

McLaughlin

Chiropractic Center

TRAINING BOOKLET

**5039 Executive Drive
Suite 300
Morehead City, NC 28557
(252) 808-2888**

www.mclaughlinchiropractic.com

Suggestions to Follow During Spinal Correction

1. Avoid rubbing, probing, or "poking" in the areas your doctor adjusts.
2. Avoid sudden twists or turns of movement beyond normal limits of motion, especially of the neck.
3. Avoid extreme bending of your spine in any direction; avoid stretching, reaching, or other overhead work. Be particularly careful when brushing or shampooing your hair.
4. Avoid bending or stooping sharply to pick up objects; rather, bend your knees to minimize the strain on your lower back.
5. When lifting, keep your back straight; bend your knees and let your legs bear the strain. Hold the object lifted as close to your body as possible.
6. When bathing, sit rather than recline in the tub. Lying back against the tub may cause a vertebra to slip out of its normal position. If you are tired and wish to relax, it's better to lie in bed.
7. Participate in simple exercises to strengthen your body, but avoid jarring activities which place stress on your neck and spine.
8. Watch your posture at all times; stand tall, sleep tall, and THINK tall!

Rest, Relaxation, and Sleep

1. Set aside a special time each day for complete mental and physical relaxation. This is important in the restoration - as well as maintenance - of normal health.
2. When sitting, choose a chair that has adequate firmness to hold your weight comfortably, and then sit straight. Avoid too soft, overstuffed chairs. Recliner chairs are acceptable if they are constructed so that when you are reclining your back is in a normal, straight position.
3. Cross your legs only at the ankles, not at the knees. Crossing your legs at the knees could aggravate an existing back condition as well as interfere with the circulation to the lower limbs.
4. Be sure to get plenty of sleep to allow your body to recuperate and repair.
5. Sleep on a firm mattress, preferably one which is neither too hard nor too soft, but just firm enough to hold your body level while at the same time soft enough so that your shoulders, buttocks, etc., will depress into the mattress.
6. Your pillow should be neither too high nor too low. The ideal pillow is one which supports your head so that your neck vertebrae will be level with the rest of your spine. Avoid sleeping on two pillows; never lie on a couch with your head on the arm rest.
7. Sleep on your back or on your side with your legs flexed slightly, not drawn up tightly. Avoid sleeping on your stomach. Raise your head off the pillow when changing positions.
8. Rise from your bed by turning on your side and swinging your legs off the bed, then push yourself into a sitting position with your arms, thus minimizing the amount of strain on your back.
9. Do not read or watch TV in bed, particularly with your head propped at a sharp or strained angle.
10. Do not sleep sitting in a chair or in cramped quarters. Lie down in bed when it is time to sleep.

IF YOU HAVE ANY QUESTIONS ABOUT ANY PHASE OF YOUR HEALTH CARE . . . FEEL FREE TO ASK YOUR DOCTOR.

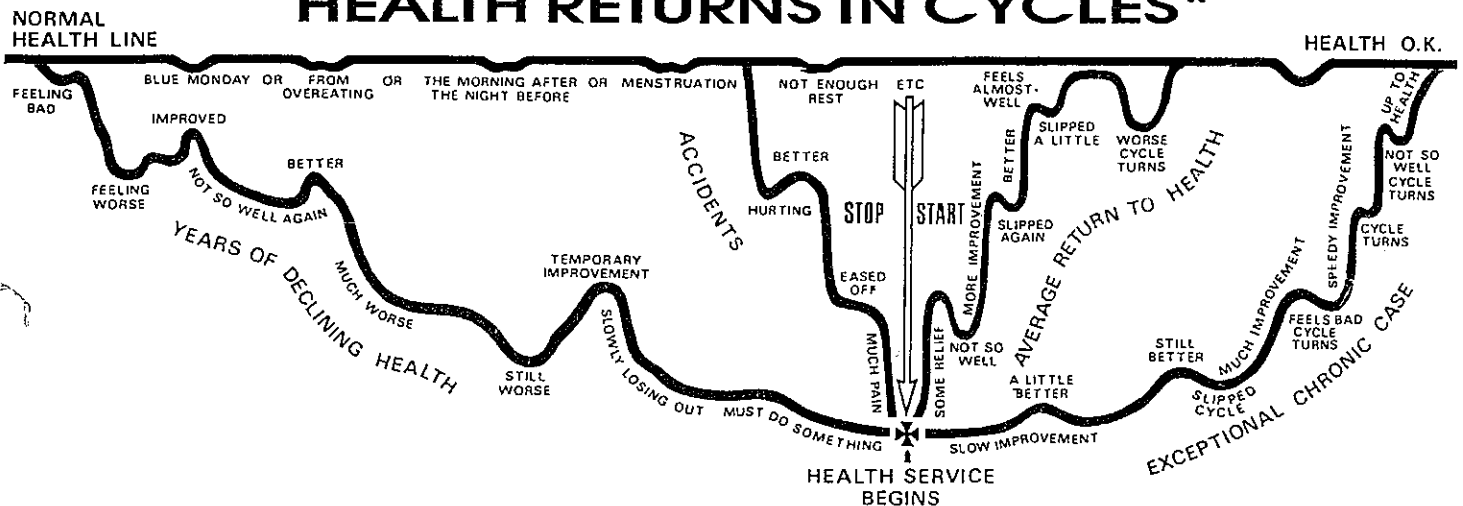
INSTRUCTIONS TO FOLLOW

If you wish to get well faster, please read these suggestions and follow them **REGULARLY**:

1. Follow the schedule of appointments that we have set up for you. There is no substitute for carefully timed chiropractic adjustments.
2. Avoid physical and mental stress before and after each adjustment. The more relaxed you are, the more benefit you will receive.
3. Follow faithfully all suggestions prescribed for your condition. These may include such therapies as hot or cold applications, daily exercises, rest periods, or a special diet.
4. You spend approximately one-third of your life in bed; it is highly important that you sleep on a good, supportive mattress.
5. Do not sleep on a foam rubber pillow (unless it is a chiropractically approved style) or more than one pillow. If you do not have a chiropractically approved pillow, a medium-size pillow should be used to give the head and neck adequate support.
6. Do not read in bed either propped up on your elbow or flat on your back.
7. Sleep on your back or side, never on your stomach. It is best for your legs to be flexed at a 30° to 45° angle.
8. Choose a firm chair, not a soft, overstuffed one. Sit straight and don't cross your legs except at the ankles.
9. Learn how to lift. Bend your knees and keep your back straight. Follow any suggestions your doctor offers.
10. If any body motion causes discomfort, avoid it!
11. Please don't try to be your own doctor! Self-administered remedies may do more harm than good.
12. Do your best to maintain a cheerful attitude. Avoid, if you can, stressful situations.
13. Set aside at least one time each day for complete mental and physical relaxation. This is a good lifetime habit for the restoration and maintenance of normal health.
14. Don't be in a hurry. Ligaments and muscles must shift and realign themselves to fit the changing bones. This is a natural process and cannot be hurried.
15. We would appreciate 24 hours notice if your appointment must be changed or canceled, so that someone else may be scheduled into your time.
16. Please feel free to ask any questions that you may have about your health care.
17. If you feel better — tell us. It is important that your doctor be aware of improvement.
18. Chiropractic may be the answer to friends' or loved ones' health problems. Take the time to explain this natural health care method to them and encourage them to visit a chiropractor.

REHABILITATING SPINES IS SIMILAR TO STRAIGHTENING TEETH;
BOTH TAKE TIME AND REPEATED CARE.

HEALTH RETURNS IN CYCLES*



*This chart is not meant and should not be construed to mean that everyone follows these specific patterns. Differences will occur from individual to individual.

DO



Bend at the hips and knees, and not at the waist.

Hold and carry objects close to you.

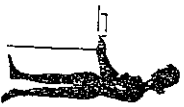
Never bend over without bending knees and tuck in buttocks under.

Keep back rounded as you return to standing from squatting.

Always face your work and turn by pivoting your feet first.

Keep buttocks tucked under as you reach. Use a stool and avoid unnecessary reaching.

DON'T



RULES TO LIVE BY

1. Avoid bending from the waist only; bend the hips and knees.
2. Avoid lifting heavy objects higher than your waist.
3. Always turn and face the object you wish to lift.
4. Avoid carrying unbalanced loads.
5. Hold heavy objects close to your body.
6. Never carry or move anything which you can not handle with ease.
7. Avoid sudden movements. Learn to move more deliberately.
8. Change positions frequently.
9. In shopping, vacuuming, raking, hoeing, etc., always work with the feet close to the body. Never use a "giant" step and a long reach in these activities.
10. Sit down to dress, shoes and socks, etc. Don't bend from the waist while trying to lace on one foot.
11. Women should wear low heels.
12. Avoid exercise and activities which arch or strain the low back (i.e., backward bends or forward bends to touch toes).
13. When you cough or sneeze, round your back and bend your knees slightly.
14. When making a bed, do so from a kneeling position.

