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

#### **Office Hours:**

Monday -8:00am - 5:30pm Tuesday -8:00am - 7:00pm Wednesday -8:00am - 5:30pm Thursday -8:00am - 5:30pm Friday -8:00am - 4:00pm Location: 91 Columbus Street Auburn, NY 13021 P: (315) 515-3117

#### INSIDE THIS ISSUE:

Not All Cardio	1-2
Equipment is Safe	
Exercise of the	2
Month: Standing	-
Hamstring Stretch	
Dr. Buchberger	2
Speaks at SWIS	
What Exactly Does a Healthy Diet Mean?	3
APTS Recipe Box:	3
Paleo Peppermint Bark	
Nutrition 101: How	4
to Avoid Holiday	
Over-eating	
DEADLINE FOR FOOD	
PANTRY DONATIONS IS	

DECEMBER 16!

variety of leg or lower back injuries.

Treadmills provide an avenue to per-

form weight-bearing cardiovascular exercise year-round in a controlled environment. Walking or running on a treadmill is more forgiving to the joints of the lower extremities than walking or running on the street. However, if you have lower back pain, you may want to avoid long periods of inclined running or walking. Perform short intervals of inclined walking or running with longer periods of flat walking or running instead. If you are planning on



running a race, you should mix outside running with treadmill running. The rotating tread helps your legs through the gait cycle; therefore your hamstring muscles in the back of your thigh don't work as hard. Training on a treadmill and racing outside can result in a leg injury.

Elliptical machines have become very popular because they afford you the opportunity to exercise your arms and legs in a non-weight-bearing method. If you have hip, knee, or ankle pain, the elliptical can be a reasonable method to maintain cardiovascular fitness. If you have any type of back problem, the elliptical can aggravate the pain. While the elliptical eliminates any pounding force on the lower extremity, it increases the rotational and shear forces through the lower back. The rapid rotation causes a wringing mechanism that can further injure the discs of the lower back.

DECEMBER 2015

Stair steppers can be a good choice for cardiovascular exercise and weight loss. They are low impact and can work the hips and core and can even help with balance. If you have good enough balance that you can use the stepper without using the handles, your upper body will get a workout as well. However, if you have excessive degeneration in the hips or knees, this may not be an option. If you have a back problem but can maintain an upright posture and avoid leaning on the handrails, this may be a low impact option for your cardiovascular needs.

Rowing machines can provide an effective total body workout. While rowing machines also provide a low impact workout, there are several physical requirements that you must possess in order to use a rowing machine effectively. First, you need to be able to sit for a long period of time. If you have back trouble while sitting, this may not work for you. Good hip flexibility is necessary since your legs come very close to your chest while using a rowing machine. If you have degeneration of the hips limiting flex-

## Not All Cardio Equipment is Safe

VOLUME V, ISSUE XI

Just because most cardiovascular

equipment is low-impact doesn't

mean that it is all injury-proof. There

are several different types of cardio-

vascular equipment, including tread-

mill, stair stepper, elliptical, upright

stationary bike, recumbent stationary

bike, and rowing machine. Each one

has its benefits and its disadvantages.

Your choice of cardiovascular equip-

ment should take into account any

particular medical problem that you

The first and most prominent disad-

ment is excessive cost. If you want to

bring cardiovascular equipment into

proposition. When it comes to car-

diovascular equipment, you get what

you pay for, but that doesn't mean

you can't find a deal if you look for

Stationary bikes are a convenient way

to develop cardiovascular fitness and

lose weight. They are a good choice if

you have injuries to the hip, knee, ankle, or foot. In order to lose

weight, you will need to either cycle

increase the intensity of the workout.

If you have back pain, the upright bike

cumbent bike. The seat adjustment is

workout. Fortunately, most upright

and recumbent bikes have easily ad-

bikes work well as a cardiovascular

alternative to running if you have a

for an extended period of time or

may actually be better than the re-

key to the comfort of any bicycle

justable seats. Upright stationary

your home, it will be an expensive

vantage of all cardiovascular equip-

may have.

one!

# APTS Monthly

#### PAGE 2





Standing hamstring stretch, start position (top), end position (bottom)

#### **Exercise of the Month: Standing Hamstring Stretch**

The hamstring muscles are a group of 3 muscles that tighten up quickly and can be overworked, depending on your posture. One often doesn't realize the hamstrings are tight until movement patterns are affected or until the onset of knee or back pain. Hamstring stretches are a necessary part of training in any sport and are useful in the maintenance of good posture.

Our postural habits contribute to hamstring tightness. We do a lot of sitting and standing in our sedentary culture. Sitting lengthens our gluteal (buttock) muscles,

making them weak. We then must rely more on our hamstring muscles when standing to keep us upright.

Stretching hamstrings is also important to prevent back injuries. Tight hamstrings prevent the forward tilt of the pelvis when bending, causing more bending of the lower back.

