

Therapeutic **Outlook**

Your Guide to Wellness Through Movement

Spring 2010



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*Manual therapy is part of the whole picture that makes up wellness and rehabilitation in a physical therapy setting. Jessica Dorrington PT, MPT, OCS, CMPT, Director
Bethany Physical Therapy. Photo by Curtis Thorne*

Manual Therapy: Why It's for You

*By David Deppeler PT, DSc, OCS, FAAOMPT
TAI Downtown Portland, TAI Director of Clinical Education*

Manual Therapy, or in our case specifically, Orthopaedic Manual Physical Therapy (OMPT), is any “hands-on” treatment provided by a physical therapist.

Treatment may include moving joints, soft tissue, or nerve tissue in specific directions and at different speeds to regain movement, function, and health of tissue. Simply put, it's all about a hands-on approach to help a body realize healthy movement and function.

Most techniques involve active participation from the patient. For

example, a mid back or thoracic joint manipulation may be followed up with an active mid back rotation activity to help keep the new movement achieved by the manipulation.

Manual therapy is a part of the whole picture that makes up wellness and rehabilitation in a physical therapy setting. It is typically used in addition to exercise and education, which are basic building blocks of physical therapy. Manual therapy is that smaller, but very significant part of treatment that helps a body respond best to the foundation of exercise and education.

For example, a physical therapist might manipulate



*David Deppeler PT,
DSc, OCS, FAAOMPT*

a joint of the mid back (manual therapy) to help improve movement and decrease pain. This could be followed up with a therapeutic exercise to improve rotation and breathing (exercise). Lastly, the physical therapist provides instructions on the best ways to achieve relaxed and comfortable posture (education). All three parts are important and serve to complement each other to achieve the best results.

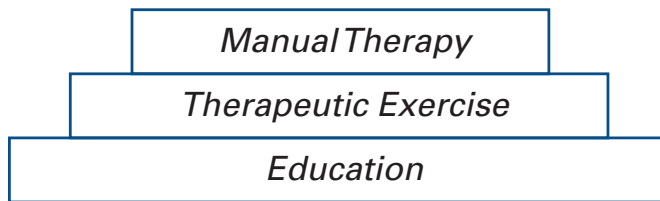


Fig 1. Building blocks of effective physical therapy treatment in many conditions involving muscle, joint, and nerve tissue problems.

OMPT Education Training

Physical Therapy education in the United States has moved to a doctorate level of education, and most programs include the beginnings of OMPT. Certification, or the bulk of OMPT training, usually occurs after a therapist graduates and gets licensed. A physical therapist may elect to complete a post graduate program or fellowship program in orthopaedic manual physical therapy. OMPT certification through fellowship is under the broader, board-certified specialization of Orthopaedics. Most training programs require about four years of post graduate training and a rigorous examination process that is combined with full time clinical practice. All TAI therapists are encouraged to pursue OMPT certification. It is a big part of its culture.

Why would you want manual therapy?

There is more than one reason why manual therapy is beneficial for anyone seeking physical therapy care for joint, soft tissue, or nerve tissue problems. One simple, yet significant reason is the fact that you'll be working with a therapist who has demonstrated a commitment to education.

As we mentioned, an OMPT education is rigorous. Our therapists are committed to education, which is a reflection of their commitment to Physical Therapy and the patients we serve. Manual therapy training is a clear demonstration of a therapist's commitment and interest in providing the best care possible.

The most obvious reason to pursue treatment with a therapist trained in OMPT is for the broad scope of

treatment options that therapist may potentially deliver. Recovery is more likely to be faster and more complete when manual or hands-on techniques are used to compliment an exercise program and general education on activity.

In our previous example of the thoracic or mid back manipulation, it is quite possible that the person who received exercise and education on posture would still improve without manipulation. But in this case, the manipulation will help the person reach a pain-free state sooner and with better motion. Simply put, the progress will be faster and more complete.

While orthopaedic manual physical therapy is not the only treatment of importance in modern day physical therapy, it is often a very important step in helping the truly beneficial effects of exercise, proper movement, and posture to shine through.

TAI is proud of the commitment our therapists have in pursuing manual therapy training as part of their commitment to you.



Conditions We Treat...

LOW BACK – COMMON DIAGNOSES

- Sprains
- Disc Disorders
- Degenerative conditions
- Post Surgical
- Muscle Imbalance
- Arthritis
- Stenosis
- Joint Pain
- Nerve problems
- Sacral Iliac Dysfunctions
- Piriformis Syndrome

HIP – COMMON DIAGNOSES

- Sprains
- Tendonitis
- Bursitis
- Arthritis
- Labral tears
- IT band syndrome
- Degenerative changes



The Battle of the Bulge

By Jeffrey R. Blanchard PT, MS, OCS
Director, TAI Valley Physical Therapy South

Many of us set New Year's resolutions every year and some of the most common and important resolutions have to do with improving our health. Recent studies found that over 60 percent of all Americans are overweight and 33 percent are considered obese, so it is not surprising to find that weight loss is one of the most popular goals each year.

Unfortunately, our American lifestyle does not lend itself toward effective weight loss.



Jeffrey R. Blanchard
PT, MS, OCS

A person is considered obese when his or her weight is 20 percent or more above what is considered their normal weight. This can create a myriad of other problems, including high blood pressure, Type II Diabetes, heart disease and breast, colon, and prostate cancer. Obesity also leads to a more rapid breakdown of our joints and,

therefore, an earlier onset of osteoarthritis. Significant obesity has been found to steal as many as 20 years from a normal life time and can diminish the health and well-being of the remainder. As a result of these and other issues, obesity costs the economy a shocking \$117 billion dollars per year!

There are many different causes for obesity in our society. As a nation we have grown more sedentary as technology has advanced. Gone are the days of scrubbing clothes and dishes by hand or clearing land to plant crops to feed ourselves. Today, many jobs principally require a computer, desk, and chair to get things done. Then, after a long day's work sitting at the computer, we come home and eat highly processed, fattening foods, followed by an evening of watching our favorite TV shows on the couch.

The number one strategy to prevent or treat the obesity epidemic is simple: *burn more calories than you consume!* The best ways to achieve this goal are to simply move more and consume less.

Move More

If you are not taking time out of your busy life for some form of exercise, your metabolism will slow more and your ability to burn calories will decrease. Exercise should include the following:

At least 30 minutes of cardiovascular exercise 3 - 5

times per week, depending on your fitness level. This is the kind of exercise that increases your heart rate and keeps it elevated. Don't exercise so hard that you cannot carry on a conversation. Keep it just below that level.

Perform 30 minutes of strength training 1 - 3 times per week, depending on your fitness level. Science has shown that if you maintain your muscle mass, your body will simply burn more calories, even at rest! You lose roughly three percent of your muscle mass for every year past your 30s when you don't maintain it through exercise. Work at it and you can slow that muscle loss to a crawl!

Look for opportunities during daily life to move a little more.

- Park farther away from the store
- Take the stairs
- Look for excuses to walk or cycle somewhere rather than drive
- Turn off the TV and walk away from the computer.

