

40th Anniversary Edition BOBANDERSON Illustrated by JEAN ANDERSON NEW! Stretches for Smartphone Users

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GETTING STARTED

This first section is an introduction to stretching. It is very important to read pages 12–13, "How to Stretch," so you will understand how to do the stretches in the rest of the book. Then, if you are new to stretching, the section "Getting Started," on pages 15–21, will take you through a series of simple stretches.

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INTRODUCTION

Today millions of people have discovered the benefits of movement. Everywhere you look they are out, running, cycling, skating, playing tennis, or swimming. What do they hope to accomplish? Why this relatively sudden interest in physical fitness?

Many recent studies have shown that active people lead fuller lives. They have more stamina, resist illness, and stay trim. They have more self-confidence, are less depressed, and often, even late in life, are still working energetically on new projects.

Medical research has shown that a great deal of ill health is directly related to lack of physical activity. Awareness of this fact, along with fuller knowledge of health care, is changing lifestyles. The current enthusiasm for movement is not a fad. We now realize that the only way to prevent the diseases of inactivity is to remain active — not for a month, or a year, but for a lifetime.

* * * *



Our ancestors did not have the problems that go with a sedentary life; they had to work hard to survive. They stayed strong and healthy through continuous, vigorous outdoor work: chopping, digging, tilling, planting, hunting, and all their other daily activities. But with the advent of the Industrial Revolution, machines began to do the work once done by hand. As people became less active, they began to lose strength and the instinct for natural movement.

Machines have obviously made life easier, but they have also created serious problems. Instead of walking, we drive; rather than climb stairs, we use elevators; while once we were almost continuously active, we now spend much of our lives sitting. Computers have made us even more sedentary. Without daily physical exertion, our bodies become storehouses of unreleased tensions. With no natural outlets for our tensions, our muscles become weak and tight, and we lose touch with our physical nature, with life's energies.

But times have changed. We have found that health is something we can control, that we can prevent poor health and disease. We are no longer content to sit and stagnate. Now we are moving, rediscovering the joys of an active, healthy life. What's more, we can resume a more healthy and rewarding existence at any age.

* * * *

The body's capacity for recovery is phenomenal. For example, a surgeon makes an incision, removes or corrects the problem, then sews you back up. At this point, the body takes over and heals itself. Nature finishes the surgeon's job. All of us have this seemingly miraculous capacity for regaining health, whether it's from something as drastic as surgery, or from poor physical condition caused by lack of activity and bad diet.

How to Stretch

Stretching is easy to learn. But there is a right way and a wrong way to stretch. The right way is a relaxed, sustained stretch with your attention focused on the muscles being stretched. The wrong way (unfortunately practiced by many people) is to bounce up and down or to stretch to the point of pain: these methods can actually do more harm than good.

If you stretch correctly and regularly, you will find that every movement you make becomes easier. It will take time to loosen up tight muscles or muscle groups, but time is quickly forgotten when you start to feel good.

The Easy Stretch

When you begin a stretch, spend 5–15 seconds in the *easy stretch*. No bouncing! Go to the point where you feel a *mild tension*, and relax as you hold the stretch. The feeling of tension should subside as you hold the position. If it does not, ease off slightly and find a degree of tension that is comfortable. You should be able to say, "I feel the stretch, but it is not painful." The easy stretch reduces muscular tightness and tension and readies the tissues for the developmental stretch.

The Developmental Stretch

After the easy stretch, move slowly into the *developmental stretch*. Again, no bouncing. Move a fraction of an inch further until you again feel a mild tension and hold for 5–15 seconds. Be in control. Again, the tension should diminish; if not, ease off slightly. Remember: If the stretch tension increases as the stretch is held and/or it becomes painful, you are stretching too far! The developmental stretch fine-tunes the muscles and increases flexibility.

Breathing

Your breathing should be slow, rhythmical, and under control. If you are bending forward to do a stretch, exhale as you bend forward and then breathe slowly as you hold the stretch. Do not hold your breath while stretching. If a stretch position inhibits your natural breathing pattern, then you are obviously not relaxed. Just ease up on the stretch so you can breathe naturally.

Counting

At first, silently count the seconds for each stretch; this will insure that you hold the proper tension for a long enough time. After a while, you will be stretching by the way it feels, without the distraction of counting.



