Improve health with movement: There is life after five

Erik Peper, Ph.D.
San Francisco State University
and
BiofeedbackHealth

Physical fitness promotes health. Find ways to make exercise part of daily life, not only because you should be fit and healthy but for fun and enjoyment. For one person it may be walking, for another jogging, bicycling or dancing. Increase the joy and pleasure of movement. In most cases about 20 minutes of continued activity is enough to keep in shape and regenerate. **When the urge to watch TV or just to crash occurs, do some of the movement—you will gain energy.** The following exercises are developed to reduce discomfort and improve health. Practice them throughout the day, especially before the signals of pain or discomfort occur. Before performing the exercises, read over the General Concepts Underlying the Exercises, and then explore the various movements.

**General Concepts Underlying the Exercises**

While practicing the strength and stretch exercises, always remember to **breathe.** Exercises should be performed *slowly, gently and playfully.* If pain or discomfort occurs, **STOP.** Please consult your health care provider if you have any medical condition which could be affected by exercise.

Perform the practices in a playful, exploratory manner. Ask yourself: “**What is happening?**” and “**How do I feel different during and after the practice?**” Practice with awareness and passive attention. Remember, **Pain, No gain** -- Pain discourages practice. Pain and the anticipation of pain usually induce bracing which is the opposite of relaxation and letting go. Also, many of our movements are conditioned. Without knowing when we do an activity we hold our breath and tighten our shoulders. Inhibit the startle/orienting/flight response embedded and conditioned with movement. Explore ways to break apart these habitual/conditioned eye, head, and hand coordination. For example, continue to breathe and relax instead of holding your breath and tightening your shoulders when you initially look at something.

Learn to reduce the automatic and unnecessary tightening of muscles not needed for the performance of the task. As you do an exercise, continuously, check your body and explore relaxing muscles that are not needed for the actual exercise. Become your own instructor in the same way that a yoga teacher keeps reminding you to exhale as you are doing an asana (yoga pose). If you are not sure if you are tightening, initially look another person doing the exercise to observe their bracing and breath holding. Ask them to observe you and give feedback. In most cases, the more others are involved the easier it is to do a practice.

It is often helpful to perform the practice in a group. Encourage your whole work unit to take breaks and exercise together. In many cases, it is much easier to do something
together, especially when you are not motivated—use others to help encourage your practice.

**Back, neck and shoulders**
The number one overall work-related complaint is the backache—and this is also true for many people who work at the computer. In many cases there is a correlation between backache and stress, immobility, and lack of regeneration. Back pain is often blamed on disk problems, to a large extent caused by chronic tension that may have some psychological factors. Explore some of the following questions, by asking yourself:

- Is there something for which I am spineless?
- Who or what is the pain in my neck or back?
- What is the weight I am carrying?
- Am I rigid and not willing to be flexible?
- What negative emotion, such as anger or resentment, needs to resolved?

Be willing to act on whatever answers you observe. Back and neck pain is often reduced significantly after emotional conflict are resolved.

The best treatment is prevention, emotional resolution, and physical movement. Allow your back to relax and move episodically. Allow tensions to dissipate and explore the physical, psychological and social burdens you carry. Explore the following exercises for the back, head, neck and shoulders, arms and hands, and legs.

**Increase back flexibility**

*Cross Crawl*

Stand up while wearing flat shoes (if wearing high heels, take them off and do this with bare feet). Reach your right hand up toward the ceiling and at the same time, lift your left (opposite) knee up. Do this as a hopping motion so that as the right hand and left knee go
up, you rise on your right toes. Then, let your right arm freely swing down and bring your left foot down. Repeat on the other side by bringing your left hand towards the ceiling and simultaneously bringing your right knee up and then allowing them to come down again. Let the arms swing freely. Do this in a playful manner, alternating side to side.

After five repetitions, repeat for five repetitions while rotating the head in the direction of the hand going up to the ceiling, then do five more repetitions while rotating the head in the direction of the hand that goes down and backwards.

**Pectoral Stretch**

While sitting in your chair, interlace your fingers behind your neck. Lean back with your head against the fingers and bring your elbows back as far as possible while pulling your shoulders down and relaxing the neck. Hold for 5 seconds and remember to keep breathing. Relax and drop your hands to your lap. Repeat five times.

**Doorway Stretch**

Stand in front of a doorway. Bring both hands behind you and place your hands on door frame at waist level. Step forward until arms are straight. Lean forward, feeling the stretch in the chest. Hold for 30 seconds. Continue to breathe. Repeat 3 times.