DO



Stand tall with chin in, back flat, pelvis tucked under and knees relaxed.

DON'T



Don't stand with stiff knees, swayback or chin forward.

BACK CARE PROGRAM

No matter what causes back pain, an important part of its treatment is improvement of posture and learning to use the body correctly. Good posture allows the use of the body without strain on muscles, joints, ligaments and internal organs. Good posture must be considered in all activities: sitting, standing, resting, working, playing and exercising. It is not simply a matter of "standing tall."

This guide is designed to help you begin to remove the positions and movements which may aggravate your back problem. Particular emphasis is placed on rest positions, because even in these positions it is possible to strain the neck and back. By learning to live with good posture in all activities, your back will gradually return to comfort and function.

REST POSITIONS

BACKLIVING

DO



SIDE LYING



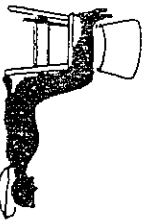
Cur tip on side with knees bent.
Optional — pillow between knees.

DON'T

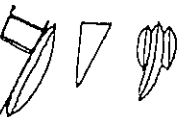


Allow positions cause swayback.

ALTERNATE REST POSITION



USE OF PILLOW FOR BACKRESTS



UP AND DOWN FROM BED

DOWN

1. Sit on edge of bed (#1).
2. Bring both arms to one side.
3. Lower side of body to bed keeping knees bent 45° (#2).
4. Put feet into bed.
5. Remain on side or roll to back.

UP

1. Roll to side (#1).
2. Push with hands to sitting position.
3. Keep knees bent and swing legs over edge of bed.

DO



Use good body mechanics when sitting down in a chair.

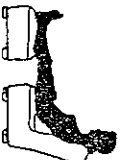
If a chair is too high, swayback is increased.

Knees higher than hips flattens the low back, legs straight on ottoman strains the low back.

CHAIR

Chair seat closer to steering wheel flattens the low back.

DON'T



DO



STANDING

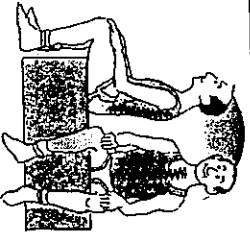
A footrest will relieve the swayback and help to flatten the back.

DON'T



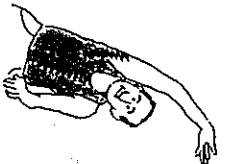
For more information on your back and exercise, contact your Doctor of Chiropractic.

STARTING POSITION



● Sit in a chair with your feet flat on the floor. Your weight should be slightly forward so that you're balanced on the two prominent bones under your buttocks. Relax your shoulders and keep your head level to maintain all three natural curves.

13 Side Stretch



● Why?: To stretch the muscles in your back and sides. How: Stretch your arm overhead and slowly bend to the opposite side. Don't twist. Hold for a count of 5; return to starting position. Repeat 5 times or ____; switch sides. Return to starting position.

14 Shoulder Exercise



● Why?: To stretch and strengthen the shoulder muscles. How: Put your hands up, forearms raised. Push your arms back, squeezing your shoulder blades together. Hold for a few seconds. Relax and repeat 3 times or ____; return to starting position.

15 Neck Turn



● Why?: To stretch neck muscles. How: Hold your head and neck upright. Keeping your eyes level, rotate your head so that you're looking over one shoulder. Hold for a count of 5; return to starting position. Repeat 5 times or ____; switch sides. Return to starting position.

16 Neck Tilt



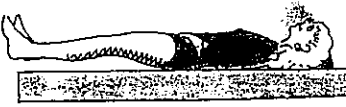
● Why?: To stretch neck muscles. How: With shoulders relaxed, tuck your chin in slightly. Tilt your head so that one ear is over your shoulder. Hold for 5; return to starting position. Repeat 5 times or ____; switch sides. Return to starting position.

Shoulder Shrug



● Why?: To strengthen and stretch your shoulders and upper back. How: Raise both of your shoulders as high as you can, as if you were trying to touch your ears. Hold for 5; return to starting position. Repeat 5 times or ____; change to next starting position.

STARTING POSITION



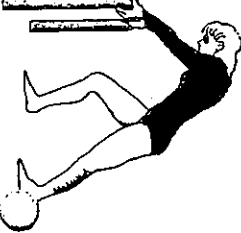
● Stand with your hips and buttocks slightly tucked under and your shoulders relaxed. Your feet should be slightly apart and positioned directly underneath your hips. Keep your eyes and chin level by trying to focus directly in front of you. Use your stomach and buttock muscles to do a slight pelvic tilt. If this makes your spine feel more in balance. As you stand in this position, feel all three curves of your spine in balance.

17 Wall Stretch



● Why?: To strengthen your back, hip, and leg muscles. How: With your back against a wall and your legs slightly apart, sink straight down slowly into a heel sit. Be sure not to lose your three natural curves. Keep the position for a count of 5 and slowly slide back up. Repeat 5 times or ____; as you get stronger, try to hold the position for at least 1 minute.

18 Calf Stretch



● Why?: To stretch calf muscles. How: With feet slightly apart, bend your front leg, keeping the heel of your back foot on the ground. Lean forward and loosely grasp a chair, shelf, or table. Hold 20-30 seconds. Then switch sides. Return to starting position.

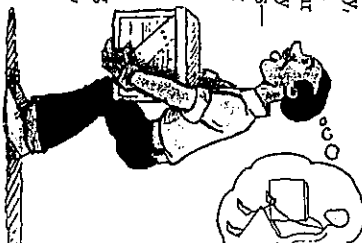
20 Heel Stand



● Why?: To stretch shoulder, back, and hip muscles. How: Stand and place your palms on your low back. Lean your upper body back, without overarch your neck. Hold for a count of 5. Relax and repeat 3 times or ____; return to starting position.

Keeping Your Back in Mind

As you move throughout the day, think about your three natural back curves. You can protect your back by using good posture, body mechanics, and lifting techniques—for example, by lightening your abdominal muscles and bending your knees while lifting. Sitting actually puts more pressure on your back than standing does, so look for ways to stay in motion all day long. Try walking instead of driving, and if possible, use stairs instead of elevators.

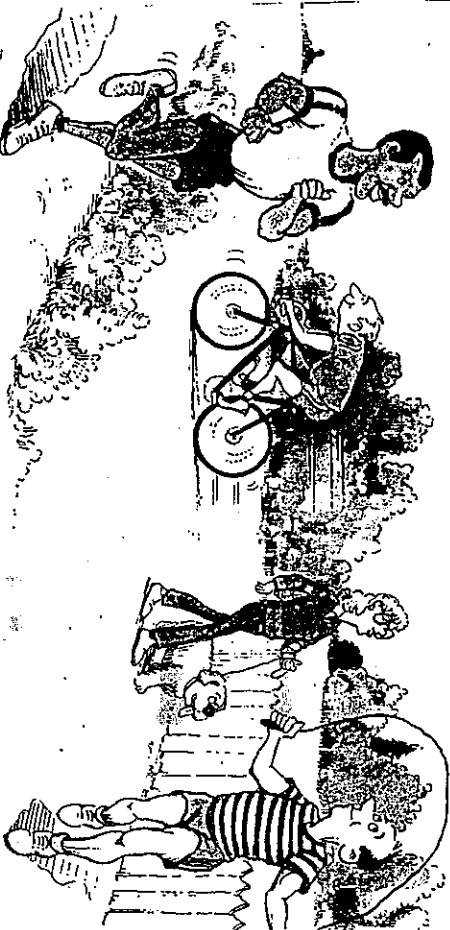
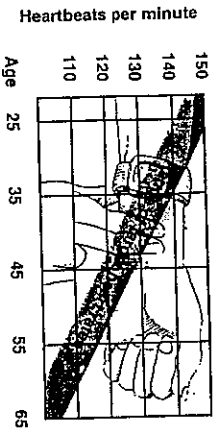


Moving Aerobically

The perfect complement to the back workout is aerobic exercise. What's aerobic? Any exercise that increases your body's use of oxygen. Aerobics can condition your heart and lungs, firm your muscles, and improve your circulation. Running, cycling, brisk walking, swimming, cross-country skiing, and jumping rope are all terrific forms of aerobic exercise. Choose one or choose a combination to suit both your mood and the season, but try to include some aerobic activity in your schedule for 20-30 minutes, 3-5 times a week. Keep active and have fun! Check your Target Heart Rate (see chart) to make sure you're exercising effectively.