THE STRETCHES

In the following section (*pp. 26–103*) are all the stretches in the book, with instructions for each position. They are grouped according to body parts and presented as a series, but any of them may be done separately without doing the entire routine.

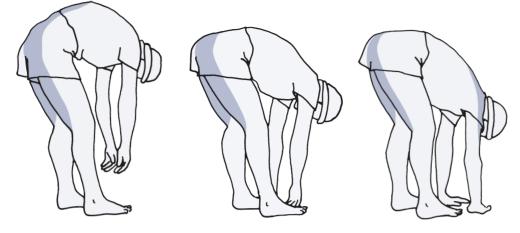
Note: You need not stretch as far as the drawings indicate. Stretch by how you feel without trying to imitate the figure in the drawings. Adjust each stretch to your own personal flexibility, which will vary daily.

Learn stretches for the various parts of the body, at first concentrating on the areas of greatest tension or tightness. On the next two pages is a guide to various muscles and body parts, with reference to the page where each may be found in the book.

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Stretches for the Lower Back, Hips, Groin, and Hamstrings

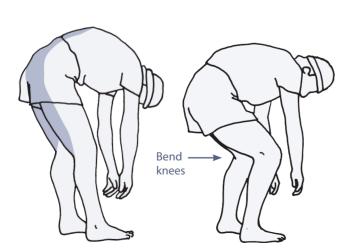


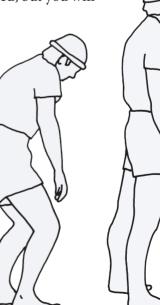
Start in a standing position with your feet about shoulder-width apart and pointed straight ahead. Slowly bend forward from the hips. *Keep your knees slightly bent* (1 inch) during the stretch so your lower back is not stressed. Let your neck and arms relax. Go to the point where you feel a slight stretch in the back of your legs. Stretch in this easy phase for 5–15 seconds, until you are relaxed. Let yourself relax physically by mentally concentrating on the area being stretched. Do not stretch with your knees locked, or bounce when you stretch. Simply hold an easy stretch.

Stretch by how you *feel* and not by how *far* you can go.

When you do this stretch, you will feel it mostly in your hamstrings (back of thighs) and back of the knees. Your back will also be stretched, but you will feel this stretch mostly in the back of your legs.

Coming Back to an Upright Position





Stretches for the Back, Hips, and Legs

It's best to stretch on a firm but not hard surface, such as a soft rug or firm mat, when doing these stretches for the back. If the surface is too hard, you won't be able to relax as easily.

Lie on your back and pull your left leg toward your chest. Keep the back of your head on the mat if possible, but don't strain. If you can't do it with your head down, use a small pillow under your head. Keep the other leg as straight

as possible, without locking your knee. Hold for 30 seconds. Do both sides. This will slowly loosen up the back muscles and hamstrings.



Spinal Roll: Don't do this stretch on a hard surface; use a mat or rug. In a sitting position hold your knees with your hands and pull them to your chest. Gently roll up and down your spine, keeping your chin down toward your chest. This will further stretch the muscles along the spine.

Try to roll evenly and with control. Roll back and forth 4–8 times or until you feel your back start to limber up. Do not rush.

Remember: If you have a neck problem, be very careful with these stretches.



Spinal Roll with Crossed Legs: Next is the spinal roll with lower legs crossed. Begin your roll in the same sitting position as for the previous spinal roll. As you roll backwards, cross your lower legs and, at the same time, pull your feet (from the outside) toward your chest. Then, release your feet as you roll up to a sitting position with your feet together and uncrossed. (Always start each roll with the legs uncrossed.)

On each repetition, alternate the crossing of your lower legs so that, with the pull-down phase of the roll, the lower back will be stretched evenly on both sides. Do 6–8 repetitions.



Standing Stretches for the Upper Body

These next two stretches are excellent for stretching the muscles along your side from your arm to your hips. They are done standing, so you can do them at any time, anywhere. Remember to keep your knees slightly bent (flexed) for better balance and to protect your lower back.