To stretch the hamstring muscle, start with your foot flat on a surface, such as a low table or stool. Bend your knee as much as possible (buttock to heel), while resting your chest on your thigh. Reach your opposite arm across your

body to grab and hold the outer foot or ankle. Straighten your knee by leaning back, putting your weight on the opposite leg. Try to keep your chest on your thigh as you straighten your knee. You should feel this stretch in the back of your thigh comfortably, not painfully. Back off on the stretch if the pain becomes a 6/10 or greater on the pain scale.

Hold this stretch for 30-60 seconds, and perform 3 different times per day. You will notice your flexibility improving fairly quickly if you perform these stretches consistently!

While the elliptical eliminates any pounding force on the lower extremity, it increases the rotational and shear forces through the lower back.

### Not All Cardio Equipment is Safe Con't

ion, this may not be the device for you. If you have chronic shoulder pain, the rower may make this worse.

Most of the cardiovascular machines mentioned have two things in common: they are generally expensive to bring into the home and they can all be monotonous to perform for long durations. Keep in mind that if you have more than one

problem area, you need to take these into account when choosing your method of cardiovascular exercise. Speaking to the healthcare provider that you trust the most with these types of decisions before undertaking this type of exercise program is worth the time. If you are recovering from a surgery, make sure you ask the aspects of your care. surgeon and/or physical thera-

pist if you have reached a stage of recovery allowing return to cardiovascular exercise. You should not be shy about asking physical therapist any questions about returning to a regular exercise routine. As the patient, it is your right to choose a physical therapist with whom you feel most comfortable discussing all

Article by Dale Buchberger, DC, PT, CSCS

Dr. Buchberger (top, third from left) with the expert panel of presenters at SWIS 2015



### **Dr. Buchberger Speaks at SWIS**

Dr. Dale Buchberger was a featured speaker at the Society for Weight Training **Injury Specialists** (SWIS) in Mississauga, Ontario, Canada, on November 13 & 14, 2015. It had been 10 years since this conference was held. Dr. Buchberger spoke on advanced rotator cuff rehabilitation protocols and participated in two expert panel discussions on rehabilitative techniques and chiropractic adjustive procedures in the weight

training athlete. There were over 600 delegates attending the conference.

**APTS** is donating non-perishable food items to the St. Alphonsus Food Pantry again this Christmas. Please bring your donation to the office before December 16 if you would like to participate!



### What Exactly Does a Healthy Diet Mean?



For years we have heard that the cure for many ailments is "diet and exercise". The problem with this simple statement is that it never explains *how much* or *what type* of exercise, and the entire concept of diet can mean different things to different people. States and schools have recently begun making an attempt to modify the diets of students by limiting calories of school lunches. The main ailment we are talking about is obesity. It is the central ailment that breeds many other disorders, such as type-Il diabetes, cardiovascular disease, high blood pressure, kidney disease, arthritis, etc.

The key to explaining the "diet and exercise" equation is education. Unfortunately, educating the population on "diet and exercise" requires what I call a "top-down, bottom-up" approach. Adults unfamiliar with proper ways to eat and exercise need the same education as children and teenagers. This is the first way to break the cycle of obesity. The education must however explain the "why" of diet and exercise not just the "how". Whether it is a patient, family member, or a friend, I have found that they are more compliant with recommendations when they understand "why" and not just "how".

The term "diet" in today's world is commonly used to imply "restriction" of calories. In actuality it really means, "what does your daily con-

sumption consist of?" Total calories are tied to their contents. If the diet is made up of poor quality foods, it is usually of higher calorie content. Diets composed of higher quality foods are usually of lower total calories. And, as is commonplace, it is cheaper to eat badly and more expensive to eat healthy.

Why do we eat the way we do? Simply put: our history dictates our eating habits. For example, my parents were raised in the depression era. Consequently, many of our meals came from that period because they were inexpensive to make and could feed several people for several days. The intangible is that we were also more active in our daily lives. We worked harder with our bodies and burned the carbohydrate-based meals (bread, potatoes, pasta, rice, etc.). Because of technology, many of us are glued to computers, reducing our daily activity level. Breaking these habits is very difficult, and a large part of our daily intake is due to habit.

Eating healthy is not only expensive, it requires work. Once you get into a new habit of eating healthy, it is actually much easier than eating unhealthy because you have fewer choices. For example: if you were to switch from the current "American diet" of processed, prepared, boxed foods that are composed of sugar, salt, fat, processed bleached flour, and hormone injected meats or farm raised fish to the Paleodiet (thepaleodiet.com), your choices would be reduced to anything you can "grow or kill". I know that sounds a little harsh, but it is the nuts and bolts of it.

