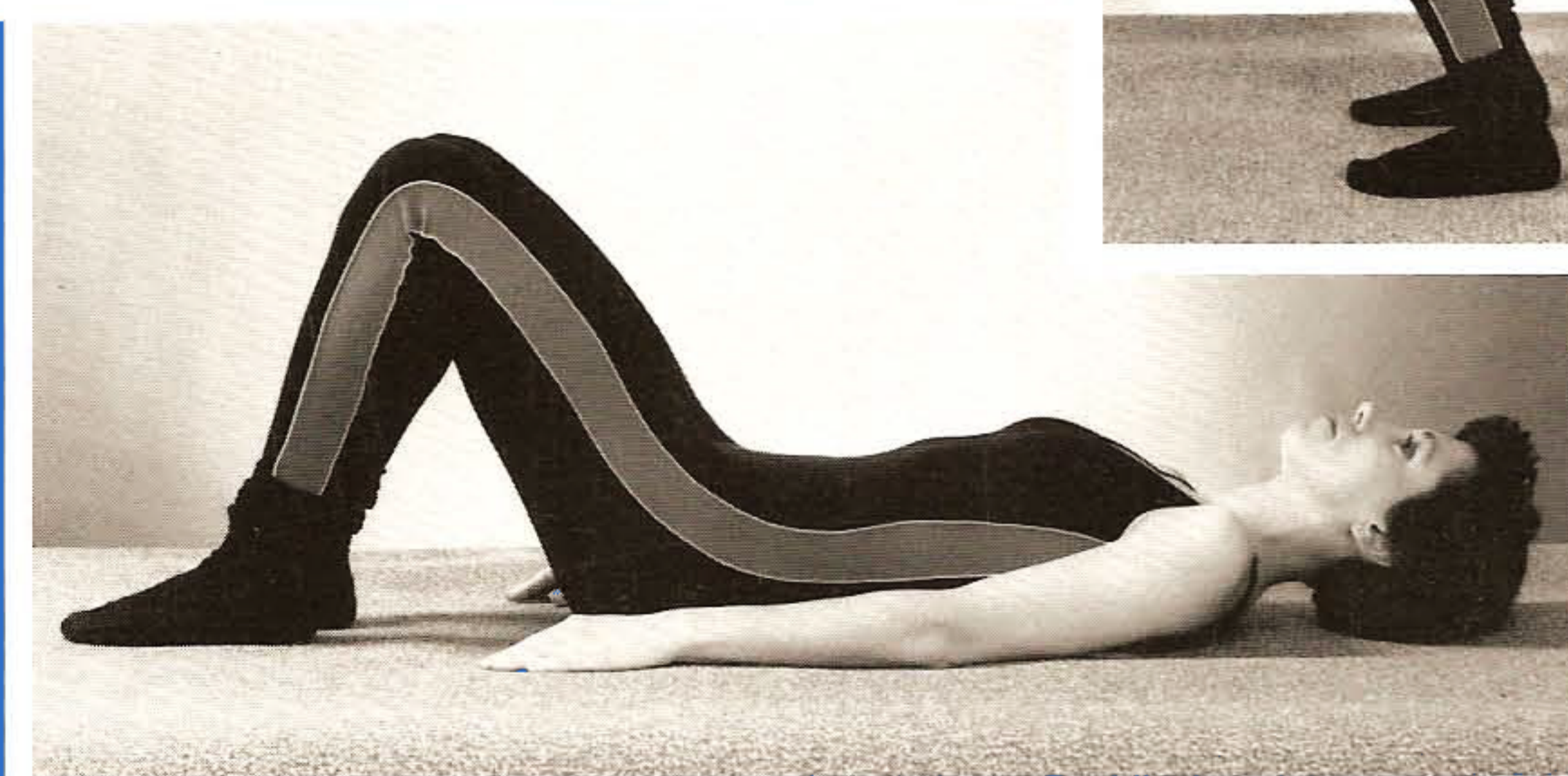
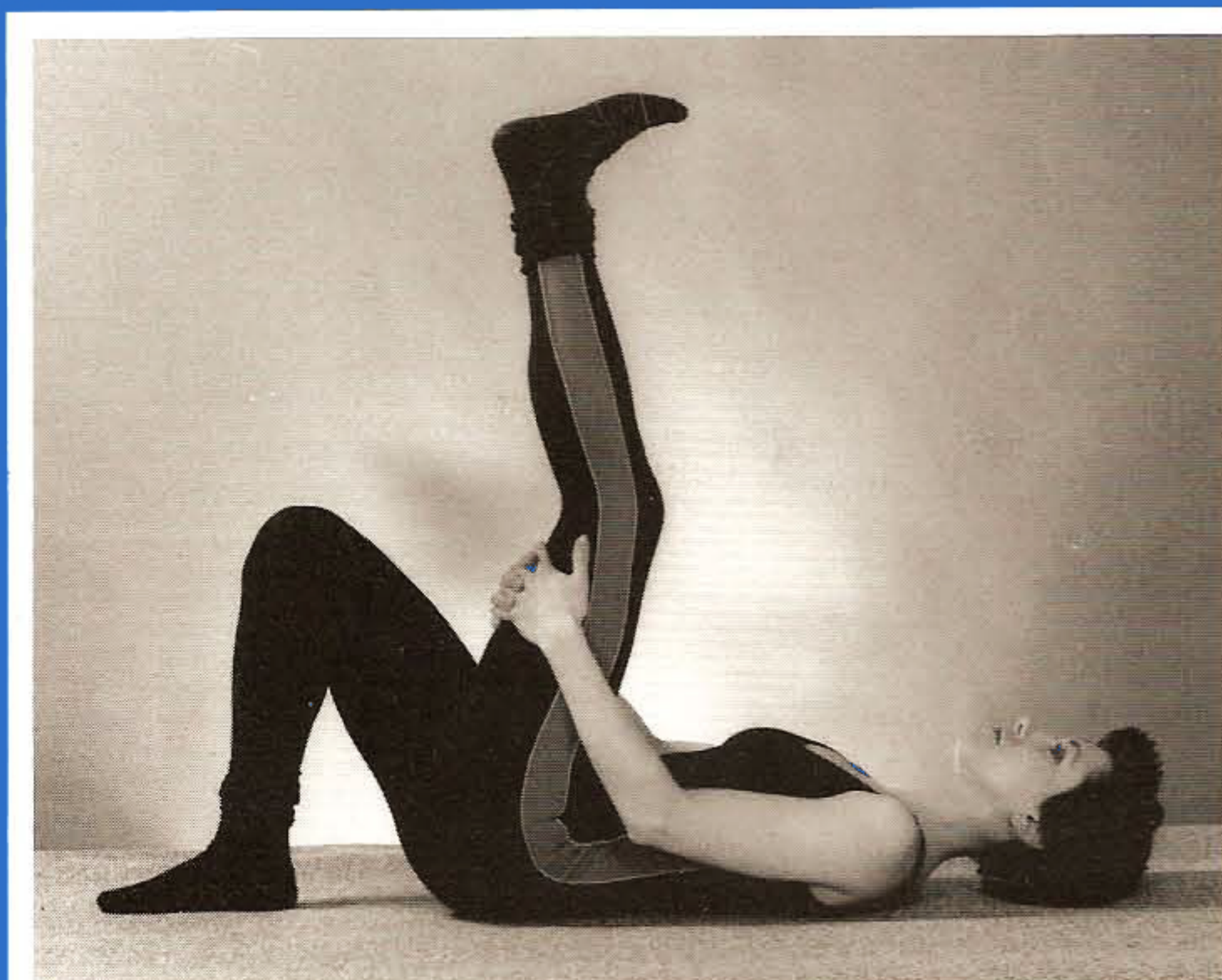




# ***HEALTHY BACK COURSE***

## Participant Guide



**HEALTHY BACK COURSE ACTIVITIES** **Page**

*The following items will be completed by you during the course.*

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**HEALTHY BACK COURSE CONCEPTS**

*This is a summary of the course concepts as well as other information provided for your future reference.*

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# Stress Survey

This survey will help you identify different signals of stress in your life.\* Remember, this workbook is your personal property. Another copy of this survey is found on page 15 of this Guide should you want to share it with a family member.

## Physical Stress Symptoms

Think about the past month. Indicate how often each of the symptoms listed occurred for you. Circle your choice.

	Almost Every Day	Weekly	Once or Twice	Never
Cold or hay fever . . . . .	3	2	1	0
Chest pain . . . . .	3	2	1	0
Shortness of breath . . . . .	3	2	1	0
Skin rash . . . . .	3	2	1	0
Dry mouth or sore throat . . . . .	3	2	1	0
Laryngitis . . . . .	3	2	1	0
Stomachache or upset . . . . .	3	2	1	0
Heartburn . . . . .	3	2	1	0
Diarrhea . . . . .	3	2	1	0
Constipation . . . . .	3	2	1	0
Abdominal pain . . . . .	3	2	1	0
Muscle tension . . . . .	3	2	1	0
Back pain . . . . .	3	2	1	0
Headache . . . . .	3	2	1	0
Grinding teeth . . . . .	3	2	1	0
	—	+	—	+
<b>Stress Symptoms Scale</b>	<b>TOTAL</b> _____			
<b>0-4</b>	<b>5-8</b>	<b>9-13</b>	<b>14 +</b>	
<b>Low</b>			<b>High</b>	

## Behavioral Stress Symptoms

Think about the past month. Indicate how often each of the symptoms listed occurred for you. Circle your choice.

