

MOVING INTO HEALTH:

The Mechanics of Healthy Body Movement

Ergonomics for the Computer-Bound

Seminar created for: INTERLEAF, Waltham, MA

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INTRODUCTION

Whether sitting for long hours in front of a computer terminal, jogging for fun and fitness, or playing the piano or trumpet, the body's movement is an integral and essential component of life's activities.

MOVING INTO HEALTH is a unique approach to preventing and overcoming injuries resulting from prolonged computer usage. Once you learn the dynamic principles of this approach, you will be able to use these exercises during work breaks to stretch and relax your body in a very short period of time. This increased flexibility and relaxation can help to prevent the common injuries and discomforts associated with sedentary office work.

Learning to be more aware of the body's movement reduces physical stress. You learn to be more aware of your body's natural movement by introducing non-habitual movement options into daily routines. This degree of body awareness can:

- ◆ Improve body usage patterns
- ◆ Reduce physical stress
- ◆ Enhance comfort and well-being
- ◆ Prevent injuries
- ◆ Speed recovery time from injuries
- ◆ Increase range of movement

The exercises in this workbook will introduce you to the principles and mechanics of healthy body movement. They are designed so that they can be practiced at your workstation.

The main idea behind the exercises is to:

- ◆ Make you more aware of what your body needs
- ◆ Increase your postural awareness
- ◆ Help you become conscious of damaging work habits
- ◆ Alert you to your body's need for a break

EXERCISE PRINCIPLES:

- ◆ AWARENESS is the key
- ◆ Non-habitual exercises increase awareness
- ◆ Doing the exercises slowly enhances the details
- ◆ Small movements reduce effort and increase sensitivity
- ◆ An attitude of exploration allows you to distinguish between good and better
- ◆ Engaging more of your body in your movements reduces the stress on weak or injured parts

THE EXERCISE PRINCIPLES EXPLAINED

- ◆ These exercises are designed to heighten body awareness.
- ◆ They are not mere repetitive muscle-stretching movements. They are new, non-habitual exercises. It is their very unfamiliarity that makes you stop and think in order to perform them. By paying close attention to the exercise and how you are doing it, you have the opportunity to correct yourself and change any damaging habits.
- ◆ The exercises emphasize slow movements. If you slow down a process, the imperfections become more apparent. You have the opportunity to try out alternative ways of doing the exercise. Movie directors use this principle of slow motion to enhance the drama of a scene, or to help the viewer see all the details that can get lost at normal speed.
- ◆ A corollary to reducing speed of movement is the use of small, non-forceful movements. If you reduce the force with which you perform an activity, you increase your sensitivity to just how much effort is needed to get the job done. The same principle is at work when you are in a crowded theater: Before the lights dim everyone is talking and the sound level is so high that you can't pick out individual conversations. But when the lights dim, and everyone quiets down in anticipation of the rising curtain, you can hear a pin drop.
- ◆ Similarly, a person who habitually hits the keys of a computer keyboard with too much force can't tell that it is too much. Only by lightening up on the pressure can that person distinguish between two degrees of pressure, and then adjust the pressure to the needs of the task at hand.
- ◆ Another thing to remember about these exercises is to do them in a variety of different ways and with an attitude of exploration. Allow yourself to make mistakes. These exercises are new and different. You are not expected to get

them right the first time. More importantly, a mistake is not a mistake until you have found a better way to do the movement. So again, doing an exercise in several different ways, and being able to distinguish between the effects of the various ways, is better than just repeating something over and over. It allows you to pick and choose and to fine-tune your performance.

- ◆ Finally, it is very important to get more of your body engaged in all or your daily movement activities. This seems obvious at first sight. But as you slow your movements down and become aware of the way you actually do things, you will be surprised to discover how many movements are limited in their scope. Getting more of your body engaged in everyday movements takes stress and pressure off weak and injured muscles and joints, and allows you to carry out these activities without pain.

FORMAT OF THE EXERCISES

This workbook contains a series of innovative exercises you can easily do at the workplace. Each exercise in this workbook targets certain body areas, and is presented in two forms:

- ◆ A long version in which the exercise is broken down into detailed numbered steps. These are intended for you to do at home, allotting enough time to learn the exercise.

- ◆ A short version, presented in bulleted steps, can be performed very quickly and is easily integrated into your workday at your workstation.