Set a time limit and then do something that requires movement!

Consume Less

Much of the obesity epidemic in America can be traced to two primary eating problems. We eat too much and we eat junk! By choosing foods wisely and decreasing our portion sizes, we can have a positive impact on our weight.

Here are a few strategies.

- Eat smaller portions and more frequently
- Add another fruit and vegetable to your plate
- Plan your meals and grocery list out for the week so that you can avoid the last-minute fast food run
- Stay away from soda pop. Drink more water!
- Pack your own lunch to work. Going out to eat has been linked to over eating and therefore to obesity.

When you are pondering how to improve your health this year, make exercise and diet a part of your strategic plan for a healthier you. You may be surprised that some of those nagging pains just go away after you shed some of those extraneous pounds.

If pain is getting in the way of your exercise designs, ask your physical therapist about what you might modify in order to still get the exercise necessary to help you keep the weight off.



Our PTs are Passionate About Their Work

By Stephen E. Anderson PT, DPT, CEO, Therapeutic Associates

Therapeutic Associates is a “Learning Organization.” It is a value that we continually strive to accomplish to improve our physical therapy clinical skills.



Stephen E. Anderson PT, DPT, CEO

We have a full time Director of Clinical Education, David Deppeler PT, DSc, OCS, FAAOMPT, who ensures every-

one at every level continues to strive toward excellence.

All graduates of physical therapy schools now earn a doctorate (DPT). For those who graduated before the profession adopted this new degree there are transitional Doctorate of Physical Therapy programs to bring the profession to a higher and consistent level as a doctoring profession. To make sure I “walk the talk,” I went back to school in 2009 and completed a program to become an official DPT.

After 30 years with TAI I am still learning and working hard to gain knowledge and stay on the cutting edge of our profession. All physical therapists who join our company are encouraged to engage in programs that will add to their educational credentials. This may include

“Our physical therapists enter the field with doctorates, but we approach it as just the beginning of the learning process.”

specialty certification from the American Physical Therapy Association (APTA) and/or a degree from an accredited program of post graduate level. TAI has a formal mentoring program where experienced PTs with advanced degrees help newer PTs fine-tune their differential diagnosis and treatment skills.

Dr. Deppeler has also instituted

an orthopaedic residency program that is credentialed by the APTA, and this year we will add a sports physical therapy residency as well.

TAI has multiple Fellows of the American Academy of Orthopaedic Manual Physical Therapy in our clinics and many more are training and working toward that goal. Our professional staff members have come to appreciate all the educational opportunities we have to offer, and in the long run, our patients reap the benefits.

Our physical therapists enter the field with doctorates, but we approach it as just the beginning of the learning process. From leadership training to understanding the financial side of healthcare, and of course the clinical training, we leave no stone unturned and dedicate our resources to always being on the cutting edge. We value education and continual learning.

You will feel their passion when you interact with our healthcare professionals.

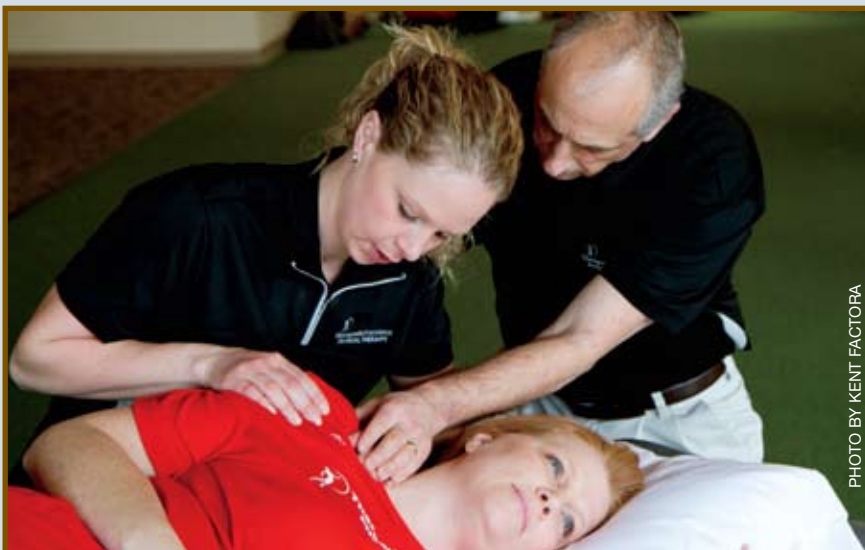


PHOTO BY KENT FACTORA

Physical Therapists are Musculoskeletal Experts Because...

Currently at the time of licensure, they have completed:

- 4 year Undergraduate Degree
- 3 year Doctorate of Physical Therapy Degree

At left: Krista Vigeland, PT, DPT, Bethany PT, and Bill Temes, PT, MS, OCS, COMT, FAAOMPT, OMG At Eugene.



Success with an exercise program involves setting reasonable goals and time frames, choosing an activity that you enjoy or have a passion for, and starting gradually.

Exercise — How and Where to Start

*By Karen Walz PT, MA, OCS, COMT, FAAOMPT
Director, TAI Redmond Physical Therapy*

As springtime arrives, those in cooler climates may be anxious to get outside and increase their exercise or activity level. Maybe you used to be more active, life got busy, and now you want to resume some indoor form of exercise?



**Karen Walz PT, MA,
OCS, COMT, FAAOMPT**

Whatever the reason, your physical therapist can assist you with getting started on the proper exercise routine.

Physical therapists can evaluate your current fitness level and functional limitations, taking into consideration your medical history, and prescribe a routine that meets your individual needs. They can instruct you on appropriate exer-

cise precautions, proper exercise techniques, and injury prevention methods for all levels of exercise.

If your goal is to start a running or walking program, there are several items to consider before you begin. Take into account your current activity level:

- Do you have a current medical condition that would warrant a visit to your medical provider for clearance to begin a regular exercise program, or are you recovering from an injury?
- Do you have running or walking experience?
- What kind of terrain will you be training on (indoors, outdoors)?
- Do you know your shoe wear?
- Do you know the time duration and/or frequency

you have to devote toward achieving your health and wellness goal?

Tables 1 and 2 outline some beginning and more advanced training ideas for walking and running to get you started.

WALKING TRAINING

Short/Easy Workout — ¾ mile

- 3–5 min warm up
- 19–23 min walk (25–30 min/mile or 2 mph speed)
- 55–65% max Heart Rate or 1–2 RPE*
- 3–5 min cool down

Long/Hard Workout — 3 miles

- 3–5 min warm up
- 45 min walking (15 min miles)
- 75–80% max Heart Rate or 5 RPE*
- 3–5 min cool down

*RPE- relative perceived exertion (a self assessment of how hard it is to talk while exercising without being breathless)

RUNNING TRAINING

Beginner — 1 mile

- walk 1/4 mile
- jog 1/2 mile
- finish with 1/4 mile walk
- Alternate days active “rest”

More advanced — 5 miles

- start with warm up 3–5 minutes/end with cool down 3–5 minutes
- Run 5 days per week with active rest days every 2–3 days.