	Almost Every Day	Weekly	Once or Twice	Never
Smoking . . . . .	3	2	1	0
Drinking alcoholic beverages . . . . .	3	2	1	0
Taking tranquilizers . . . . .	3	2	1	0
Taking aspirin and other pain relievers . . . . .	3	2	1	0
Taking other drugs . . . . .	3	2	1	0
Loss of appetite . . . . .	3	2	1	0
Overeating . . . . .	3	2	1	0
No time to eat . . . . .	3	2	1	0
Watching TV (over 2 hours a day). . . . .	3	2	1	0
Overwhelmed by work . . . . .	3	2	1	0
Difficulty meeting commitments or completing tasks . . . . .	3	2	1	0
Resent people I encounter at work . . . . .	3	2	1	0
Hard to pay attention to work tasks . . . . .	3	2	1	0
Accidents or injuries . . . . .	3	2	1	0
Distant and uninvolved at work . . . . .	3	2	1	0
Withdrawing from close relationships . . . . .	3	2	1	0
Criticizing, blaming or ridiculing others . . . . .	3	2	1	0
Feeling victimized or taken advantage of . . . . .	3	2	1	0
	—	+	—	+
<b>Stress Symptoms Scale</b>	<b>TOTAL</b> _____			
<b>0-7</b>	<b>8-12</b>	<b>13-18</b>	<b>19 +</b>	
<b>Low</b>			<b>High</b>	

	Almost Every Day	Weekly	Once or Twice	Never
Insomnia . . . . .	3	2	1	0
Difficulty awakening . . . . .	3	2	1	0
Too much sleep (over 9 hours). . . . .	3	2	1	0
Difficulty concentrating . . . . .	3	2	1	0
Mind going blank . . . . .	3	2	1	0
Forgetting important things. . . . .	3	2	1	0
Depressed . . . . .	3	2	1	0
Fearful . . . . .	3	2	1	0
Hopeless . . . . .	3	2	1	0
Crying easily . . . . .	3	2	1	0
Nervousness or anxiety . . . . .	3	2	1	0
Tremor or trembling . . . . .	3	2	1	0
Twitch or tic . . . . .	3	2	1	0
Keyed-up feeling . . . . .	3	2	1	0
Cannot turn off certain thoughts . . . . .	3	2	1	0
Worrying . . . . .	3	2	1	0
Unable to keep still; fidgeting . . . . .	3	2	1	0
Irritable; angry emotional outbursts . . . . .	3	2	1	0
Fatigue . . . . .	3	2	1	0
Low energy . . . . .	3	2	1	0
Apathetic; nothing seems important . . . . .	3	2	1	0
Emotionally drained . . . . .	3	2	1	0
Loss of sexual interest or pleasure . . . . .	3	2	1	0
	—	+	—	+
	TOTAL ———			

<b>Stress Symptoms Scale</b>				
0–7	8–17	18–29	30 +	
Low			High	

## Emotional Stress Symptoms

Think about the past month. Indicate how often each of the symptoms listed occurred for you. Circle your choice.

\*This survey is designed for adults. Certain questions may not be appropriate for younger family members.

STOP!

Movement	Example At Home, Work Or Elsewhere
Push (example) . . . . .	<i>Pushing a cart or sliding a heavy object</i>
Push . . . . .	_____
Pull . . . . .	_____
Reach (out or overhead) . . . . .	_____
Bend . . . . .	_____
Bend/Lift . . . . .	_____
Carry . . . . .	_____
Twist . . . . .	_____
Twist/Lift . . . . .	_____
	(avoid this hazardous action)
Sit . . . . .	_____
Stand . . . . .	_____
Climb . . . . .	_____
Lie Down . . . . .	_____

## Body Movement Inventory

The movements you make throughout your day at home, work, or elsewhere may either help or hurt you. Complete this inventory to focus on movements that you could improve by applying the Position of Strength.

For each movement listed, write an example of how you use it in a common activity (when applicable).

## Personal Goals

### NOTES

Congratulations! You have come to the most valuable part of the Healthy Back Course and are ready to take some steps toward protecting your back and improving your back health.

Think about all of the course concepts. What did you relate to? Did you experience something that you felt good about and you want to continue in your life? Here is a listing of some concepts to help refresh your memory. You may want to check off those concepts or skills that interest you.

- ☐ Stomach Breathing
- ☐ Deep Relaxation
- ☐ Stress Survey
- ☐ Sounds of Nature Audiocassette
- ☐ Position of Comfort
- ☐ First Aid for Back Pain
- ☐ Position of Strength
- ☐ Body Movement Inventory
- ☐ Correct Postures
- ☐ Back Exercise Routines
  - ☐ Basic Routine
  - ☐ Advanced Routine
  - ☐ Stomach Power
  - ☐ Standing Stretches
  - ☐ Sitting Stretches
  - ☐ Self-Selected Routine

STOP!

## **STRESS AND BACK PAIN**

### **A. Understanding Stress**

#### **Results of Stress**

Stress affects people in many different ways. Symptoms may be physical, behavioral, or emotional. The Stress Survey (see page 15) lists many of the most common symptoms. Back pain is one of these physical symptoms.

Stress leads to back pain by causing tension in your muscles. Tense muscles are tight and inflexible and are more susceptible to injury. Studies show that tension in muscles also increases the amount of pain-causing chemicals in your body (lactate). Furthermore, blood cannot enter the tense/tight muscles as easily as relaxed muscles. And blood, of course, is essential to keeping your body healthy and healing injuries.

### **B. Understanding Relaxation**

#### **Benefits**

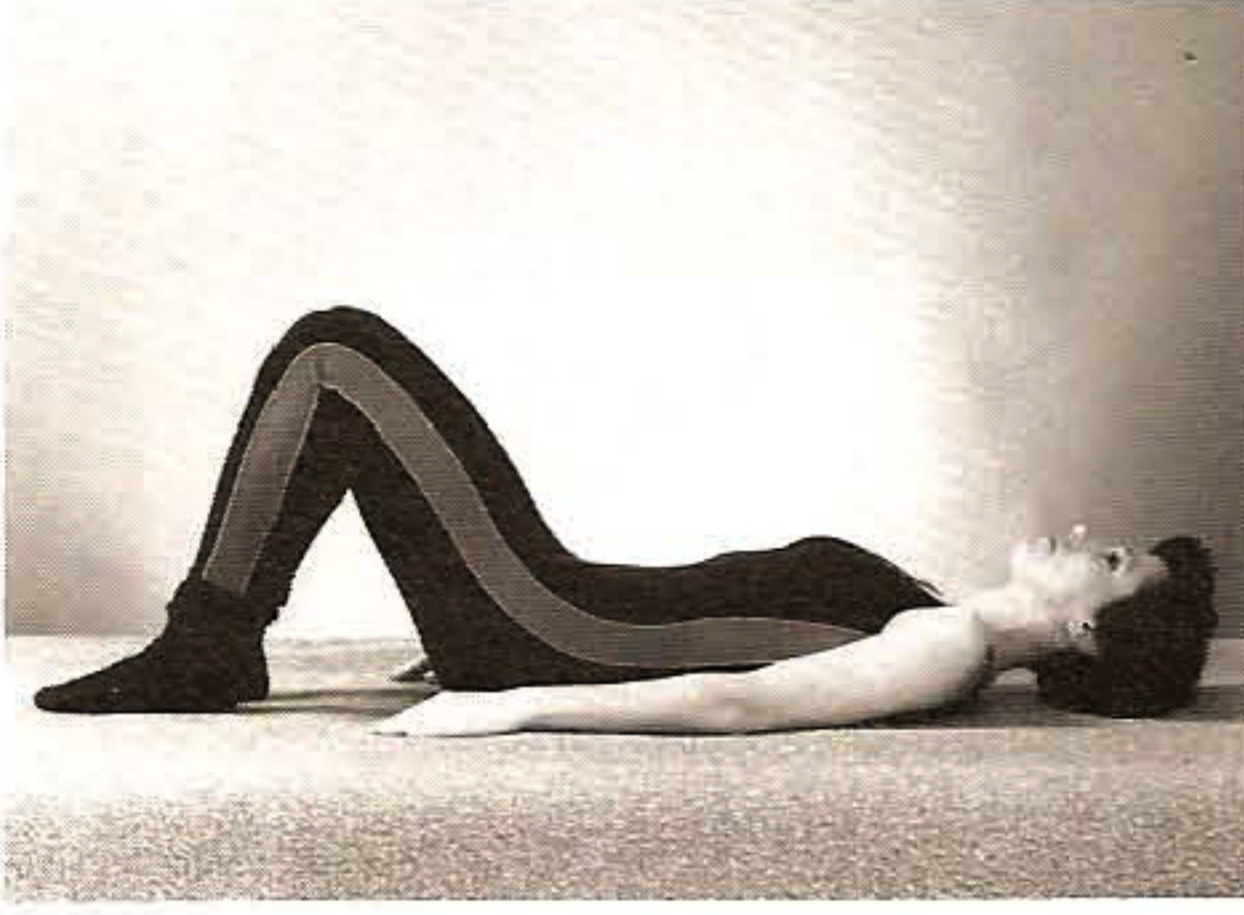
Daily relaxation may help you in two ways. In the long term, it often helps to relieve the accumulation of daily stresses on your body with results like sleeping better, greater flexibility and agility, and just feeling better. In the short term, relaxation may help you reduce the pain of a back problem by relaxing tight back muscles as part of Back First Aid (see page 8).

Relaxation helps your body because it *releases muscle tension*; muscles let go, and some of the inner pressures creating pain are reduced. If an individual is experiencing muscle-binding tension (even imperceptible tension), his/her blood flow to the muscles becomes restricted. This has a negative effect on supple movement and endurance of muscles. Relaxation releases the restricted blood flow and provides a rich supply of oxygenated blood to muscle tissue. Relaxation also helps to *reduce pain* by lowering the level of pain-causing chemicals in the blood (lactate).

In addition, relaxation helps you to *sleep better*. Relaxation is natural, unlike sleeping pills and alcohol which make you drowsy but actually interfere with adequate REM time and decrease the natural quality of your sleep.

REM time (Rapid Eye Movement) is the flickering of the eyelids which occurs while you are dreaming. During this time, the brain consumes more OXYGEN than at any other time of the day or night. This indicates a natural healing or growth process required by the brain is taking place.

Another benefit of relaxation is *less illness*. Stress affects your IMMUNE SYSTEM by lowering the number of white blood cells, your defense against illness. RELAXATION increases the quantity of white blood cells and helps you fight off infectious illnesses.



### ***Position of Comfort (P.O.C.)***

The Position of Comfort is a basic and safe resting position of the body. It relieves pressure and strain on the back because the lower back is straight and supported by the floor when the legs are raised and supported or the knees are bent. The stomach and thigh muscles are relaxed.

### ***Relaxation Skills***

Relaxation is a skill which can be developed with practice. The Relaxation Therapy Audiocassette may help you in developing your ability to relax quickly and deeply.