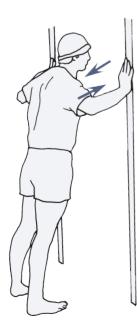


Stand with your feet about shoulder-width apart and toes pointed straight ahead. With knees slightly bent (1 inch), place one hand on your hip for support while you extend your other arm up and over your head. Now slowly bend at your waist to the side, toward the hand on your hip. Move slowly; feel a good stretch. Hold for 5–15 seconds and relax. Gradually increase the amount of time you are able to hold the stretch. Always come out of a stretch slowly and under control. No quick or jerky movements. Breathe and relax.

Instead of using your hand on your hip for support, extend both arms overhead. Grasp your right hand with your left hand and bend slowly to the left, using your left arm to gently pull the right arm over the head and down toward the ground.

By using one arm to pull the other you can increase the stretch along your sides and along the spine. *Do not overstretch*. Hold an easy stretch for 8–10 seconds.







PNF Technique: Contract — Relax — Stretch. Stand behind a doorway. With your hands on the door jambs a little above shoulder height, with arms bent, push yourself back by straightening your arms, as in a push-up. Do 3–5 repetitions of this exercise, then relax and slowly let your upper body go toward the doorway to stretch the front of your shoulders and chest. Hold for 15–20 seconds at a comfortable tension.

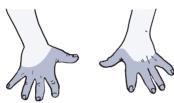
A Series of Stretches for Hands, Wrists, and Forearms (Sitting or Standing)



First, interlace your fingers in front of you and rotate your hands and wrists clockwise 10 times.



Repeat counterclockwise 10 times. This will improve the flexibility of your hands and wrists and provide a slight warm-up.



Then separate and straighten your fingers until the tension of a stretch is felt. Hold for 10 seconds, then relax.



Next, bend your fingers at the knuckles and hold for 10 seconds. Then relax.



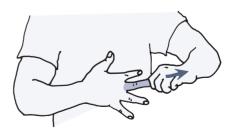
Now, with your arms straight out in front of you, bend your wrists with fingers pointing upwards. This will stretch the back of your forearms. Hold for 10–12 seconds. Do twice.



Then bend your wrist with your fingers pointing downwards to stretch the top of your forearms. Hold for 10–12 seconds. Do twice.



With your index finger and thumb gently hold a finger or the thumb of the opposite hand. Use your index finger and thumb to rotate each finger and thumb 5 times clockwise and counterclockwise.



Next gently pull each finger and thumb straight out and hold for 2–3 seconds.

STRETCHING ROUTINES Everyday Activities

These are stretching routines that can help you in dealing with the muscular tension and tightness of everyday life. There are routines for different age groups, different body parts, different occupations and activities, as well as stretches to do spontaneously at odd moments throughout the day. Once you learn how to stretch, you will be able to develop your own routines to suit your own particular needs.

When you first do the routines, you can look up the instructions for each stretch in the page numbers listed. After a while you will know how to stretch without looking at the instructions each time.

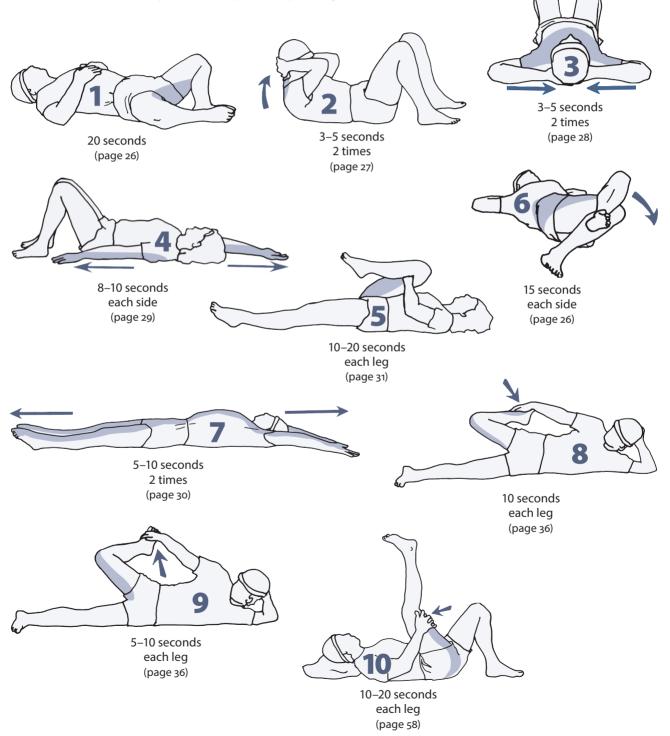
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EVERYDAY STRETCHES

APPROXIMATELY 8 MINUTES

Start with several minutes of walking. Then use these everyday stretches to fine-tune your muscles. This is a general routine that emphasizes stretching and relaxing the muscles most frequently used during normal day-to-day activities.