Success with an exercise program involves setting reasonable goals and time frames, choosing an activity that you enjoy or have a passion for, and starting gradually.

For example, some people are naturally very social and like group exercise or team sports sessions — others prefer individual or independent activities. Maybe your goal is to address stretching and improved aerobic conditioning? Maybe you want to build muscle tone and strength more than anything else?

Use these goals to help you target what you start in regard to activity to ensure your success. Pacing gains in your exercise program progression may mean you don't increase exercise load or volume by more than 10 percent a week, especially if rehabilitating from an injury.



Your Physical Therapist can prescribe a routine that meets your individual needs and help you reach your exercise goals. Jessica Dorrington PT, MPT, OCS, CMPT, Director Bethany Physical Therapy. Photo by Kent Factora

Are you a morning or an evening type activity person? Are you more likely to do some activity regularly for 10 minute bursts or to do it all in a one-time shot during the day? Do you only have time to exercise on your lunch break at work?

All these scenarios can be accommodated with your therapist's help to prescribe the best program for you.

General exercise prescriptions include components of warm up/cool down, flexibility, strength, and aerobic conditioning. Recommendations include 30 minutes of light to moderate aerobic exercise 3–5 times per week, depending on your fitness level. Strength training usually means 30 minutes 1–3 times per week of focused strengthening for specific core, trunk, and arm/leg functional goals, depending on your fitness level. Stretching could be included 2–5 days a week depending on what your individual needs and goals are targeting.

For some, an exercise or activity program should include some relaxation training too. Some physical therapy clinics, for example, offer therapeutic yoga sessions that can help you incorporate relaxation into your overall program. Sometimes, instruction by your therapist can achieve this relaxation goal by reviewing breathing methods and modifications.

Therapeutic Associates' website, www.therapeuticassociates.com, offers an “Ask the Expert” section if you have a question about a functional limitation, injury, or medical diagnosis. The President's Fitness challenge offers information on fitness challenges you can sign up for and general information. Click on www.presidentschallenge.org. Fitness assessments of walking/running, Body Mass Index, and injury screenings are often offered at your local TAI Physical Therapy clinic. You can also get some information at www.apta.org/consumer about how regular exercise delays aging.

Ask your therapist for information on these tools to help you perfect your exercise routine and reach your exercise goals.





Running could just be the perfect exercise. It doesn't require a membership, you don't need a personal trainer, it gets you outside, and the only equipment you need is a pair of running shoes. Photo by Kent Factora

Starting a Running Program

*By Rob Barnes PT, DPT, OCS
Director, TAI Boise Physical Therapy on State Street*

Running could just be the perfect exercise. As an avid runner, I am quite biased on the subject. Running doesn't require a membership, you don't need a personal trainer, it gets you outside, and the only equipment you need is a pair of running shoes. Research shows that runners get sick less, have reduced depression and cancer rates, have decreased cholesterol and incidence of Diabetes, and have greater longevity. In addition, running may not be as stressful to the joints as once thought. A Stanford researcher found that there was no difference in osteoarthritis in the knees between runners and non-runners.



*Robert Barnes PT,
DPT, OCS*

In fact, a study out of the British Journal of Sports Medicine showed that the onset of disability (difficulty walking, standing, performing daily activities) in people over age 60 was 16 years later in runners versus non-runners. Recently, the concept that humans have “evolved” to run long distances has received a lot of media attention. An evolutionary biologist out of Harvard has proposed that early humans evolved to run long distances to outlast their hunted prey in a technique called “persistence hunting.” Current evidence suggests that perhaps humans are built more for running than for sitting at a desk and that running is not “bad for the knees,” can prolong your life, and can improve your quality of life as you age.

If you have never run before, it is important to take it slow. The human body is an amazing biomechanical ma-

chine that responds to physical stress by getting stronger. If stress is applied in the correct dose, the muscles, tendons, ligaments, and joints will adapt and get stronger. However, if the dosage is increased too quickly, there is breakdown in these tissues and injuries occur.

One reason for high injury rates, especially in runners and athletes over 30, is that cardiovascular fitness improves faster than tissue fitness. In other words, your lungs and heart get in shape in less time than it takes your body's tendons, joints, and ligaments to tolerate the increased load of running. Another reason is the high forces of running can produce anywhere from 6-10 times your body weight at impact.

The tips listed below will help you avoid overstressing your tissues and prevent injuries.

Run/Walk program: If you are a new runner or are returning to running after taking more than a year off, start with a run/walk program. A good ratio to start with is 1 minute run: 4 minute walk. Add 1 minute to your ratio every two weeks (2 minute run: 3 minute walk) until you have progressed to a ratio that is pain-free and comfortable.

10 percent Rule: Do not increase your weekly mileage by more than 10 percent per week. If you add hills and track workouts to your training, you may even want to decrease your mileage that week.

Stretch after you run: Studies have shown that stretching before a run can actually increase your risk of injury. Take the time to stretch key muscle groups after your run. A link for a copy of running stretches can be found at the end of the article.

Run with short strides: To reduce the impact of your body weight, attempt to strike your foot under your body (not out in front of you).

Purchase good shoes: Go to a store that specializes in runners' shoes.

You can count on having some soreness as you start your running program, but all pain is not bad. Our body responds to physical stress through inflammation. Inflammation is the process that our body uses to heal itself, and this process can make you sore (this is also the process that makes us stronger).

Significant soreness usually lasts 24-48 hours after a workout. Signs and symptoms that indicate you have overstressed your body include severe, sharp joint or tendon pains, pain that keeps you awake at night, swelling or redness, excessive fatigue, and frequent illness. If you are experiencing these types of symptoms, take a week off from running and then slowly ease back into your normal workout program.

If you need more guidance, join a local running group or a coached training program. In Boise, we have several running programs and groups that meet one to two

times a week for organized runs and coaching. Another way to get motivated is to pick a local event and train for it. Most communities will have races at distances ranging from 5 to 30 kilometers.

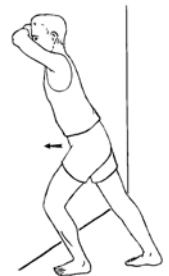
Finally, physical therapists are great resources for runners. PTs are experts in biomechanics and injury treatment. Many offer free screenings and running classes. At our clinic we offer a weekly running strengthening class, Video Gait Analysis, Running Biomechanical evaluation, and free running injury prevention lectures. Several Therapeutic Associates clinics offer similar services.

Running is a lifetime sport if you listen to your body and are smart with your training. Keep on running!

For more running tips and copies of stretching and strengthening programs, go to: www.therapeuticassociates.com/locations/idabo/treasure-valley-boise/state-street/injury-prevention-for-the-runner/.

Here are samples of some great post-running stretches to get you started. Hold each for 30 seconds.

LOWER LEG — Achilles / Gastroc
With back leg straight, move hips forward until stretch is felt. Make sure your back foot is straight.