One of the best ways to do Relaxation Therapy is to lie in the Position of Comfort. You may want to support your bent knees with pillows.

### ***Relaxation Therapy Audiocassette Summary:***

Side 1: Sounds of the Sea  
Length: 30 minutes

Side 2: A Quiet Place  
Length: 30 minutes

On both sides of the cassette, the speaker begins the first stage of relaxation therapy with deep breathing exercises. You use stomach breathing which means pushing out your stomach as you inhale so your lungs have greater room in which to expand.

Gradually, the speaker progresses to the second stage of relaxation therapy, and you begin to relax your muscles, starting at your toes and progressing to all the muscles throughout your body.

Finally, you are in a deep state of relaxation and the sounds of nature continue to soothe you.

### ***Relaxation Therapy Questions and Answers***

**How often can or should I do RT?**

You can do RT as often as you like.

**I often feel guilty when I take time out to relax. What can I do about this?**

Remember, you are a more pleasant person when you are relaxed. You have a right to a restful time alone.

**How long does it take to respond to RT?**

People have varying degrees of resistance to deep relaxation. Many people respond during their first session. Almost everyone will relax fully in two or three sessions.

**Can I relax too deeply and not wake up on my own?**

No, your body has its own regulatory system. You will not relax too much and you will wake up when you are ready. RT emphasizes you and your control over yourself.

**Will I always need to use the tape player and the tapes to relax?**

No, you will eventually learn how to relax on your own without the tapes. This is one of the *primary* reasons for doing RT on a regular basis. Once you learn "how" to relax, you will be able to apply this skill in everyday situations and on short notice. In time, it will become very easy to "come down" in just a few seconds throughout your day.

## C. Back Anatomy and Pain

### Back Anatomy

The back is structured to allow for flexibility, protection of the spinal cord, and strength to support the upper body.

**Vertebrae** — 26 separate small bony sections that protect the spinal cord and nerves. The spine is grouped into five regions: cervical, thoracic, lumbar, sacral, and coccygeal.

**Facet Joints** — These small joints are formed where the vertebrae rest on each other and limit twisting and bending.

**Discs** — These shock absorbers with jelly-like centers separate each vertebra within the spine.

**Ligaments and Tendons** — These gristly, flexible “guy wires” hold the spinal bones together.

**Muscles** — These active parts also act as “guy wires” to support the back and contract or lengthen to allow for movement.

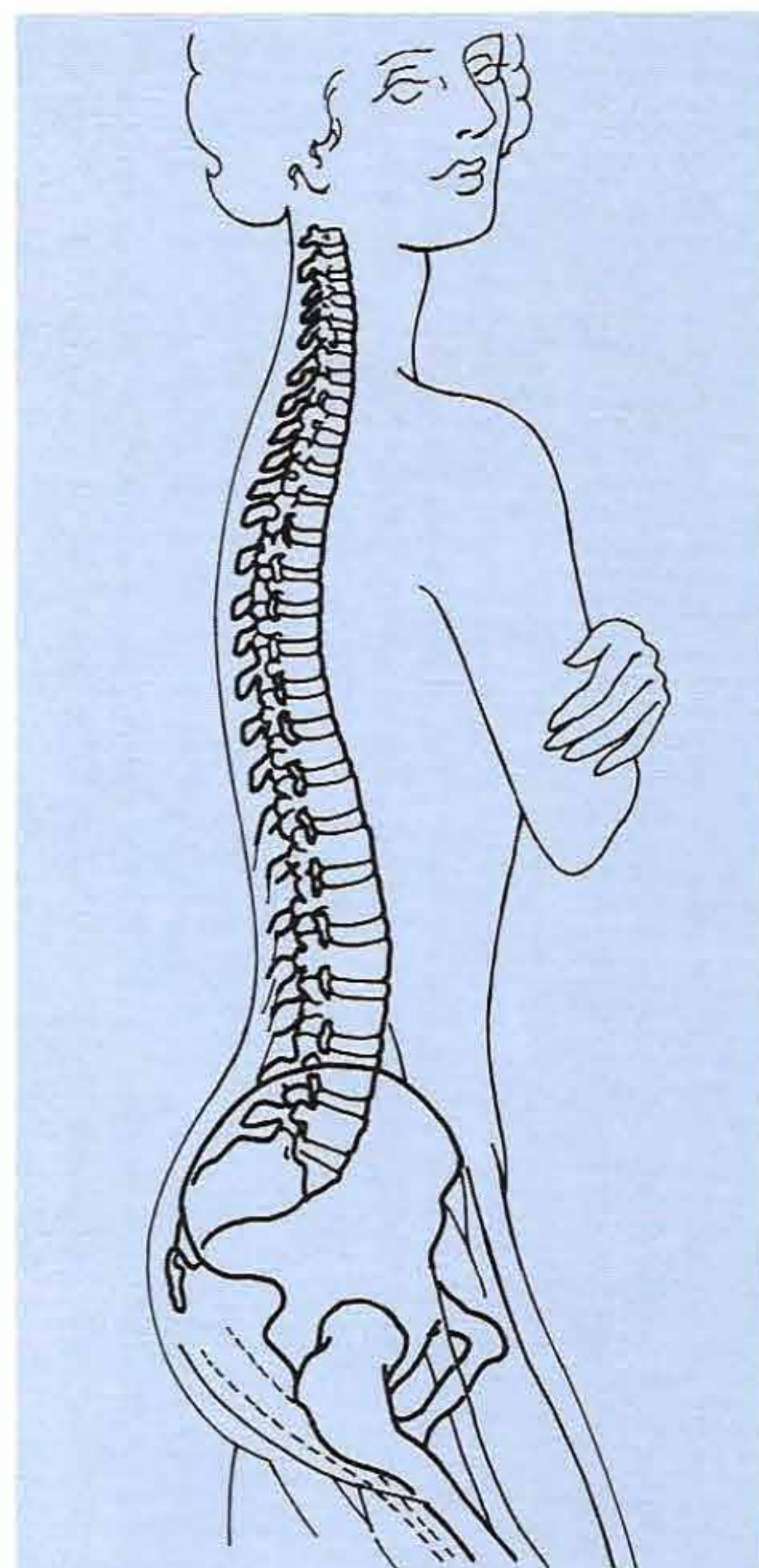
**Spinal cord** — The spinal cord is a bundle of nerves which runs from the brain through the middle of the protective vertebrae. The spinal cord sends out roots between the vertebrae.

### Common Back Problems

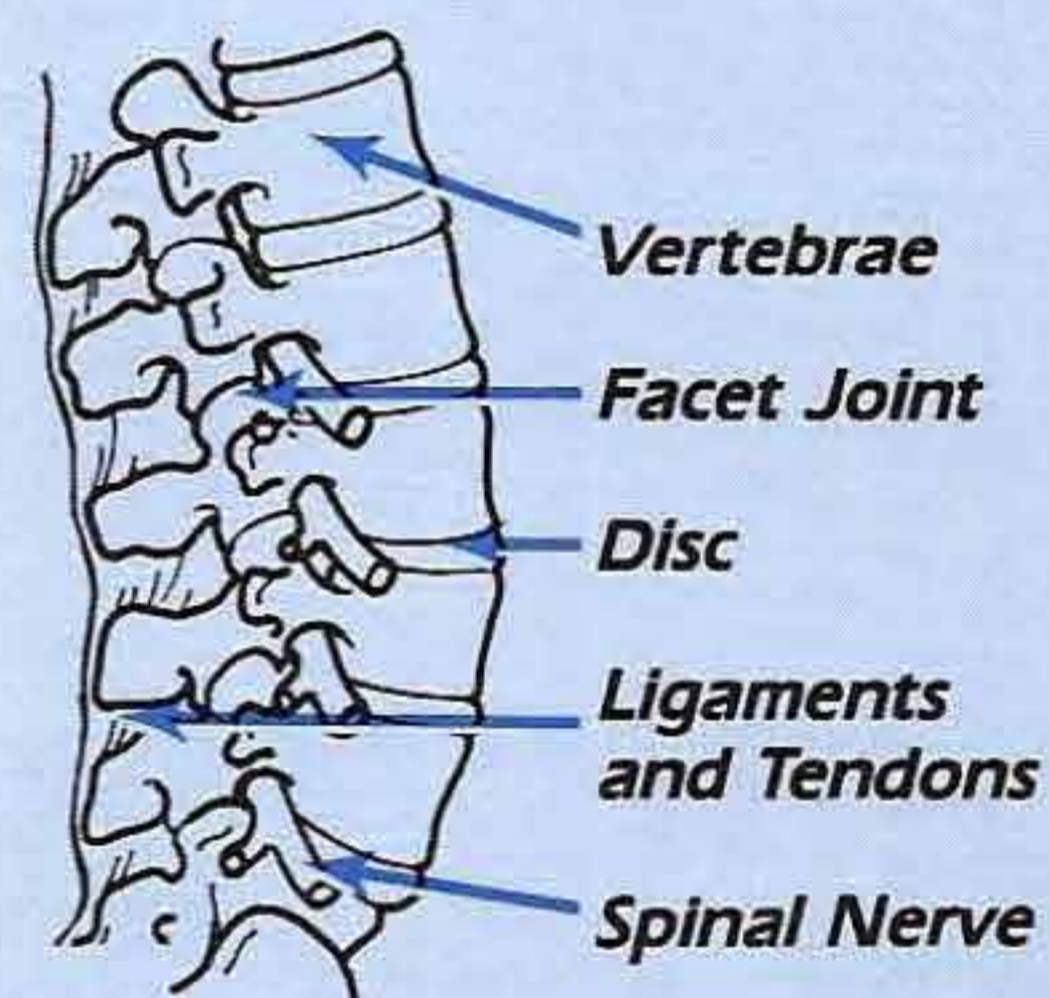
Most people (80%) experience back pain at some time in their lives. Most back pain is triggered by strains, chronic wear and tear, emotional stress, fatigue, or most commonly, a combination of factors. More than three-fourths of the time the pain is felt in the lower back, although it may affect the neck or cervical area.

