are usually asking for a "brand" versus a "type" of shoe. Back in "the day", it was much easier to pick athletic shoes by brand because the number of models was limited. Nowadays, almost every company makes 10+ models, so keeping track of the "good ones" is quite difficult. Today there is what would be called "subtypes" of models. For instance, running shoes, walking shoes, and cross-training shoes are all subtypes. So the real question is, "What subtype of sneaker should I be buying?"

Let's start with the first most common mistake made on a daily basis: wearing running shoes to walk in. We need to examine the shoe's purpose. Running shoes are made to run in for approximately one-hour 5-days per week, not to walk or stand in 8-12 hours per day. Wearing running shoes to walk or stand in breaks them down prematurely and subjects your legs and back to the forces you were trying to avoid in the first place by purchasing the running shoes. So, what should you buy to walk or stand in? Typically, the best shoes for walking or standing are either walking shoes or cross-training type shoes. These shoes are made to withstand sustained forces generated through walking or standing. They will last longer and provide the support you are looking for.

The next question is, "What if I wear orthotics?" Most athletic shoes today will accommodate a custom or over-the-counter orthotic. The main thing to keep in mind when buying shoes and wearing orthotics is to be sure that the manufacturer's insole is removable.



By now you have an idea of the type of shoe you are looking for but you may not know where to buy them.

There are many options today for the purchase of athletic and walking footwear. If you shop at large chain retail sporting goods stores, your choices will be limited and

you cannot be sure of the knowledge background of the sales person giving you the advice. While the advice may sound good, it may not be accurate. Most sales people in sporting goods stores rarely have healthcare or biomechanical degrees. It is not a bad idea to ask the person selling you the shoes for their qualifications to provide athletic footwear advice. If you shop online the most comprehensive website for fitness and walking footwear is www.roadrunnersports.com. Shoes are broken down by gender, activity, foot type, and cost. In a pinch, they have a helpline with a very knowledgeable staff. Their return policy is also consumer friendly.

This is another common mistake that is seen clinically each day. Patients spend hundreds of dollars on custom orthotics and then place it on top of the existing insole. Most orthotics should sit on a flat platform. By placing it on an angled or uneven platform, such as the existing insole, it makes the custom orthotic ineffective or even detrimental. If you have recently been prescribed custom orthotics, you should also insert them in new shoes. Placing a new custom orthotic in an old pair of broken down shoes is a waste of money.

Now we pose the question, "What if you actually run?" Choosing running shoes can be a daunting task. There are numerous brands and varying subtypes of running shoes. First, buy running shoes that correspond to your foot type and weekly mileage. Next, only run in your running shoes; don't run in shoes that you walk around in. If possible, rotate at least two pairs of shoes. This will extend the life of the shoes and help prevent injuries. Keep in mind that the materials of the shoe break down long before the shoe looks bad. If you start feeling a strange ache or pain in your legs that you haven't felt before, remember how old your running shoes are. Most running shoes are good for somewhere between 300-500 miles or 6 months. When you get your new shoes, write the date of first use on the heel with a Sharpie® and, if you alternate shoes, number each pair so you don't mix them up.

Whether your foot has a low arch or high arch, and whether you walk, run, or stand, keep in mind that shoes are only half of the equation for foot, ankle, knee, hip, or back pain. Even the best shoes and orthotics in the world cannot replace strong hips. When you feel as though you cannot get a straight answer on footwear, ask your healthcare provider. Healthcare providers that treat and manage sports injuries of the feet, knees, hips, and back should be able to give you straightforward advice on the purchase of adequate athletic and walking footwear.

Article by Dale Buchberger, DC, PT,
CSCS



Soleus pump, start position (top), end position (bottom)

Exercise of the Month: Soleus Pump

The soleus pump exercise is a dynamic flexibility technique for the soleus muscle, which is a deep calf muscle. It is deeper than the gastrocnemius, which is typically the muscle we think of when we hear “calf”, and it does not cross the knee joint; thus, you cannot stretch it unless the knee is bent. The gastroc and soleus muscles have a common attachment at the heel, known as the Achilles tendon. When this is tight, it can cause stiffness of the plantar fascia (the bottom of the foot). The soleus pump will help if you are experienc-

ing pain, inflammation, or stiffness of your plantar fascia.

