

Prepared by the Physical Therapy Unit University Health Services UC Berkeley

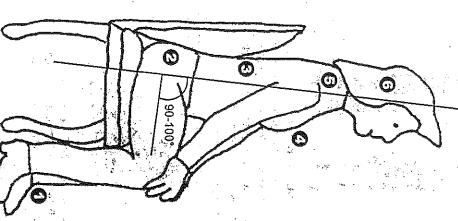
Become familiar with good sitting posture that enables you to change positions while keeping correct spinal alignment.

The key to good posture is learning to balance comfortably on your pelvis as a base of support.

Find the position where you can stay aligned without excessive tension in the muscles of your neck, shoulders or back

Notice that in all of these positions, the pelvis->chest->head alignment does not change. They remain in line whether you sit upright, forward or in a reclined position.

Follow these steps and you're Fit to Sit!



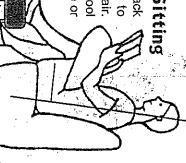
- Feet firmly supported on the floor or a stool.
- Sit on your sit bones with your hip angle 90-100 degrees. Sit fully back in the seat.
- Spine straight, supported and relaxed. Don't over arch your back or slouch.
- Chest forward (not up).
- Shoulders relaxed down and back (not rounded forward).
- Head and neck aligned straight so that ears are above shoulders.

Active Reading, Writing

Use a towel, pillow or sweatshirt under the sweatshirt under the back of your hips to help support you and maintain correct hip angle when sitting forward

Reclined Sitting

Position your pelvis at the back of the seat when reclined to utilize support from the chair. You may need to use a footstool to maintain correct hip angle or pillows to bring your work up to a good height.



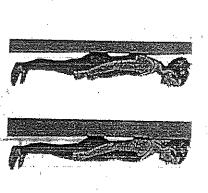
xcicises for Those Who sit

- Perform these exercises slowly while maintaining good postural alignment.
- the exercises. move into pain. Your symptoms should not intensify as a result of doing You may feel a stretch or slight discomfort with the exercises.
- to breathe throughout the exercises. Perform each exercise 2-3 times/day. Repeat each 5-10 times. Be sure



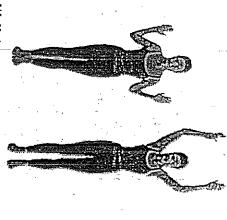
Backward Bending

buttocks. Slowly, gently lean back keeping knees straight. Keep your chin Place your hands on your low back and to your chest. Hold 2-5 seconds.



Postural decompressing

ed on the wall. Flatten low back; pull head shoulders down and back. back, flattening neck toward the wall; pull Feet one foot from the wall and back rest-



Wall Angels

the wall. Feel tension in mid back. ly while keeping forearms in contact with the wall. Bring arms up and down slowof elbows, forearms and wrists against Stand well as in exercise 2. Place back



Neck Rotation

perpendicular to ground. looking over your shoulder. Keep face Turn head to each side as if you are



Neck Side Bending

ways bringing ear towards the shoulder. Face parallel to wall/mirror. Bend head side-



Chin Tuck

as though you are growing taller by Gently flatten the curve of your neck. Feel elongating the back of your neck



Seated Trunk Rotation

posite shoulder and reach turn your head to look behind the op-Shift your weight to one hip as you your body with your arm. across



Seated Hamstring Stretch

you feel a stretch in the back of your thigh bent 30. Hinge at your hips (back flat) until Sit up tall with one knee bent 90 the other Hold 20 seconds.



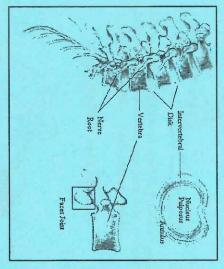
Shoulder Blade Squeeze
Squeeze shoulder blades down and back. Keep chin tucked, chest out and abdominal muscles tight.