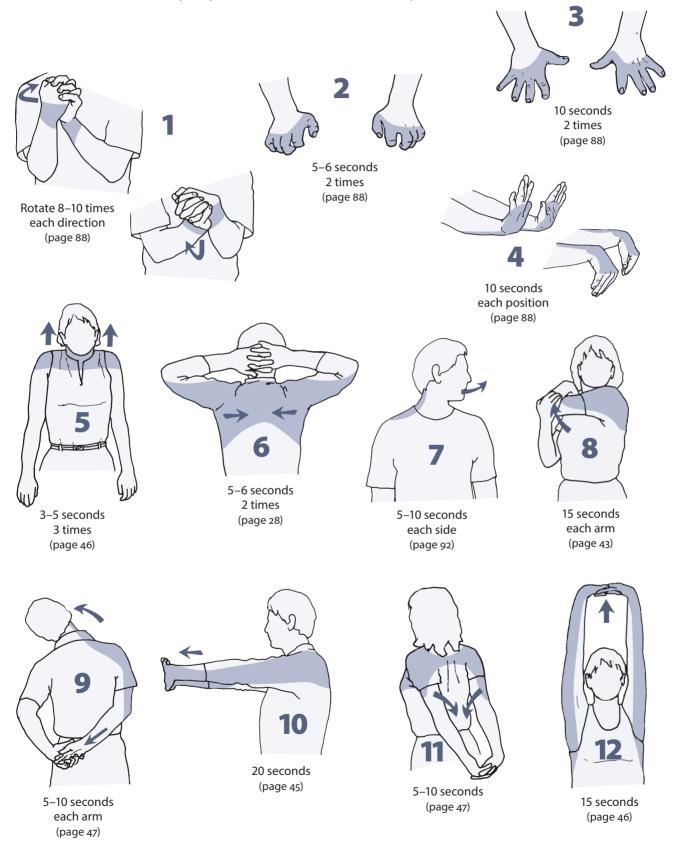
In the simple tasks of everyday living, we often use our body in strained or awkward ways, creating stress and tension. A kind of muscular *rigor mortis* sets in. If you can set aside 10 minutes every day for stretching, you will offset this accumulated tension so you can use your body with greater ease.



STRETCHES HANDS, ARMS & SHOULDERS

APPROXIMATELY 4 MINUTES

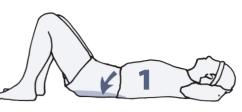
This series of stretches works for repetitive stress problems in the hands and arms. Breathe naturally, stay comfortable, and be relaxed as you stretch.