To perform this exercise, you will want to find a surface that is just higher than the height of your knee. Place the affected foot on this surface and fold up a towel to place under your toes so that your toes are pulled up. Keeping your abdomen on your thigh, bring your weight forward to bend the knee as far as you comfortably can without lifting your heel off the surface. You are feeling for a stretch on the outside of the calf. Once you reach this

point, you will let off the stretch by leaning back slightly, and then come forward again, producing a “pumping” motion with the leg. Continue this pumping motion for 30 seconds, working up to 60 and then 90 seconds. Perform this dynamic stretch 3 times per day to keep the soleus muscle flexible.

Forwarding Medical Records to Your PT

If you are currently or have ever been a patient here at APTS, you may have been asked to have all diagnostic imaging or office notes from a referring doctor forwarded to the office prior to your initial evaluation. You may have found yourself asking, “Why do they need that?”

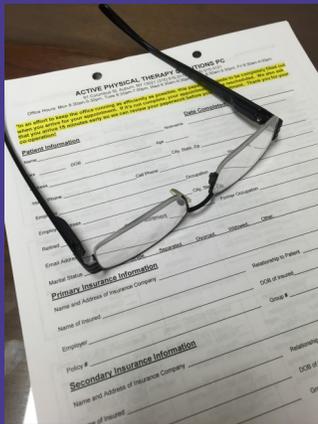
During your initial evaluation, the physical therapist will meet with you one-on-one. Your evaluation will include a thorough history of your injury as well as your past

medical history. Having progress notes from a referring physician can help to prepare your therapist so that they may make the best assessment of your injury.

You will then be informed of your functional physical therapy diagnosis, how your medical diagnosis may affect your functional diagnosis, and the plan of care to efficiently treat your problem. Certain diagnostic findings can indicate whether to focus on or to avoid certain exercises that will be included in your physical therapy

treatment plan. Knowing this information at the time of your assessment will make your initial evaluation more efficient.

In essence, having as much medical information prior to your initial evaluation will make your first appointment more efficient and your treatment plan more goal specific so that you can recover from your injury faster! Now *that's* an active physical therapy solution!



Active PT Solutions is 11 Years Old!



On Monday, March 23, 2020, Active Physical Therapy Solutions turned 11 years old! APTS opened its doors in 2009 with two full-time employees—Dr. Dale Buchberger, physical therapist and chiropractor, and Cara Cuthbert, office manager (who resigned from her position last year). Four months later, Maggie Whitehouse joined the team as

Dale's assistant. Six months after that, Tom Zirilli, PT, came on board. One year later, Linda Schattinger was hired to help at the front desk, and 9 months after Linda, Carolyn Collier, PTA, joined the provider team to assist Tom. In the summer of 2018, Sue Fiermonte joined the APTS family to work at the front desk. And most recently, in January 2020, Claire Sargent, DPT, joined

the clinical team.

Thanks to all of you, our patients, who have remained loyal to us all these years. We truly appreciate your business and referrals, and we look forward to continuing to work in this community for years to come.



Do High Top Sneakers Prevent Ankle Sprains?



The question of whether or not the high top sneaker will help prevent

ankle sprains has been asked for decades. The only sport to me intimately associated with the ankle sprain and the high top sneaker is basketball. While the sport of basketball was born in 1891 the association between basketball and the high top sneaker did not form until 1917 when the Converse high top sneaker was born. This is the same sneaker that would be later endorsed by Chuck Taylor and, as they say, the rest is history. So while the sneaker material extends above the ankle to the lower leg, the question remains: does this reduce the rate and severity of ankle sprains?

