

# In Motion

NOVEMBER 2007, VOL. 69

SPECIAL SUPPLEMENT FOR VITALITY: BACK CARE, ERGONOMICS, AND OCCUPATIONAL SAFETY

## digest

**DEEP-WATER RUNNING IN A POOL** gives you the same endorphin buzz you get when you run on land, but with more toning and without the impact (so you protect your knees and back).

*Shape, 21100 Erwin St., Woodland Hills, CA 91367, monthly, \$20/yr.*

**“OM” YOUR WAY TO BACK PAIN RELIEF.** In one study, 78 percent of back pain sufferers who participated in yoga classes twice a week could do everyday tasks with less pain than those who did weekly physical therapy.

*Weight Watchers, 747 Third Ave., 24th Floor, New York, NY 10017, 6 times a year, \$12.95/yr.*

**USE YOUR ARM,** not just your wrist, to move your computer mouse and you'll probably feel more comfortable. Also, use a mouse that fits the size of your hand comfortably and is as flat as possible to minimize wrist pain.

*American Academy of Orthopaedic Surgeons, Rosemont, IL.*

## VOD reader service

**135** Even Moderate Amounts of Exercise Can Improve Health

**307** Poor Fitness Linked to Death Risk More in Women Than Men

**544** Walking for Fitness

**916** Top 10 Ways Exercise Can Reduce Stress

To access these and other *Vitality-on-Demand* articles, go to [www.vitality.com](http://www.vitality.com).



**Typing for hours,** poor posture, and maintaining a static seated position all day can lead to aches and pains in the hands, wrists, back, and neck.

However, a variety of actions can be used to prevent these conditions.

“Musculoskeletal problems, including repetitive stress injuries such as carpal tunnel syndrome, are certainly a growing problem in the workplace,” says Trevor Schell, an ergonomist with Occupational Health Clinics for Ontario Workers Inc., in Sudbury, Ontario, Canada. “Even so, using properly adjusted ergonomic equipment, taking breaks, and maintaining good posture can help people prevent many of these syndromes.”

The following suggestions can reduce your risk for keyboard-related pain.

### Make Adjustments

To do the job they're designed to do, ergonomic chairs and computer desks must be adjusted to fit the person using them.

“If your office chair has a lumbar support designed to support the low back, you must adjust it to fit your specific height,” says Steve MacDonald, an ergonomist with the same organization as Schell. “Otherwise, the design function is going to waste and you're not getting the benefit.”

Other adjustments to improve your comfort include the angle of the seat, the height of the armrests, and the height of the chair.

“Most office equipment is designed to fit the average man,” says Schell. “So to achieve any degree of comfort, women have to make the necessary adjustments.”

### Perfect Your Posture

Slouching in your chair—even an expensive ergonomic one—can cause problems if nerves and tendons are being pinched or compressed.

To sit in the ideal posture for computer work:

- Adjust your chair height so your wrists can be in a naturally straight position, not bent up or down when you're typing.
- Keep your elbows bent at a right angle, close to your body.
- Sit up straight and relax your shoulders.
- Bend your knees at a right angle. Put your feet flat on the floor or on a footrest.

### Put it Together

“The science of ergonomics can go only so far,” advises Schell. “The keys to comfort are being aware of the positions and actions that can cause upper body and low back issues and avoiding them.”

□ Barbara Floria spoke with Trevor Schell and Steve MacDonald, ergonomists with Occupational Health Clinics for Ontario Workers Inc., in Sudbury. For more information, visit [www.ohcow.on.ca](http://www.ohcow.on.ca).



## PROTECTING Kids in Motion

**Sports and other physical activities** can help kids stay healthy and physically fit, but they also can result in injuries, such as scrapes and sprains.

Here are some steps parents can take to treat their children's minor sports injuries.

### Scrapes and Cuts

When a child gets a scrape or cut, the blood flow can make even a minor cut look like an emergency.

However, a minor cut should stop bleeding after a few minutes. To treat it, press a clean, soft cloth against the wound for several minutes and raise the injured part to stop the bleeding. Then clean the area with warm water. Use mild soap around the edges of the wound to clean dirt and debris off the surrounding skin.

After the bleeding has stopped, place a small amount of an antibacterial cream or ointment on the wound and apply a clean bandage. Change the dressing periodically.

### Strains and Sprains

Muscle strains and sprains may be difficult to assess because the damage is on the inside. Generally, a strain will appear bruised, and pain,

soreness, and swelling can develop several hours after the incident. With a sprain, the injured area usually swells immediately and may be accompanied by acute pain. A sprain can take weeks to heal and can feel similar to a broken bone.

If you suspect your child has a sprain or strain, immediately eliminate weight or pressure from the injured part. For general treatment, follow the RICE rule: *Rest* the injured part; apply *ice* or cold compresses several times a day to reduce swelling; have the child wear a bandage or splint to *compress* the area and prevent swelling; and *elevate* the injured part so it's above the heart.

