Week Six on The PATH

# Moovin' & Groovin'

Getting exercise does not have to involve sweaty sneakers and stinky gym bags. There are many ways to get your body moving that are easy, fun, and healthy.

#### WHAT TO DO THIS WEEK

- Move in fun ways not associated with hard-core exercise
- ·Learn a range of exercises
- Find those movement types that work for you

#### WHAT TO KNOW THIS WEEK

- •Benefits and dangers of exercise
- How activity helps your body, mind, and brain
- •What produces long-term success

#### RESOURCES

- Stretching exercises
- Toning exercises

#### HOMEWORK

- •Do something active that is also fun!
- Do 10 minutes of tone-building each day
- Record in your Journal

#### JOURNALING

•The Fit Fallacy

# Just a little activity leads to great changes!

In a landmark study conducted at the University of Virginia, exercise physiologist Glenn Gaesser, PhD, asked men and women to complete 15 10-minute exercise routines a week. After just 21 days, the volunteers' aerobic fitness was equal to that of people 10 to 15 years younger. Their strength, muscular endurance, and flexibility were equal to those of people up to 20 years their junior.

In yet another study, researchers at the Johns Hopkins School of Medicine in Baltimore found that for improving health and fitness in inactive adults, many short bursts of activity are as effective as longer, structured workouts. "It would be useful for people to get out of the all-or-nothing mind-set that unless they exercise for 30 minutes, they're wasting their time," says Gaesser.

Breaking exercise into small chunks on your overscheduled days can also keep your confidence up, says Harold Taylor, time management expert and owner of Harold Taylor Time Consultants in Toronto, who has written extensively on the subject. "Skipping exercise altogether is 'de-motivational'—you feel depressed and guilty," Taylor says. "If you skip it, you tend to figure, 'What's the use? I can't keep up with it anyway.' Yet as long as you make some effort each day, that motivates you onward. Success breeds success."

Keep in mind, though, that short bursts of exercise are meant to supplement, not replace, your regular fitness routine. Here's a roundup of practical ways to work exercise into your day even when you "don't have time to exercise." (You don't have to do them all in 1 day; select what works for you.)

#### Around the House

- •When you go outside to pick up your morning newspaper, take a brisk 5-minute walk up the street in one direction and back in the other.
- •If you're housebound caring for a sick child or grandchild, hop on an exercise bike or treadmill while your ailing loved one naps.
- •Try 5 to 10 minutes of jumping jacks. A 150-pound woman can burn 90 calories in one 10-minute session.
- •Cooking dinner? Do standing push-ups while you wait for a pot to boil. Stand about an arm's length from the kitchen counter, and push your arms against the counter. Push in and out to work your arms and shoulders.
- •After dinner, go outside and play tag or shoot baskets with your kids and their friends.
- Just before bed or while you're giving yourself a facial at night, do a few repetitions of some dumbbell exercises, suggests exercise instructor Sheila Cluff, owner and founder of The Oaks at Ojai and The Palms, in Palm Springs, CA, who keeps a set of free weights on a shelf in front of her bathroom sink.

#### While Waiting

- Walk around the block several times while you wait for your child to take a music lesson. As your fitness level improves, add 1-minute bursts of jogging to your walks.
- Walk around medical buildings if you have a long wait for a doctor's appointment. "I always ask the receptionist to give me an idea of how long I have left to wait," Cluff says. "Most are usually very willing to tell you."
- •While your son or daughter plays a soccer game, walk around the field.
- Turn a trip to a park with your child into a miniworkout for you. Throw a ball back and forth and run for fly balls.

#### At Work

- Walk to work if you can. "I walked to work for months, 1 1/2 miles each way," says Mary Dallman, PhD, professor of physiology at the University of California, San Francisco, and she really saw results.
- If you dine out on your lunch hour, walk to a restaurant on a route that takes you a little bit out of your way.
- If you have a meeting in another building, leave 5 or 10 minutes early (or take some time afterward), and do some extra walking.
- •On breaks, spend 5 to 10 minutes climbing stairs.
- If you're pressed for time and must wait for an elevator, work your abdominal muscles. Stand with your feet parallel and your knees relaxed. Contract the muscles around your belly button. Then elevate your upper torso, and release. Finally, contract your buttocks for a few seconds.
- Stand with your feet astride. Imagine that you are encased in a plaster cast from your waist to your head. Gently tilt the lower part of your pelvis backward. Contract your abdominal muscles. Then gently tilt your pelvis forward.

#### When You're Watching TV

- •Put away your remote and change channels the old-fashioned way—by getting up and walking to the television set.
- Dance as if you were 16 again. Put on a music program or MTV. Then dance like crazy, advises Peg Jordan, PhD, RN, author of *The Fitness Instinct*. "Free yourself to think of movement as something that you have a right to do," she says.
- During commercials, jog in place. A 150-pound woman can burn up to 45 calories in 5 minutes.
- Do leg lifts with small weights while you watch The Weather Channel, cooking shows, movies, or the news.

#### While Traveling

- Pack your sneakers and an exercise video. Call ahead to make sure your room has a videocassette player. If it doesn't, ask to rent one from the hotel.
- If you're traveling by car, stop twice a day for short, brisk walks and some stretching.
- During layovers at airports, avoid the mechanized "moving carpets" that transport travelers from concourse to concourse. If you're in between flights, walk around the concourse.
- •Book a hotel room between the fifth and eighth floors, then ignore the elevator. Better yet, take two stairs at a time. (Check with the hotel first because for security reasons some hotels do not allow guests to use stairs except for emergencies.)
- Do calf stretches while riding in elevators.