Target Heart Rate

The goal of aerobic exercise is to reach your Target Heart Rate (THR) for at least 20 minutes. Find your THR on this chart. Right after exercise, take your pulse on your wrist or neck. Count 15 seconds and multiply by 4.



By doing your 15-minute workout 3-5 times a week, you can condition the muscles and joints that support your back and keep it in healthy balance throughout the day. Strengthening exercises help build strong muscles, while stretching exercises increase flexibility. Begin each group of exercises

from the starting position indicated, and do them in the order shown. Try not to rush or strain. Relax and enjoy the feeling!

Before beginning a new exercise program, it's wise to check with your health care professional. If you have back problems, you may need an evaluation. Don't do any exercise that causes pain.

STARTING POSITION



● Lie on your back with your knees bent and feet flat on the floor. Try to feel your whole back on the floor. Breathe deeply, expand your lungs, and rest your hands on your palms. You should feel comfortable and relaxed.

1 Pelvic Tilt



● Why?: To stretch back muscles, strengthen stomach muscles, and gain pelvic mobility. How: Tighten your abdomen and buttocks, pressing your lower back toward the floor (a small, subtle movement). Hold for a count of 5; release. Repeat 5 times or ____ Return to starting position.

2 Lower Back Rotation



● Why?: To stretch and strengthen back rotation muscles. How: Drop both knees to one side while rotating your head to the opposite side. Hold for a count of 5. Repeat 10 times or ____, slowly alternating sides. Return to starting position.

3 Double Leg Pull



● Why?: To stretch your lower back and buttocks. How: Gently pull both knees to your chest. Hold for a count of 5. Repeat 5 times or ____ at first; gradually work up to 20 repetitions. Return to starting position.

4 Hip Lift



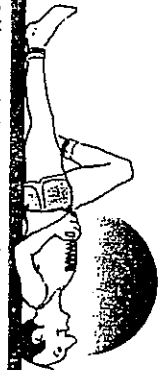
● Why?: To strengthen your buttocks. How: Without arching your back, slowly raise your hips upward. Keep a straight line from knees to shoulders. Hold for a count of 5; lower. Repeat 5 times or ____ Return to starting position.

5 Partial Curl Ups



● Why?: To strengthen abdominal muscles. How: Cross your arms loosely and tuck your chin in. Tighten your abdomen and curl halfway up directly in front of you. Hold for a count of 5; curl down. Repeat 5 times or ____ Change to next starting position.

STARTING POSITION



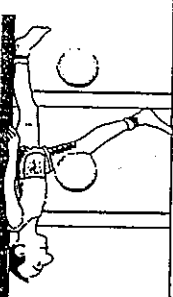
● Lie on your back with one leg bent, one foot flat on the floor, and your other leg extended straight out. Again, try to feel your whole back relaxed on the floor. Rest your hands lightly on your stomach so you can feel your abdominal muscles working as you do the exercises.

6 Single Leg Pull



● Why?: To stretch hip, lower back, and buttock muscles. How: Slowly pull the bent knee to your chest while keeping your other knee and your lower back pressed against the floor. Hold for 5; release. Repeat 5 times or ____, then switch legs. Return to starting position. Remember to breathe and relax.

7 Hamstring Stretch



● Why?: To stretch your back thigh muscles and space your back. How: With your buttocks close to a doorway, extend your legs along the floor. Raise one leg and rest it against the doorway. Hold for 20 seconds, then slowly switch legs. Repeat 5 times or ____ Change to next starting position.

STARTING POSITION



● Lie face down with your feet slightly apart, and relax your back and stomach muscles. Rest your forehead on the floor. For many people, this position may feel awkward at first. If you have trouble relaxing your neck, it may help to think about looking down at your feet.

8 Elbow Press



● Why?: To stretch and maintain the lower back curve. How: While keeping your neck lined up with your spine, press your heel up on your forearms. Keep your hips and abdomen against the floor. Hold for 20-30 seconds, then lower slowly. Repeat 5 times or ____ Change to next starting position.

STARTING POSITION



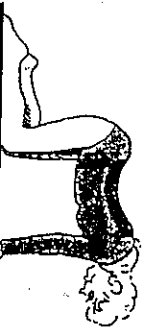
● Sit with your hands and knees, keeping your knees directly under your hips and your hands directly under your shoulders. Keep your abdomen slightly firm, so that your spine is in a neutral position (not arched or sagging). Keep your neck relaxed in its natural curve so that your ears are aligned with your shoulders.

9 Back Press



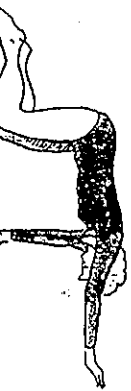
● Why?: To strengthen abdomen, neck and buttocks and stretch your back. How: Press your back upward by tightening your abdominal and buttock muscles. Allow your head to drop slightly, keeping hands and knees still. Hold for a count of 5; return to starting position. Repeat 5 times or ____ Return to starting position.

10 Back Release



● Why?: To stretch your back muscles. How: Allow your stomach and the muscles of your buttocks to relax and let your back sag. Be sure to keep your weight evenly distributed; don't sit back on your hips. Hold for a count of 5, then return to starting position. Repeat 5 times or ____ Return to starting position.

11 Arm Reach



● Why?: To strengthen your shoulders and your upper back. How: Stretch one arm straight out in front of you. Don't raise your head, and be sure not to "sink" into your supporting arm. Hold for a count of 5; return to starting position. Repeat 5 times or ____, then switch arms. Return to starting position.

12 Leg Reach



● Why?: To strengthen the muscles of your buttocks. How: Extend one leg straight out behind you and hold it parallel to the floor for a count of 5. Don't let your back, head, or stomach sag, and try not to arch your back. Return to starting position. Repeat 5 times or ____, then switch legs. Change to next starting position.

Date _____

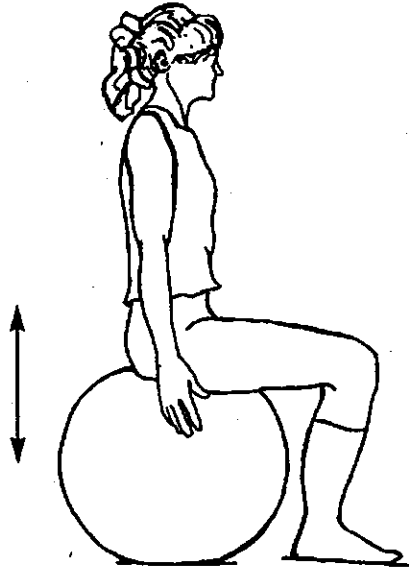
Name _____

Basic Bounce

1:1

Starting Position: Sit correctly on the ball in optimal posture (see page 27).

Movement/Exercise: Begin bouncing by pushing feet into the floor and tightening thigh and hip muscles to slightly lift trunk, relax. Continue bouncing by alternating tightening and relaxing these muscles as vigorously as balance, coordination and comfort allow in optimal posture.



CAUTION: KEEP FEET PLANTED ON FLOOR. DO NOT BEND OR TWIST SPINE WHILE BOUNCING.

Breathing: Monitor heart rate. If winded, bounce less vigorously.

Modification: Lightly touch hands to ball or stable object for balance assistance.

Beats/min _____ Repeat _____ Times

Do _____ Times/day

Purpose/Goal _____

Comments: Bouncing on the ball helps to align spine in optimal posture and activates the muscles around spine to tighten and support it. Bouncing for extended periods can increase postural endurance for unsupported sitting and standing.

Date _____

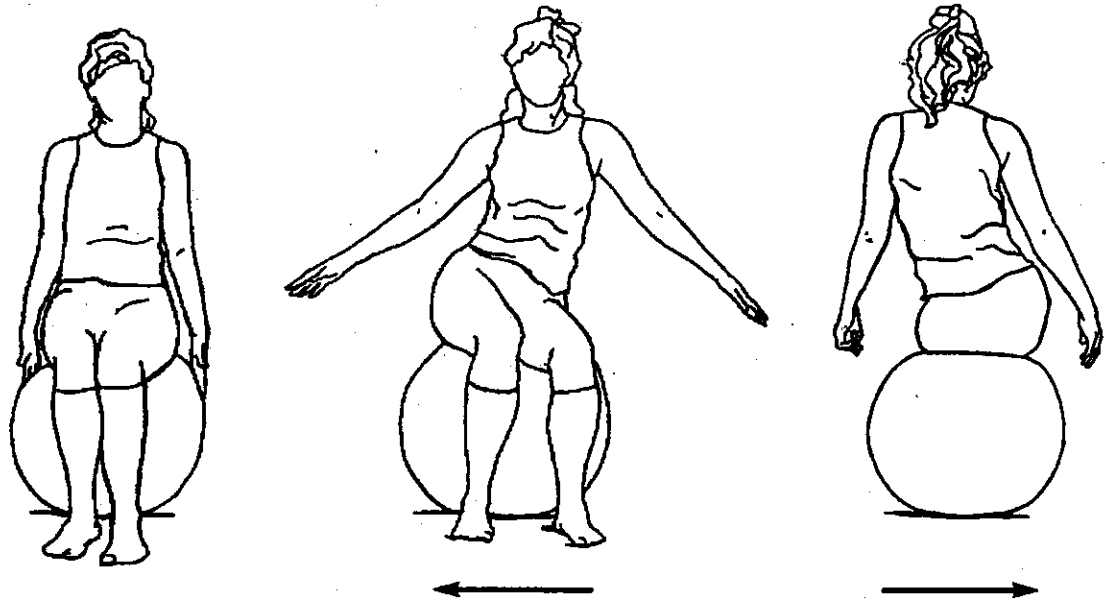
Name _____

Side to Side Hip Roll

2:1

Starting Position: Sit correctly on the ball in optimal posture.