A doctor should evaluate a sprain that causes more than mild pain.

### Relieving the Pain

The over-the-counter pain relievers acetaminophen and ibuprofen are generally safe, with few side effects, when given in the correct dosage. Both types of pain relievers come in forms children can take more easily, such as liquids or chewable pills.

### Injury Prevention

Take the following steps to reduce your child's risk for injury:

- Schedule an annual physical for the child before he or she participates in sports.
- Make sure the child wears appropriate safety gear that fits properly (for example, a helmet when playing football or hockey).
- Be sure the child's coaches are trained in basic first aid.

Finally, don't pressure your child to compete above his or her level. If you put a child in a situation he or she isn't ready for, you can increase the risk for injury.

## digest

**SLEEPING ON A SEMIFIRM MATTRESS** is best for the back, though experts aren't sure why. It could be because firm mattresses don't have enough give, so muscles don't relax fully, and water beds and pillow tops may not provide enough support.

*Weight Watchers, 747 Third Ave., 24th Floor, New York, NY 10017, 6 times a year, \$12.95/yr.*

**TO AVOID EYE STRAIN WHEN YOU WORK AT A COMPUTER:** Position your monitor slightly farther away from you than you would normally hold reading material. Keep the screen clean and dust-free. Minimize lighting reflections and glare. Blink your eyes frequently to keep them lubricated and prevent them from drying out.

*Occupational Safety and Health Administration, Washington, DC.*

**TRAINING YOUR HAMSTRINGS HARDER** can help you avoid the imbalances in your lower body muscles that can lead to knee pain and hamstring pulls.

*Research at the University of Nevada, Reno.*

**SOOTHE A TIRED BACK WITH A SELF-MASSAGE.** Fill a tube sock with three or four tennis balls, tie the end of the sock, stretch it around your back, and move it back and forth just as you do with a towel after you bathe.

*First for Women, 270 Sylvan Ave., Englewood Cliffs, NJ 07632, 17 times a year, \$19.97/yr.*

**USING A WIRELESS MOUSE** can help you avoid hand and wrist pain caused by using an attached mouse. Be sure to place the mouse in a spot where you can hold it comfortably.

*Woman's Day, 1633 Broadway, New York, NY 10019, 17 times a year, \$17.97/yr.*

□ By Barbara Floria, editor of *Vitality*. For more information, visit KidsHealth at [www.kidshealth.org](http://www.kidshealth.org).

**TILT YOUR REARVIEW MIRROR UP A BIT** on a long road trip. This will keep you from slouching and prevent the resultant low back pain.

*Men's Health, 33 E. Minor St., Emmaus, PA 18098, 10 times a year, \$19.97/yr.*

**WHEN WORKING ON A COMPUTER**, you'll strain your eyes less if the room lighting is 50 percent less than the lighting used by other office workers. It helps to control lighting with curtains, window blinds, or shades on windows.

*Ellen Brisco, O.D., optometrist, Los Angeles, CA.*

**IF YOU SLEEP ON YOUR SIDE**, you need a pillow labeled "firm density" or "extra-firm density" so your head isn't scrunched against your shoulder, which can cause neck, shoulder, and back problems.

*First for Women, 270 Sylvan Ave., Englewood Cliffs, NJ 07632, 17 times a year, \$19.97/yr.*

**TO PREVENT HAND AND WRIST PAIN**, ask your doctor to refer you to a physical therapist who can teach you hand- and arm-strengthening exercises and stretches. The therapist also can show you better ways to perform repetitive tasks at work and home.

*Woman's Day, 1633 Broadway, New York, NY 10019, 17 times a year, \$17.97/yr.*

**THESE ARE SOME OF THE SYMPTOMS** of musculoskeletal disorders associated with computer use: numbness or a burning sensation in the hand; reduced grip strength in the hand; swelling or stiffness in the joints; blurred or double vision; dry, itchy, or sore eyes; reduced range of motion in the shoulder, neck, or back. If you notice any of these signs, evaluate your working positions and your workstation layout.

*Occupational Safety and Health Administration, Washington, DC.*

## HOW MUCH DO YOU KNOW ABOUT Shoveling Snow?

**Snow shoveling can be good exercise**; however, it also can be dangerous for people who take on more than they can handle.

To assess how much you know about shoveling snow, decide if the following statements are true or false, then check your answers. Take steps to increase your knowledge, as needed.