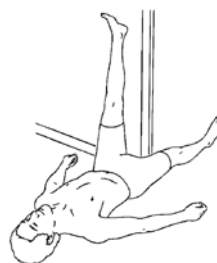
LOWER LEG — Achilles / Soleus
With back foot flat and toes turned slightly inward, lower hips and bend knees until stretch is felt. Hold 30 seconds. Repeat with other leg.



HIP OBLIQUE — Iliotibial Band
With back foot flat and toes turned slightly inward, lower hips and bend knees until stretch is felt. Hold 30 seconds. Repeat with other leg.



HIP / KNEE — Stretching: Hamstring – Wall
Lying on floor with right leg on wall, other leg through doorway, scoot buttocks toward wall until stretch is felt in back of thigh. As leg relaxes, scoot closer to wall.





There are a few basic principles at the core of each weight maintenance program that can work for everyone.

What is Your Metabolic Rate?

By Lindsey McLeod PT, DPT
 Staff Therapist, TAI Madison Park Physical Therapy

Wouldn't it be great if you could make it simple and easy to maintain your target body weight? The great news is that there are a few basic principles at the core of each weight maintenance program that can work for everyone. Whether you want to maintain your current weight or trim a few pounds, here are a few tips to stay healthy and on target.

Let's talk about the basics first. The human body is always burning calories, even while sleeping. Calories burned at rest are used to complete essential functions, such as cellular respiration, maintaining body temperature, delivering blood and nutrients to tissue, and repairing cell damage.

The amount of calories your body burns at rest in one day is known as your Basal Metabolic Rate (BMR). Each individual has a unique BMR because the rate is based on a number of variables, including age, genetics, gender, weight, body fat, and diet.

Table 1: Basal Metabolic Rate (BMR) is the amount of calories an individual will burn at rest in one day. Use the following table to calculate BMR for Men and Women.



Lindsey McLeod
 PT, DPT

BMR for men	$BMR = 66 + (6.23 \times \text{weight in pounds}) + (12.7 \times \text{height in inches}) - (6.76 \times \text{age in years})$
BMR for women	$BMR = 655 + (4.35 \times \text{weight in pounds}) + (4.7 \times \text{height in inches}) - (4.7 \times \text{age in years})$

To calculate how many calories you burn in one day — a value known as your Total Daily Energy Expenditure (TDEE) — you will also need to factor in the amount of physical activity you get during the week. If you want to maintain your current body weight, you will need to consume no more or less than the number of calories you burn each day.

Table 2: Total Daily Energy Expenditure (TDEE) is the amount of calories an individual must consume daily to maintain their current body weight. Use the following table to calculate TDEE based on the amount of exercise completed each week.

Sedentary	BMR X 1.2 (little or no exercise, desk job)
Lightly active	BMR X 1.375 (light exercise/sports 1-3 days/wk)
Mod. active	BMR X 1.55 (moderate exercise/sports 3-5 days/wk)
Very active	BMR X 1.725 (hard exercise/sports 6-7 days/wk)
Extr. active	BMR X 1.9 (hard daily exercise/sports & physical job or 2X day training, i.e. marathon, contest, etc.)

Tip Number One: To Lose Weight, Eat Less and Burn More

In order to lose weight you must have a calorie deficit, which means you need to burn more calories than you eat. There are approximately 3,500 calories in one pound of stored body fat. To lose one pound, you will need to have a deficit of 3,500 calories. The best goal is to have a small calorie deficit each day. If you calculate how many calories your body requires each day (TDEE), experts recommend subtracting 15 to 20 percent from that total to determine a healthy estimate for daily calorie consumption. Results should be monitored and adjusted according to each person's metabolism.

Tip Number Two: Use Weight Training to Increase Metabolic Rate

One simple way to increase your BMR is to increase your lean body mass through resistance training. Fatty tissue is easy for your body to maintain, muscle is not. Muscle demands high calorie consumption to circulate blood, exchange gases, restore nutrients, and regulate temperature. If you increase your muscle mass and decrease your body fat, you will burn more calories while relaxing, sitting at your desk, flipping through magazines, and even sleeping. Men are known to have a higher lean body mass, which is why their BMR is typically higher than women by 10 to 15 percent.

Tip Number Three: Exercise to Increase Energy Expenditure

By increasing the amount of activity you get each week, your body burns more calories. For example, a person with a BMR of 2,000 calories will burn 2,740 calo-



Weight management is not just about your diet, it is about balancing exercise and calorie consumption so you can stay fit and healthy. Jessica Dorrington PT, MPT, OCS, CMPT, Director Bethany Physical Therapy. Photo by Kent Factora

ries each day if they exercise one to three days per week. This same person can burn 3,450 calories each day by increasing their routine to six or seven days per week.

Weight management is not just about your diet, it is about balancing exercise and calorie consumption so you stay fit and healthy. (To see how these numbers were calculated, use the information provided in Table #2 above)

Tip Number Four: Avoid a Low-Calorie Diet that will Decrease Metabolic Rate

If you cut calories too fast, your BMR can slow down by 20 to 30 percent, meaning your diet is preventing you from burning calories. With an overly restrictive diet, your thyroid does not work properly, metabolism will slow, and lean body mass will be lost. The American College of Sports Medicine (ACSM) cautions to NEVER drop below 1,200 calories a day for women and 1,800 calories a day for men. The best approach to reaching an ideal weight is to keep the calorie deficit small and increase your weekly activity level.

If you have questions or concerns about what exercises to do, consult your local Physical Therapist.





Many walkers and runners, though very active, lack the strength needed in the hips and core as they enter their prime running and walking season and the bulk of their mileage.

Strength Training for Runners and Walkers

*By Megan Houser PT, DPT, OCS
Director, TAI Seattle Physical Therapy*

With winter and spring weather in the Pacific Northwest being a bit soggy, the mileage of many walkers and runners tends to be more limited than the summer months. This presents optimal opportunity for “off-season strengthening.”

Many walkers and runners, though very active, lack the strength needed in the hips and core as they enter their prime running and walking season and the bulk of their mileage. Running and walking alone do not sufficiently address these strength deficiencies. This can leave the low back, hips, knees, and feet vulnerable to injury. Therefore, a more specific strength regimen is needed.



*Megan Houser
PT, DPT, OCS*

When it comes to strength training for a runner or walker, there are a few goals to consider.

- Increase the strength and endurance of the muscles
- Coordinate the muscles to operate efficiently and effectively together through motor control training
- Elevate the lactate threshold of the muscles if speed/hills are a factor in your workouts.

Increasing Strength and Endurance

Strengthening can be achieved in many ways. Research suggests that heavy weightlifting does not provide significant benefit to the performance of walkers and runners. Instead, it is recommended that the focus of your strengthening program be sport-specific to allow for improved strength and improved muscle control

over the body while moving through weight-bearing postures similar to those experienced during running and walking.

The four activities shown below are examples of static and dynamic weight-bearing exercises which challenge the strength of your thighs, hips, and core while demanding coordination of the muscle groups for proper performance.

Muscle Coordination

As you attempt to work on strengthening, you should experience fatigue or burn in the muscles being worked. If at any time the symptoms become painful or sharp, you should consider modifying the exercise.

