

THE OFFICE WORKER'S EXERCISE AND INJURY PREVENTION GUIDE

Courtesy of:

Back, Neck and Wrist Pain Treatment Center
of San Francisco

230 California Street, Suite 600
San Francisco, CA 94111

(415) 627-9077 x1

www.sf-chiro.com

Free Booklet:

O.K. to Make Copies; Pass it Around to Those in Need!

Disclaimer: This guide is not intended to be used as a substitute for treating musculoskeletal conditions. It is intended to outline preventive measures one can take to reduce his or her risk of developing an occupational and/or ergonomic injury. If you are experiencing pain in any form, please consult your doctor prior to engaging in any of the exercises described in this booklet.

The Office Worker's Exercise and Injury Prevention Guide

Working in an office environment can over time be a major source of back, neck and extremity pain. The sedentary nature of sitting at a workstation can cause spinal discs to thin and joint surfaces to degenerate. The lack of adequate movement can lead to weakened back and abdominal muscles, resulting in less support to the spine, in effect accelerating spinal degeneration. Pain can develop in a few months for some people, and over a few years for others. Factors such as body weight, physical fitness, pre-existing health conditions, and lifestyle habits such as smoking can influence your risk of developing problems. Prolonged use of a computer keyboard, mouse, and 10-key can lead to wrist and arm pain, hand numbness, elbow pain, shoulder pain, and neck and upper back pain. The following is a list of health conditions that are associated with office work:

1. Lumbar disc herniation
2. Radiculopathy (radiating pain down the leg or arm due to nerve root compression)
3. Sciatica (buttock pain often radiating to leg due to compression of sciatic nerve)
4. Osteoarthritis/Degenerative Joint Disease in Neck, Spine
5. Osteoarthritis of the Hand Joints
6. Tendinitis/Bursitis
7. Repetitive Strain Injury/Myofascial Pain
8. Adhesive capsulitis (Frozen Shoulder)
9. Carpal Tunnel Syndrome
10. Cervicogenic Headaches

What you can do: If your occupation requires prolonged hours sitting at a desk in front of a computer monitor, you need to take a proactive approach. Think in terms of an athlete preparing himself for his sport: a football player will not show up for a game unprepared. He lifts weights to strengthen his muscles, stretches his limbs to increase flexibility, and does cardiovascular exercises like the treadmill and stair climber so that he can sustain a high level of physical activity over the course of several hours. Just like a football game, working in an office environment places certain physical demands on your entire body, and if your body is not conditioned to absorb these physical demands, the end result will be a slowly developing pain syndrome that may stay with you for years.

You do not need to go to the gym and try to be superman. The simple exercises contained in this manual are easy to do, and do not require much time. All you need to do on your part is to modify your daily routine to incorporate these simple exercises. These exercises can be done at the office, or in your home. The key to success is consistency: the exercises are effective only when done consistently, in accordance with the recommended frequency. You must make them a routine part of your day, just as you do putting on your clothes in the morning, and brushing your teeth before you go to bed.

Dietary Considerations

The second means to condition your body to withstand the rigors of office work is through your diet. Remember, the food you consume is used by your body to rebuild itself. The old adage, “garbage in = garbage out” holds true—if you are careless in the foods you consume, you will pay for it down the road. Here are basic dietary guidelines to abide by, if you want to maintain a healthy body:

1. Drink enough water for hydration. Distilled water is the best. Keep a bottle at your desk; drink throughout the day.
2. Include fish in your diet. Fish, especially salmon, contains Omega-3 Fatty Acids which have been shown to lower cholesterol and have anti-inflammatory properties.
3. Eat lean protein. Your body needs protein for muscle repair/rebuilding.
4. Eat only low-glycemic carbohydrates (those that take awhile to convert to sugar).
5. Eat plenty of fruits, especially berries, kiwi, and tomatoes. The vitamin C and phytochemicals in these fruits have strong anti-oxidant properties.
6. Eat raw vegetables for fiber, vitamins, and minerals.
7. Use generous amounts of olive oil for cooking and in salads.
8. Eat nuts for snacks in between meals. This will kill your craving for sweets.
9. Eat dark green leafy vegetables for phytochemicals and other nutrients.

Foods to avoid:

1. Processed food, especially potato chips, crackers, cookies and similar junk foods
2. White bread
3. Potatoes
4. Margarine
5. White Sugar
6. Soda, including diet soda

Supplements:

1. Vitamin C supplement (2500 mg)
2. Glucosamine Sulfate for cartilage health
3. Vitamin B-6
4. Flaxseed Oil
5. Multivitamins

OTHER HELPFUL THINGS TO DO

- Get enough rest. Take some time out for yourself. Find a stress reliever activity to do at least once a week, force yourself to do it even though you're tired (movie, walk in park, museum, toastmasters, etc.). Go to sleep early.
- Read self-improvement books.
- Find a hobby.
- Spend quality time with family and friends.