Movement/Exercise: Using hips, gently roll ball from side to side as far as possible allowing ankles and knees to participate in the movement. Keep shoulders level.



CAUTION: DO NOT FORCE MOVEMENTS SO THERE IS DISCOMFORT. STAY IN PAIN FREE RANGE.

Modification: Lightly touch hands to ball or stable object for balance assistance.

Progression: Feel the point where balance is challenged and hold for five seconds. Return to start.

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: Notice if movement is equal to both sides. Movement restrictions could be caused by many factors. This exercise can gently mobilize the spine in side bending and expand the ribs. It can be a gentle range of motion and proprioceptive exercise for the hips, knees and ankles. This exercise can also be used effectively for improving balance skills.

Date _____

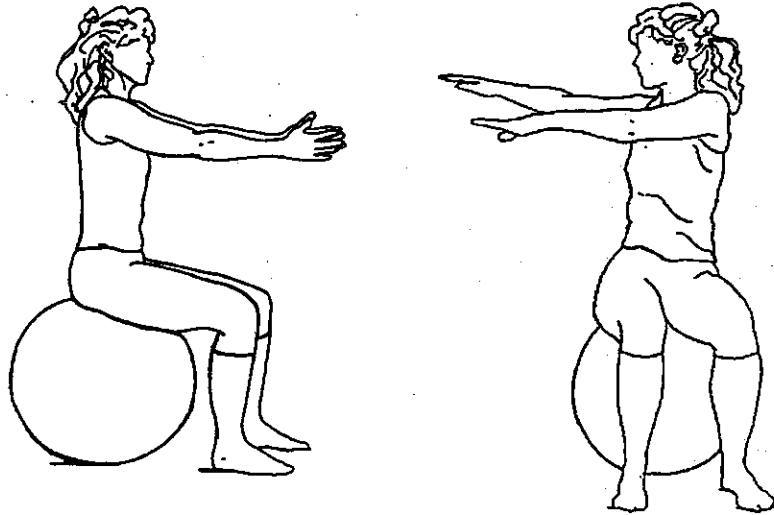
Name _____

Gentle Trunk Rotation-Sitting

2:4

Starting Position: Sit correctly on the ball in optimal posture. Lift straight arms forward to shoulder level. Keep feet planted on floor and knees forward.

Movement/Exercise: Swing arms around behind body as far as possible allowing trunk, shoulders and head to turn in the same direction. Return to start and repeat in other direction. Ball should remain almost still during movement.



CAUTION: DO NOT FORCE MOVEMENTS SO THERE IS DISCOMFORT. STAY IN PAIN FREE RANGE. SLOW DOWN MOTION IF BECOMING DIZZY.

Breathing: Inhale on twist, exhale on return.

Modification: Move arms as far as comfort will allow.

Progression: Hold a medicine (*weighted*) ball or weights in hands to add momentum.



Hold ____ Seconds / Weights _____ / Repeat ____ Times / Do ____ Times/day

Purpose/ Goal: _____

Comments: This exercise gently mobilizes the spine in rotation. Notice if movement is equal to both sides. Movement restrictions could be caused by many factors in hips, spine and shoulders. This exercise gently mobilizes the spine and can also be used effectively for improving balance skills.

Date _____

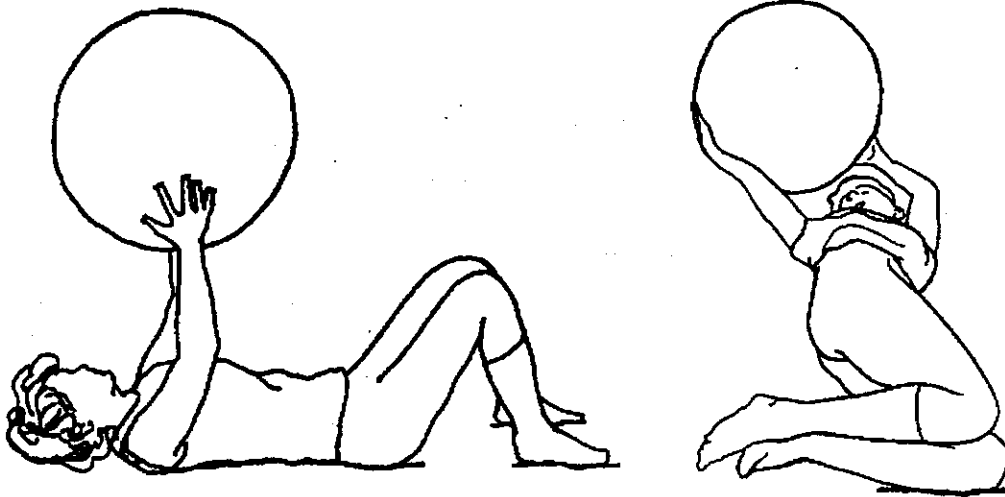
Name _____

Supine Trunk Rotation

2:6

Starting Position: Lie on back with knees bent and feet on floor. Pick up ball with both hands and lift it above body.

Movement/Exercise: Keeping hands above head, simultaneously lower ball to the right as knees lower to the left. To reverse, tighten abdominal muscles and press lower back into floor before lifting ball and knees back to center. Repeat to other side.



CAUTION: STAY WITHIN PAIN FREE RANGE. DO NOT ALLOW LOWER BACK TO ARCH AS LEGS AND BALL ARE LIFTED AND LOWERED.

Breathing: Inhale as ball is lowered, exhale on return.

Modification: Only move arms or legs.

Progression:

1. Lift weighted ball.
2. Increase tempo.
3. Straighten knee of top leg to increase stretch.



Hold ___ Seconds / Weights _____ / Repeat ___ Times / Do ___ Times/day

Purpose/ Goal: _____

Comments: Feel how this stretches the soft tissue of the trunk diagonally from the lower hip to opposite shoulder as legs and ball lower. As legs lift, feel abdominal and chest muscles activate. Notice if movement is equal to both sides.

Date _____

Name _____

Prone Rocking

2:7

Starting Position: Kneel behind ball and lie trunk over top of ball. Fold hands and place them on the ball. Relax neck and put head on ball.

Movement/Exercise: Dig toes into floor or place feet against wall. Straighten and bend knees to gently rock body forward and backward over ball. Allow head to hang.



CAUTION: STAY WITHIN PAIN FREE RANGE. DO NOT LET BALL ROLL OVER HANDS OR LONG HAIR.

Breathing: Inhale while rolling forward, exhale on return. Focus on breathing into the back of the rib cage.

Modification: Touch hands to floor (out of the ball's path).

Progression:

1. Rock to side to side.
2. Roll ball underneath body in small circle by placing hands on floor and pushing on each extremity in sequence.

Hold _____ Seconds

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: Notice that there is a slight unweighting distraction of the vertebrae of the cervical spine as the muscles relax and head hangs. The farther the rock forward, the lower the distraction (reaching the upper thoracic vertebrae). On return, feel the weight loading each vertebra. There may be visible stiffness in the movement if there is restriction between vertebral segments.

Kneel and Bow**2:8**

Starting Position: Sit on heels with hands on top of ball. Lean forward letting the ball roll forward and relax spine into a C curve.

Movement/Exercise: Walk hands out and roll ball forward while slightly lifting buttocks. Relax spine and allow it to hang from shoulders and hips (like going under a limbo stick. Do not arch back like a cat). Go out as far as comfortable. Pause. Return to beginning curved position by lowering hips and rolling ball backward. Keep head between arms and eyes focused on floor.

