



active living  
for all ages

# InMotion

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## TEEN GIRLS NEED TO BUILD BONES NOW TO PREVENT PROBLEMS LATER

Experts are very worried about the future bones of today's teenagers, especially girls. They have good cause to be alarmed, as do parents: More than 85 percent of girls ages 12 to 19 fail to consume the recommended amount of calcium.

A low calcium intake is bad at any age. But it's especially serious during adolescence. A young woman acquires almost 90 percent of her adult bone mass by age 19. The less bone your teen builds now, the likelier she'll suffer from bone fractures and osteoporosis later in life.

Children and teens ages 9 and older need 1,300 milligrams of calcium a day. One 8-ounce cup of low-fat milk supplies 300 milligrams. Other high-calcium foods and beverages include cheese, yogurt, and green, leafy vegetables.

How can you get a teenager to care

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## Moving Your Outdoor Workout Inside

**I**nclement weather doesn't have to spell an end to your workout routine. You can get as good a workout indoors as you can outside. Wherever you exercise, aim for at least 30 minutes of aerobic activity most days of the week.

The following activities, which can be done indoors, all provide aerobic benefits:

- Fast dancing
- Basketball
- Stationary cycling at 13 miles per hour
- Ice or roller skating
- Racquetball
- Jogging
- Walking 4 miles per hour
- Swimming at 45 yards per minute
- Singles tennis

There are various ways you can continue running or walking indoors:

- Take a walk in the mall. Many shopping malls are open for walkers before business hours begin.
- Join a fitness club or community center with a track.
- When you travel, search out a hotel with a gym. Hotels without a fitness center may have an arrangement with a local gym, so pack your workout clothes.



- Walk at the airport while waiting for your plane.

Household chores can give you a good workout, too. Some examples include:

- Vacuuming
- Washing your windows or floors
- Reorganizing your closet
- Scrubbing your shower or tub

Other indoor activities you can do at home include:

- Walking up and down the stairs at a brisk rate
- Pedaling on a stationary bicycle while reading, talking on the phone, watching television, or listening to the radio
- Jumping rope (All you need are comfy shoes and a lightweight rope with foam grips. And when you travel, you can easily pack your jump rope in your suitcase.)
- Following an exercise routine on a videotape or DVD

Or do you prefer to exercise with a friend? If so:

- Join a gym where you can play basketball
- Start a volleyball league
- Take a walk around your office with a coworker or walk the mall with a friend

### MAKE A CHANGE FOR THE NEW YEAR!

Make a New Year's resolution to add a simple activity to your daily routine.

### Inside:

*How To Protect Your Young Hockey Player*

*"Head" for the Hills with Safety in Mind*

*Seven Steps To Avoid Sports Injury*



## How to Protect Your Young Hockey Player

**I**njuries are very infrequent among hockey players at the Mite and Squirt levels (ages 10 and younger), but increase for Peewee and Bantam players (ages 11 through 14).

“The chance of sustaining an injury is dependent on many variables, including the level of participation, player position, game versus practice exposure, protective equipment, violent behavior, and personal susceptibility due to pre-existing injury and style of play,” says youth hockey expert Michael J. Stuart, M.D., Chairman of Orthopaedics at the Mayo Clinic and Chief Medical Officer of USA Hockey. Injuries occur much more frequently in games than in practice. The risk of injury in games increases with each higher level of participation.

In an effort to reduce hockey injuries, studies have been undertaken to better understand the risks and to implement preventive measures. Rule changes, enforcement of existing rules, and protective equipment standards are attempts to improve the safety of the game. Attention also has been directed toward the education of coaches, players, parents, and officials. Potentially dangerous actions, such as checking from behind and the use of the helmet or the stick as a weapon, must be eliminated from the game.

Dr. Stuart says enforcement of

existing rules to minimize dangerous behaviors can reduce injury risk in the great sport of ice hockey. Athletes who focus on stretching and strength training are less likely to sustain soft tissue injuries. Players should always demonstrate sportsmanship and mutual respect for their opponents and the officials. Development of body contact and body control skills is essential in addition to stick handling and shooting proficiency. Full facial protection and a custom-fit mouthpiece protect the face and teeth. Improved equipment designs may better safeguard hockey players. Rink modifications, such as an increased ice surface size as well as force-dissipating boards and glass, will reduce collisions. ●

### HOCKEY DOS AND DON'TS!

#### Hockey players should never:

- Deliver a hit to the head
- Check from behind
- Use the stick as a weapon
- Leave one's feet to give a check
- Drop one's head near the boards

#### Hockey players should always:

- Have fun
- Play hard
- Play smart
- Play fair

## FITNESS PROGRAM TIPS TO PREVENT FALLS

Falls can be serious at any age, but they are of special concern for older adults. One-third of adults ages 65 and older fall each year, many suffering significant injuries. Weak bones and muscles are often the culprits, but you can reduce your risk for falls by strengthening them.