There have been several different scientific studies performed that have compared high top sneakers to low top sneakers and their relationship to ankle motion and to ankle sprains. There are studies that show reduced inversion motion (the motion that typically results in an ankle sprain) at the ankle while wearing high top sneakers. While some studies show a reduction in ankle sprains with high top sneakers, there is no clear-cut data that proves high top sneakers are superior in the prevention of ankle sprains. The majority of studies performed are also very low in numbers and research strength. So while several studies have been performed, there is still the need for quality research.

To understand why the research of sneaker type and the relationship to ankle sprains remains inconclusive, we have to go back to the basic anatomy of the ankle and how the shoe design matches up with ankle anatomy. Instead of asking the question, “do high top sneakers prevent ankle sprains?” we should ask the question: “where do ankle sprains occur?” The most common type of ankle sprain is known as the *inversion ankle sprain*. This sprain occurs at the subtalar joint of the ankle. The *subtalar joint* is located below the two bony prominences on the inside and the outside of the ankle. When you “turn your ankle” excessive motion occurs at the subtalar joint. This excessive motion results in abnormal strain to the ligaments on the outside of the ankle. If all of our protective systems fail, the force results in a sprain or tearing of the ankle ligaments.

We need to remember that the sneaker and/or brace are a fail-safe system only designed to provide support and protection once our natural protective mechanisms fail. Our brain is the first line of protection utilizing reaction time. If our reaction time is slow, we move to the next line of protection: the muscles and tendons that cross the ankle joint. If those fail, the ligaments are next. If the ligaments fail, we are left with any external support such as a brace and lastly the sneaker. With the lighter more flexible materials that basketball sneakers are made of also allow the foot to slide on the platform. In many cases, the foot slides off the platform and tips downward putting the ankle sprain in motion. This usually occurs as the player drives in one direction and comes to an abrupt

stop to reverse direction or set for a shot.

Low top sneakers do not cross the subtalar joint and consequently do not supply any external support. Therefore, from an anatomical perspective, this type of shoe provides no additional protection. The high top shoe extends above the subtalar joint and therefore places the softest part of the shoe material at the subtalar joint. While the high top does provide some protection by limiting ankle motion, the design places the weakest part of the shoe at the point where the strongest part is needed. So if we match anatomy with shoe design, we end up with what is known as a mid-top sneaker. The mid-top sneaker places the stiffest part of the sneaker material at the subtalar joint. If you combine the mid-top sneaker with a lightweight figure-8 style brace, it will provide the best anatomical fail-safe system of protection against ankle sprains. This is an area that should be studied in greater detail.

With about half of all NBA players and the majority of college players wearing low top sneakers, there is very little talk about a system that combines a strap like brace that produces a “heel-lock” effect with a mid-top sneaker. In effect, the use of high top sneakers to prevent ankle sprains has been propagated on a myth that the extra material will prevent the ankle sprain. At the end of the day, the best protection against ankle sprains is a system that is directed at the anatomical region where the ankle sprain occurs.

Article by Dale Buchberger, DC, PT, CSCS

While the high top does provide some protection by limiting ankle motion, the design places the weakest part of the shoe at the point where the strongest part is needed.

APTS Recipe Box: AIP Orange Teriyaki Meatballs



AIP stands for Autoimmune Paleo Protocol, and it is designed to avoid even the Paleo-friendly foods that could contribute to inflammatory issues. (See page 4 for more info) These little meatballs are

bursting with flavor.

Ingredients: Meatballs: 2 lbs ground chicken, 1/2 cup finely chopped green onions, 2 tsp

orange zest (2 oranges worth), pinch of salt.

Sauce: 2/3 cup of fresh orange juice (juice of 2 navel oranges), 2 tsp grated ginger, 1/4 cup coconut aminos (a replacement for soy sauce), 1 tbsp apple cider vinegar, 1 clove crushed garlic, 1 tbsp honey.

Instructions: In a bowl, mix ground chicken, orange zest, pinch of salt, and green onions. On a parchment lined cookie sheet, form 2-1/2-inch sized meatballs. Bake at 350 until internal temperature reaches 170 degrees, about 30 minutes.