Generally, modification of strengthening exercises should start with assessment of your form to ensure safe technique. Next, modify the resistance or duration of a hold. If that does not improve symptoms, then reduce

the range of motion performed. For example, if pain occurs with balance and reach and you are certain you are maintaining proper technique, reduce the depth of the knee bend on your stance leg and reassess. If sharp or painful symptoms persist, stop your resistance training and consult your local PT before proceeding.

These strengthening and muscle control activities should be performed a minimum of three times per week. As you find your exercises becoming easy, vary the surfaces on which you perform them, such as standing on grass, on a pillow, or in the sand, with eyes open then eyes closed. This will increase your challenge and address all surfaces over which you might walk or run.

You should find that building a better foundation of strength and control at the hips and core will allow you to walk or run with fewer risks for injury this season!



Balance and Reach:

Stand on one leg, keeping hips/pelvis level. Tap forward, side, and back with non weight-bearing leg as you bend the knee on the stance leg. Be sure to return to start position and straighten the knee following the tap in each direction. Keep the knee lined up with the foot and the pelvis level as you bend the knee.



Single-Leg Stance Rotations (with cable or resistance band):

Stand on one leg with pelvis level, knee soft, stomach tight, and a band or cable in each hand. Pull your hands together toward your chest and hold. Rotate your body to the right, back to center, to the left, and finally back to center, keeping hands together at your chest. Then straighten the elbows while returning to start position. Repeat.



Balance with Hand Touch: Standing tall on one leg with the pelvis level and knee soft, slowly reach down to touch the floor while hinging at the hip and keeping the back flat. Return to upright position using your hip while keeping the back flat. Repeat.



Side planks: Lay on your side with feet, hips, and shoulders in a straight line and stacked. Tighten the abdominals with the elbow underneath you and raise your body off the ground, balancing on the forearm and feet. Hold 15–45 seconds, then lower and repeat.



Seattle

May 15: Ladies Day at Interbay Golf Course (Seattle)

June 6: North Olympic Discovery Marathon
(Sequim/Port Angeles)

August 28: Oyster Urban Adventure Race (Seattle)

September 19: Cycle the Wave (Seattle)

Spokane

May 30: Wildcat Hoops 3 on 3 Tournament

June 26 – 27: Hoopfest

July 11th: Valley Girl

September 12: SpokeFest

September 19: Cat Scramble Golf Tournament

Portland

April 17: Amani Center Race Against Child Abuse (St. Helens)

April 24: Scappoose Spring Garden Fair

June 12–13: Soccer in the Sand Tournament (Seaside)

July 2–4: Portland Cup FC Portland Academy

July 17: Troutdale Summerfest (Gresham)

July 25: Lacamas Lake Run/Walk (Camas, WA)

August 1: Fremont Festival

September 18: Oyster Urban Adventure Race (Portland)

October 8–9: Portland Marathon Expo

Eugene

May 1: Eugene Marathon Expo

May 2: Eugene Marathon

Salem

May 20–23: Keizer Iris Festival

Mid-Willamette Valley

April 3: Valley OSU Beaver Freezer Sprint Triathlon

April 8: OSU Gerontology Conference

May 26–28: OSU Wheel-O-Thon

Southern Oregon

May 16–17: Spring Thaw Mountain Bike Festival (Ashland)

May 22: Relay For Life (Ashland)

August 7: MT. Ashland Hill Climb

September 18: Ride the Rogue

Boise

- May 2:** Treasure Valley Omnium
- May 22:** High Desert Trail Run (Blue Circle Sports Series)
- May 29:** Velopark State Championship Short Track XC (Wild Rockies Series)
- May 30:** Idaho Velopark Dual Slalom State Championship (Wild Rockies Series)
- May 30:** Ironman 70.3 Sports Medicine Conference
- June 6:** Bogus Practice DH and trail maintenance (Wild Rockies Series)
- June 11 – 12:** Ironman 70.3 Boise
- June 19–20:** Idaho City Tour (Wild Rockies Series)
- June 26–27:** Jug Mountain Ranch Marathon (Wild Rockies Series)
- July 3–4:** Brundage Mountain Festival (Wild Rockies Series)
- July 10:** Fit For Life Half Marathon/10K/5K (Blue Circle Sports Series)
- July 31:** Spudman Triathlon
- July 31–Aug 1:** Pomerelle Pounder DH, Utah STATE Series (Wild Rockies Series)
- August 21:** FluidRide Schweitzer Resort DH (Wild Rockies Series)
- August 22:** Xterra Wild Ride (America Tour Series)
- September 3–5:** Bogus Hari-Kari Trail Run Championship (Wild Rockies Series)
- September 5:** Payette Lake Run (Blue Circle Sports Series)
- September 5:** Wild Rockies Finals
Bogus Kamikaze DH (Wild Rockies Series)
- October 10:** City Of Trees Marathon and Half Marathon (Blue Circle Sports Series)



Central Oregon

- April 18:** Light of Hope 5K (Bend)
- May 15–16:** Pole Pedal Paddle
- June 5:** Duel in the Desert Duathlon
- July 10:** Smith Rock Sunrise Summer Class, 5K / 10K / ½ Marathon (Redmond)
- July 30–31:** Cascade Lakes Relay
- August 6–8:** Bend Open swim meet (Bend)

June 24-27: 3 Day Cycling Camp

Bend, OR - \$1090 per person

Information or Registration:

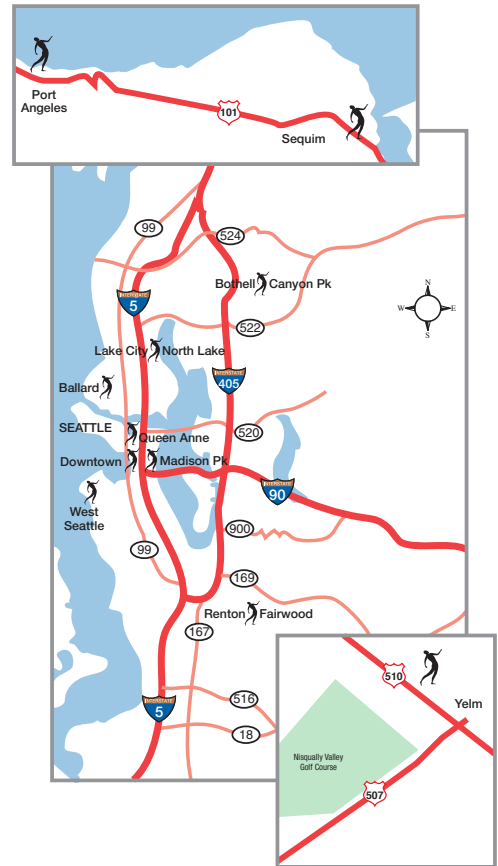
[www.therapeuticassociates.com/
events/2010-cycling-camp/](http://www.therapeuticassociates.com/events/2010-cycling-camp/)

Team and Program Sponsorship

- Black Diamond Cycling (Seattle)
- BMX Redmond
- Bogus Basin Nordic Team Sponsorship (Boise)
- FC Portland Academy – Soccer Club (Hillsboro)
- Get Fit Live Fit
- Grants Pass Boys & Girls Club (Basketball/Football)
- Grants Pass National Little League
- Grants Pass Youth Soccer Club
- Liberty Rugby Club (Seattle)
- Phoenix High School Athletic Training coverage (Medford)
- Portland Bethany Summer Concerts
- Portland Triathlon Club (Portland)
- Redmond High School Basketball
- Relay for Life (Grants Pass)
- South Medford Panther Basketball
- TAI Cycling Team
- Tualatin Youth Baseball
- Word Motorsports (Grants Pass/Medford)
- XC Oregon (Bend)



Teams from Fairwood and Queen Anne PT participate in the Seattle Oyster Urban Adventure Race.