Specific causes of back pain in order of the most common to least common are:

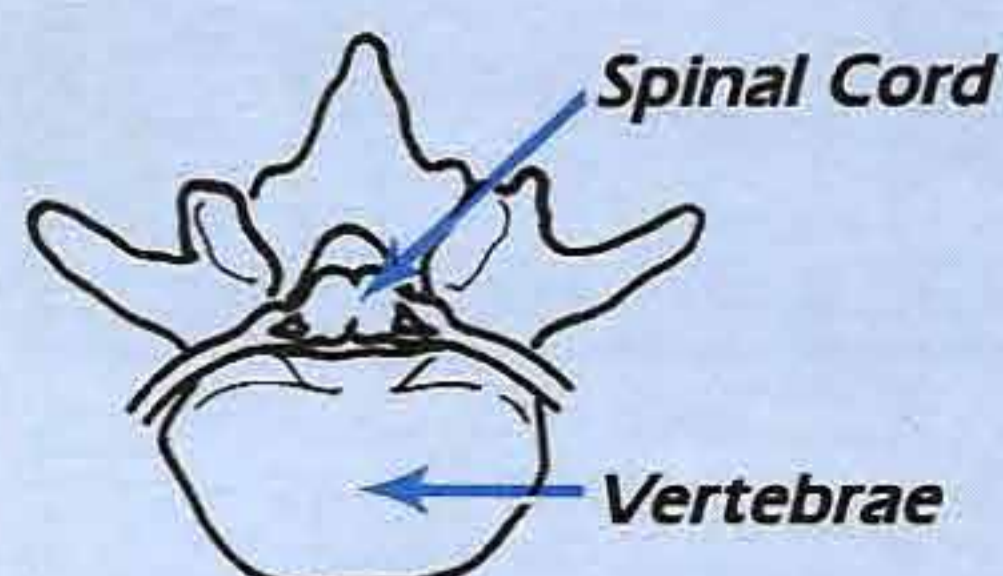
1. **Muscle Spasm:** This may be caused by a pinched nerve (see #5 below), emotional stress or a muscle strain. A muscle strain is defined as the tearing of a small percentage of the muscle fibers that together comprise a whole muscle (much as many strings make up a thick rope). Motion at the tear produces pain. To prevent motion, the adjacent muscles involuntarily tighten or spasm to “splint” the strain. Both the strain and spasm may be painful. Additionally, muscles in spasm form “knots” that can pinch nerves resulting in the vicious cycle of muscle spasm and pinched nerves.
2. **Ligament and Tendon Strains:** Ligaments and tendons are composed of many smaller interlocking fibers that together comprise the whole unit. A strain is the tearing of a small percentage of these fibers. This results in pain and inflammation.
3. **Disc Degeneration:** Through daily “wear and tear,” discs may become cracked or strained. This may cause the loss of space between the vertebrae, leading to abrasion, osteoarthritis (see #4) and pinched nerves (see #5).
4. **Osteoarthritis:** Through daily “wear and tear,” the vertebrae and the vertebral joints may rub against each other or against other tissues of the back. This can cause bony spurs and rough areas of bone to form and irritate the nearby tissues.
5. **Pinched Nerve:** A nerve may be pinched anywhere along its length from near the spinal cord to down the leg. Nerves can be pinched by herniated discs, narrowed vertebral spaces, bony spurs, muscle spasm, or swelling of soft tissues. A nerve that is pinched sends out more electrical impulses that result in more contraction of muscles, ligaments, and tendons, and, thus, more spasm. It may cause pain at the root of the nerve; *sciatica* (shooting pain down the legs), or pain, tingling, or numbness in the arms, hands, and fingers.



### Close-Up



### Cross Section



6. *Herniated Disc*: This has been poorly named as a “slipped disc.” Actually, the jelly-like material inside the disc bulges and presses on one of the nerve roots or interferes with the blood supply. This causes pain along the affected nerve and is one cause of *sciatica*. Less than 5% of patients with back pain have a herniated disc.
7. *Facet Joint Problems*: The bony vertebrae facet joints may “slip” or dislocate when bending backward and twisting. This is described as a “catching” or “locking” sensation with severe pain.

## D. First Aid for Back Pain

This first aid procedure is a major breakthrough in Back Health. Please share it with others.

### **Symptoms**

Many symptoms of back pain, such as a back muscle spasm or a strain or soreness from work or exercise are treatable by the individual. Prompt attention will help relieve pain and prevent the condition from worsening. Anytime back pain occurs at work, seek medical attention according to your local first aid/medical treatment policy.

If the symptoms involve the following, contact a medical professional:

- Shooting pain down the leg (*sciatica*) or arm.
- Injury.
- Inability to move without severe pain.
- Persistent pain after first aid is used for a few days.
- Other accompanying symptoms (i.e., fever).

Most *lower back pain*, other than the symptoms listed above, can be treated successfully with “back first aid”. Pain may be reduced as quickly as the first day or slowly decrease over two weeks.

### **Back First Aid Summary**

(See explanations for more information.)

At the onset of back pain, reduce the inflammation that causes the pain with:

1. Position of Comfort and relaxation therapy.

If this does not provide relief, continue with:

2. Over-the-counter medication (anti-inflammatory).
3. Ice (days 1, 2, 3) then heat (day 4) as described.

### **1. Position of Comfort and Relaxation Therapy**

As soon as you feel pain, the back should be positioned so that the *least amount of stress* is placed upon the discs, muscles, and ligaments. The following positions are listed starting with the best or the least stressful to the back.

#### Position of Comfort

##### **Flat on back with knees bent and feet on floor.**

Other options if necessary:

On the side with knees bent and top knee closer to chest (fetal position).

See page 10 for lifestyle applications of pain-reducing posture.



### Relaxation Therapy

Sudden pain causes the release of adrenalin which adds to the stress and anxiety produced by the pain. Deep relaxation is very beneficial in relieving pain and muscle spasm, thereby ending this cycle of pain, stress and more pain (see page 5, Stress and Back Pain).

### **2. Medication** (Anti-Inflammatory)

- Aspirin or Ibuprofen (generic or name brand) is effective on both *pain and inflammation*. Neither should be taken by someone who has peptic ulcer disease or who is taking blood thinners (anticoagulants). Read the label and take as directed.
- Acetaminophen or Tylenol treats pain only, not inflammation, but may be used by people with peptic ulcer disease. Read the label and take as directed.

### **3. Ice Then Heat**

Day 1 (24 hours)

Ice and heat are helpful for back pain.

Ice should be used for the first *24 hours*. An ice pack wrapped in a damp towel applied for 20-30 minutes every 2-4 hours is ideal. Alternatively, water can be frozen in a paper or styrofoam cup and the top two inches peeled off. This may be massaged in a circular motion over the painful area for 5-10 minutes every 2-4 hours. Ice reduces the inflammation and swelling. Heat used too early may aggravate the condition.

Days 2, 3, and 4 (24-72 hours)

After 24 hours, each person's body responds differently, and ice alone, heat alone, or ice followed by heat (contrast therapy) may be appropriate. If you know that heat helps you after 24 hours, then use it. Otherwise, continue to use *ice until the fourth day and then use heat*. Use moist or dry heat for no more than 20 minutes at a time. Moist heat is more relaxing than dry heat and is preferred.

CAUTION: To prevent severe burns, *never fall asleep* on a heating pad.

### **NOTE: Back Stretches Come Later**

Exercises are the mainstay of a back-care program. Bed rest should be limited to severe cases and for less than three days. Recent studies have shown that early mobility, as in nonstrenuous daily activities, improves the long-term outcome. Movement helps maintain muscle flexibility and strength and promotes blood flow and healing.

Exercises should *not* be done until the pain is approximately 50% improved. When exercises are begun, only the *stretching* exercises of the Basic Routine (see page 12-13 and Exercise Chart) should be done. If the pain is made worse or radiates down the leg, the exercises should be stopped.



Section Two

## HEALTHY BACK COURSE

### Lifestyles



### A. Position of Strength (P.O.S.)

The Position of Strength is a powerful and self-protective body posture that may be used while performing any basic body movement. It involves:

- ❑ Straight Back
- ❑ Bent Knees
- ❑ Stomach Power
- ❑ Thigh Power
- ❑ Load Close to Body

In challenging movements where the Position of Strength seems difficult to use, such as reaching or working in a cramped area, try these additional actions:

1. Tighten your stomach muscles.
2. Keep your head and shoulders in line.
3. Brace or support yourself with your hand.
4. Change the positioning of the task or the surroundings to make it easier.



### B. Posture Hints

Correct body posture throughout the day and night is essential to good back care.

#### ***Sleeping:***

Use the Position of Comfort: \*

- Lie on the back with the *knees bent* or supported by pillows to take stress off the back, or
- Sleep on your side in the fetal position with your knees bent. A pillow between the knees may add comfort.
- For adults, sleeping *on the stomach* may be *harmful*, as it reduces blood supply when the neck is bent backwards and it places a constant load on the spine.
- You move throughout the night, so no one position will last long. Find what is comfortable and restful to you.

Other sleeping hints:

- To reduce strain on the neck and avoid restricting the blood flow to the brain, choose a pillow that allows the head to *settle in comfortably* rather than one which elevates it. A feather pillow or thin soft pillow is better than solid foam.

- A *firm mattress* will support the back and increase blood circulation by causing you to shift position more than a soft bed does. Water beds support the back but do not promote shifting of position. Comfort is the key. If you wake up with a sore back, your mattress may be too hard or too soft.

\* Some less common back problems, such as a bulging disc, make it uncomfortable to sleep in the Position of Comfort. Patients with such problems should consult their back specialist, who may advise them to try to retain their lower back arch by sleeping with a small pillow under their back.

### ***Sitting:***

Use the Position of Strength:

- Keep the *back straight* and push your chest forward with the lower back supported by the chair, a small pillow or a rolled towel.
- Keep the *knees bent* with feet flat on the floor or on a footrest, if preferred. Your knees should be even with or slightly above your hip line.
- Keep the *stomach tight* to avoid slouching. Relax the back and shoulders.
- Change your position frequently and get up and walk around.  
BACK PAIN – If you must sit, then stand every 20-30 minutes.