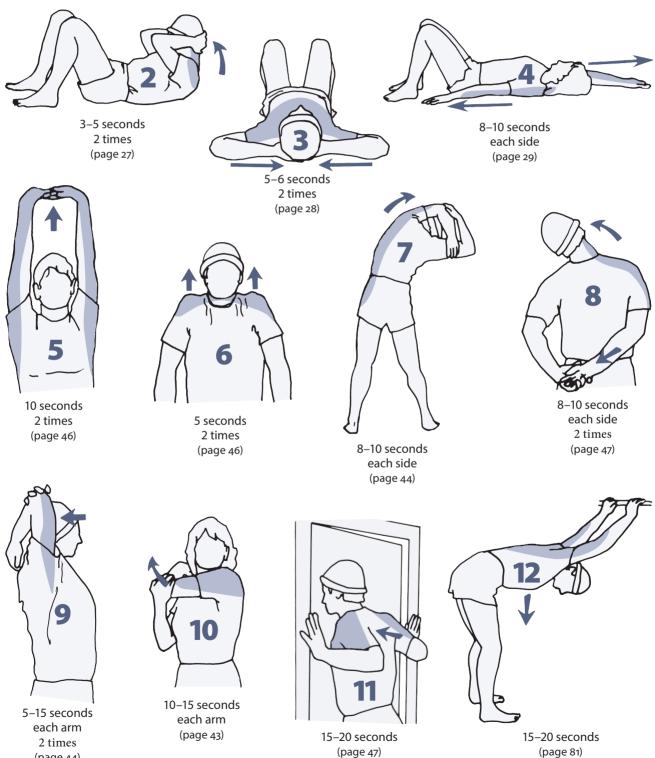
STRETCHES FOR NECK, SHOULDERS & ARMS

APPROXIMATELY 5 MINUTES

Many people carry stress in their neck and shoulder area. This stretching routine will help with that problem. Do these stretches throughout the day. Breathe deeply and relax.



5-6 seconds (page 29)



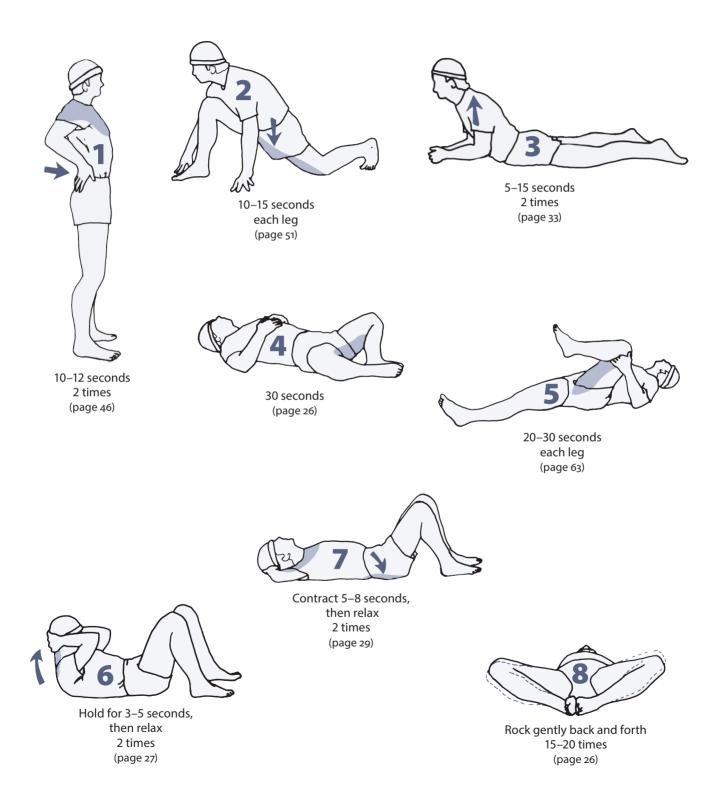
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STRETCHES LOWER BACK TENSION

APPROXIMATELY 6 MINUTES

These stretches are designed for the relief of muscular low back pain and are also good for relieving tension in the upper back, shoulders, and neck. For best results do them every night just before going to sleep. Hold only stretch tensions that feel good to you. *Do not overstretch*.



STRETCHING IN THE AGE OF COMPUTERS AND SMARTPHONES

Computers

Ten years ago, we updated this book to address the problems coming from sedentary office work, especially from too much time spent at a computer.

People were staying in the same position for long periods of time while working on computers. Even typewriters that were in usage earlier required some movement: putting in paper, turning the roller knob, working the carriage release lever. Computers eliminated these functions.

Phones

What's new?

The last ten years have seen a tremendous increase in smartphone usage, and this has caused problems, especially poor posture from looking downward most of the time.

In this section of the book, we'll outline the main problems that come from spending a lot of time on a computer and/or phone each day, and present simple stretches and tips that will improve your posture, make you feel better, and minimize pain.

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DESK (COMPUTER) FITNESS

Sitting for hours at a time is a relatively recent phenomenon in human history. These days, most people working on computers sit for too long without a break, and problems are multiplying.

Computer Injuries

Fast, light-touch keyboards that allow high-speed typing have resulted in an epidemic of injuries to the hands, arms, and shoulders. Slowly, the thousands of repeated keystrokes and long periods of gripping and dragging a mouse damage the body. This happens even more quickly due to improper keyboarding technique and/or body positions that stress the tendons and nerves in the hand, wrist, arms, shoulders, and neck.