Western Washington

SEATTLE AREA therapeuticassociates.com/Seattle



BALLARD PT
Julie Dresch PT, MS, OCS,
CMPT, Director
206-789-7975
TPI Certification
New Director



MADISON PARK PT
Cora Bundy PT, MPT, OCS, CMPT,
CPI, Director
206-324-5389
New Location



SEATTLE PT
Megan Houser PT, DPT, OCS,
Director
206-623-4570
TPI Certification



BOTHELL
Canyon Park Physical Therapy
Christopher Leck PT, DPT,
Director
425-489-3420



QUEEN ANNE PT
Jennifer Lesko PT, MS, Director
206-352-0105
TPI Certification



WEST SEATTLE PT
Erica Clark PT, Director
206-932-8363
TPI Certification
New Location



LAKE CITY
North Lake Physical Therapy
Chuck Hanson PT, OCS, Director
206-361-4745
TPI Certification



RENTON
Fairwood Physical Therapy
Nicole Smyth PT, DPT, OCS,
Director
425-272-0252
New Director

PORT ANGELES AREA

therapeuticassociates.com/OlympicPeninsula



PORT ANGELES
Corinne Schaefer PT, DPT,
Director
360-452-6216



SEQUIM
Enid Halewyn PT, Director
360-683-3710
TPI Certification

OLYMPIA AREA

therapeuticassociates.com/Yelm



YELM PT
Paul Groschel PT, MSPT, Director
360-458-2444



Jeff Bresnahan PT, DPT, Director, Evergreen PT, and his son participate in Spokefest.

Spokane/ North Idaho

therapeuticassociates.com/Spokane



LIBERTY LAKE PT
Steve Allen PT, OCS, FAAOMPT, Director
509-891-2258



MEAD
Mt Spokane
Physical Therapy
Gale Anderson PT, MSPT, OCS, FAAOMPT, Director
509-468-4861



NORTH SPOKANE
Wandermere Physical Therapy
Jim Moore PT, OCS, ATC, FAAOMPT, Director
509-466-4379

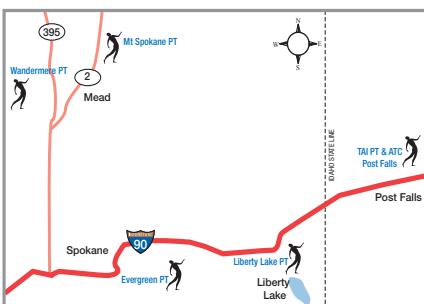


SPOKANE VALLEY
Evergreen Physical Therapy
Jeff Bresnahan PT, DPT, Director
509-926-5367

NORTH IDAHO



POST FALLS
Physical Therapy & Athletic Training Center
David Andrews PT, OCS, SCS, ATC, LAT, MTC, CSCS, Director
208-777-8273



Yakima Valley

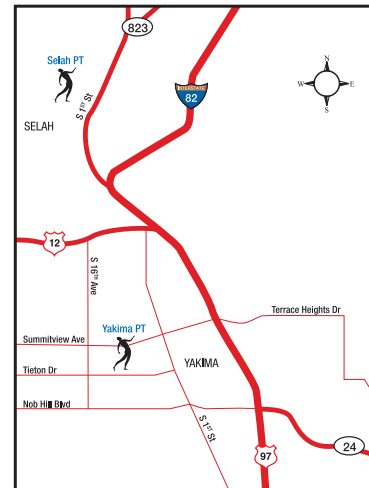
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SELAH PT
Robb Jacobs PT, DPT, Director
509-697-9109
New Clinic



YAKIMA PT
Robb Jacobs PT, DPT, Director
509-453-3103
New Clinic



Tri Cities

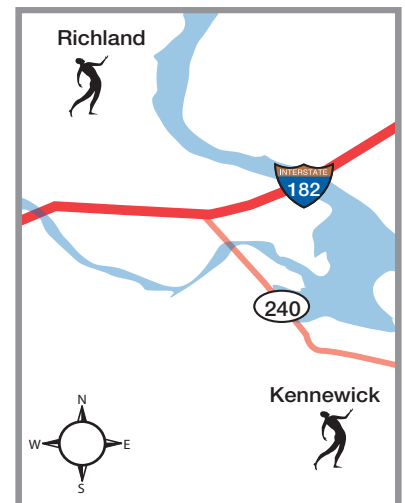
therapeuticassociates.com/TriCities



RICHLAND PT
LeeAnn Carlson PT, Director
509-946-8497



WEST KENNEWICK PT
Kenneth Call PT, DPT, Director
509-783-1962
TPI Certification





Chelsea Kerr, SPT; John Parr PT, CMPT, Director; and Lesley DeFazio DPT of Gresham PT at the Troutdale Summer Festival.

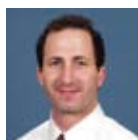
Portland Metro Area

therapeuticassociates.com/Portland

WEST PORTLAND



BEAVERTON PT
Zachary R Jones PT,
DPT, Director
503-644-3311



DOWNTOWN
Tony Rocklin PT, DPT,
COMT, Director
503-450-0591



NW PORTLAND PT
Todd J Cruz PT, MPT,
Director
503-227-3479
TPI Certification



SW PORTLAND PT
Darin Borter PT, DPT,
OCS, COMT, Director
503-244-0570



BETHANY PT
Jessica Dorrington PT,
MPT, OCS, CMPT, Dir.
503-466-2254
TPI Certification
New Location



FOREST GROVE PT
Scott Hein PT, DPT,
Director
503-357-9810



ST HELENS PT
H. Patrick Corrigan
PT, Director
503-397-1914
TPI Certification



TUALATIN PT
Stephen A Barsotti
PT, Director
503-692-4934
TPI Certification



CEDAR HILLS PT
Kelly Reed PT, OCS,
COMT, Director
503-292-3583



HILLSBORO PT
Timothy O Brinker PT,
OCS, FAAOMPT,
Director
503-844-9294



SCAPPOOSE PT
Olya Kurkoski PT,
DPT, Director
503-543-0254



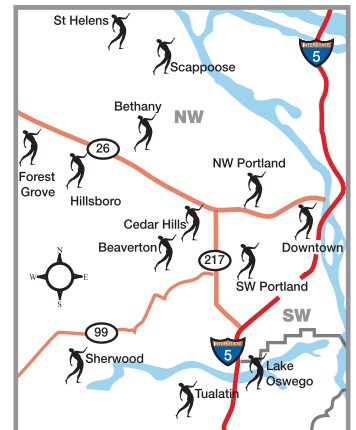
CEDAR HILLS PT
Aimee Jackson PT,
MSPT, Director
503-292-3583