# How & Why To Stretch

Stretching will lengthen your muscles, lubricate your joints, rebalance your nervous system, refresh a weary body, and calm a worried mind. Of the **three dimensions of fitness**, stretching is the simplest, the most pleasurable and least stressful, and the most humbling (most people have very tight muscles). **It simply makes you feel great**. It is also one of the safest ways to exercise, as you can do it almost anywhere, and only requires a minimum of equipment. Stretching is also a great introduction to individuals who want to participate in the benefits of **Yoga** or **Pilates** as a therapeutic form of exercise.

If you are new to stretching, and performing the exercises at home, it is recommended that you choose a clear floor space large enough to include a **workout or yoga mat**, and enough room to move throughout your routine without restriction. Perform your routines in front of a mirror if possible, to ensure that you are performing each stretch properly.

If possible, play **music that you find relaxing and soothing**. Hard rock music is recommended for aggressive weight lifting and aerobic sessions as an external motivator, but not a stretch or yoga session, which is also a mind relaxing and physically calming exercise.

Wear loose fitting workout clothes that allow some "give", or are not restrictive in the groin area for performing some of the more difficult exercises. Footwear is not mandatory; many people find they can move easier and "feel" the stretches more deeply by just wearing socks or preferably, being barefoot.



Before performing each stretch, take a deep breath through your nose and breathe out slowly through your mouth while performing the deepest part of the exercise. For longer stretches, inhale before starting, exhale slowly, then inhale again and exhale again while consciously allowing your body to stretch to its limit. Repeat each inhalation and exhalation until the stretch is complete. **Do NOT hold your breath** while performing these exercises.

Stretch the major muscle groups a minimum of two or three days a week, and repeat each stretch for four sets, if you have the time available. If possible, **hold your stretches for 10 to 30 seconds** at the point of mild discomfort for the maximum benefit.

Do not force or bounce any of your stretches. If you begin to experience pain, immediately back off and return to your starting position, and take several deep breaths to relax your mind and body—you've gone too far with your stretch.

If you are in a stretch class with others, and find that your body is "tighter" and less flexible than the other participants, do NOT attempt to duplicate what they are doing. Stretching is not a competitive exercise to see who is the most flexible—a lot of your tightness could be caused by genetics. You may never be able to perform certain stretching or flexibility exercises with the degree of ease that some people who seem to be double jointed.

TIP: If you find that your body is not properly warmed up, or you are suffering from minor aches and pains take a brief but hot shower before starting, or continuing further. Stay in the shower until you can feel your muscles loosen up, then change into your workout gear and start your stretching session. Alternately, take a warm, soothing bath to relax your muscles—but not too warm, or for too long—you may forget why you took the bath and be TOO relaxed to climb out of the tub and do some stretching exercises.

# Stretches You Can Do

#### Lower Back, Buttocks and Hip Stretches:

Lower back pain affects the majority of the North American population at some point in their lifetime, and can be prevented by doing the following:

- •Strengthen your weaker muscles and stretch the tighter ones
- Avoid excessively arching your spine
- ·Maintain good alignment and a vertical torso when you move
- ·Always use your legs when you lift heavy objects.

Popular lower back, buttocks and hip stretches that can be performed while **lying flat** on an exercise or yoga mat include:

**Hug Knees to Chest stretch**—Lie on your back and lift both knees up to your chest. Place your arms under your knees, and slowly pull the knees toward your shoulders. Hold this position without rocking, and breathe slowly and deeply. This exercise also stretches the gluteus maximus muscles.

**Erector Spinal stretch**—Lying on your back, hug your knees to your chest and then lift both legs upward so that the soles of your feet are pointed toward the ceiling. Gently open your legs to shoulder width apart and grasp the center of your outstretched feet (the arch) by placing your elbows inside your thighs. Slowly press your knees toward the floor and hold. If you can't reach the arch or soles of your feet, perform this exercise by holding onto your ankles instead. This exercise also gives you an inner thigh stretch.

**Pelvic Tilt into Bridge stretch**—Lie flat on the mat with your feet on the floor and your heels directly under your knees. Stretch your arms overhead, with your palms facing upward to stretch your lower back and upper torso. Pull in your stomach and lift **only** your tailbone to the ceiling to stretch your lower back. To perform the bridge, slowly lift the entire spine except the neck. Hold this position before returning your back to the floor.

**Pelvic Tilt into Bridge (alternate) stretch**—Lie flat on the mat with your feet on the floor and your heels directly under your knees. Stretch one of your arms overhead, with the palm facing upward to stretch your lower back. Gently lift your lower back and place the other arm underneath the lower back, so that when you gently lower your back (tailbone), it is supported by your forearm. Slowly stretch or lower your tailbone to the floor, using your forearm as a brace. Pull in your stomach and lift **only** your tailbone to the ceiling to stretch your lower back. To perform the bridge, slowly lift the entire spine except the neck. Hold this position before slowly lowering your back to your forearm and stretching your tailbone to the floor using your forearm as a brace. Repeat this exercise by switching your arms.

**Cat stretch**—On your hands and knees, pull your belly button up into your spine and round your spine completely. Lower your back, shoulders and neck. Let your head drop and hold.

**Child's Pose stretch** — On your hands and knees, with your hands flat and palms downward on the mat and pointing forward, slowly lower your buttocks down to sit on your heels. Slowly walk your hands in front of you with your palms downward as far as you can safely stretch, so that hands and forearm are flat on the floor. Lower your forehead to the floor and hold. Relax, and breathe.