**Shoulder Blade Squeeze**

Place your palms on your back over the kidneys. Slide them slowly down toward the floor, pinching shoulder blades together. Hold for count of 3. Repeat 5 times. This movement stretches the front of chest and exercises the back muscles.
**Arch and curl**

Sit erect on the edge of your chair with your feet shoulder width apart and the angle of the knees about 110 degrees (you can see your toes as you look over your knees). While inhaling arch your back, tilt your head backwards and look as far backwards along the ceiling. As you exhale, curl forward and let your spine, neck and head hang like a letter C. Repeat 3 times and then repeat 3 times breathing in the opposite pattern: exhale as you arch backwards and inhale as you curl forward. Finally, repeat 3 more times while inhaling as you arch backwards and exhaling as you curl forward.

**Cat and dog**

Get on the floor on your hands and knees like a cat or dog. While inhaling, round your back and tuck your head—let the top of your back go as high as possible and hold for 5 seconds. Then lower your back into an arch while exhaling. Let your head and back be as long and arched as possible for 5 seconds. Repeat curling and arching five times.

Optional: Explore breathing in the opposite pattern—exhaling as you round your back and inhaling as you arch.

**Side Bend Stretch**

While sitting at the edge of your chair with the feet shoulder width apart, bring your arms toward the ceiling and interlace your fingers and point the palms toward the ceiling. While pointing the palms to the ceiling and keeping the arms pointing upward, move the center of your body to the left. Feel the lifting of your right buttock and increasing pressure on your left buttock as you curve your trunk. Exhale as you are bending your trunk side ways. Then move the center of your body to the right and feel the lifting of your right buttock and increasing pressure on your left buttock. Repeat moving back and forth and remember to exhale as you bend sideways. Repeat five times.
Pattern interrupt

This is a slightly complicated, but very effective process. You may want to ask a friend or co-worker to read the following instructions to you.

Push away from the keyboard. Sit at the edge of the chair with your knees bent at approximately 90 degrees and your feet flat on the floor about shoulder width apart. Do the movements slowly. Do NOT push yourself if you feel discomfort. Be gentle with yourself.

Look to the right and gently turn your head and body as far as you can go to the right. When you have gone as far as you can comfortably, look at the furthest spot on the wall and remember that spot. Gently rotate your head and body back to center. Close your eyes and relax.

Reach up with your right hand; pass it over the top of your head and hold on to your left ear. Then gently bend to the right lowering the elbow towards the floor. Slowly straighten up. Repeat a few times, feeling as if you are a sapling flexing in the breeze. Observe what your body is doing as it bends and comes back up to center. Notice the movements in your ribs, back and neck. Then drop your arm to your lap and relax. Make sure you continue to breathe diaphragmatically throughout the exercise.

Reach up with your left hand, pass it over the top of your head and hold on to your right ear. Repeat as above, this time bending to the right.

Reach up with your right hand and pass it over the top of your head, now holding onto your left ear. Then look to the right with your eyes and rotate your head to the right as if you are looking behind you. Return to center and repeat the movement a few times. Then drop your arm to your lap and relax for a few breaths.

1 Adapted from a demonstration by Sharon Keane and developed by Ilana Rubenfeld

© Peper 2013-02-02
Repeat the same rotating motion of your head to the right, except that now your eyes look to the left. Repeat this a few times, then drop your arm to your lap and relax for a few breaths.

Repeat the exercise except reach up with your left hand and pass it over the top of your head, and hold on to your right ear. Then look to the left with your eyes and rotate your head to the left as if you are looking behind you. Return to center and repeat a few times. Then drop your arms to your lap and relax for a few breaths.

Repeat the same rotating motion of your head to the left, except that your eyes look to the right. Repeat this a few times, then drop your arm to your lap and relax for a few breaths.

Next, look to the right and gently turn your head and body as far as you can go. When you cannot go any further, look at that point on the wall.

Did you rotate further than at the beginning of the exercise? Most people will rotate significantly further.

Gently rotate your head back to center, close your eyes, relax and notice the relaxing feelings in your neck, shoulders and back.

**Neck and shoulders looseness**

Many computer users experience neck and shoulder discomfort. Sometimes, the person points their nose to the screen in order to see better—a body position that increases neck and shoulder tightness. Explore the following practices to reduce the muscle tension and increase relaxation.

**Shoulder Rolls**

![Shoulder Rolls](image)

Shrug shoulders backward and forward in a slow, circular motion. Roll both shoulders at once and then alternate. Complete several circles -- each of a different diameter. Continue breathing easily.

**Turkey Pull**

Gently pull your neck backwards as if someone had a string attached to the back of your neck and was pulling it backward. Keep jaw parallel to the ground and shoulders relaxed — do not look up. Keep tongue relaxed, toward the back of the mouth and not against the
palate. Continue breathing easily and keep your trunk still throughout the exercise. As you are pulling your neck backwards, imagine that your spine elongates and your shoulders are relaxing and dropping together down your back. Hold for 5 seconds. Do 20-30 times daily.

**Write with your shoulders**
Sit straight up at the edge of your chair with your feet on the floor. Imagine that you attach a long pencil to your right shoulder and that the tip of the pencil reaches the wall on the side of you. Now write your name on the wall with the movement of your right shoulder. Then repeat this for the left shoulder. Now write a love letter.