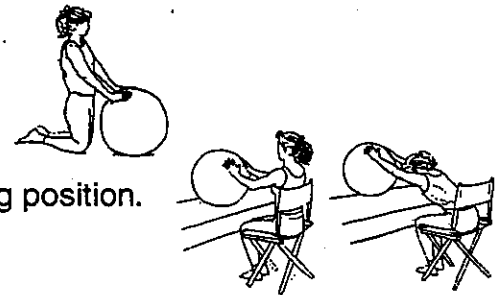


CAUTION: STAY WITHIN PAIN FREE RANGE. PAD KNEES IF NECESSARY.

Breathing: Inhale on roll out, exhale on return.

Modification:

1. If there is discomfort in shoulders, bend elbows out to side.
2. If unable to sit on heels, start exercise in kneeling position.
3. Sit in chair with ball in front on bed.



Progression: At end of stretch, shift weight back slightly, so that one hand can be pressed into the ball and lift the other hand off the ball one inch. As arm lifts, tighten abdominals and keep back flat.

Hold _____ Seconds

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____



Comments: Move slowly and try to feel each vertebra glide forward in succession starting at the neck as spine is extended. On return, try to feel each vertebra move backward in succession as spine is flexed. There will be visible stiffness in the movement of the spine if there is restriction between two or more vertebrae. This is also a gentle self controlled stretch for shoulder flexion.

Date _____

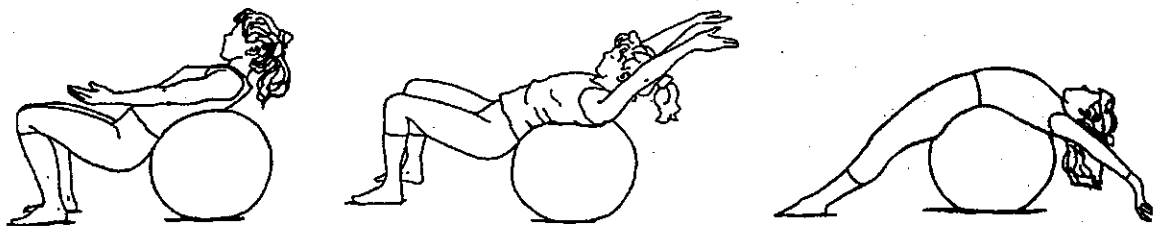
Name _____

Squat and Arch-Supported Extension

2:13

Starting Position: Assume Squat and Rock position (see page 12). Stay in pain free range.

Movement/Exercise: Reach arms overhead while straightening knees. Letting ball roll back as spine arches over ball. Reach for the floor with hand as far as is comfortable.



CAUTION: IF DIZZY, TUCK CHIN. PREVENT FEET FROM SLIPPING BY PLACING TOES AGAINST STABLE OBJECT OR WEARING RUBBER SOLED SHOES.

Breathing: Inhale on rock backward, exhale on rock forward.

Modification:

1. Let hands touch ball until in squat position then touch floor and rock backwards, letting fingers glide on floor for balance assist.
2. Place one hand behind head to support head and neck.



Hold _____ Seconds

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: Feel how gravity assists in expanding chest and ribs as spine is gently mobilized into extension while fully supported by the ball. (This exercise counteracts a rounded shoulder/forward head posture.) This is also a good proprioceptive exercise for hips, knees and ankles while elongating hip flexors and shoulder flexors and abductors at end range.

Date _____

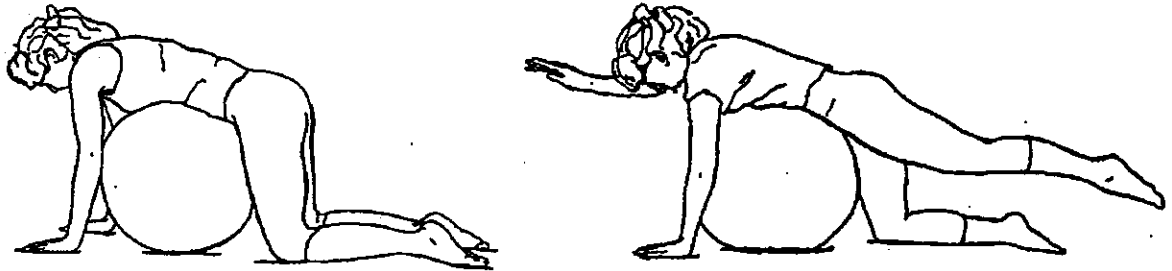
Name _____

Arm & Leg Lifts Quadruped

3:1

Starting Position: Kneel behind ball. Rest trunk over ball and put hands on floor under shoulders.

Movement/Exercise: Raise one arm and opposite leg squeezing the buttocks as leg lifts off floor. Return to start. Alternate to other side.



CAUTION: STAY WITHIN PAIN FREE RANGE. AVOID ARCHING BACK BY KEEPING HIPS ON BALL WITH FACE PARALLEL TO FLOOR.

Breathing: Inhale as leg lifts, exhale as leg lowers.

Modification:

1. Lift only one arm or leg at a time.
2. Place ball forward to support chin if unable to comfortably hold head up.

Progression:

1. Use cuff weights or resistive band on legs and/or arms.
2. Have an assistant give manual resistance as instructed by therapist (use either hold/relax or contract/relax techniques).

Hold _____ Seconds

Weights _____

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: The support of the ball takes pressure off the knees and wrists while the exercise gently tightens spinal extensor muscles as opposite arms and legs are lifting.

Date _____

Name _____

Gentle Upper Spine Extension-Prone

3:2

Starting Position: Kneel behind ball. Rest trunk over ball and place hands lightly behind head. Do not press on neck. Lower head and neck.

Movement/Exercise: Raise head, neck and upper back until head and arms are parallel to floor (keep elbows even with ears). Slowly lower and repeat.



CAUTION: STAY WITHIN PAIN FREE RANGE. AVOID ARCHING BACK OR NECK BY KEEPING LOWER RIBS ON BALL.

Breathing: Inhale while lifting, exhale while lowering.

Modification: Lift only as far as comfort and/or strength allows.

Progression: Dig toes into floor and extend knees. Lift and lower as above.

Hold _____ Seconds

Repeat _____ Times

Do _____ Times/day



Purpose/ Goal: _____

Comments: This exercise strengthens the entire back while keeping the lumbar spine unweighted and in optimal posture.

Date _____

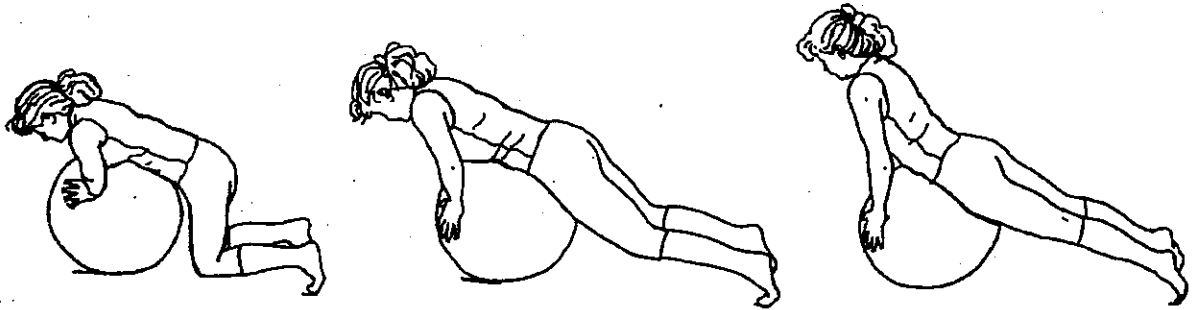
Name _____

Basic Push-Up

3:3

Starting Position: Kneel behind ball. Rest trunk over ball and put hands under shoulders. Dig toes into floor.

Movement/Exercise: Let ball roll as arms and legs straighten. Extend spine as far as is comfortable. Press hips into ball squeezing buttocks and tightening abdominals. Slowly lower to starting position.



CAUTION: STAY WITHIN PAIN FREE RANGE. KEEP NECK IN OPTIMAL POSITION.

Breathing: Inhale while lifting, exhale while lowering.

Modification: As legs extend, do not fully extend spine by keeping elbows slightly bent or placing hands on the floor.

Progression:

1. Pick one leg up off floor. Balance and return foot to floor. Switch legs.
2. Pick up one leg and write alphabet in the air as big and fast as possible. Lower to floor. Switch legs.



Hold _____ Seconds

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: Feel the tightening of spinal extensors, flexors and shoulder girdle muscles. Lifting one leg changes the center of gravity and lessens the base of support. This challenges balance reactions and trains trunk stability while allowing for mobility of the leg.