Advanced Child's Pose stretch — On your hands and knees, slowly lower your buttocks down to sit on your heels. Slowly lower your head towards your knees while simultaneously reaching with your arms down your side to gently hold onto your feet. If possible, lower your forehead to the floor and roll your shoulders down so that they are resting on your knees and hold. Relax, and breathe.

**One Knee to Chest stretch**—Lie on the floor with one leg straight, and gently lift the other knee to your chest. Grasp this leg with both hands **underneath** the knee joint and gently tug the knee toward your nose. Hold, then repeat with the other knee.

Knee Across the Body stretch—Lie on the floor with your right leg straight. Bend your left leg and slowly lower it across your body towards the floor, by gently holding and guiding the knee down with your right hand. Place your left arm comfortably beside you and turn your head and upper trunk to the left—so that you are facing the opposite way to the stretch on your left leg. Gently push your left knee toward the ground as your tailbone falls back toward the floor. An advanced form of this exercise is to stretch your left arm outward and place it palm down on the floor in front of your face—stretch it out as far in front of you as possible without hurting. Hold, and then switch sides.

Ankle on the Knee stretch—Lie on your back and bend the right leg so that right ankle rests on your left knee. Place both hands underneath the left knee and gently pull both legs towards the chest. Relax your neck and shoulders. Hold, and then switch sides. Seated Floor Twist stretch — Sit up straight with your legs flat on the floor. Slowly cross your left leg over top of your right leg, and put it on the floor, outside of the right knee. "Hook" the outside of your left knee with your right elbow as you simultaneously turn your torso to the left. Place your left hand on the floor for balance, and stare at a spot on the wall that lifts your head slightly. Hold, and then switch sides.

Advanced Seated Floor Twist stretch — Sit up straight with your legs flat on the floor. Slowly cross your left leg over top of your right leg, and grasp your left leg with your right hand. Gently pull your left leg towards your chest, and place your left foot on the floor midway between the knee and hip. Turn or twist your torso to the left. Place your left hand on the floor for balance and stare at a spot on the wall that lifts your head slightly. Hold, and then switch sides.

Popular lower back, buttocks and hip stretches that can be performed while **seated** include:

Seated Lower-back stretch — Sit on a chair or weight bench with your feet flat on the floor, and legs shoulder width apart. Place your hands on your knees and slowly incline or bend your body forward from the hips until your head and upper back hang forward between your legs. Slowly lower your head to the ground and hold. To add an inner thigh stretch, brace your elbows inside your knees and slowly press your legs open. Make sure you come up slowly when completed this exercise, and wait a few seconds before standing up - otherwise you may get dizzy from the rush of blood to your head.

Seated Chair Twist stretch — Sit on a chair or weight bench with both feet flat on the floor with an upright posture. Take a deep breath, and place your right hand on the outside of your left leg (about halfway between the knee and the buttocks). Slowly rotate your head and chest to the left side and place your left hand on the weight bench for support. Take another deep breath and twist your torso just a bit further, while keeping your feet firmly planted on the floor and looking as far back as possible. Hold, and then switch sides.

#### Quadriceps (Quads) and Hip Flexor Stretches:

The quadriceps muscles help straighten or extend your leg, and in conjunction with the hip flexors are responsible for lifting or flexing the knee toward the chest.

**Supine Quad stretch**—Lie on a weight bench, couch or the edge of your bed, and hang one leg and arm over the side with your other leg stretched out straight. Bend that knee and hold the top of the foot while you stare directly at the ceiling. Pull your belly button to your spine, being careful not to arch your lower back. Press your foot down and into your hand. Hold, and then switch sides.

**Standing Quad stretch**—Stand on your left leg and pull your right foot up behind you with your right hand. To maintain balance either flex your left leg slightly or hold onto a solid object with your left hand. To make this a more difficult stretch that also stretches your lower back, lift your left hand directly above your head and reach for the ceiling, keeping your palms facing outward. Hold, and then switch sides.

**Face Down Quad stretch**—Lie facedown on a yoga mat with both legs straight and your left hand under our forehead. Bend your right knee so you can hold the foot in your right hand. Gently lift the foot up toward the ceiling and slightly raise the thigh off the floor. To stretch the hip flexor, lift the thigh higher and press your abdominals into the floor to maintain stability. Hold, and then switch sides.

**Quad stretch on Your Side**—Lie on your right side with your right arm stretched out above your head with the palms on the ground, and your right knee bent at a 90 degree angle flat on the floor. Bend your left knee behind you and hold your left foot with your left hand. To stretch the hip flexor, press your left hip forward as you push left foot back into your hand. Hold, and then switch sides.

**Hip Flexor stretch on Bench**—Lie on a weight bench or bed so that your buttocks are up to the edge, and stare at the ceiling. Pull one knee to your chest using your arm underneath the knee as support, while slowly lowering the other leg toward the floor. This leg doesn't have to touch the floor, but make sure this doesn't force you to arch your back. Hold, and then switch sides.

#### Hip and Thigh Stretches:

The outer hip and thigh muscles (the abductors) help you step side to side, and rotate your leg in and out of the hip socket. The inner-thigh muscles help you cross your legs over the center line of your body, flex the knees, and also rotate your legs in the hip socket. Tight abductors can cause pain and unsteadiness when you walk.

Floor stretch on Side — Lie on your left side, and bend your left leg in front of you to stabilize your torso. Straighten your right leg and rest your right foot on the floor. Take a deep breath, and stretch your right arm over your head. Grasp your right arm by the wrist and gently stretch the entire side of the body. Hold, and then switch sides.