LAKE OSWEGO PT
Shawn Dailey PT, Director
503-635-0844
TPI Certification



SHERWOOD PT
Chris Hoekstra PT,
DPT, OCS, COMT,
FAAOMPT, Director
503-625-1691



EAST PORTLAND



CLACKAMAS PT
Mark McCurdy PT, MPT, COMT,
Director
503-659-9155



EAST PORTLAND PT
Jennifer Hammond PT, DPT,
Director
503-253-0924



GRESHAM PT
John Parr PT, CMPT,
Director
503-666-7644
TPI Certification



N PORTLAND PT
David V McHenry PT, DPT,
Director
503-283-8133



NE PORTLAND PT
Aubree Swart PT, DPT, Director
503-493-4463
TPI Certification



SE PORTLAND PT
Daniel Renelt PT, DPT,
Director
503-774-3585

SW WASHINGTON



VANCOUVER PT
Andrew Sahnaw PT, DPT,
Director
360-514-9383



Salem

therapeuticassociates.com/Salem



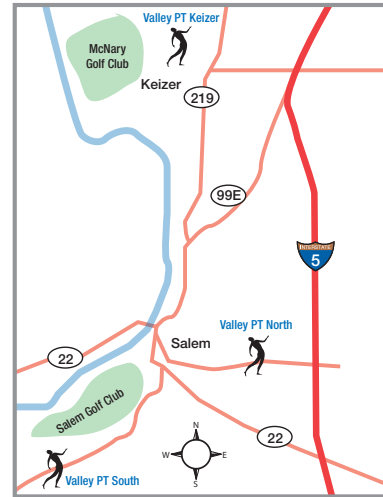
SALEM NORTH
Valley Physical Therapy
Evan Jones PT, OCS,
Director
503-378-7434



SALEM SOUTH
Valley Physical Therapy
Jeffrey R Blanchard PT, MS,
OCS, Director
503-585-4824



KEIZER
Valley Physical Therapy
Marcey Keefer Hutchison PT,
MSPT, ATC, CMP, Director
503-463-4221



Mid-Willamette Valley

therapeuticassociates.com/MidValley



ALBANY
Mid Valley Physical Therapy
Richard Costain PT, Director
541-967-1224



CORVALLIS
Angela Lewis PT, DPT,
Director
541-757-0878





Grants Pass National Little League participants.

Eugene

therapeuticassociates.com/Eugene



WEST EUGENE PT
Bradley Schwin PT, MS,
OCS, Executive Director
541-484-9632



OMG SOUTHTOWNE
Hannah Shalice PT, MSPT,
Director
541-242-4470



SPRINGFIELD
Gateway Physical Therapy
Matthew Weigel
DPT, ATC, Director
541-242-4172
New Director



CRESWELL PT
Ed Meelhuysen PT,
Director
541-895-5913
TPI Certification



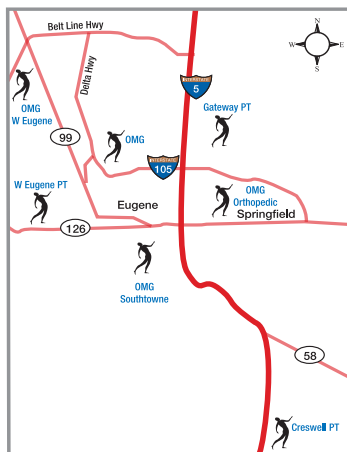
OMG AT EUGENE
David Dowd PT, MS,
Director
541-242-4172



OMG AT WEST EUGENE
Bradley Schwin PT, MS,
OCS, Executive Director
541-463-2191



OMG ORTHO AND SPORTS MEDICINE
David Dowd PT, MS,
Director
541-242-4870



Southern Oregon

therapeuticassociates.com/SouthernOregon



ROSEBURG
Central Physical Therapy
Jeffrey S Jones PT,
Director
541-673-1808



MEDFORD PT
Jay A Ruetters PT, DPT,
ATC, CSCS, Director
541-779-1041



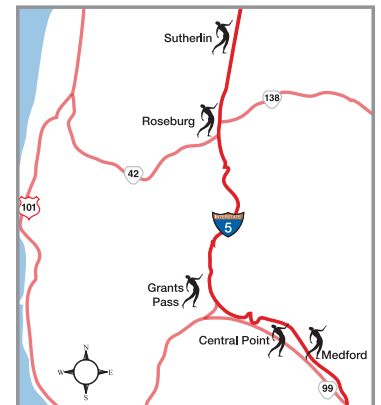
GRANTS PASS PT
Eric Medley PT, MSPT,
CSCS, Director
541-479-0765



SUTHERLIN PT
Dan Hirtle PT, Director
541-459-8459



CENTRAL POINT PT
David B Standifer PT,
Director
541-664-2800





Second place Winners in the Pole, Pedal, Paddle race: Craig Boswell, PT (bike); Susie Jones, PT (run); Chris Cooper, PT, MS (skate ski); Chrissy Ruitter, aide (sprint); Matt Kirchoff, PT (kayak); and Moira Hundley, aide (downhill ski).

Central Oregon

therapeuticassociates.com/CentralOregon



BEND PT
 Chuck Brockman PT, MPT,
 OCS, CSCS, Director
541-388-7738



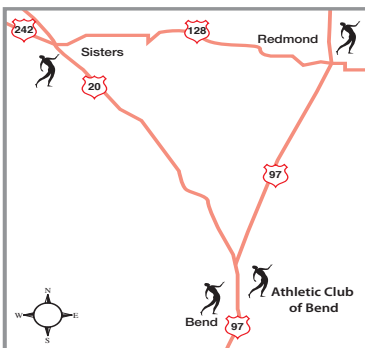
REDMOND PT
 Karen Walz PT, MA,
 OCS, COMT, FAAOMPT,
 Director
541-923-7494



BEND IN THE ATHLETIC CLUB
 Laura Cooper PT, MSPT,
 CSCS, Director
541-382-7890
TPI Certification



SISTERS IN THE ATHLETIC CLUB
 Gary Keown PT, Director
541-549-3574



Southern Idaho

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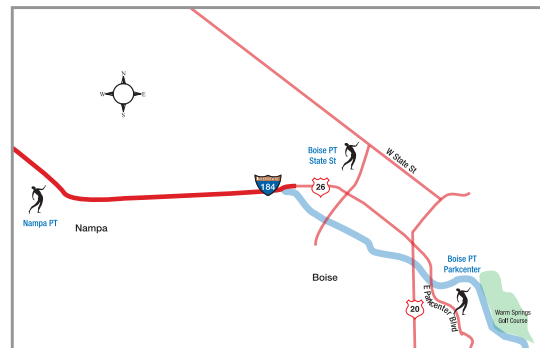
BOISE PT
 Park Center
 Matt Booth PT, DPT, OCS,
 Director
208-433-9211
TPI Certification
New Location



BOISE PT
 State Street
 Robert Barnes PT,
 DPT, OCS, Director
208-336-8433
TPI Certification



NAMPA PT
 Derek Stiegemeier PT,
 DPT, Director
208-442-0577





GET *MOVING* PROFILE

By Melissa Andersen, Patient of TAI Valley Physical Therapy with her husband, Michael, another SAM success story.