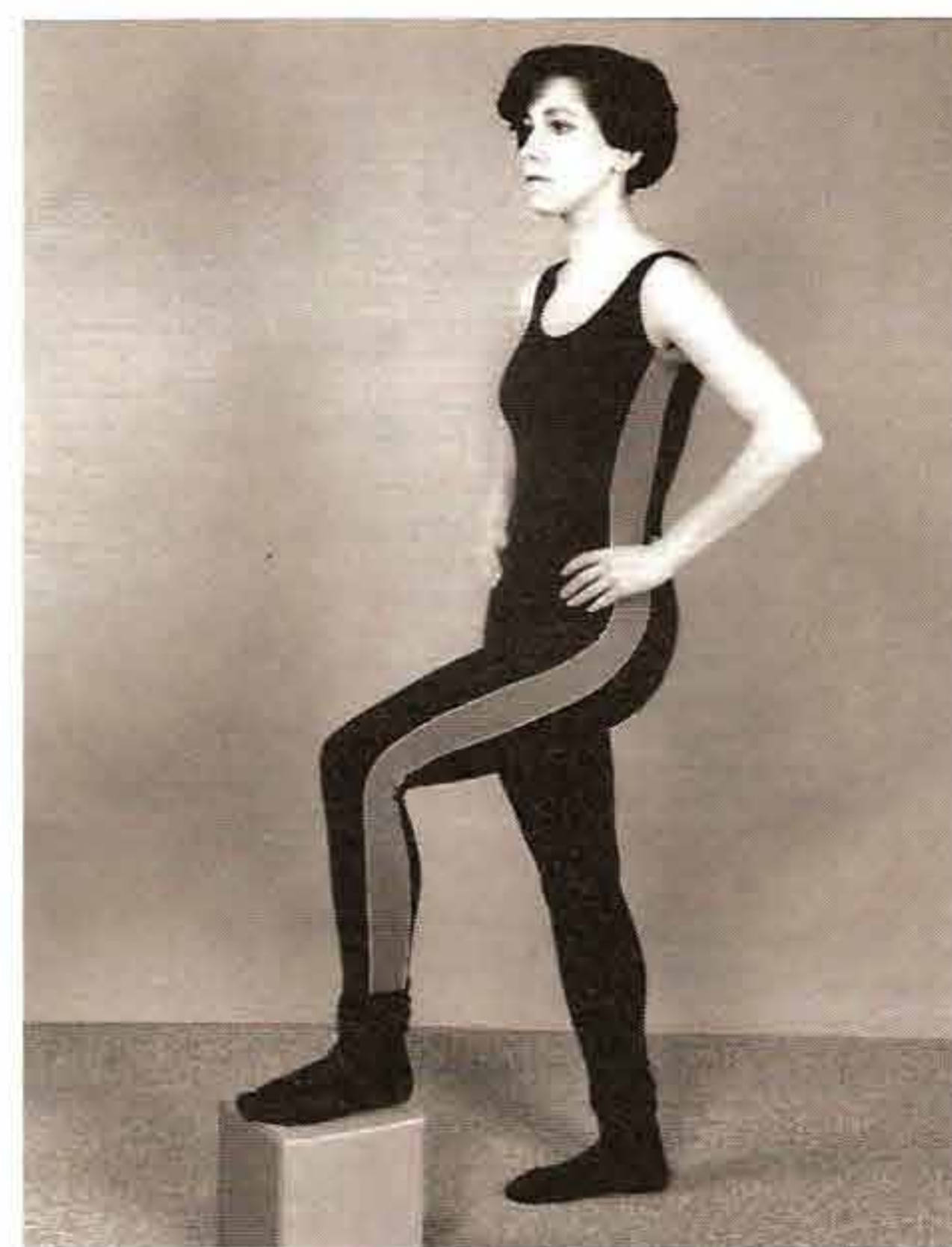
### ***While driving:***

- Move the seat forward to allow the knees to bend.

### ***Standing:***

Use the Position of Strength and these additional hints:

- Keep the *back straight* and stomach tight, with the natural curve of the lower back. Avoid an excessive curve or swayback as well as slouching or rounded shoulders. Try pushing your chest forward rather than pulling your shoulders back.
- Slightly *bend the knees*. Place your foot on a ledge or step so that one leg supports your weight. Shift your feet often.
- Keep your *head up* with your chin slightly tucked in.
- Note: High heels are stressful on the back, as they throw your pelvis forward and out of line.



Section Three  
**HEALTHY BACK COURSE**  
**Exercises**

### A. Stretching Benefits

Through daily living, strenuous exercise, inactivity, aging and back problems, our muscles tighten and shorten. Unless the muscles are stretched out again they will continue to lose flexibility. The back muscles require special stretching exercises to promote flexibility in order to reduce the chance of injury or to help alleviate back pain.

### B. Stretching Guidelines

If you are seeing a professional for a back problem, review the exercises with him and follow his recommendations. Follow these simple but important suggestions for successful and safe stretching:

1. If you do not have a back problem, you may want to *warm up* for a few minutes before you do the more complex Advanced Back Routine. Try easy walking, marching in place with arm pumps, or other simple aerobic activity until you break into a light sweat.
2. Stretching is a *gentle process*. Try to do your stretching routine in a quiet place with no distractions when you have the time to devote to yourself. Relaxation is the key.
3. *Never bounce* while stretching. Bouncing invokes a reflex which contracts the muscle rather than lengthens it. Bouncing can also cause tears in the muscle fiber.
4. *Breathe* throughout the exercises. This helps keep you relaxed as well as provides enough oxygen to your entire body.
5. *Avoid pain*. Do the stretches to the point of mild tension, not pain. If you push until you feel pain, you stop stretching and a reflex actually contracts the muscles instead of relaxing them. Stop any exercise that causes back pain. Note the exercise that caused pain and discontinue it for a few sessions but continue with the others. Consult your back specialist if appropriate.
6. *Exercise daily* for best results. Occasional inconsistent exercise may actually be harmful, so allow time each day, even twice a day, for stretching.
7. Stretch an area *three times*, holding each stretch a little longer than the previous one. Begin your stretches by holding about 5 seconds to evaluate your condition. If no pain occurs, hold for 15 to 30 seconds. Don't overdo it at first.

The benefits of stretching last for about three hours.

## C. Basic Back Routine

Length: 12–15 minutes.

Reviewed on Healthy Back Course Video Section 3.

The Basic Back Routine's purpose is twofold:

- 1) it is designed to help you relax and stretch your muscles and
- 2) it is designed as a screening test for the progression to a more advanced back exercise program.

**CAUTION:** *If you have back pain or pain radiating down your leg or arm while doing this routine, you should not progress to the Advanced Back Routine.*

It is recommended that you consult your medical professional and stop performing the exercise(s) that render pain. Continue with the other exercises and slowly add the difficult exercise(s) into your routine, unless advised differently by your doctor.

The Basic Back Routine is an excellent yet abbreviated relaxation/stretching program. Perform the routine daily; consistency is essential to your success. Once you no longer have pain when performing the routine you may progress to the Advanced Back Routine, Stomach Power Routine, or other stretches.

If you have no back pain when initially doing this routine, you may automatically progress to the Advanced Back Routine. This will help you achieve even greater muscle relaxation and strength.

## D. Advanced Back Routine

Length: 25 minutes.

Reviewed on Healthy Back Course Video after Section 4.

The Advanced Back Routine repeats some of the basic stretches and adds some more difficult stretches for your back and related muscles. The Advanced Back Routine is for anyone who has completed the Basic Back Routine without significant pain. Do these exercises at least once a day as indicated to increase your flexibility, reduce your chance of back injury, and relieve muscle soreness.

## E. Stomach Power

Abdominal strengthening exercises are essential to developing the stomach power needed when working in the Position of Strength. This sequence strengthens your upper and lower abdominal muscles and those along the sides of your stomach.

**CAUTION:** *Do these only if you are able to do the Basic Routine without pain. These exercises are more difficult than stretches, so consult your doctor before doing these exercises if you have a heart condition, high blood pressure, or other physical concern.*

## F. Stretches on the Move

**Standing Routine** – This sequence of stretches can be done in whole or in part while standing whether at work, at home, at driving rest stops, at meeting breaks, or anytime you feel the need to loosen up your tight neck, shoulders, back, or legs. Use them in addition to your daily stretching routine. These are designed to be done one right after the other, repeating the entire sequence.

**Sitting Routine** – This sequence of stretches is for people who sit at work, in a car or truck, or at other activities. They help to release tension and stress, increase flexibility, and promote blood circulation. They are designed to be done one right after the other with the whole sequence repeated as needed.

# Self-Selected Routine

## Directions

Use the chart below for guidance if you have special needs or interests and want to design your own routine. Simply select the recommended number of stretches from each body area. Then write your routine on the self-selected form of your Exercise Chart.

An extra "self-selected form" is included in the back pocket if you want to change it in the future.

Include the indicated number of stretches from each body area.

No. to Include	Body Area	Basic	Advanced	Standing	Sitting
1	Neck	Head Turn	Head Roll	Head Roll	Head Roll
1	Upper Body			Upward Reach	Shoulder Squeeze
2	Lower Back	Knee to Chest Both Knees to Chest	Knee to Chest Both Knees to Chest Hip Flexor Trunk Twist Arm Supported Back Bend	Backward Bend	Forward Bend
2	Lower Body	Hamstring Stretch	Hamstring Stretch Full Body Groin	Standing Hamstring	Leg Extension

# Stress Survey

This survey will help you identify different signals of stress in your life.\*

	Almost Every Day	Weekly	Once or Twice	Never
Cold or hay fever . . . . .	3	2	1	0
Chest pain . . . . .	3	2	1	0
Shortness of breath . . . . .	3	2	1	0
Skin rash . . . . .	3	2	1	0
Dry mouth or sore throat . . . . .	3	2	1	0
Laryngitis . . . . .	3	2	1	0
Stomachache or upset . . . . .	3	2	1	0
Heartburn . . . . .	3	2	1	0
Diarrhea . . . . .	3	2	1	0
Constipation . . . . .	3	2	1	0
Abdominal pain . . . . .	3	2	1	0
Muscle tension . . . . .	3	2	1	0
Back pain . . . . .	3	2	1	0
Headache . . . . .	3	2	1	0
Grinding teeth . . . . .	3	2	1	0
	—	+	—	+
	TOTAL _____			
<b>Stress Symptoms Scale</b>				
0–4 Low	5–8	9–13	14 + High	

## Physical Stress Symptoms

Think about the past month. Indicate how often each of the symptoms listed occurred for you. Circle your choice.