Seated Butterfly stretch—Sit up straight on a yoga mat with the soles of your feet together about six to eight inches in front of your hips. Rest your elbows on your inner thighs and incline your head forward without rounding your shoulders. Hold.

**Groin stretch**—Lie on a yoga mat on your right side and bend your right knee in front of you to stabilize your torso. Stretch your right arm out so that your palms are flat on the floor, and rest your head on your shoulder. Lift your left leg upward and hold it by the back of the knee. Pull your left knee toward your left shoulder and simultaneously press your knee toward the floor. HOLD, and then switch sides. To do a more advanced version of this stretch, hold the back of your leg by the foot (instead of behind the knee), and straighten out the leg when pressing your knee toward the floor.

**The Straddle stretch**—Sit on a yoga mat with your back straight, and extend your legs in front of you. Bend both knees so that both feet touch the floor (your legs should be in a V formation). Put your hands on the floor in front of you with the palms downward while simultaneously incline your torso forward. Hold.

#### Hamstring Stretches:

The hamstrings work in opposition to the quadriceps muscles, but lag behind in muscle strength and flexibility. As a result they are prone to "pulls" from sudden movements and additional injury if the hip flexors are also tight.

Hamstring stretch with Leg Up—Lie on your back, bend one knee, and put that foot flat on the floor to stabilize your spine. Extend the other leg in the air, and grasp it with both hands by the knee. If you're tight, you won't be able to straighten it. Bend the knee so that the sole of the lifted foot faces the ceiling. Slowly straighten the leg as much as possible and then pull the leg towards your nose. Hold, and then switch sides.

Hamstring stretch on Floor — Sit up straight on the floor and bend one leg so that foot touches the floor. Straighten the other leg as much as possible and flex the toes up. Place one hand on your flexed knee to support your spine and grasp your straight leg by the toes. If you are unable to do this, use a towel or strap around your foot to assist with this stretch.

Tone

## Abdominal Stretches:

Stretching the abdominal muscles is one of the most overlooked stretches, as most daily activities and exercises generally tighten these muscles. When performing abdominal stretches, **do not arch the spine**, especially if you have lower back problems.

**Full-Body stretch**—Lie on your back and extend your arms overhead with your palms facing upward. Raise your chest to the ceiling and let your lower back lift off the floor. Suck in your belly button toward your back and point your toes. Using your stomach as midpoint, consciously attempt to stretch your hands and feet in opposite directions. Hold for 30 seconds.

**Upward-Facing Dog stretch** — Lie facedown on a yoga mat and place your hands on the floor just outside your shoulders with your palms down. Press into your hands and lift your head, shoulders, upper body and hips off the floor. Lift your head high enough to focus on a point on the wall where it intersects with the ceiling. You should be balanced on your hands and hips. Hold for 30 seconds. To perform an advanced version of this stretching exercise, move from this position to the Child's Pose, by keeping your hands flat on the floor and simultaneously moving your torso back so that you end up with your buttocks resting on your heels, forehead on the floor, and your hands pulled backward toward your body along the floor.

Half Locust stretch—Lie facedown on the floor with both feet stretched out, and your left hand under your left hip. Bend your right knee so you can hold your right foot in your right hand. Lift the foot in the air while simultaneously lifting your shoulders off the floor. Hold, and then switch sides.

**Full Locust stretch**—If you can safely perform the Half Locust without hurting your back or neck, lie facedown on the floor with both feet stretched out. Bend both knees and grasp your feet with both hands. Look straight ahead and hold for 30 seconds.

## Torso Stretches:

Torso stretches generally work the entire trunk of the body and involve the use of numerous upper body muscles in most exercises.

**Overhead stretch** — Stand with your feet a shoulder width apart and your knees slightly flexed. Put your arms out in front of you at shoulder level at lace both your fingers together. Lift your arms over your head so that your palms are pointing towards the ceiling. Keep your shoulders down as you extend your arms up.

**Overhead stretch with Bend** — Stand with your feet a shoulder width apart and your knees slightly flexed. Lift your arms directly over your head, bend both of your elbows, and grasp each elbow with the opposite hand. Take a deep breath, lift your chest and bend as far as you can to the left with no movement from the hips down. Hold for up to 10 seconds and return to the overhead position. Repeat for the bend to the right side.

Lateral stretch — Stand with your feet a shoulder width apart and your knees slightly flexed. Place your right hand firmly on your right hip to support and help straighten the spine. Raise your left arm, and place your left arm comfortably behind your head. With your weight distributed evenly between both legs, and without leaning into your left hip, incline your torso to the right as far as comfortably possible. Hold and then switch sides.

Stretch

64 Movin' & Groovin'

#### Chest and Shoulders Stretches:

Due to their poor construction and heavy upper-body work load, the shoulder joints are vulnerable to injury and can become more unstable as we age. Do NOT perform any sharp, sudden motions.

Hands Behind Head stretch—Stand with your feet a shoulder width apart and your knees slightly flexed. Lace your fingers together with the palms out. Put them behind your head and rest your head in your palms. Tilt your head back slowly, lift your chest up, and look at the ceiling. Hold for 10 to 30 seconds.

Arms Behind Back stretch — Stand with your feet a shoulder width apart and your knees slightly flexed, facing straight ahead. Lace your fingers together with the palms out, behind your back. Gently pull your hands down towards the floor to depress your shoulder joints. Then lift your arms and chest up at the same time, without arching your spine

**Doorway stretch** — Stand inside an open doorway with your feet together. Lift your arms to shoulder level and bend your elbows at a 90 degree angle with your palms facing forward. Place your hands on either side of the door frame and gently push your upper body through the doorway until your elbows end up slightly behind you. Hold for 10 to 30 seconds.