SHOULDER EXERCISES

THE THINKER

1. Sitting in your office chair, lean forward, spread your knees apart, and support the weight of your torso with your elbows resting on your knees.
2. Let your chest sink down toward the floor (don't force the movement), while pinching your shoulder blades together.
3. Now raise your chest by pushing your elbows against your knees and slightly arching and widening your back.
4. Gently alternate raising and sinking your chest, 5-10 times, slowly, and with awareness.
5. Stop and rest a moment.
6. With elbows on your knees, move your torso to the left until until your right elbow slips off your knee and hangs suspended.
7. Gently lift your right shoulder so your right hand moves away from the floor, and then let it drop back down toward the floor. Repeat this several times with awareness.
8. Now let your hanging arm swing so your hand traces a circle in the air.
9. Repeat steps #6-8 with your left arm and shoulder.

THE THINKER: Workstation Version

- ◆ Sit with knees spread apart
 - ◆ Rest your elbows on your knees
 - ◆ Sink your chest towards the floor while shoulder blades pinch together
 - ◆ Raise your chest to arch and widen your back
 - ◆ Repeat 3-5 times
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- ◆ Sit with knees apart
 - ◆ Rest your elbows on your knees
 - ◆ Move your torso to the left
 - ◆ Let your right arm fall off your knee and dangle
 - ◆ Make circles with your hand
 - ◆ Repeat on the other side

NECK EXERCISES

NECK CIRCLES

1. Sit in your chair facing a wall. Lean forward knees well apart, and place the top of your forehead comfortably against the wall. Support the weight of your upper body by resting your elbows on your knees.
2. Press your right elbow into your right thigh, gently pushing your torso to the left. (Notice that your head rolls slightly, your left ear comes closer to the wall, and your right ear comes closer to your shoulder.)
3. Push your left elbow against your left thigh to move your torso to the right. (Your right ear comes closer to the wall, your left, toward your shoulder.)
4. Move your torso from side to side by alternating steps #2 and #3. Do this several times with awareness, allowing your head to roll gently from side to side. (First one ear and then the other moves closer to the wall.)
5. Stop and rest a moment, sitting in the center again, head resting against the wall, elbows on your thighs for support.
6. Lower your chest down towards your knees, rolling your head backward, and bringing your chin away from your chest.
7. Raise your chest by pushing both elbows against your thighs. (This rolls your head forward, bringing your chin down towards your chest.)
8. Raise and lower your chest, rolling your head away from, and towards your chest.
9. Resting the top-center of your forehead against the wall, make small circles around your forehead in both directions.

NECK CIRCLES: Workstation Version

- ◆ Sit facing a wall
- ◆ Lean forward, place the top of you forehead against the wall
- ◆ Put your elbows on your knees
- ◆ Make 3-5 circles around the top of your head
- ◆ Make 3-5 circles in the opposite direction

UPPER BODY EXERCISES

ARM PRETZELS- Part 1

1. Sit in a chair and stretch both arms in front of you.
2. Rest your left forearm on top of your right forearm, and rotate both hands so that your palms face each other.
3. Interlace your fingers, and bend your elbows, twisting your arms and bringing your hands toward your chest. (Notice that your hands trace an arc and move like a pendulum.)
4. Fingers still interlaced, twist in the opposite direction, so your hands point towards the floor.
5. Twist and swing your hands back and forth many times like a pendulum, towards you and away from you.
6. See if you can increase the range of movement in both directions, within your comfort range, a little bit at a time. (Your hands come closer to your face, and then your elbows straighten out in front of you.)

ARM PRETZELS- Part 2

1. Interlace your fingers again.
2. Bend your elbows and bring your hands to your right shoulder and then to your left. Move them back and forth from one shoulder to the other.
3. Stretch your arms straight out in front, fingers interlaced.
4. Bend your right elbow and gently pull it toward your right side while keeping your left elbow relatively straight. (Notice that this action pulls your left arm and shoulder to the right,)
5. Repeat to the left, and alternate to the right and to the left.

Repeat Parts 1 and 2 with your fingers interlaced in the opposite direction.

ARM PRETZELS- Part 1: Workstation Version

- ◆ Stretch your arms out in front, left arm overlapping the right.
- ◆ Turn palms to face each other and interlace your fingers.
- ◆ Swing your arms down and up, like a pendulum, 3 times.
- ◆ Repeat with your right arm overlapping the left.

ARM PRETZELS- Part 2: Workstation Version

- ◆ Stretch your arms out in front, left arm overlapping the right.
- ◆ Turn palms to face each other and interlace your fingers.
- ◆ Bend the right elbow and pull to the right, keeping the left elbow straight.
- ◆ Bend the left elbow and pull to the left, keeping the right elbow straight.
- ◆ Alternate swinging right and left.
- ◆ Repeat with your right arm overlapping the left.