Here are some simple guidelines from the American Academy of Orthopaedic Surgeons, the National Athletic Trainers' Association, and other experts to help you stay on your feet. It's always a good idea to check with your doctor before beginning a new exercise routine.

- Add strength training to your exercise routine. Strength or resistance training is usually performed with free weights, weight machines, or elastic bands. Regular strength training two to three times a week (on nonconsecutive days) strengthens muscles, increases bone density, and raises your metabolism to help control weight.
- Practice exercises that improve your balance. Try this simple balance exercise: While holding onto the back of a chair, stand on one leg for a minute. Repeat with the other leg. Gradually increase the amount of time you can hold each position. Try balancing with your eyes closed or without holding on.
- Choose low-impact activities to reduce stress on joints. Biking, swimming, walking, and yoga are low impact, as is Tai Chi, a martial art that uses slow movements to increase strength and balance.
- Stretch daily to improve flexibility and mobility. Stretch before and after strength training with slow, steady movements to keep muscles and joints loose.

### DON'T LET A STRESS FRACTURE STRESS YOU OUT!

For a FREE tip sheet on preventing and treating stress fractures, e-mail your name and address to [inmotion@aossm.org](mailto:inmotion@aossm.org). Reference "stress fractures" in the subject line.

## VOLLEY

News from *The American Journal of Sports Medicine (AJSM)*

### ACL INJURIES IN WOMEN MAY CORRELATE WITH TYPE OF ACTIVITY

For years, researchers have tried to understand why women suffer more knee injuries, specifically anterior cruciate ligament (ACL) tears,

than men. A new study conducted during a 10-year period at the U.S. Military Academy at West Point, N.Y., found that certain activities

seemed to put females at higher risk. In the required gymnastics classes, women suffered ACL tears nearly six times as often as males. Basketball and obstacle-course tests were two to three times more likely to result in female ACL tears. Prior research has implicated biological, musculoskeletal, and hormonal factors for the higher female ACL tear rate, rather than the actual activities or gender.

— *AJSM*, October 2007



### HIP-HIP-HOORAY FOR NEWER HIP SURGICAL TECHNIQUE FOR HOCKEY PLAYERS

A common injury in hockey players is impingement of the hip joint, which reduces range of motion and decreases on-ice performance. Researchers in Switzerland performed a small study on five professional hockey players using a new technique on a common surgical procedure and then accompanying it with an intensive rehabilitation program.

With the combination procedure, three of the five players returned to competition in nine months. Researchers stressed that more analysis on the technique and longer follow-up is needed.

— *AJSM*, November 2007



## "Head" for the Hills with Safety in Mind

Are you planning to hit the slopes this season? You're not alone. Millions of people around the world enjoy skiing and snowboarding. But these activities aren't without their risks.

While serious head injuries are not frequent — less than 2.5 percent of all medically diagnosed injuries — some of them can lead to serious consequences. Most ski resorts don't require people to wear a helmet on the slopes, but usage is rapidly rising and approaching a majority of all skiers and snowboarders. Helmet use is well above 50 percent in many segments of the population.