**Shoulder stretch** — Stand with your feet a shoulder width apart and your knees slightly flexed, facing straight ahead. Draw the left arm across the body at shoulder level. Grasp the left arm with the right arm at the elbow and gently pull it toward the body. Hold, and then switch sides.

Triceps stretch — Stand with your feet a shoulder width apart and your knees slightly flexed, facing straight ahead. Raise your right arm over your head and hold on to your right elbow with your left hand. Gently pull your right elbow down toward your left shoulder without moving your trunk or any other part of your body. Hold, and then switch sides.

## Neck Stretches:

Exercise caution when stretching your neck, by always doing each stretch slowly, and in muscular control. It is also **NOT recommended that you roll your head in a full circle** as a neck stretching exercise.

**Back of the Neck stretch**—Lie down with your knees bent and your feet on the floor. Lace your fingers together behind your head and gently lift your head off the floor so the top of your head curls toward your feet. Keep your shoulders on the floor and hold.

Lateral Neck stretch — Stand with your feet a shoulder width apart and your knees slightly flexed, facing straight ahead. Place your right hand behind your head so that your fingers are over your left ear. Without moving your trunk, gently pull the right ear to your right shoulder. Hold, and then switch sides.

Neck stretch on Bench—Lie on your back on a weight bench with your upper back supported by the bench and your neck hanging horizontally over the bench. Clench your jaw by holding your teeth comfortably together and then slowly tuck your chin towards your chin. Hold for a count of two and slowly lower your clenched jaw to a level slightly below horizontal. Hold for a count of two and repeat the motion again two to five more times.

Neck stretch on Bench (alternative) — Lie on your back on a weight bench with your upper back supported by the bench and your neck hanging horizontally over the bench, staring at the ceiling. Clench your jaw by holding your teeth comfortably together and then slowly turn your head to the right as far as possible without any pain. Hold for a count of two, and slowly return to the starting position. Repeat the motion for the left side. Do this two to five times for each side.

#### Wrists and Fingers Stretches:

Stretches in the wrists and fingers helps prevent carpal tunnel syndrome (inflammation of the nerves in the wrist), which is common for people who spend a lot of time on a computer keyboard. Do these exercises **very gently**.

**Wrist Flexor stretch** — Stretch your left arm out in front of you with your right hand holding onto your left fingers. Point the fingers upwards, and gently pull them back toward your body. Hold, and then switch arms.

**Wrist Extensor stretch**—Stretch your left arm out in front of you and turn your fingers down so that your palm is facing towards your body. With your right hand gently pull the fingers back toward your body. Hold, and then switch arms.

#### Walking Rules:

If there's a single "perfect exercise," it's walking, says Susan Johnson, EdD, who has helped thousands of people walk their way to good health as director of education for The Cooper Institute in Dallas and author of their *Walking Handbook*.

"Walking is easy, convenient, and inexpensive—all you need is a good pair of shoes," she notes. "Nearly anybody can do it at any skill level—from Grandma to the kids. You can do it almost anywhere, anytime. Plus, it has the lowest dropout rate and injury rate of all exercise programs."

And for you exercise dropouts, it doesn't take much. "Just 30 minutes a day can reduce your risk of dying prematurely and of developing numerous chronic diseases," says Johnson. "And it will help control your weight, build and maintain healthy bones, muscles, and joints, reduce your risk of falls, and boost your mood."

So walk your way to health with this 30-day plan. Try a tip a day to build walking into your life.

#### **Buy Shoes!**

Get a pair of comfortable walking shoes, being sure to allow 1/2 inch (or the width of your index finger) between the end of your longest toe and the end of the shoe.

#### Adopt a "Bottoms-Up" Mentality

Always look for ways to *add* steps into your day. Use the bathroom on another floor, and climb stairs to get there. Recharge a sluggish brain by going on a quick "walk-about" during a work break.

Tone

#### Build Some Extra Hoof Time Into Your Day

On days when you can't fit your regular walk into your schedule, focus on shorter walks you can add to your day. Park in the farthest lot, or get off your bus or train a stop early, and walk the rest of the way. These small walks add up and bring you closer to your 60-minuteper-day goal.

#### Buddy Up

Enlist a friend or family member to walk with you, and start out slowly—with as little as 5 minutes daily. Walking with someone will not only make the time fly, but it will keep you motivated to walk farther and faster. Add 5 minutes each week.

#### **Check Foot Form**

During your walk, be sure you land on your heel, roll your foot from heel to toe, then push off forcefully with your toes. To keep your feet in top shape, use this exercise every day: While seated, rise onto the balls of your feet, then your tip-toes, then curl your toes under. Repeat 10 times, holding each position for 5 seconds.

#### Start at the End

Reverse your usual walking route, beginning where you usually end. If you walk on a trail or track, try walking at a different time of day. If you usually walk in the morning, try an evening walk, and vice versa.

#### Shop Aerobically

Walk a brisk lap or two around the market or mall before beginning to shop. Shopping at the mall can burn up to 210 calories per hour—far more than shopping online. You can get an even greater benefit by taking the stairs instead of the escalator or elevator.

#### Talk Yourself Into It

Have a daily, positive walking affirmation to repeat to yourself, such as "Walking makes me look and feel great" or "Walking helps me think creatively."

#### Turn Downtime Into Uptime

Take a 2-minute walk during TV commercials, while your computer is booting up, or when waiting for the copy machine. Fifteen 2-minute walks per day add up to fulfill the surgeon general's exercise prescription!