I LOVE MY EXERCISE

I have tried a lot of diet and exercise programs to help me get into shape over the last five years. After having two children less than two years apart and spending the few years that followed surviving long nights and busy days by snacking more and exercising less, I slowly gained more and more weight.

By the middle of 2009, I found myself seriously overweight and feeling much older than my age of 31. So when I was asked by Chelsey Franz, ATC of Therapeutic Associates Valley PT clinics to join a SAM (Speed-Agility-Mobility) program for 10 weeks, I was more than ready to get in shape and even more ready to try a new and effective workout routine.

I was amazed that with just two workouts a week, the SAM program kicked my body into gear! Each workout was HARD, but it worked on every part of my body. With just small, common sense changes in my diet and the SAM program, I was losing 3–4 pounds each week and was feeling stronger and healthier by the day. No other workout routine had ever been this fun and this effective!

When the 10 weeks ended, I was disappointed and worried about what I would do next that would help me continue to lose weight and get in shape. It was at this point that Chelsey introduced me to the half marathon training schedule to train me for an upcoming half marathon.

Having never run longer than a sprint, I was skeptical (and quite honestly unexcited) about the idea of running and training for a race as the next step to my getting in shape.

Well, I will happily admit that not only did I stick with the program, but I trained for the entire 17 weeks, ending with my running in, and successfully finishing, the Cascade Half Marathon last January. It was an exciting and life-changing experience for me, and today I can say that I LOVE to run! The training schedule was balanced and doable for a busy mom like myself — just three, one-hour runs a week utilizing run/walk intervals.

With the help of Chelsey, TAI, and their training programs I have lost 60 pounds over the last seven months! Not only has my weight loss been wonderful, but I've also toned and shaped my body in

a way that makes me feel healthy and strong. Both programs have given me tools and experience to continue staying healthy for the rest of my life.

Even for someone like myself, who was a master of excuses and rationalizations about why I didn't have the time or money to get healthy, I could not excuse the practicality of these programs. I'm now a mother of four small children, have started a second round of SAM, and am training for a 10K run in May.

I've also shared my success by participating in the clinic's "Community Involvement" program that challenges us to "be a part of something larger than ourselves" by encouraging friends to start a SAM program to improve their health as well.

I will forever be grateful that I participated in these programs, as they have helped me to take charge of my own physical health and regain possibilities for my future.

 **Therapeutic Associates**
PHYSICAL THERAPY

Balance Training Helps Strengthen Core

By Tony Rocklin PT, DPT, COMT, Director, TAI Downtown Portland

Thinking of starting a new exercise program? Maybe some core strengthening or improving your flexibility? Don't make the mistake of leaving out some balance training. Balance and coordination are key components to not only staying healthy, but to enhancing your athletic performance.

Whether you are just interested in going hiking this summer or are dreaming of becoming a professional athlete, improving your *proprioception* is a key component to your routine.

Proprioception is the ability to sense stimuli arising within the body. For example, if your eyes are closed and you raise your arm above your head, how do you really know it's up there? That's proprioception. We have these receptors all throughout our bodies that tell our brain where our body parts are in space. The quicker these messages travel to and from our brain from throughout our bodies, the better balance and coordination we have.

The importance of better balance becomes clear when trying to hike on a slippery trail, play basketball, or hit a golf ball. Adding a few static and dynamic balance exercises can increase our proprioception.

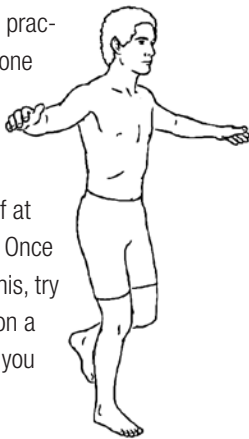
In addition to enhancing our athletic performance, an increased sense of proprioception will also help prevent injury and keep us safe. Humans rely too heavily on vision for balance. As we age, our vision begins to diminish, which leads to stumbles or possibly even falls.

Try a few of these simple balance activities with your eyes open AND closed to enhance all systems. Of course, make sure you are in a safe environment and start with the most basic exercises until you are comfortable with more advanced training. If you have any history of dizziness or loss of balance, definitely consult your primary care physician or your local Therapeutic Associates Physical Therapist before beginning any balance program.

Happy Balancing!

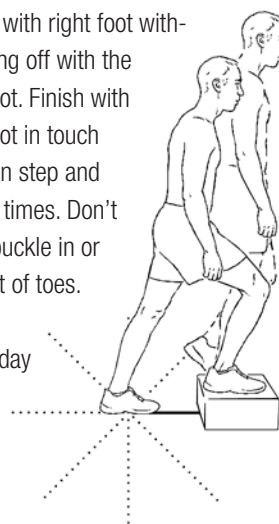
Single Leg Beginning Balance

Take 5 minutes to practice balancing on one leg with eyes open, then closed. Try to set new records of at least 60 seconds. Once you can achieve this, try doing it standing on a pillow. Make sure you are safe!
1-2 x per day



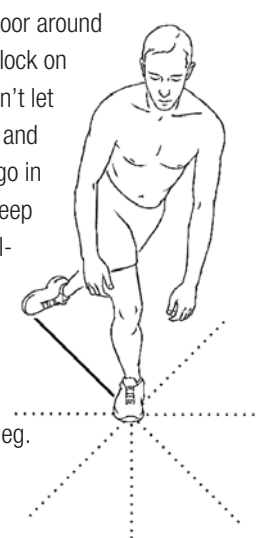
Balance Step-Up

Stand with 6-12 inch step. Step onto step with right foot without pushing off with the ground foot. Finish with ground foot in touch balance on step and return 10 times. Don't let knee buckle in or go in front of toes.
2-3 sets
once per day



Balance Vectors

Stand on right leg. Reach opposite leg to points on the floor around an imaginary clock on the ground. Don't let knee buckle in and don't let knee go in front of toes. Keep arms up for balance help.
2-3 sets of
5-10 touches around the clock on each leg.
1-2 x per day



Contact us at: **Therapeutic Associates, Inc.**
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206-241-8488 phone • 206-241-0028 fax
Dorothy Klemetson x2200 | dorothyk@taiweb.com
Scott Wick x2214 | swick@taiweb.com



Cover photo: Krista Vigeland PT, DPT, Photo by Kent Factora

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- All entries must be received by September 20, 2010
- Winner will be randomly selected on October 1, 2010
- Official rules are available at www.therapeuticassociates.com/WinAWiiforPT

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