	Almost Every Day	Weekly	Once or Twice	Never
Smoking . . . . .	3	2	1	0
Drinking alcoholic beverages . . . . .	3	2	1	0
Taking tranquilizers . . . . .	3	2	1	0
Taking aspirin and other pain relievers . . . . .	3	2	1	0
Taking other drugs . . . . .	3	2	1	0
Loss of appetite . . . . .	3	2	1	0
Overeating . . . . .	3	2	1	0
No time to eat . . . . .	3	2	1	0
Watching TV (over 2 hours a day) . . . . .	3	2	1	0
Overwhelmed by work . . . . .	3	2	1	0
Difficulty meeting commitments or completing tasks . . . . .	3	2	1	0
Resent people I encounter at work . . . . .	3	2	1	0
Hard to pay attention to work tasks . . . . .	3	2	1	0
Accidents or injuries . . . . .	3	2	1	0
Distant and uninvolved at work . . . . .	3	2	1	0
Withdrawing from close relationships . . . . .	3	2	1	0
Criticizing, blaming or ridiculing others . . . . .	3	2	1	0
Feeling victimized or taken advantage of . . . . .	3	2	1	0
	—	+	—	+
	TOTAL _____			
<b>Stress Symptoms Scale</b>				
0–7 Low	8–12	13–18	19 + High	

## Behavioral Stress Symptoms

Think about the past month. Indicate how often each of the symptoms listed occurred for you. Circle your choice.

## Emotional Stress Symptoms

Think about the past month. Indicate how often each of the symptoms listed occurred for you. Circle your choice.

	Almost Every Day	Weekly	Once or Twice	Never
Insomnia . . . . .	3	2	1	0
Difficulty awakening . . . . .	3	2	1	0
Too much sleep (over 9 hours) . . . . .	3	2	1	0
Difficulty concentrating . . . . .	3	2	1	0
Mind going blank . . . . .	3	2	1	0
Forgetting important things . . . . .	3	2	1	0
Depressed . . . . .	3	2	1	0
Fearful . . . . .	3	2	1	0
Hopeless . . . . .	3	2	1	0
Crying easily . . . . .	3	2	1	0
Nervousness or anxiety . . . . .	3	2	1	0
Tremor or trembling . . . . .	3	2	1	0
Twitch or tic . . . . .	3	2	1	0
Keyed-up feeling . . . . .	3	2	1	0
Cannot turn off certain thoughts . . . . .	3	2	1	0
Worrying . . . . .	3	2	1	0
Unable to keep still; fidgeting . . . . .	3	2	1	0
Irritable; angry emotional outbursts . . . . .	3	2	1	0
Fatigue . . . . .	3	2	1	0
Low energy . . . . .	3	2	1	0
Apathetic; nothing seems important . . . . .	3	2	1	0
Emotionally drained . . . . .	3	2	1	0
Loss of sexual interest or pleasure . . . . .	3	2	1	0
	—	+	—	+
<b>Stress Symptoms Scale</b>	<b>TOTAL</b> _____			
<b>0–7</b>	<b>8–17</b>	<b>18–29</b>	<b>30 +</b>	
<b>Low</b>			<b>High</b>	

\*This survey is designed for adults. Certain questions may not be appropriate for younger family members.

STOPI

Movement	Example At Home, Work Or Elsewhere
Push (example) . . . . .	Pushing a cart or sliding a heavy object
Push . . . . .	
Pull . . . . .	
Reach (out or overhead) . . . . .	
Bend . . . . .	
Bend/Lift . . . . .	
Carry . . . . .	
Twist . . . . .	
Twist/Lift . . . . .	(avoid this hazardous action)
Sit . . . . .	
Stand . . . . .	
Climb . . . . .	
Lie Down . . . . .	

## Body Movement Inventory

The movements you make throughout your day at home, work, or elsewhere may either help or hurt you. Complete this inventory to focus on movements that you could improve by applying the Position of Strength. For each movement listed, write an example of how you use it in a common activity (when applicable).



## HEALTHY BACK COURSE Exercise Chart

### Stretching Guidelines

If you are seeing a professional for a back problem or other physical concern, review the exercises with him and follow his recommendations. Follow these simple but important suggestions for successful and safe stretching:

1. If you do not have a back problem, you may want to *warm up* for a few minutes before you do the more complex Advanced Back Routine. Try easy walking, marching in place with arm pumps, or other simple aerobic activity until you break into a light sweat.
2. Stretching is a *gentle process*. Try to do your stretching routine in a quiet place with no distractions when you have the time to devote to yourself. Relaxation is the key.
3. *Never bounce* while stretching. Bouncing invokes a reflex which contracts the muscle rather than lengthens it. Bouncing can also cause tears in the muscle fiber.
4. *Breathe* throughout the exercises. This helps keep you relaxed as well as provides enough oxygen to your entire body.
5. *Avoid pain*. Do the stretches to the point of mild tension, not pain. If you push until you feel pain, you stop stretching and a reflex actually contracts the muscles instead of relaxing them. Stop any exercise that causes back pain. Note the exercise that caused pain and discontinue it for a few sessions but continue with the others. Consult your back specialist if appropriate.
6. *Exercise daily* for best results. Occasional inconsistent exercise may actually be harmful, so allow time each day, even twice a day, for stretching.
7. Stretch an area *three times*, holding each stretch a little longer than the previous one. Begin your stretches by holding about 5 seconds to evaluate your condition. If no pain occurs, hold for 15 to 30 seconds. Don't overdo it at first.

The benefits of stretching last for about three hours.

# Basic Back Routine

See the Stretching Guidelines on the reverse side before doing these stretches. Repeat each stretch 3 times, about 5 seconds as a test for pain and then each other stretch increasingly longer for 15 to 30 seconds. To help you relax, do a full stomach breath in between each of the five stretches. Remember, do not do exercises that cause pain.



## 1. Deep Breathing in the Position of Comfort – *Relaxes the entire body.*

Lie on your back with your knees bent and arms resting at your sides. Tighten your stomach and buttocks muscles and push your back toward the floor. Relax and inhale to the count of four; exhale to the count of eight. Repeat 3 times.



## 2. Knee to Chest – *Stretches lower back.*

In the Position of Comfort, inhale deeply. Then slowly exhale as you gently bring your knee to your chest, keeping your low back flat and your head on the floor. You may want to hold your knee.

Hold the stretch position. Inhale as you return your leg to the bent knee position and relax as you exhale. Inhale and repeat with the other leg.



## 3. Both Knees to Chest – *Stretches lower back.*

In the Position of Comfort, bring both knees to your chest. Place both hands in front of your knees and take a deep breath. Then slowly exhale as you pull your knees to your chest, keeping your head on the floor. Hold. Deep breathing is important to this stretch. Return to the Position of Comfort and repeat.

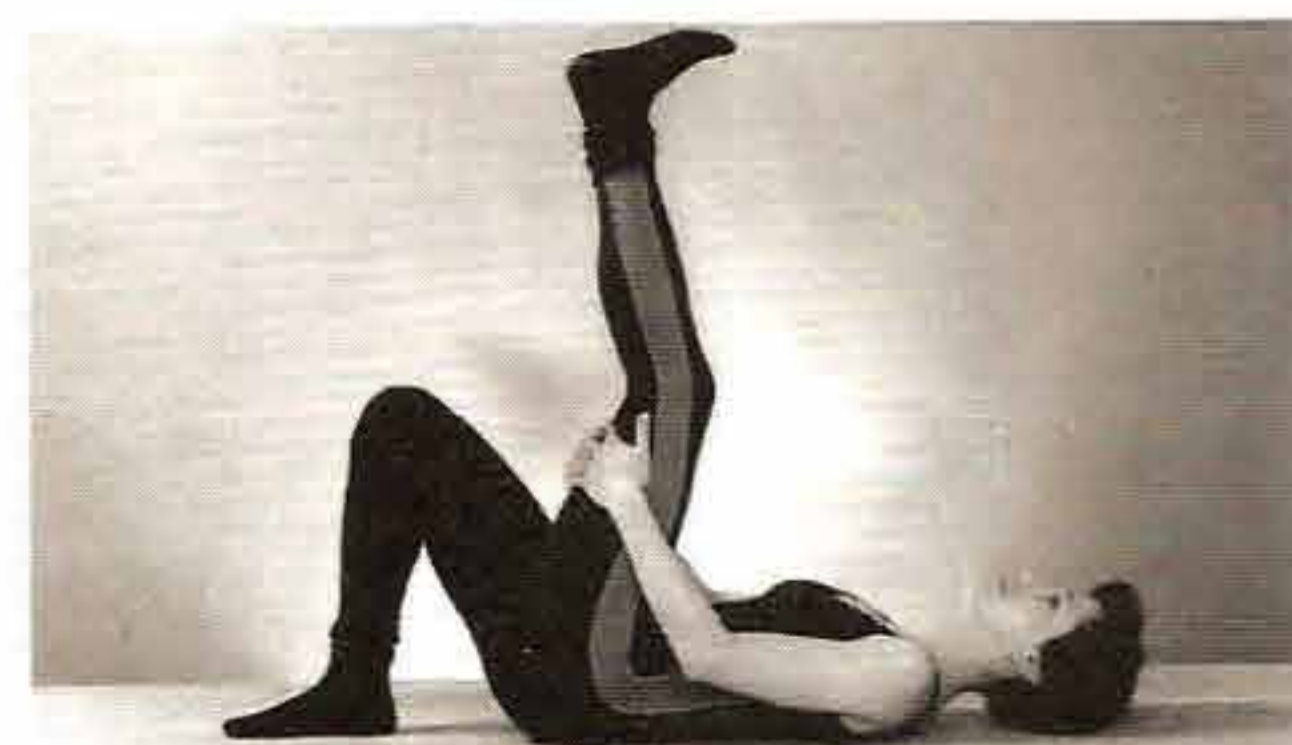
If you are able to do the Knee to Chest and Both Knees to Chest Stretches without pain, proceed to the Hamstring Stretch. If you experience pain see Stretching Guideline #5.