How does the "American diet" influence body composition? Everything in the current American diet can be found on a list of things to avoid if you have type-II diabetes, high blood pressure, are overweight, etc. This diet has been impli-

cated as the so-called "inflammatory diet" resulting in chronic inflammation and chronic pain. The "American diet" is also designed to maximize taste and not function. I try to explain to the athletes I work with not to focus on taste but focus on what the food is doing for you. Is it helping you build muscle? Recover from a hard workout? Prepare for a big meet or game?

Diet also includes what you drink. Soda is one of the worst things in the world. Carbonated drinks rob the body of calcium and add empty calories. Water is simply the best thing you can drink. How much? Approximately 60% of your body weight in ounces. If you weigh 150 pounds then you should drink 90 ounces of water per day.

The exercise component is a bit easier. In order to improve cardiovascular health, you need to walk 12-20 minutes a day 4-5 days/ week. To lose weight or alter body composition, you need to walk 30-45 minutes 4-5 days/ week. Adding resistance exercise will build muscle and increase your metabolism, contributing to the weight loss. If you perform resistance exercises 2 days per week and walk 4-5 days per week while modifying your food intake, then weight loss is achievable.

Eating and exercising – like anything else – is a lifestyle choice. Eating a healthy diet should not be confused with eating a "survival diet". Exercise is also a lifestyle choice and it doesn't mean having to go to the gym. It means if you have time to watch Dancing with the Stars or Monday Night Football, then you probably have the time to go for a walk!

Article by Dale Buchberger, DC, PT, CSCS

In order to improve cardiovascular health, you need to walk 12-20 minutes a day 4-5 days/ week. To lose weight, you need to walk 30-45 minutes 4-5 days/week.

## **APTS Recipe Box: Paleo Peppermint Bark**

This peppermint bark recipe is the perfect healthy treat for the holiday season, and everyone at your next gathering will love this delicious and refreshing dessert! 2.

5

 Ingredients: 3/4 cup dark chocolate chips;
 3.

 I/2 teaspoon peppermint extract; 2 table 3.

 spoons coconut milk; 3/4 cup coconut butter,
 3.

 melted (by placing the jar in a pan with hot
 water); handful of fresh or dried cranberries,

 chopped.
 4.

#### Instructions:

- I. Melt the chocolate chips in a bowl over simmering water (double boiler).
- Mix in the peppermint extract and coconut milk to the melted chocolate until smooth. If your chocolate becomes thick, add some coconut oil, I tablespoon at a time, until you achieve a desired consistency.
- Line a 9-inch or 8-inch pan with a large piece of parchment paper covering the bottom and all four sides of the pan, and spread the chocolate across the bottom of the pan.
- Freeze or refrigerate until chocolate sets.
- Pour melted coconut butter evenly on top of the chocolate and refrigerate for 5 minutes.

- 6. Sprinkle with chopped cranberries and refrigerate until the coconut layer is firm.
- 7. Break or cut into small pieces and serve.

You can also make your own coconut butter by adding 2 cups of unsweetened dried shredded coconut to a food processor or high speed blender and processing until the coconut turns into a smooth creamy paste.

Serves 10+. Keep refrigerated.

Source: http:// livinghealthywithchocolate.com/desserts/paleopeppermint-bark-3391/



Active P.T. Solutions 91 Columbus Street Auburn, NY 13021 Phone: 315-515-3117 Fax: 315-515-3121 E-mail: cara@activeptsolutions.com website: www.activeptsolutions.com Get Well...Get Active...Be Active 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!

...BECAUSE LIFE SHOULD BE

**ACTIVE!** 

### Nutrition 101: How to Avoid Holiday Over-eating

One of the best parts of the holiday season is getting together with family and friends. More often than not, these gatherings are centered around food and drinks. This environment can create the ideal opportunity to over-indulge. Here are a few tips to avoid overeating at the holidays:

- Eat before the party. This does not have to be a full meal, but a small snack can help you avoid being to hungry at the party. Going on an empty stomach can cause you to look for something quick and you'll be more likely to eat high calorie foods.
- Watch your portion size. You don't have to deprive yourself of your favorite foods. Try taking small portions of higher calorie foods.

 Make it a point to sit down when you eat. It is much easier to overeat when you are standing near or walking past food at a party.



- 4. **Move away from food.** You're less likely to overeat when food is out of reach.
- 5. Find a distraction from food. Play a game with family or friends, take

a walk around the neighborhood, or find something to do that doesn't involve food.

- Cut your portion in half when eating out. Portion sizes are usually oversized at restaurants. Before your start your meal, ask for a container and place half of it in the container before you eat.
- 7. Add healthier foods to your plate. Make it a point to snack on fresh vegetables or fruit when available.

Following these few simple tips (not only during the holidays but all year long, too) can prevent a lot of discomfort in the short term and weight gain in the long term! Don't focus as much on food and have a happy and healthy holiday!

Article by Tom Zirilli, PT