Essential Exercises for the Busy Office Worker



SPINAL ROTATION:

1. Sit erect on your chair, scoot forward. Interlace your fingers and bring arms up to shoulder level.
2. Turn your neck to the right as far as you can to get a good stretch, keeping your torso facing forward.
3. Twist your torso to the right, keeping your neck turned/stretched to the right.
4. Keeping your torso stretched to the right, turn your neck to the left till you get a good stretch.
5. Twist your torso to the left, keeping your neck turned to the left.
6. Repeat 10 times to each side. Do every two hours.



SPINAL SIDE-BENDING

1. Start out the same as above. Keeping your nose facing straight, sidebend (not lean) to the right. Keep your head 90 deg. to shoulder (don't bend neck yet). Also, don't lift your left buttock off the chair.
2. Keeping your spine side-bent, bend your neck to the right. Make sure to keep your nose facing forward (not turned) at all times. Get a good stretch to the side of your neck.
3. Return to neutral.
- 4.-6. Repeat on left side, do 10 reps. per side, every two hours.



SPINAL FLEXION/EXTENSION

1. Sit forward on your chair, erect. Place hands on knees.
2. Push and lock elbows, forcing your spine into extension while taking a deep breath. Let your head fall back.
3. Exhale, and let your spine curl forward into flexion; relax arms. Do 10 sets every hour.



SHOULDER CIRCLES

1. Sit erect on chair, scoot forward. Contract trapezius muscles, lifting shoulders up while keeping arms down and relaxed.
2. In a circular motion, rotate both shoulders forward.
3. Rotate shoulders downward.
4. Rotate shoulders backward. Complete circular pattern by returning to (1). Movements 1-4 should be one fluid motion. Do ten reps; then reverse direction. Do every two hours.

A. Hands Up stretch: Sit in chair, raise hands to ceiling as high as you can, hold for five seconds, repeat.



CORNER STRETCH

1. Find an unobstructed corner in your office. Place forearms on each wall, keeping shoulders and elbows at a 90 degree angle. Place your right foot about 18" behind your left foot.
2. Bend your left knee and push your chest into the corner slowly and gently. Apply a stretch to your pectoralis (chest) muscles; hold for five seconds, repeat. Do four sets before and after work.



HAND STRETCHES

1. Sit in chair, elbows bent and relaxed, hands facing up. Bend fingers as shown.
2. Straighten out fingers keeping them close together as shown.
3. Open fingers as wide as possible; hold for five seconds.
4. Close fingers together.
5. Bend fingers as shown.
6. Bend fingers at knuckles as shown. Repeat. Do five sets every two hours.



WRIST CIRCLES

1. While sitting, bend elbows 90 deg., bend wrist up so hands are facing forward.
2. Rotate wrists 90 deg. as shown.
3. Continue to turn wrists down to 180 degrees, then turn wrists so hands face towards you.
4. Continue rotating wrists to complete 360 degrees. 1-5 should be done in a continuous motion.
5. Repeat. Do ten circles, and then reverse directions. Do every hour if you type continuously throughout the day.



WRIST STRETCHES

1. While sitting, hold arms in front of you as shown; extend wrists so hands are facing up; hold this stretch for five secs.
2. Bend wrists downward, stretching back of wrists. Hold for five secs.
3. Drop arms to side, bend elbows 90 deg., hands facing down. Keeping fingers close together, bend wrists outwards, hold for five secs.
4. Now, bend wrists inwards, hold for five secs. Repeat. Do two sets every two hours.



NECK STRETCHES

1. Sit erect in chair. Grasp bottom of chair with your right hand. Place left hand on top of your head as shown. Gently pull left elbow downwards, stretching the right side of your neck. Keep your nose facing forward.
2. Repeat for left side.



HAMSTRING STRETCH:
 Sit as shown, grasp above your ankle; pull your torso forward. Try to touch your forehead to your knee. Hold stretch for five seconds. Do five reps, switch legs.



LEG STRETCH

1. Find a wall for support. Place hands on wall, keep arms parallel to floor. Place right foot about 18" forward of left foot.
2. Bend your right knee slowly in a controlled fashion, and allow elbows to bend. Do not allow your left heel to lift from the floor, and do not allow your left knee to bend. Get a good stretch on your left calf muscle; hold for 10 secs. Switch legs, repeat stretch on right leg.

BREATHING EXERCISE

Do this exercise after doing your stretch routines. This exercise is designed to promote relaxation.

1. Sit straight in your chair. Form a "cup" with your hands as shown. Relax; do not tense up your arms.
 2. Inhale slowly and deeply; focus on expanding your diaphragm rather your stomach as you inhale. Raise arms as you inhale, stopping at a level where you can no longer take in air.
 - 3-4 Turn your hands over (face down), slowly exhale. Let your hands lower as you release air from your lungs.
- Repeat five times. It is better if you do this exercise with your eyes closed.

PROPER BODY POSITION WHILE AT COMPUTER STATION:

1. Slightly lean back in chair.
2. Ears directly over shoulders.
3. Arms and shoulders relaxed.
4. Elbow 95-110 degrees, close to body.
5. Wrist straight, in line with forearms.
6. Feet flat on floor.

Take short breaks (20-30 sec) every few minutes if you need to type in excess of 20 continuous minutes.