Typical problems

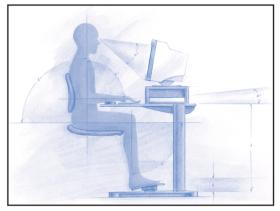
- **Repetitive strain injuries** RSIs (such as carpal tunnel syndrome and tendinitis) are typically caused by repetitive hand movements.
- **Back pain:** Sitting for long periods compresses your spine. If your posture is bad, gravity accentuates the problem.
- **Stiff muscles:** Not moving for long periods can cause neck and shoulder pain.
- **Tight joints:** Inactivity can cause joints to tighten, which makes moving more difficult or even painful.
- **Poor circulation:** When you sit very still, blood settles in the lower legs and feet and does not circulate well. There can be tingling, coldness, or numbness in the hands, and back pain.

What If You Have Such Symptoms?

We all have occasional aches and pains that go away in a day or two. But if you have recurring problems from using the computer, run, do not walk, to your doctor or health care provider. An early diagnosis can limit damage. Don't ignore the pain; you may sustain a serious injury. There are no quick fixes. No wrist splint, arm rest, split keyboard, spinal adjustment, etc. is going to get you right back to work at full speed. Even carpal tunnel sufferers who have wrist release surgery can be back in pain if they don't make long-term changes in their techniques and work habits. Healing does happen but it may take months, not days.

Ergonomics Modern-day office ergonomics is the science of providing furniture, tools, and equipment that improve the comfort, safety, and health of office workers. Some basic principles:

• Keyboard should be set at a height so that forearms, wrists, and hands are aligned when keyboarding, and parallel to the floor, or bent slightly down from elbow to hand — the hands are never bent back.



Preferably the stand or desk on which the keyboard sits is adjustable. There are many ergonomic keyboards available, some of them quite unusual.

- Mouse pad should be at a height where your arm, wrist, and hand are aligned and in "neutral." It's good if the stand or desk the mouse pad sits on is also adjustable.
- Wrists, while you are actually typing, should not rest on anything, and should not be bent up, down, or to the side, but should be in a straight line with your forearm, as viewed from above. Your arms should move your hands around, and instead of resting your wrists, stretch to hit keys with your fingers.
- **Chair** should be adjustable and comfortable. Set it so that your thighs are either parallel to the floor or at a slight downward angle from the hips to the knees. Sit straight, not slouching, and not straining forward to reach the keys. Stay relaxed.

PHONE HEALTH PROBLEMS

Google research indicates there were between 3–4 billion smartphone users worldwide in 2019, and that number is growing.

According to RescueTime, an app for iOS and Android phones, people in 2019 spent an average of 3–4 hours every day on their smartphones, with 20% of users spending 4½ hours.

It sneaked up on us. Smartphones are life-changing devices, so useful and compelling that we've overlooked a major downside: bad posture! Which leads to back problems, among other things.



If you look at teenagers, they're invariably looking at their phones, heads bent forward, posture off-balance. Young people get off to a bad start in life when they unwittingly develop bad posture from bending over and staring at a small screen for hours on end. Unwittingly, because it's a gradual process, like the frog placed in a pot of slowly-warming water.

The same goes for adults. The next time you're in the streets, or are in a market, or on public transit, notice how people are bent over, looking at their phones.

(This isn't due entirely to phones: we hunch over when reading, driving, even walking. The head is almost always out of balance.)

The repetitive use of fingers (or thumbs) can contribute to repetitive stress injuries such as tendinitis or carpal tunnel syndrome.

Symptoms of tech neck (or text neck) are not just a stiff neck, but pain between shoulder blades, and sometimes headaches. Worse, over time, tendons and joints can become damaged and slouching permanent.

Poor posture while sitting, standing, walking, or looking at your phone can lead to more than upper body pain and stiffness; poor posture affects other parts of the spine, such as the middle and low back. Once sustained, these types of injuries are difficult to treat. Tendons are not muscles that tighten and contract, so tendon damage is hard to repair.

We encourage you to do some web research on the subject. Start by googling "tech neck"; there's a ton of information out there. We also encourage you to seek advice from a health care professional if you are having problems.

Tech Neck

Tech neck is a phrase describing neck (and shoulder) soreness that results from tucking your head down over your chin (sometimes called "hunchback slouch") while looking down at a phone screen. This causes the muscles in the back of your neck to contract in order to hold the head up.