In a saucepan, add coconut aminos, grated ginger, garlic, honey, vinegar, and fresh orange juice.

Bring to a simmer and reduce until sauce coats the back of a spoon. It will simmer for about 10 minutes and then start to watch it closely. It will start to foam and bubble as it is reducing and almost ready. You want the sauce to be the consistency of maple syrup.

When meatballs are cooked, place in a bowl and drizzle with the sauce. Gently toss to coat all the meatballs.

Source: <https://jessicaflanigan.com/recipe/aip-orange-chicken-teriyaki-meatballs/>



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Get Well...Get Active...Be Active

Newsletter Edited by Carolyn B. Collier, PTA

**At Active Physical Therapy Solutions,
we utilize the most cutting edge
treatment and management
techniques available. Our goal is to
deliver the best possible healthcare in
a friendly, caring, and well-organized
environment. Our staff is here to
provide active solutions to achieving
your personal goals!**

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Nutrition 101: The Anti-Inflammatory Diet, Part I

Inflammation is at the root of most diseases that plague our society, including but not limited to arthritis, heart disease, diabetes, high blood pressure, asthma, and inflammatory bowel disease. By addressing the inflammation with anti-inflammatory foods, the symptoms of these diseases can be alleviated or even cured.

Inflammation in a healthy body is the normal and effective response that facilitates healing. The immune system brings its army of white blood cells to the area of concern via increased blood flow. When the immune system overreaches and begins attacking healthy body tissues, we see an autoimmune disorder like leaky gut, arthritis, fibromyalgia, celiac disease, or irritable bowel disease causing inflammation in otherwise healthy areas of the body. Even with diseases that aren't autoimmune, inflammation can still play a role as the body continuously tries to heal the tissues in a given area.

When talking about inflammation, it becomes vitally important to rethink our typical diets. To move toward an anti-inflammatory diet and anti-inflammatory foods, we must move away from the abundance of overly processed, unbalanced diets of the West and toward the ancient eating patterns of the

Mediterranean, which includes plenty of fresh fruits and vegetables, little to no red meat, no chemicals or meat additives, and an abundance of omega-3 foods.

Small, gradual changes are easier for the body to adapt to and can make you less likely to go back to your old ways. So rather than emptying your pantry and sailing off to the Mediterranean, you can pursue an anti-inflammatory diet one step at a time. By adding in the anti-inflammatory foods that fight inflammation and restore health at a cellular level, you can begin to repair the body without any drastic changes. Once you find foods that heal your body and satisfy your palate, you can remove the ones causing the inflammation without feeling deprived.

Fifteen of the best anti-inflammatory foods you can add to your diet include green leafy vegetables, bok choy, celery, beets, broccoli, blueberries, pineapple, salmon, bone broth, walnuts, coconut oil, chia seeds, flaxseeds, turmeric, and ginger. We will go into more detail of each food in next month's article.

With anti-inflammatory foods filling the diet, you naturally begin to eliminate pro-inflammatory foods and substances. They're not as satisfying as a diet rich in whole foods.

Saturated and trans fatty acids are found in processed foods and cause inflammation as well as increase risk factors for obesity, diabetes, and heart conditions. The same foods are also likely to be higher in omega-6 fatty acids, which are only necessary to an extent. In excess and without the balance of omega-3s, omega-6s actually create inflammation in the body. Sadly, the typical American diet tends to contain 14-25 times more omega-6 fatty acids than omega-3 fatty acids.

Simple, refined sugars and carbohydrates are more culprits of inflammation. Limiting refined grains is an important factor in an anti-inflammatory diet. Whole grains should replace the refined carbohydrates.

Establishing a regular routine of physical activity can help prevent systemic inflammation from building up or returning. An active life fueled by fresh, whole anti-inflammatory foods and unrestricted by processed, toxic compounds can set you on the path toward ridding your body of inflammation!

Article by Carolyn Collier, PTA

Source: <https://draxe.com/anti-inflammatory-foods/>