## 4. Hamstring Stretch – *Stretches the muscles along the backs of your thighs.*

In the Position of Comfort, take a deep breath and exhale as you gradually bring one knee to your chest. Slowly, extend your leg upward to the point of mild tension and hold. Make sure your toes are flexed toward your head, not the ceiling, and your head is on the floor. Hold.

Gradually bend your leg and inhale as you return to the Position of Comfort. Repeat the same procedure with the other leg.



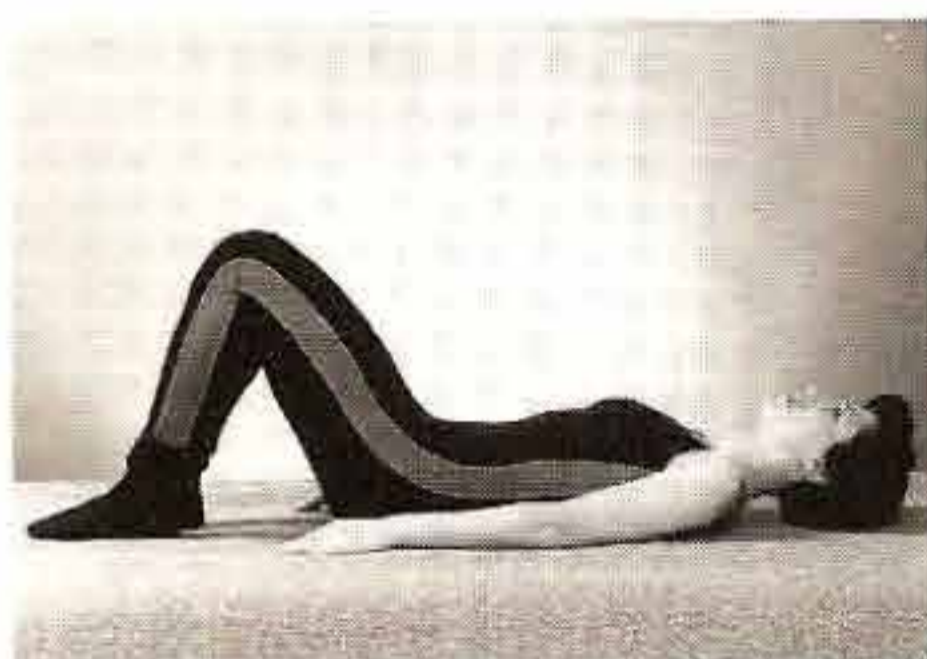
## 5. Head Turn – *Relaxes the neck, where tension often occurs.*

In the Position of Comfort, take a deep breath and slowly exhale as you let your head roll to one side. Slowly return to the center and repeat for the other side. Repeat 3 times to each side.



# Advanced Back Routine

See the Stretching Guidelines before doing this routine. Repeat each stretch 3 times, about 5 seconds as a test for pain and then each other stretch increasingly longer for 15 to 30 seconds. Do a deep stomach breath between each of the eight stretches.



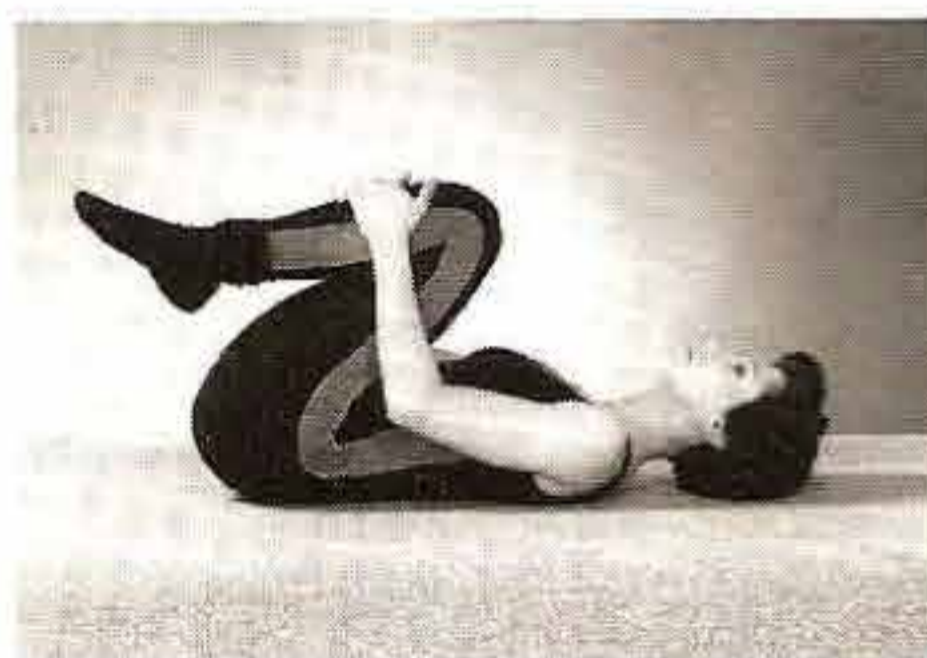
## 1. Deep Breathing in the Position of Comfort – Relaxes the entire body.

Lie on your back with your knees bent and arms at your sides. Tighten your stomach and buttocks muscles and push your back toward the floor. Relax and inhale to the count of four; exhale to the count of eight. Repeat 3 times. (Same as Basic Routine)



## 2. Hip Flexor Stretch – Stretches lower back and muscles across the hip.

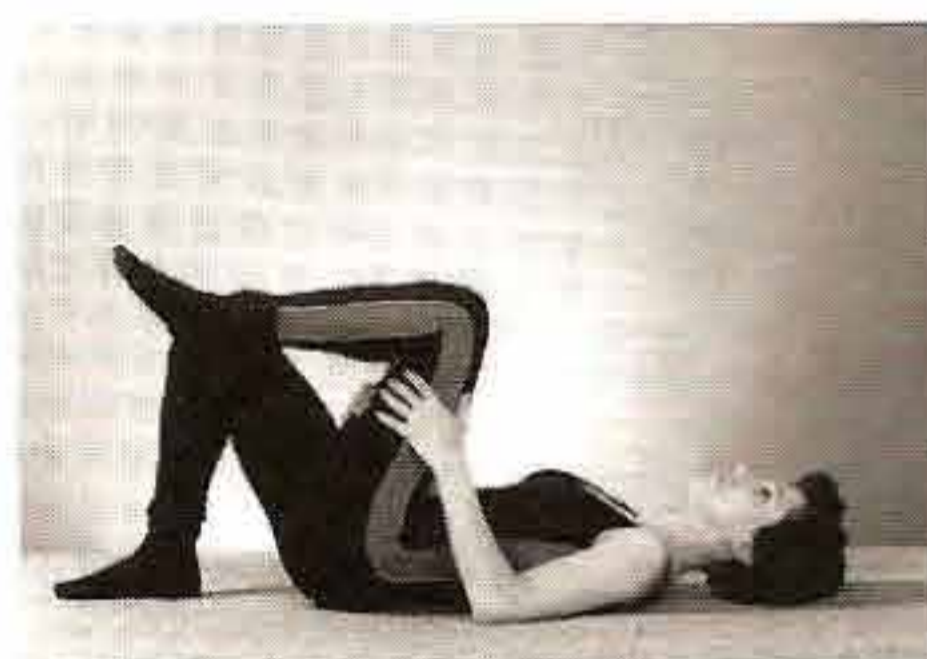
Lie in the Position of Comfort, breathe in deeply and exhale as you slowly raise one knee to chest. Slide the other leg along the floor until the point of mild tension and hold. Slide the straight leg back in and lower the bent knee to the Position of Comfort. Repeat 3 times.



## 3. Both Knees to Chest – Stretches lower back.

In the Position of Comfort, bring both knees to your chest and take a deep breath. Then slowly exhale as you pull your knees to your chest, keeping your head on the floor. Hold. Deep breathing is important to this stretch. Return to the Position of Comfort and repeat.

As in other physical exercises and stretches, stop if this causes pain. (Same as Basic Routine)



## 4. Hamstring Stretch – Stretches the muscles along the backs of your thighs.

In the Position of Comfort, take a deep breath and exhale as you gradually bring one knee to your chest. Slowly, extend your leg upward to the point of mild tension and hold. Make sure your toes are flexed toward your head, not the ceiling, and your head is on the floor.

Gradually bend your leg and inhale as you return to the Position of Comfort. Repeat the same procedure with the other leg. (Same as Basic Routine)



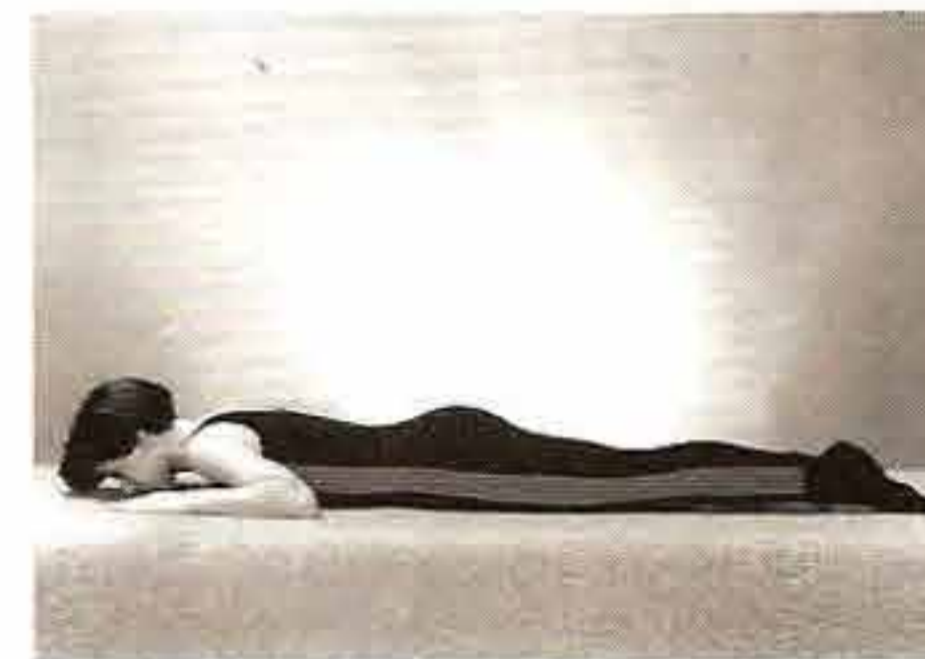
## 5. Trunk Twist – Stretches both sides of the abdomen.