**Reach to the ceiling**
Stand up with feet shoulder width apart. Bring your arms up so that the fingers point to the ceiling. Then, reach further upwards with your left hand to the ceiling. As you reach, exhale. Then relax and reach with your right hand to the ceiling, alternate back and forth for a minute. Optionally, as you reach turn your head first in the direction of the reach and then in the opposite direction. Explore the different rotations of the head with the arms reaching upward.

![Inverted Chair](image)

**Inverted Chair**
Lie on the floor with your legs resting on a chair. Your knee and hip joints should be at 90 degree angles. Relax your arms out to your sides at about 45 degrees from your trunk and the palms facing up. Let neck, shoulders and back relax. Breathe slowing in the diaphragm.

**Head Eye Tongue**
Slowly, easily, and playfully turn head and look over one shoulder and then the other shoulder. Do 3 times. Relax. Repeat with eyes moving in the opposite direction of the head. Do 3 times. Relax. Repeat with tongue moving in the opposite direction of the head. Do 3 times. Relax. Lastly, repeat with the tongue moving in the opposite direction of the head and the head moving in the opposite direction of the eyes. Do 3 times. Relax. Keep jaw and shoulders relaxed and continue breathing throughout.

**Arms, wrists and hands relaxation**

Wrist movement can affect the tendons, blood vessels and nerves which run through narrow tunnels in the wrist, from the forearm to the hand and fingers. Keep your wrists straight so that the nerves are not stretched or squeezed, and circulation is not compromised. Chronic wrist flexion, or bending so that there is an acute angle between the little finger and the forearm, may contribute to carpal tunnel syndrome. Avoid working with bent wrists. Explore the following exercises:
Hand Stretch

Spread fingers on both hands as far as they will go. Hold for 5 seconds while breathing and keeping shoulders and jaw relaxed. Bring hands into tight fists. Hold for 5 seconds while breathing and keeping shoulders and jaw relaxed. Repeat at least 3 times.

Wrist Stretch

Place palms together in a praying position in front of your chest. As you exhale, pull hands down gently across front of body. Keep palms flat; gently push together.

Upper Arm Stretch

Interlace your fingers behind your back. Straighten your arms and lock elbows. Now push your hands up and away from your back as far as possible while breathing and keeping shoulders relaxed. Return to starting position. Relax. Repeat 5 times.

Leg relaxation

The legs are often curled around the pedestal of the chair, or scrunched under the desk. There is no space to move them as they compete with boxes, wastebaskets or backpacks and purses. In addition, the circulation of the legs may be decreased as the front edge of the chair seat presses into the thighs, especially if the legs are dangling and do not reach the ground. Enough leg room and movement are necessary to avoid blocking lymph and blood circulation. Give your legs enough space and explore the following movements:

Play Footsy

While sitting, explore the floor with your right foot. Move it along the floor in large and small circles going clockwise and counter clockwise; move more ten seconds. Then repeat with your left foot. Move in an unpredictable pattern for ten seconds. Optional: Repeat same movement except you move your nose in the same pattern as your foot. Then repeat moving your nose in the opposite direction of the foot.
Ankles
Extend your legs and cross the legs at the ankles. Then rotate your foot on top in small circles. While rotating the foot, relax the other leg and keep breathing. Repeat by placing the other leg on top.

Stairs
Skip the elevator and escalators and use the stairs.

Wall Sit
Stand with your back against wall. Slowly, with control, slide down the wall until your knees and hips are at 90 degree angles, hold while continuing to breathe. This exercise strengthens the muscles of the front of the thighs.

Bounce
Stand with your knees slightly bent and the feet flat shoulder width on the floor. Let your arms hang loosely at your sides. Let your neck and shoulders relax, and let your body bounce slightly up and down like a raggedy ann doll. The movement is mainly in your knees--slightly flexing and straightening. Let your whole body be jostled by the movement for 60 seconds. Stop and be aware of the sensations in your arms and hands (notice the tingling and streaming) and imagine that you are breathing air through your arms.

For fun and giggling
Do movement games with co-workers and friends to trigger joy and laughter. Often, childhood games evoke timeless relaxing bubbly moments during which our subjective energy level increases and we become more relaxed and energized. Explore the following with co-workers and friends. Yes, it is embarrassing; it feels so good!

Patty cake
Ask a colleague of friend to join you in this exercise. Stand-up and face each other about two feet apart. Then clap your hands in front of your chest and alternately reach out with the palm of your hand to the other person’s palm. Explore the many possibilities such as alternately touching each other’s palms, touching both hands simultaneously, to twisting and turning in inbetween touching.

Backrub
Ask a colleague or friend to join you in this exercise. Stand-up with your backs nearly touching about six inches apart. Then, bend your knees slightly and lean back against each others back and begin to wiggle back and forth, up and down, thereby giving each other a back massage. Keep breathing as you move, wiggle and giggle….