#### Faster, Faster

Take quicker—not longer—steps, letting your stride length come naturally. Remember, you'll burn more calories as you increase your walking speed.

#### Consider It Your Duty

Consider it your patriotic duty to walk today. If the more than 88 million inactive Americans started taking a daily walk, we'd save more than \$76 billion per year in medical costs.

#### Stretch It Out

Warm up by walking slowly for about 5 minutes. Then spend 5 minutes stretching at the end of your walk. Target your tightest areas first, and hold each stretch for 60 seconds to achieve the greatest flexibility.

#### Save Some Bucks

Your walks can boost your bank account as well as your health. On average, inactive Americans spend approximately \$330 a year more on health care expenses than their more active counterparts.

#### Swing 'Em, Don't Wing 'Em

For a speed boost, bend your elbows to 90 degrees, and let your hands swing in an arc from your waistband to chest height. Pump your arms up and down; don't "chicken wing" them across your body.

## Bet Your Life

Make a friendly wager with someone — or yourself — that you'll meet your walking goals. If you fail, vow to send money to an organization you dislike.

## Let a Dog Dog Your Steps

Dogs are enthusiastic walking partners, though they do like to stop at every bush. You can use your dog to ensure that you are walking at a good pace. If he's trotting, you're probably in your target range. If you don't have a dog, borrow the neighbor's.

## Celebrate 3 Weeks of Walking

After 3 weeks of walking, congratulate yourself with a treat, such as a pedicure, a massage from a professional, or a new walking accessory—a new T-shirt, heart rate monitor, walking video, or a pair of new shoes.

#### Walk, Don't Wait

Whenever you have to wait—for a restaurant table, doctor's appointment, child's music lesson, or soccer practice—don't just sit there, walk! (Let the receptionist know you'll be circling the block, checking in at each lap.)

#### Try Some Phone-y Moves

Get a headset for your cordless phone and cell phone so you can do aerobic phoning by walking as you talk. Just stay mindful of others. Not everyone wants to know the latest gossip in your office or where you're going on vacation!

## Take to the Hills

For a more strenuous workout—and greater calorie burn—walk some hills. Even a moderate grade can significantly boost your energy expenditure. Remember to maintain an upright posture, work up to steeper inclines, and stretch out thoroughly to get the best results.

## Walk Out a Problem

Stuck for an idea? Pondering over a predicament? Get your creativity flowing with a brainstorming walk—be sure to bring along a pencil and paper, or even better, a mini-tape recorder!

## Shine Your Headlights

Counter the tendency to have round-shouldered posture by imagining there's a headlight in your breastbone: Shine it forward, not down on the ground, and look to the horizon.

# Count on It

A good goal is to take 130 steps per minute, which is a walking pace of about 4 mph—terrific for a cardiovascular workout. It takes roughly 2,000 steps to walk a mile; a great daily goal is 10,000 steps. Purchase a pedometer online or call (800) 325-3186.

# Add a Little Travelin' Music

Wear a personal stereo to accompany your walk with music, news, or books on tape. If you're outdoors, be careful to keep one ear free to hear sounds around you.

#### Take a Grateful Walk

Stop the negative self-talk, and instead, dedicate today's walk to being thankful. Instead of thinking "my thighs are too big," be grateful for the strong, healthy thighs that support you as you walk.

# Tone Builders

If you do daily weight-bearing exercises, you must be careful not to overtax the muscles you are working, in order to avoid injury. That's why it's good to alternate muscle groups so you can get the benefit of activity without overstressing particular muscles.

Do each of the exercises 10 times, or until fatigued. Always hold your posture for one long second as you do each repetition.

## Group 1. Legs

**Hamstrings** Lie on your back with your fee up on a chair. Your legs should be at a comfortable 90 degree angle. Straighten your legs as you arch your back. Hold for a long count of one. Then return to the beginning.

**Quadriceps (squats)** Stand next to a chair or bedside. *Keeping your back straight*, slowly sit down to touch the chair. Hold that position for a long count of one. Then return to standing

**Calves (calf raises)** Stand on stairs with only the ball of your feet on the stair (your heels extended over the edge). Allow your feet to extend as far down as they will go. Slowly move to your tip-toes. Hold that extended position for a long count of one. Then return.

#### Group 2. Legs

**Inner Thigh (inner leg lifts)** Lie on your side. Cross upper leg over lower leg as shown in the picture. Lift lower leg slowly up and hold for a long count of one. Slowly return to floor. Repeat each leg 10 times, 3 sets, or until fatigued.

**Outer Thigh (outer leg lifts)** Lie on your side with both legs held straight out. Lift upper leg slowly upward as far as you can. Hold that position for a long count of one. Slowly return to floor. Repeat each leg 10 times, 3 sets, or until fatigued.

**Butt (donkey kicks)** Get on hands and knees on the floor or on a mat. Extend leg slowly straight back as far out and up as you are able. Hold that position for a long count of one. Slowly return to knee. Repeat each leg 10 times, 3 sets, or until fatigued.



















## Group 1. Arms

**Front Shoulders** You can use weights if you like, but you don't have to if you don't have them. Sit in a chair with your hands extended to your knees. And, if you like, hold something that weighs about 5 pounds in both hands. Keeping your arms extended, slowly raise your arms to the level of your head. Hold that position and then lower your arms back to your knees. Repeat this 10 times, 3 sets.