An adult head weighs 10 to 11 pounds. As the angle of leaning forward increases, there's increasing stress on your spine. A 15-degree forward tilt is said to put a strain on your neck of 27 pounds (10 pounds from weight of the head, 17 pounds from imbalance).

Looking down at smart phones for long periods of time can cause the bones in the neck to mold into a curved position.

Text Neck

Text neck refers to the problems that come from *texting* on a phone.

The dangers of texting while driving are obvious, but there's also danger in texting while walking; there's been an increase in pedestrian accidents from people texting while walking. Some cities have even considered making texting while walking illegal.

Texting requires more concentration than talking and/or using voice recognition. (You can talk on a phone without staring at it.)

STRETCHING ROUTINES Sports and Activities

In this section are stretching routines for sports and activities, arranged in alphabetical order.

Each time you do a stretch for the first time, read the *specific* instructions for that stretch. (See the page reference under each stretch.) After you follow the instructions a few times, you'll know how to do each stretch correctly. From then on, simply look at the drawings.

Warming up: For the more vigorous sports (running, football, etc.), I recommend that you do a short warm-up before stretching (jogging for 3–5 minutes with an exaggerated arm swing, for example). See p. 14, *Warming Up and Cooling Down*.

To teachers and coaches: These routines can serve as guidelines. You can add or subtract stretches to meet specific needs and time allotments.

Note: Be sure to read *How To Stretch* on pp.12–13 before you do these routines.

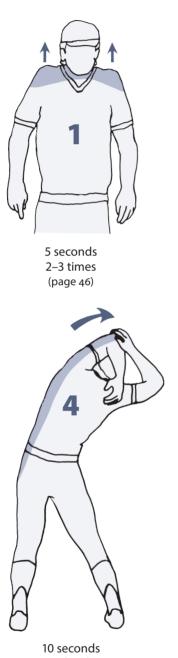
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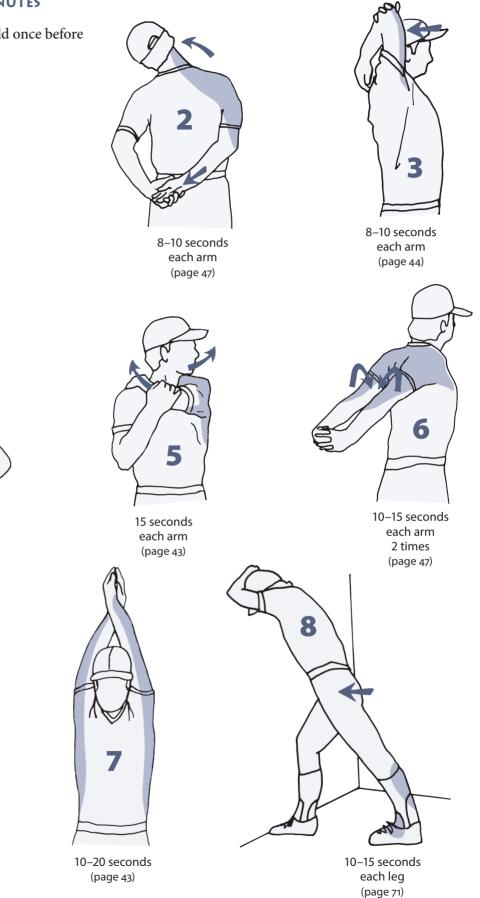
BASEBALL/SOFTBALL

APPROXIMATELY 8 MINUTES

Jog around the baseball field once before stretching.