Date _____

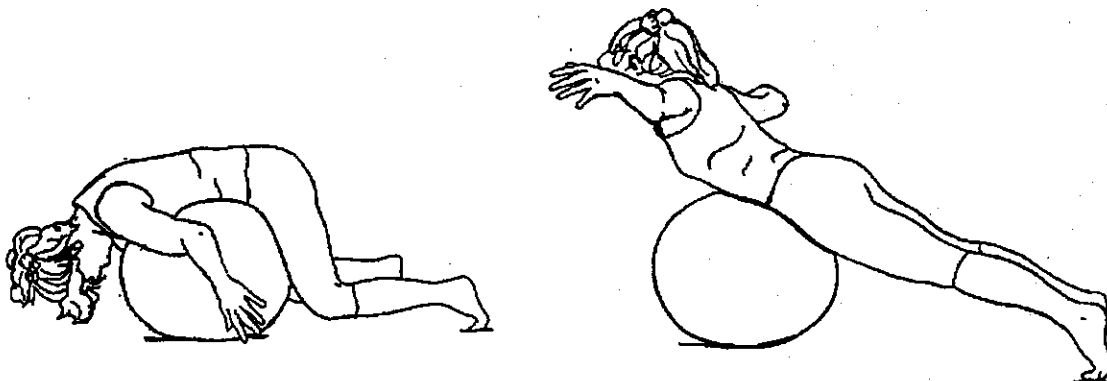
Name _____

Airplane

3:4

Starting Position: Kneel behind ball. Rest trunk over ball and dig toes into floor. Raise arms out to side.

Movement/Exercise: Let ball roll down body while legs straighten. Lift trunk off ball as far as balance and comfort allow. Press hips into ball and squeeze buttocks. Slowly reverse and return to starting position.



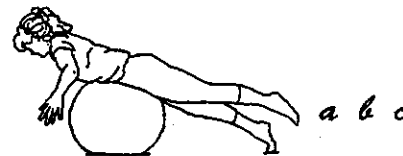
CAUTION: STAY WITHIN PAIN FREE RANGE. KEEP NECK IN OPTIMAL POSITION.

Breathing: Inhale when lifting, exhale when lowering.

Modification: Straighten legs and lift arms and trunk only as far as comfort allows.

Progression:

1. Pick one leg up off floor. Balance and return foot to floor. Alternate sides.
2. Pick up one leg and write alphabet in the air as big and fast as possible.
3. Use weights or resistive band in hands and/or on ankles.



Hold _____ Seconds

Weights _____

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: While this exercise targets the back muscles, notice the abdominal muscles tightening to support the weight of the body on the ball. Lifting one leg decreases the base of support and changes the center of gravity to challenge balance reactions. Moving the leg also trains trunk stability while allowing for mobility of the arms and legs.

Date _____

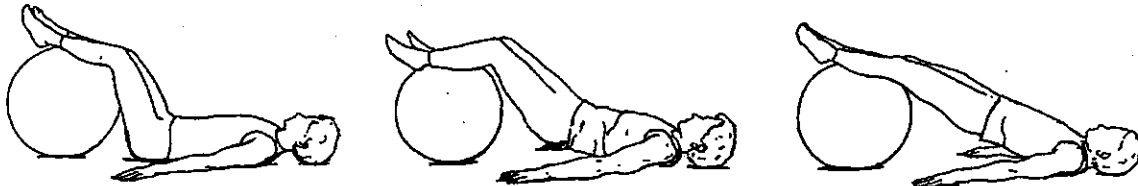
Name _____

Hip Lift-Spinal Stability

3:8

Starting Position: Lie on back. Put calves on ball and hands on floor at side.

Movement/Exercise: Find pain free position of the spine. Press arms into floor and lift trunk as a single unit until body is in a line from ankles to shoulders. Reverse and lower spine to floor as single unit. Distance between hip bone and lowest rib does not change while lifting or lowering body.

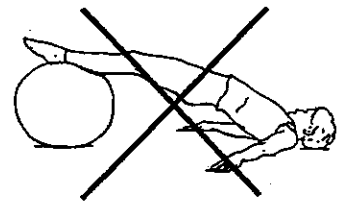


CAUTION: STAY WITHIN PAIN FREE RANGE. DO NOT ARCH BACK.

Breathing: Inhale when lifting, exhale when lowering.

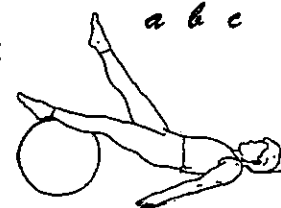
Modification:

1. Place ball closer to buttocks.
2. Lift only as far as comfort and balance allow.



Progression:

1. Place ball farther down legs to heels.
2. Pick one leg up off ball. Balance, lower leg on ball. Alternate sides.
3. Pick up one leg and write alphabet in the air as big and fast as possible.
4. Add cuff weights at ankles.



Hold _____ Seconds

Weights _____

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: Lifting one leg decreases the base of support and changes the center of gravity to challenge balance reactions. It also trains trunk stability while allowing for mobility of the legs.

Date _____

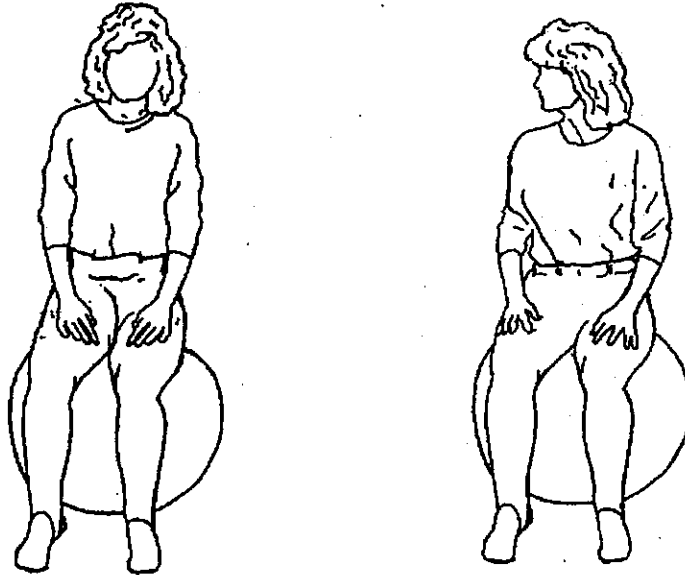
Name _____

Gentle Abdominals-Sitting

4:1

Starting Position: Sit correctly on the ball in optimal posture.

Movement/Exercise: Turn neck as far as possible to look over one shoulder. Return to center and repeat to other side.



CAUTION: KEEP FEET PLANTED ON FLOOR.

Breathing: Inhale on rotation, exhale on return.

Modification: Lightly touch hands to ball or stable object for balance assist.

Progression:

1. Allow ear to lower toward shoulder without turning neck.
2. Close eyes and lower ear toward shoulder and return to center

Hold _____ Seconds / Repeat _____ Times / Do _____ Times/day

Purpose/ Goal: _____

Comments: *Turning the head changes the center of gravity and causes abdominal muscles to tighten automatically to maintain balance. The ability to keep the trunk stable while mobilizing the neck is important so the head can move independently of the trunk and gather optimal visual and auditory information.*

Date _____

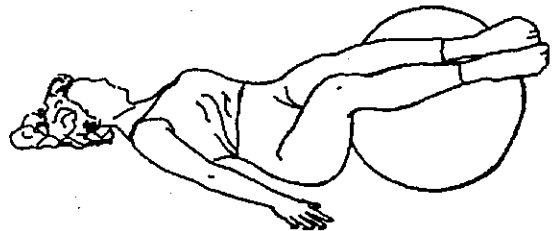
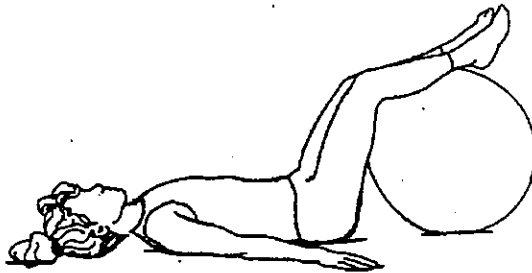
Name _____

Gentle Abdominals-Rotation

4:2

Starting Position: Lie on back and place calves on top of ball with arms at sides on floor.

Movement/Exercise: Let ball roll as knees rock to one side as far as possible. Tighten abdominals and bring knees back to start. Repeat to other side.



CAUTION: STAY IN PAIN-FREE RANGE. DO NOT ARCH BACK AT END OF RANGE.

Breathing: Exhale when lowering, inhale on return.

Modification: Only rock knees through partial range.

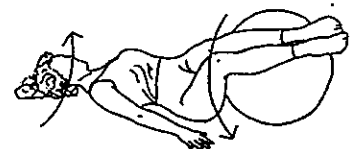
Progression:

1. Hold at end range before returning.
2. Lift arms off floor.
3. Simultaneously turn face in the opposite direction of knees.