Low Back Pain

tingling in the buttocks or lower extremity can be related to the back. There are multiple causes of low back pain (see DESCRIPTION: Eighty percent of adults will experience significant low back pain sometime during their lifetime. below). Prevention of low back pain is extremely important, as symptoms can recur on more than one occasion. Low back pain usually involves muscle spasm of the supportive muscles along the spine. Also, pain, numbness and

COMMON CAUSES

- Muscle strain. The muscles of the low back provide the strength and mobility for all activities of daily living Strains occur when a muscle is overworked or weak.
- injured with a sudden, forceful movement or prolonged stress. Ligament sprain. Ligaments connect the spinal vertebrae and provide stability for the low back. They can be
- Poor posture. Poor postural alignment (such as slouching in front of the TV or sitting hunched over a desk) creates muscular fatigue, joint compression, and stresses the discs that cushion your vertebrae. Years of abuse can cause muscular imbalances such as tightness and weakness, which also cause pain.
- Age. "Wear and tear" and inherited factors may cause degenerative changes in the discs (called degenerative disc disease), and joint degeneration of the facet joints of the spine (called degenerative joint disease). Normal aging causes decreased bone density, strength and elasticity of muscles and ligaments. These effects can be minimized by regular exercise, proper lifting and moving techniques, proper nutrition and body composition, and avoidance of smoking.



- responds well to a strengthening and stretching program and rarely requires surgery. Disc bulge. or herniation, can cause pressure on a nerve, which can radiate pain down the leg. This generally
- Other causes of low back pain include bladder/kidney infection, endometriosis, cancer, or ovarian problems.

TREATMENT:

- REST: Rest from aggravating activity. Avoid prolonged sitting, driving, bending, heavy lifting and twisting.
- Avoid using heat for the first 48 hours of an acute injury. ICE: Ice applied to the low back for 15 minutes every 1 - 2 hours is helpful in reducing pain and spasm
- NSAIDs: Your doctor may prescribe anti-inflammatory medication such as aspirin, advil, aleve, ibuprofen or
- back of this sheet. can help decrease the severity, duration and recurrence of low back pain. Try the suggested exercises on the EARLY EXERCISE: Gentle exercise for mobility and stretching (especially the muscles of the legs and back) Do not perform exercises that increase your pain.
- thighs and if you are side bent, a folded towel under your waistline. bed is firm enough to give you adequate support, and use a small pillow for you head. If you sleep on your back, try putting a pillow under your knees. Or if you prefer to sleep side lying, put a pillow between your POSITIONING: Modifying your sleeping position can help ease strain to your low back. Make sure your

PREVENTION:

- Once the severity of pain has decreased, a rehabilitation program to strengthen your hip, abdominal and back muscles can help prevent recurrences.
- Posture! Posture! Posture! The goal is neutral spine, not slumped or over-arched
- Proper lifting and body mechanics.

leg(s) below the knee, leg weakness, bowel or bladder problems, or back pain due to a severe blow or fall. unexplained weight loss, redness or swelling on the back or spine, pain /numbness /tingling that travels down the See your health care provider if you have the following: significant pain that persists beyond a week, unexplained fever,

If your symptoms do not resolve within 2-4 weeks please contact your clinician.





BASIC EXERCISES FOR THE LOW BACK

exercises. Perform the exercises 2-3 times daily. feel a slight stretch, however, do not move into pain. Your symptoms should not intensify as a result of doing your Perform these exercises slowly, without forcing movement. Be sure to breathe throughout the exercises. You should





Lying on floor, pull thigh towards your chest to about 90° Straighten your knee until a stretch is felt in back of thigh. Hold 1 minute. Repeat with opposite leg.

Single Knee to Chest (fig.2)



and lower back. Hold 15 seconds. Repeat with opposite leg. Pull knee in to chest until a comfortable stretch is felt in hip Repeat 5-10 times each leg.





Flatten back by tightening stomach and buttock muscles. Hold 10 seconds. Repeat 10 times.

Cat and Camel (fig.4)



On all fours, assume a "hump" back position by arching the back up. Hold briefly and then slowly lower the back into a sagging position. Repeat 10-15 times.

Hip Flexors(fig.5)



midline or rotate. Hold 30 seconds. Repeat 2 times each leg back flat. Allow the opposite thigh to drop over the edge of Lying on you back, pull one knee to the chest to keep the the bed. Do not allow the thigh to move away from the

Prop Up on Elbows (fig.6)



On firm surface, lying on your stomach, prop up on your elbows. Keep pelvis, hips and legs relaxed. If propping on elbows is painful, try only lying on stomach or with a pillow under your abdomen. Hold 30 seconds. Repeat 3-5 times.

Tail Wag (fig.7)



move hips toward rib cage to side bend trunk. Hold briefly On all fours with back maintained in neutral position, gently then alternate and do other side. Repeat 10-15 times.

Lumbar Rotation (fig.8)



motion. Allow back to rotate slightly. Repeat 10-15 times. Slowly rock knees from side to side in a pain free range of