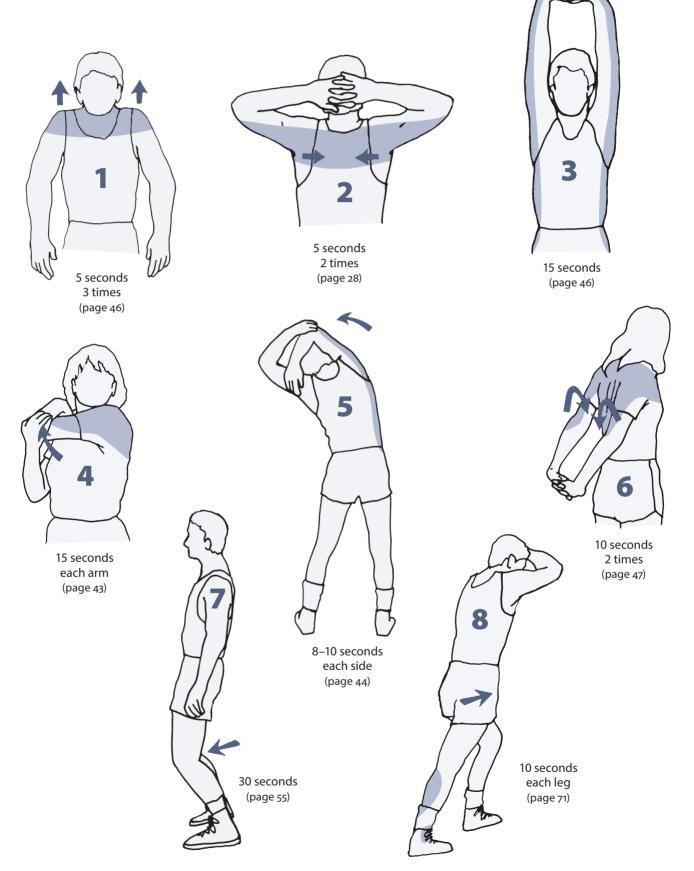


l0 seconds each side (page 44)



BASKETBALL APPROXIMATELY 7 MINUTES

Warm up by jogging for 3-5 minutes before stretching.



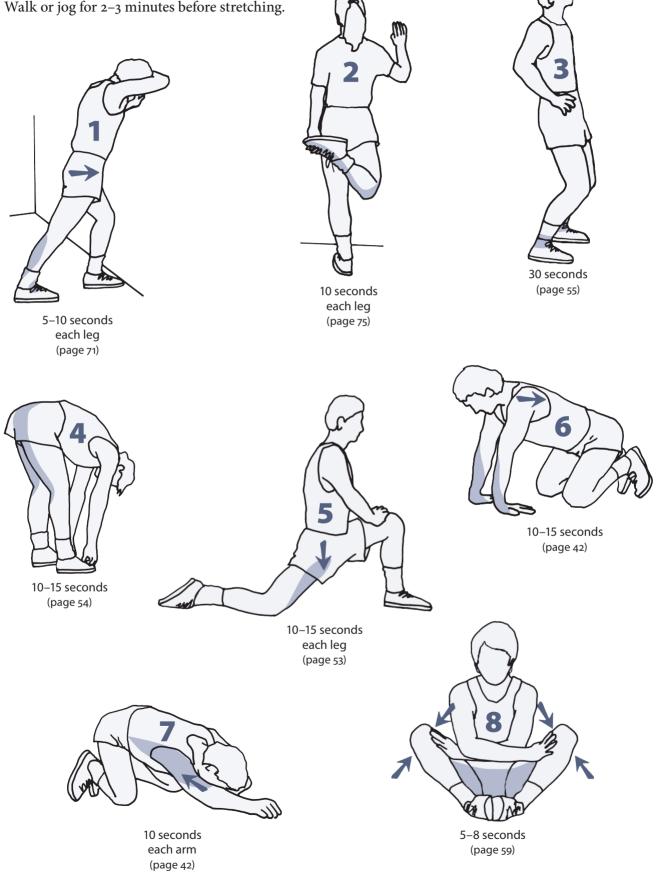
FOOTBALL



VOLLEYBA

APPROXIMATELY 6 MINUTES

Walk or jog for 2–3 minutes before stretching.



The Best Selling Fitness Book of All Time!



STRETCHING

One of the most popular fitness books of all time. The original edition has sold over 3³/₄ million copies worldwide and is in 24 languages.

STRETCHING

Stretching has been updated in this revised 40th anniversary edition, with:

- new stretching routines for smartphone users
 - remedies for "tech neck" and "text neck"
 - practices to improve posture

STRETCHING

"Every stretch you will ever need . . ." –Rocky Mountain News

> "The field's pioneer work . . ." -Athletic Journal

"...a bible of the stretching gospel." –Washington Post

"Stretching can get the beginner started and keep the hard core fitness addict in shape." –Jackson Daily News



Shelter Publications