**Chest (kneeling push-ups)** Get on hands and knees. Be sure to keep your back straight from your knee to your shoulder (do not bend at the waist). Slowly bend your arms until your body touches the floor. Hold that position for a long count of one, and then return. Complete this 10 times, 3 sets, or until fatigued.

**Forearms (gripping)** Get a tennis ball or other squeezable object (racquetball also works). Put ball in one hand and squeeze gently until you cannot impress the ball any more. Hold that position for a count of one. Slowly relax. Complete 10 times, 3 sets.





#### Group 2. Arms

**Biceps (curls)** You can use weights if you like, but any object with a handle will do. Sit in a comfortable position. Grab your weight in one hand and slowly curl up the weight. Hold in that position for the count of one. Return to the extended position. Complete 10 times, 3 sets.

**Triceps (dips)** Find any fixed object (bath tub, cabinet edge, etc.). Face away from that object and put your hands behind you on the edge. Make sure you have a good grip and then put your feet down 3 feet in front of you. Keep your legs straight, and slowly bend your arms until your tricep is roughly parallel to the floor. Hold position for a slow count to one. Return to the arms-extended position. Repeat 10 times, 3 sets.

Lateral Shoulders (lateral shoulder raise) You can use weights if you have them, but any object (approximately 5 pounds) will do. You don't have to use weights at all. Standing tall with your hands at your side, slowly raise your arms to become parallel to the floor. Hold this position for a slow count to one. Slowly return to your side. Complete 10 times, 3 sets.



#### Group 1. Torso

**Lower stomach (leg raises)** Lying comfortably on the floor, bend one leg to support you. With the other leg, slowly lift 1 foot off the ground. Hold in that position for a long count of one. Return slowly to the ground. Repeat 10 times, 3 sets or until fatigued.

**Lower back (the Boat)** Lying on your stomach with your hands extended in front of you, slowly arch your torso and legs off the ground. Hold that position for a long count of one. Return slowly to floor. Complete 10 times, 3 sets or until fatigued.

#### Group 2. Torso

**Upper stomach (mini-ups)** Lying on your back with your knees bent at a 90 degree angle, place your hands across your chest. Slowly lift your shoulders but not your lower or middle back off the ground. Return to the ground. Repeat 10 times, 3 sets, or until fatigued.







# Homework

- Start by making a list of the most enjoyable activities you can think of. Remember to think outside of the box (or at least, outside of the gym), and feel free to choose alternative exercises we suggested such as dance, yoga, pilates, gardening, etc.
- •Once you have settled on the one you feel like you can stick with the longest, and make a plan to add that one structured activity to your week.
- •Include just 10 minutes of toning exercises each day.
- •Be sure to alternate the muscle groups, so you avoid working the same ones two days in a row.

# Journaling

Your goal this week is to move more and weave it into your day.

Essay topics of the week:

- •Exercise is associated with pain. Diet is associated with rigor. Coincidence?
- •How did gardening, playing, and dancing get missed as exercise?
- •Slow and steady wins the diet race, and also the fitness race.

# Beginning of the week

- •Are you doing activities you love?
- •Do you watch too much TV?
- Do you consider yourself active?

# End of the week

- •What fun activity have you added?
- •How are you doing with your toning exercises?
- •Thoughts on increasing activity levels.

# Further Reading

#### Diabetes Res Clin Pract. 2002 Oct;58(1):11-8.

# The effect of walking before and after breakfast on blood glucose levels in patients with type 1 diabetes treated with intensive insulin therapy.

**OBJECTIVE** — We examined the effect of walking at different timing on carbohydrate metabolism in patients with type 1 diabetes.

SUBJECT & METHODS — Subjects included six non-obese patients treated with intensive insulin therapy. The blood glucose profile was determined with and without walking for 30 min before (ExBM) or after (ExAM) breakfast.

RESULTS — Mean blood glucose values at 07:00 h in the control, ExBM, and ExAM were 9.0, 8.0, 8.8 mM, respectively. Glucose levels gradually increased after meals up to 13.6, 15.0, and 15.3 mM, respectively, at 09:00 h (0.5 h after meals). At 09:30 h, glucose levels significantly fell to 11.0 mM during walking in the ExAM (P=0.039 vs 09:00 h values). The area under blood glucose response curve was significantly lower only in the ExAM when compared with that in the control (P=0.043) (11.8, 17.8. and 3.8 h mM in the control, ExBM and ExAM, respectively).

**CONCLUSION**—These results suggest that walking after meals improves glycemic control in patients with type 1 diabetes being treated with intensive insulin therapy consisting of the basal-bolus (NPH-human regular) insulin regimen.

#### J Clin Psychiatry. 2003 Sep;64(9):1005-12.

# Aerobic endurance exercise improves executive functions in depressed patients.

BACKGROUND—Aerobic endurance exercise has been shown to improve higher cognitive functions such as executive control in healthy subjects. We tested the hypothesis that a 30-minute individually customized endurance exercise program has the potential to enhance executive functions in patients with major depressive disorder.

METHOD—In a randomized within-subject study design, 24 patients with DSM-IV major depressive disorder and 10 healthy control subjects performed 30 minutes of aerobic endurance exercise at 2 different workload levels of 40% and 60% of their predetermined individual 4-mmol/L lactic acid exercise capacity. They were then tested with 4 standardized computerized neuropsychological paradigms measuring executive control functions: the task switch paradigm, flanker task, Stroop task, and GoNogo task. Performance was measured by reaction time. Data were gathered between fall 2000 and spring 2002.