Hold _____ Seconds

Repeat _____ Times

Do _____ Times/day



Purpose/ Goal: _____

Comments: Notice if range is the same on each side. Asymmetries may be due to joint or soft tissue restrictions. The legs get heavier the farther the knees move to the side. The abdominal muscles must activate to resist gravity and keep legs on the ball.

Date _____

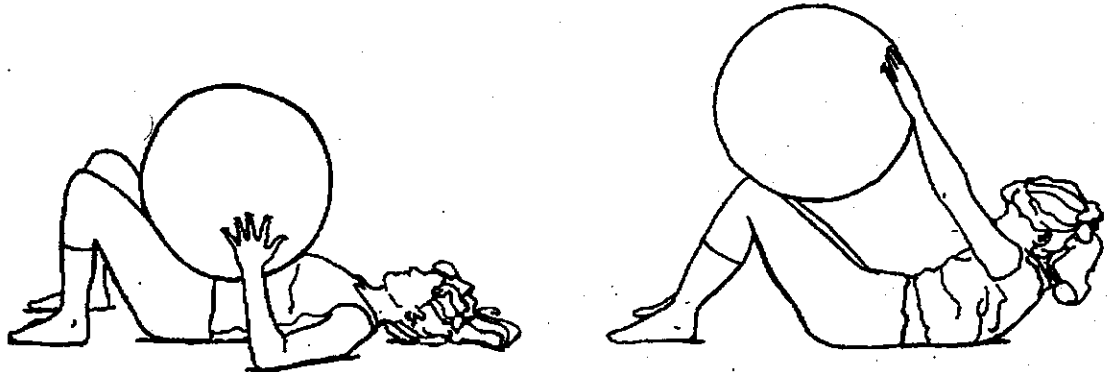
Name _____

Abdominal Curls

4:3

Starting Position: Lie on back with knees bent and feet on floor. Place ball on abdomen and hold with both hands.

Movement/Exercise: Use hands to roll ball up to top of knees. Tuck chin toward chest and lift head and shoulders off the floor. Lower to start. Repeat.

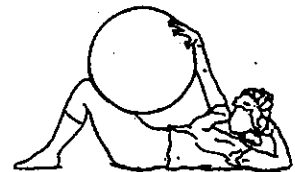


CAUTION: STAY IN PAIN-FREE RANGE. KEEP CHIN A FIST'S DISTANCE FROM CHEST.

Breathing: Exhale while lifting, inhale while lowering.

Modification: Put one hand behind neck to support head or touch fingers of one hand lightly to head but avoid pushing chin to chest.

Progression: Place one hand behind head and one hand on top of ball. Roll ball diagonally across body to outside of opposite knee. Tuck chin toward chest and lift head and shoulder of arm rolling ball.



Hold _____ Seconds

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: The ball serves as a 1 1/2 to 2lbs weight. Rolling straight targets the rectus abdominis muscle and rolling diagonally targets the oblique abdominal muscles.

Date _____

Name _____

Dynamic Full Sit-Up

4:8

Starting Position: Sit on ball and place feet forward until knees are straight and feet are flat on floor. Reach arms forward to shoulder level.

Movement/Exercise: Simultaneously bend knees and lean backward (allow ball to roll forward). Keep going until knees are bent 90° and back is in a straight line. Keep arms at sides and squeeze buttocks.



To reverse, push feet into floor, straighten knees and curl trunk up to sitting position allowing ball to roll underneath buttocks.

CAUTION: STAY IN PAIN-FREE RANGE. DO NOT RISE ON TO TOES OR LET HIPS FLEX IN SUPINE POSITION.

Breathing: Inhale while leaning backward, exhale while moving forward.



Modification:

1. Touch ball or stable object while rolling for balance assistance.
2. Only lean back and roll down as far as comfort allows.
3. Place hands behind head to support neck.

Progression:

1. Increase speed of repetitions.
2. Add light weights to wrist or hands.



Hold _____ Seconds

Weights _____

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: Rolling on the ball while performing an abdominal curl dynamically challenges balance. Adding speed increases the body's momentum mimicking losing and recovering balance. In the end position, the buttock and abdominal muscles should maximally tighten. This trains these muscles to integrate to support and protect the low back.

Date _____

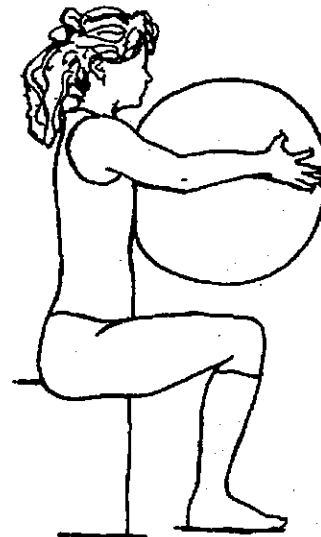
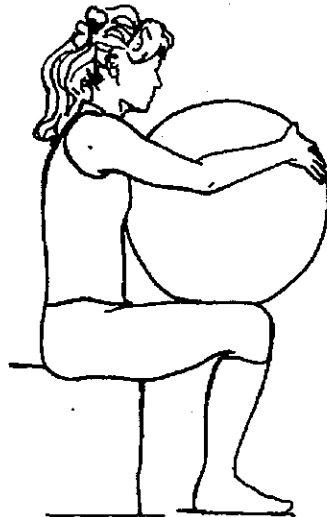
Name _____

Ball Hug

5:1

Starting Position: Sit on edge of chair or bench with ball resting in lap against chest. Place arms around widest part of ball.

Movement/Exercise: Lift ball off lap until hands are even with shoulders and hug ball to chest. Hold. Lower to starting position. Repeat.



CAUTION: KEEP SHOULDERS DOWN WHILE LIFTING AND HUGGING BALL WITH HANDS.

Breathing: Inhale while lifting and squeezing, exhale while lowering.

Modification: Extend knees and squeeze ball into stomach.

Hold _____ Seconds

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: *Feel spine straighten as ball is lifted and squeezed. Besides activating spinal stabilizers, the scapular muscles between shoulder blades and shoulder joint muscles are required to tighten.*

Date _____

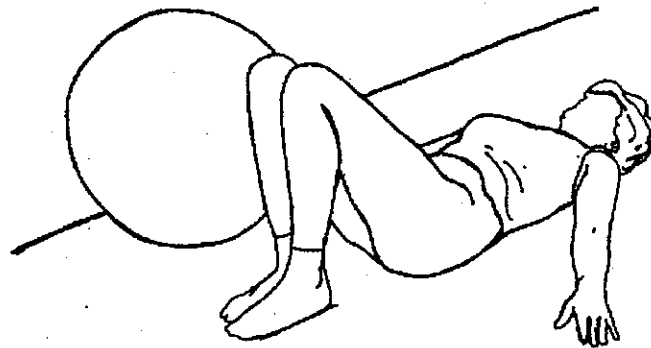
Name _____

Gentle Trunk Isometric-Supine

5:2

Starting Position: Place ball close to wall and lie down next to it with knees bent and feet on floor. Adjust ball so that it is lightly pressed between the wall and knees. If no wall is available, use arm to hold ball at side.

Movement/Exercise: Press knees against ball as hard as is comfortable. Hold. Relax and repeat. Switch sides.



CAUTION: STAY IN PAIN-FREE RANGE AND DO NOT ARCH BACK.

Breathing: Inhale while pressing, exhale while relaxing.

Modification: Sit in a chair and press knees against ball holding it still with hand or wall.

Progression: Tie resistive band around knees and open knees apart pressing one knee into ball and other out to side.



Hold _____ Seconds

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: Feel oblique abdominal muscles tighten along with spinal stabilizers in an isometric contraction. This exercise targets spinal rotator muscles without rotating spine.

Date _____

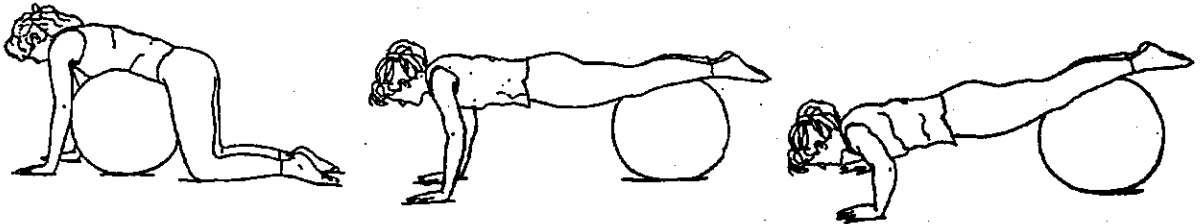
Name _____

Push-Up

5:3

Starting Position: Kneel behind ball, lie trunk over ball and place hands on floor under shoulders. Walk out on hands letting the ball roll down body and legs as far as strength/balance allows. Keeping spine in optimal posture.