In the Position of Comfort, inhale as you extend your arms out to your sides. Exhale as you slowly lower both knees to one side and hold. Return to the Position of Comfort and repeat on the other side.

CAUTION: Stop if this causes pain or tingling in your legs or buttocks.

## 6. Arm-Supported Back Bend – Rests the discs from weight-bearing, improves mobility.

Lie on your stomach, with your legs straight out. Tighten your buttocks, support yourself with your forearms, and gently lift your chest off the floor to the point of mild tension. Breathe deeply, exhale and relax back down onto the floor. Repeat 3 times.



## 7. Full Body Groin Stretch – Stretches the lower back, groin, and upper hamstrings.

Roll over into a sitting position. Place the soles of your feet together, your hands on your toes, and your elbows out in front of your knees. Take a deep breath and exhale as you allow your head to fall forward. Hold, then return to the upright position and pull your feet closer. Repeat 3 times.



## 8. Head Roll – Relaxes neck muscles, and releases tension.

In the sitting position, inhale and then exhale as you drop your chin toward your chest. Slowly roll your head so that your ear is leaning toward your shoulder. Relax and hold. Roll center and lift straight up. Inhale and repeat to the other side. DO NOT ROLL YOUR HEAD BACK or you may compress and possibly damage the spinal column. Repeat 3 times.

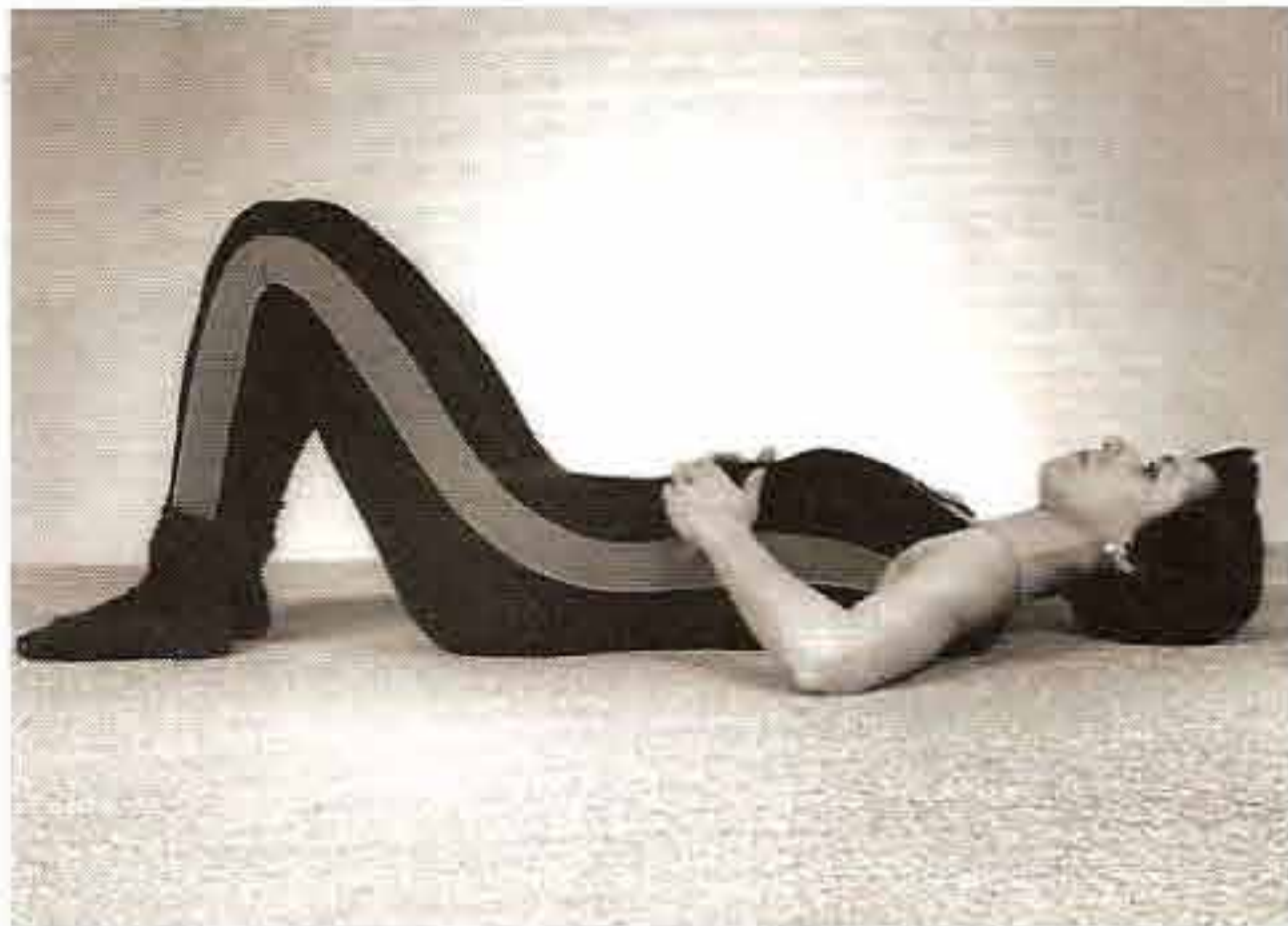


# Stomach Power

These exercises are more physically demanding than stretches. If you have a heart condition, high blood pressure, or other physical concern, consult your doctor before doing these exercises. To help you relax, do a full stomach breath before each new curl-up.

## 1. Abdominal Warm-up

In the Position of Comfort, rest your hands on your stomach. Inhale deeply and push your stomach out. Exhale fully and tighten your stomach muscles. Repeat 3 times.



## 2. Upper Body Curl – Strengthens upper abdominal muscles.

Neck Pain: If you are sensitive to neck pain, support your neck with your hand while doing these exercises.

In the Position of Comfort, inhale and tuck in your chin. Exhale as you slowly reach toward your knees, lifting your shoulders only thirty degrees off the floor. Return to the Position of Comfort and repeat 5 to 10 times.

Option: Hold each curl-up for 3–5 seconds, working up to 5 seconds. When stronger, extend the hold to one minute and repeat only 2 or 3 times.



## 3. Lower Body Curl – Strengthens lower abdominal muscles.

From the Position of Comfort bring your knees to your chest and your hands to your ears. Inhale deeply, and exhale as you tighten your stomach muscles and pull your knees to your elbows. Relax to the knee-to-chest position and repeat.

Option: Hold your knees if too difficult.



## 4. Side Body Curl – Strengthens the oblique (side) abdominal muscles.

In the Position of Comfort, bring your hands to your ears. Inhale deeply, and exhale as you bring one elbow to the opposite knee. Repeat by alternating elbows.



# Stretches On The Move

Review the stretching guidelines. Repeat this sequence 3 times.  
Do a deep stomach breath between each sequence.

## STANDING ROUTINE

### 1. Deep Breathing in Position of Strength

Stand with your back straight, knees bent, stomach tight, and arms close. Inhale (4 counts) and exhale (8 counts).

### 2. Backward Bend

Slightly bend your knees and place your hands on the small of your back. Slowly bend backward and hold a few seconds. Keep your eyes focused straight ahead to prevent rolling your head back.

### 3. Upward Reach

Inhale deeply and exhale as you slowly reach toward the ceiling. Hold and bring your hands down slowly to your sides and return to the Position of Strength. Do a backward bend.

### 4. Standing Hamstring

**CAUTION:** This exercise is difficult for back patients. Reach only a little bit at a time and stop before you feel pain. Bending your knees as indicated will protect your back. Do this stretch only as directed.

Stand in the Position of Strength with your *knees slightly bent*. Slowly bend forward at the waist, and let your head, neck, shoulders, and arms hang freely as you descend into a Position of Weakness. Now *straighten your legs* and hang in a relaxed and comfortable manner. Take a deep breath and relax as you slowly exhale, allowing your neck, shoulders, back, and legs to stretch.

When you feel your legs begin to tire, *bend your knees*, then *straighten your back* as you come upright and stand in the Position of Strength. Use your hands on your knees as extra support.

## SITTING ROUTINE

### 1. Upward Reach

Sit in your chair in the Position of Strength with a straight back. Inhale and slowly exhale as you reach to the sky. Bring your hands down slowly to your sides.

### 2. Shoulder Blade Squeeze

Reach behind your back and clasp your hands. Squeeze your shoulders together as you straighten your arms.

### 3. Head Roll

In the sitting position, inhale and then exhale as you drop your chin toward your chest. Slowly roll your head so that your ear is leaning toward your shoulder. Relax and hold. Roll center and lift straight up. Inhale and repeat to the other side. **DO NOT ROLL YOUR HEAD BACK** or you will compress the spinal column.

### 4. Forward Bend

Sit forward in your chair so that some weight is on your feet and legs. Spread your feet and slowly bend toward the floor. Drop your chin, arms, and shoulders and hang loosely for about 5 seconds.

Return to an upright position.

### 5. Leg Extension

**CAUTION:** This exercise may be difficult for those with back problems. Stop if it causes pain.

Inhale as you extend one leg in front of you and flex your toe toward your head. Exhale as you gently reach forward to stretch the hamstring. Keep your back straight—not rounded. Repeat with the other leg.



## ***GOOD LUCK!***

### **Track your achievements and reward yourself.**

You may want to keep track of your progress on a calendar and reward yourself at the end of each month when you meet your goal. You could give yourself points for each time you do your program or use a new skill and reward yourself at a certain number of points. Pick a reward that makes you feel good, maybe new clothing, a trip to a favorite place, time out to read a favorite book or watch a good movie. You know best what to shoot for, and you've got to be the one who pushes for it.

### **Let us know of your success.**

If you have a Healthy Back Course Success Story, please let us know. Your commitment to meeting life's challenges by using the information in this course may help motivate your co-workers or their families to help protect their back or reduce their discomfort.

Send us an email: [support@mulrymethod.com](mailto:support@mulrymethod.com)

# Self-Selected Routine

See the chart on page 14 to help you select stretches for each body area. Then, list the routine name, the exercise number, and exercise name as desired.

Routine / Exercise No.

### Exercise Name

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.