**1. People over 40 and those who are relatively inactive should be especially careful when shoveling snow.**

True  False

**2. Anyone with a history of heart trouble shouldn't shovel snow without a doctor's permission.**

True  False

**3. Typical risks for snow shoveling include cold exposure, fatigue, muscle strains, and low back injuries.**

True  False

**4. It's important to warm up before shoveling by walking for a few minutes or marching in place.**

True  False

**5. To protect your back, push rather than lift the snow, if you can.**

True  False

**6. If you must throw the snow, take only as much as you can easily lift and turn your feet in the direction you're throwing—don't twist at the waist.**

True  False

**7. Lift with your legs bent, and keep your back straight.**

True  False

**8. Don't shovel to the point of exhaustion.**  True  False

**9. Use the largest snow shovel you can manage.**  True  False

**10. It's safe to smoke or have a cup of coffee before shoveling.**

True  False

### Answers

1. True. 2. True—this includes anyone who has had a heart attack or has a history of heart disease. 3. True. 4. True—you also should stretch the muscles in your arms and legs. 5. True. 6. True—and don't pick up too much at once. 7. True—by bending into the movement, you'll keep your spine upright and less stressed. 8. True—if you become out of breath, take a break. If you feel tightness in your chest, stop immediately. 9. False—use a small shovel to limit the amount of snow you lift. A snow shovel should be lightweight with a handle long enough so you don't have to stoop to shovel. 10. False—avoid these substances. These stimulants may increase your heart rate and cause your blood vessels to constrict, placing extra stress on the heart.

By James Allen, a feature writer for *Vitality*. For more information, visit the National Safety Council at [www.nsc.org](http://www.nsc.org) and enter "snow shoveling" in the search function.



# Desk Exercises

**Whether you're typing,** writing by hand, or answering a phone all day, sitting at a desk can cause stiffness and fatigue in your shoulders, neck, and back. Taking time to do stretching exercises throughout the day can provide relief.

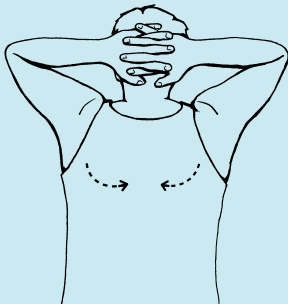
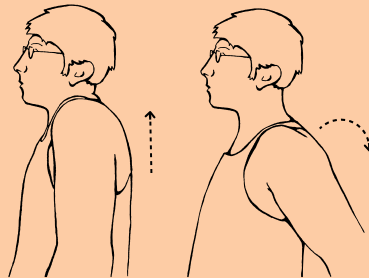
While doing these exercises, keep the following in mind:

- Take in a deep breath through your nose and make your abdomen expand. Exhale all the air slowly through your mouth. Pause and relax.
- Then, do the stretch and hold it for 10 counts.
- Repeat each exercise three to five times.



## Shoulder Roll

Roll your shoulders by raising them, pulling them back, and dropping them. Relax, then repeat in the opposite direction.



## Middle Back Releases

With your fingers interlaced behind your head, keep your elbows straight out to the side and your upper body in a well-aligned position. Pull your shoulder blades together to create a feeling of tension through your upper back and shoulder blades. Relax and repeat.

## Neck Side Bends

While sitting or standing, move your head toward your right shoulder, trying to touch your shoulder with your ear while keeping your shoulder down. Repeat on the left side.



□ Exercises from Occupational Health Clinics for Ontario Workers Inc., Sudbury, Ontario, Canada. For more information, visit [www.ohcow.on.ca](http://www.ohcow.on.ca).

**GO AHEAD, EXERCISE.** There's no relationship between walking, jogging, or any other activity and the development of osteoarthritis, one study found.

*Cooking Light, 2100 Lakeshore Drive, Birmingham, AL 35209, 10 times a year, \$22/yr.*

**TO ENSURE A COMFORTABLE HOME OFFICE,** be sure to spend as much or even more on an ergonomic chair as you would on a computer monitor.

*David Rempel, M.D., M.P.H., professor of medicine, University of California, San Francisco.*

**TRUST THE NEEDLE.** Men suffering from low back pain reported a 19 percent reduction in symptoms after acupuncture treatments, one study found.

*Men's Health, 33 E. Minor St., Emmaus, PA 18098, 10 times a year, \$19.97/yr.*

**IF YOUR KEYBOARD IS CORRECTLY POSITIONED,** your elbows stay near your body; your arms are nearly perpendicular to the floor; and your wrists are nearly straight.

*American Academy of Orthopaedic Surgeons, Rosemont, IL.*

**IF YOU'RE INTERESTED IN AN ALTERNATIVE MEDICINE TREATMENT,** check national certifying organizations to find qualified practitioners near you. At [www.ahha.org](http://www.ahha.org), the American Holistic Health Association offers links to a wide range of professional organizations.

**WHEN YOU'RE FEELING TENSE,** sit down and use two fingers to firmly press on the center of your breastbone. Doing this for a couple of minutes will release immune-boosting hormones that help fight stress.

*First for Women, 270 Sylvan Ave., Englewood Cliffs, NJ 07632, monthly, \$24/yr.*