Movement/Exercise: Lower body by bending elbows while balancing on the ball. Push body up by straightening elbows. Repeat. Keep spine still by tightening abdominal and buttock muscles.

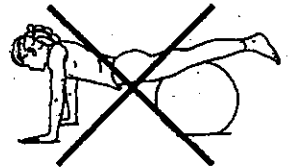


CAUTION: DO NOT LET LOWER BACK SAG OR BEND AT HIPS. KEEP FACE PARALLEL TO THE FLOOR. TRY TO PERFORM EXERCISE ON PADDED SURFACE SUCH AS CARPET, MATS OR BOTH. AVOID LOCKING ELBOWS WHEN RESTING.

Breathing: Inhale while lowering, exhale while raising. Do not hold breath.

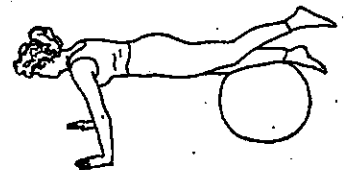
Modification:

1. Have someone assist by lightly touching legs for balance.
2. Walk out on fisted hands if stress is too great on wrists.



Progression:

1. Increase speed.
2. Lift up one leg.



Hold _____ Seconds / Repeat _____ Times / Do _____ Times/day

Purpose/ Goal: _____

Comments: This exercise is a weight bearing kinetic chain for the arms and shoulders. Notice that the closer the ball is to the feet the more strenuous this exercise becomes on arms and trunk as body maintains balance while lowering and raising up.

Date _____

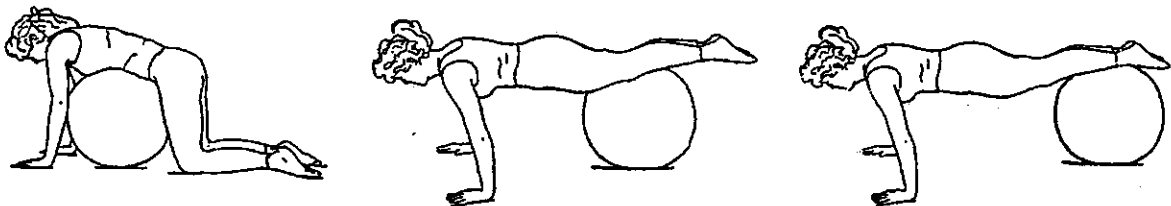
Name _____

Prone Walk-Out

5:5

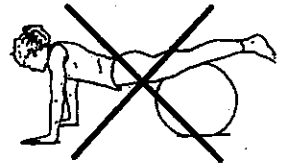
Starting Position: Kneel behind ball. Lie trunk over ball and place hands on floor under shoulders.

Movement/Exercise: Walk out on hands letting the ball roll down body. Walk out as far as strength/balance allows and return to starting position. Keep spine in optimal posture by tightening abdominals and buttocks.



CAUTION: DO NOT LET LOWER BACK SAG OR BEND AT HIPS. KEEP FACE PARALLEL TO THE FLOOR. TRY TO PERFORM EXERCISE ON PADDED SURFACE SUCH AS CARPET, MATS OR BOTH.

Breathing: Breathe comfortably. Do not hold breath.

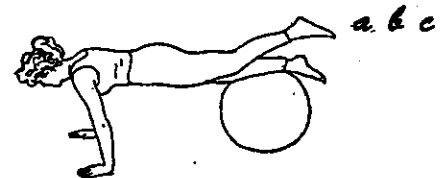


Modification:

1. Have someone assist by lightly touching legs for balance.
2. Walk out on fisted hands if stress is too great on wrists.

Progression:

1. Gently rock forward and backward.
2. When at end position, balance and lift up one leg.
3. Write the alphabet with foot of lifted leg.



Hold _____ Seconds / Repeat _____ Times / Do _____ Times/day

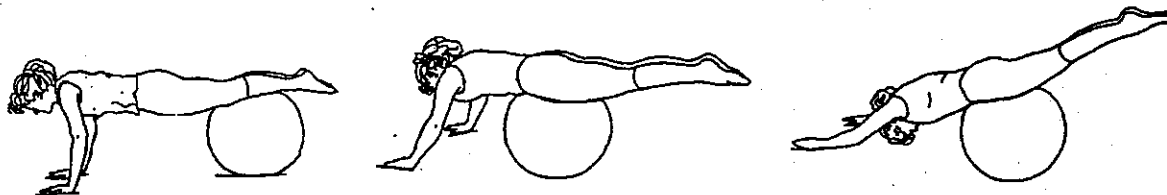
Purpose/ Goal: _____

Comments: This exercise is a weight bearing kinetic chain for the arms and shoulders. Notice that the farther one walks out on the ball the exercise becomes more strenuous on the upper body and trunk as they adjust to keep the body balanced as the lever arm increases.

Total Body Extension**5:7**

Starting Position: Assume prone walkout position (exercise 5:5). Keep spine in optimal posture and allow ball to roll down legs until knee caps are just on top of ball.

Movement/Exercise: Press hands into floor and lift feet as body pushes back (do not move hands). Allow ball to roll up body to support pelvis. Extend spine as far as strength and comfort allow. Lower head between arms. Reverse motion by tightening abdominal muscles to initiate. Return to starting position (do not let lower back sag).

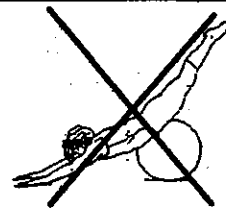


CAUTION: AVOID LIFTING FEET TOO HIGH AS IT WILL RESULT IN OVER ARCHING THE LOWER BACK. STAY IN PAIN FREE RANGE.

Breathing: Inhale on roll back, exhale on roll forward.

Modification:

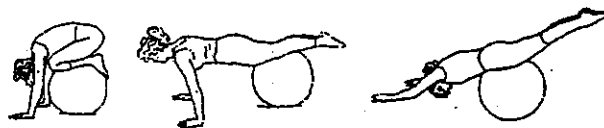
1. Have someone assist by lightly holding ankles for balance.
2. Perform through partial range only if restriction exists.
3. Only walk out as far as comfort allows.

**Progression:**

1. Combine total body flexion and extension into a fluid movement sequence (inhaling on flexion, exhaling on extension).
2. Have an assistant add resistance to movement by holding ankles and walking forward and backward during movement.

Hold _____ Seconds

Repeat _____ Times / Do _____ Times/day



Purpose/ Goal: _____

Comments: This exercise is a weight bearing kinetic chain for the arms and shoulders. Notice how strenuous this exercise is on the upper body and abdomen as it adjusts to keep body balanced and to coordinate this exercise while the base of support, lever arm and center of gravity continually change.

Date _____

Name _____

Hamstring Stretch-Supine

6:4

Starting Position: Lie on back with calves on ball.

Movement/Exercise: Straighten one knee and lift leg off ball as far as comfort allows. Hold. Return, rest and repeat. Switch sides.



CAUTION: KEEP BUTTOCKS AND LOW BACK ON FLOOR.

Breathing: Do not hold breath. Breathe comfortably.

Modification: Use resistive band to lift leg for strength assist.

Progression: Flex ankle to increase stretch.

Hold _____ Seconds

Repeat _____ Times

Do _____ Times/day

Purpose/ Goal: _____

Comments: *This position allows comfortable support of the spine and other leg as the hips are stabilized and the hamstring muscles experience a targeted yet easily controlled gravity assisted stretch activated by the quadriceps muscle.*

Date _____

Name _____

Side Bend-Standing

8:8

Starting Position: Stand with feet spread about two feet apart and with toes pointing slightly outward. Hold ball between one arm and side of trunk. Raise other arm out to side parallel to floor.

Movement/Exercise: Raise free arm up toward ceiling and simultaneously side bend trunk letting weight rest on ball while hips sway to opposite side for counter balance. Hold. Return to start. Repeat. Switch to other side.



CAUTION: STAY WITHIN PAIN-FREE RANGE. KEEP KNEES IN LINE WITH TOES.

Breathing: Inhale while side bending, exhale while returning to start.

Modification: Only bend as far as comfort allows or keep opposite arm at side.

Progression: Push up on toe on side of ball causing increased trunk sway and side bend.

Repeat _____ Times / Do _____ Times/day

Purpose/ Goal: _____

Comments: This is a gravity-assisted side bending stretch to increase flexibility of spine and ribs and can increase respiratory capacity on inhalation. Sway challenges balance.