**RESULTS**—While there were no significant exercisedependent alterations in reaction time in the control group, for depressive patients we observed a significant decrease in mean reaction time for the congruent Stroop task condition at the 60% energy level (p =.016), for the incongruent Stroop task condition at the 40% energy level (p = .02), and for the GoNogo task at both energy levels (40%, p = .025; 60%, p = .048). The exercise procedures had no significant effect on reaction time in the task switch paradigm or the flanker task.

**CONCLUSION**—A single 30-minute aerobic endurance exercise program performed by depressed patients has positive effects on executive control processes that appear to be specifically subserved by the anterior cingulate.

#### J Clin Exp Neuropsychol. 2003 Aug;25(5):643-53.

#### Early life physical activity and cognition at old age.

Physical activity has shown to be inversely associated with cognitive decline in older people. Whether this association is already present in early life has not been investigated previously. The association between early life physical activity and cognition was studied in 1,241 subjects aged 62-85 years, in a prospective populationbased study. Physical activity between ages 15 and 25 years was asked retrospectively. The findings suggest a positive association between regular physical activity early in life and level of information processing speed at older age in men, not in women. The association could not be explained by current physical activity or other lifestyle factors. This finding supports the cognitive reserve hypothesis, and might suggest that early life physical activity may delay late-life cognitive deficits.

# *Researchers find 30 minutes' daily walking key to maintenance*

CHICAGO, Illinois (AP) — Overweight adults who are not on a diet need only a small amount of exercise the equivalent of a half-hour of brisk walking per day — to prevent further weight gain, a study found.

Participants who got no exercise during the eightmonth study gained an average of almost 2.5 pounds. But 73 percent of those who briskly walked 11 miles a week, or about 30 minutes a day, were able to maintain their weight or even lose a few pounds.

The most noticeable weight loss occurred in those who did the most vigorous exercise — jogging about 17 miles weekly. They lost an average of nearly eight pounds over eight months, and also shed more than 10 pounds of body fat and gained about 3 pounds of lean body mass on average.

The study was led by Duke University researchers and involved 120 overweight or mildly obese adults who were instructed not to diet during the research. The findings appear in Monday's Archives of Internal Medicine.

The study confirms that exercise without cutting calories is not the most effective way to lose weight, said Dr. Samuel Klein, director of the Center for Human Nutrition at Washington University School of Medicine in St. Louis.

But demonstrating that small amounts of exercise alone can prevent weight gain is significant, given the nation's growing obesity epidemic, Klein said. "That's important because on average we gain about a pound of fat a year from age 25 to 55 in this country," he said. "Preventing that would be very important."

The men and women studied were ages 40 to 65. They had an average body-mass index of 29.7; anything between 25 and 29 is considered overweight, while 30 and above is obese. The index is a height-weight ratio.

Government estimates suggest more than 60 percent of American adults are overweight. The study may help settle confusion over conflicting recommendations from the Institute of Medicine and the federal Centers for Disease Control and Prevention. Arch Intern Med. 2003 Jul 28;163(14):1682-8. Comment in: Arch Intern Med. 2004 Feb 23;164(4):460.

#### Cardiorespiratory fitness and the risk for stroke in men.

BACKGROUND—Low cardiorespiratory fitness is considered to be a major public health problem. We examined the relationship of cardiorespiratory fitness, as indicated by maximum oxygen consumption VO(2)max with subsequent incidence of stroke. We also compared VO(2)max with conventional risk factors as a predictor for future strokes.

METHODS — Population-based cohort study with an average follow-up of 11 years from Kuopio and surrounding communities of eastern Finland. Of 2011 men with no stroke or pulmonary disease at baseline who participated in the study, 110 strokes occurred, of which 87 were ischemic. The VO(2)max was measured directly during exercise testing at baseline.

RESULTS—The relative risk for any stroke in unfit men VO(2)max, <25.2 mL/kg per minute) was 3.2 (95% confidence interval [CI], 1.71-6.12; P<.001; P<.001 for the trend across the quartiles); and for ischemic stroke, 3.50 (95% CI, 1.66-7.41; P =.001; P<.001 for trend across the quartiles), compared with fit men VO(2)max, >35.3 mL/kg per minute), after adjusting for age and examination year. The associations remained statistically significant after further adjustment for smoking, alcohol consumption, socioeconomic status, energy expenditure of physical activity, prevalent coronary heart disease, diabetes, systolic blood pressure, and serum low-density lipoprotein cholesterol level for any strokes or ischemic strokes. Low cardiorespiratory fitness was comparable with systolic blood pressure, obesity, alcohol consumption, smoking, and serum low-density lipoprotein cholesterol level as a risk factor for stroke.

**CONCLUSIONS**—Our findings show that low cardiorespiratory fitness was associated with an increased risk for any stroke and ischemic stroke. The VO(2)max was one of the strongest predictors of stroke, comparable with other modifiable risk factors.

#### J Clin Exp Neuropsychol. 2003 Aug;25(5):625-33.

#### Cognitive reserve and lifestyle.

The concept of cognitive reserve (CR) suggests that innate intelligence or aspects of life experience like educational or occupational attainments may supply reserve, in the form of a set of skills or repertoires that allows some people to cope with progressing Alzheimer's disease (AD) pathology better than others. There is epidemiological evidence that lifestyle characterized by engagement in leisure activities of intellectual and social nature is associated with slower cognitive decline in healthy elderly and may reduce the risk of incident dementia. There is also evidence from functional imaging studies that subjects engaging in such leisure activities can clinically tolerate more AD pathology. It is possible that aspects of life experience like engagement in leisure activities may result in functionally more efficient cognitive networks and therefore provide a CR that delays the onset of clinical manifestations of dementia.