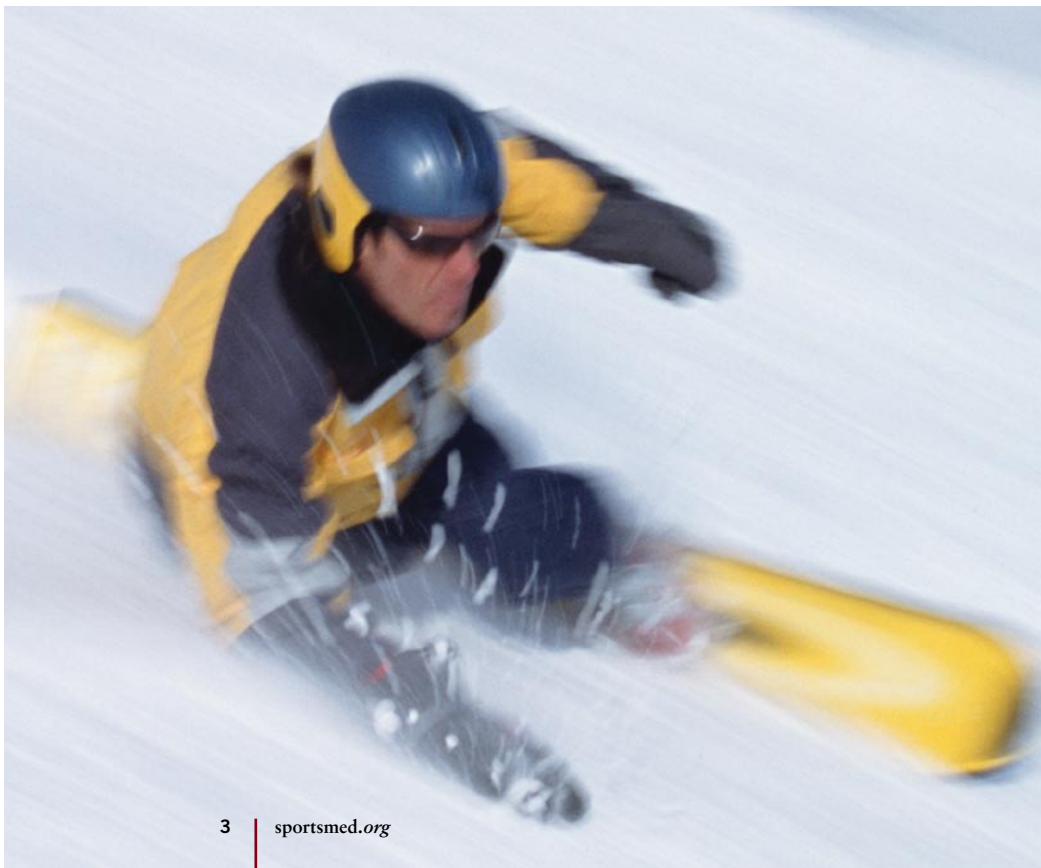
Helmet protection could reduce the risk of any head injury by 60 percent, according to one study that analyzed skiers and snowboarders at eight major resorts. Unfortunately, most of the injuries avoided are minor cuts and contusions, while more severe head injuries have not been reduced in incidence, according to ski injury researchers Robert J. Johnson, M.D., from the University of Vermont, and Jasper E. Shealy, Ph.D., from the Rochester Institute of

Technology, New York. It's not well known that helmets used by snow sport participants are not designed to protect the head from direct impacts with fixed objects at speeds that exceed 14 miles per hour. "Most skiers and snowboarders ski or ride much faster than that on intermediate terrain. Thus it must not be assumed that wearing a helmet can prevent severe head injuries, unless the participant avoids high-risk behavior such as rapidly skiing on densely wooded slopes or icy surfaces," say Drs. Johnson and Shealy.

They recommend the use of helmets, but unless the participant knows the risks of high-speed falls or collisions, severe head injuries will not be avoided. "The use of a helmet is not a satisfactory substitution for good judgment," the doctors caution. ❄️

### LET IT SNOW!

Enjoy winter speed sports — safely. For a FREE tip sheet on helmet use in snow sports, e-mail your name and address to [inmotion@aossm.org](mailto:inmotion@aossm.org). Reference "helmet use" in the subject line.



Teen Girls Need To Build Bones Now  
*continued from page 1*

about calcium? The following approaches might help:

- Pour low-fat milk for everyone in the family at all meals.
- Keep your kitchen stocked with calcium-rich snacks, such as frozen yogurt, cheese cubes, pudding made from low-fat milk, and small cheese pizzas.
- Discourage soft drinks. Instead offer flavored milk or calcium-fortified orange juice. One reason so many girls are consuming so little calcium may be because they're choosing carbonated drinks instead of calcium-rich beverages.

Regular exercise is also vital for strong bones. Activities that involve jumping, climbing, walking, or running can help your daughter build bone mass. Examples of bone-healthy sports include basketball, soccer, jumping rope, dancing, hiking, skating, and tennis.

#### **DID YOU KNOW?**

Vitamin D and calcium help prevent osteoporosis. But did you know that four daily servings of vitamin D and calcium also might cut your risk for premenstrual syndrome (PMS)?

## **In Motion**

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**BIOMET**  
SPORTS MEDICINE

# Seven Steps To Avoid Sports Injury

**B**aby boomers began turning 60 in 2006. They crowd the running trails, pound the treadmills, and work the weight machines. That's great because staying active can help you keep and improve your strength, balance, and energy levels, as well as prevent or delay conditions such as heart disease and diabetes.

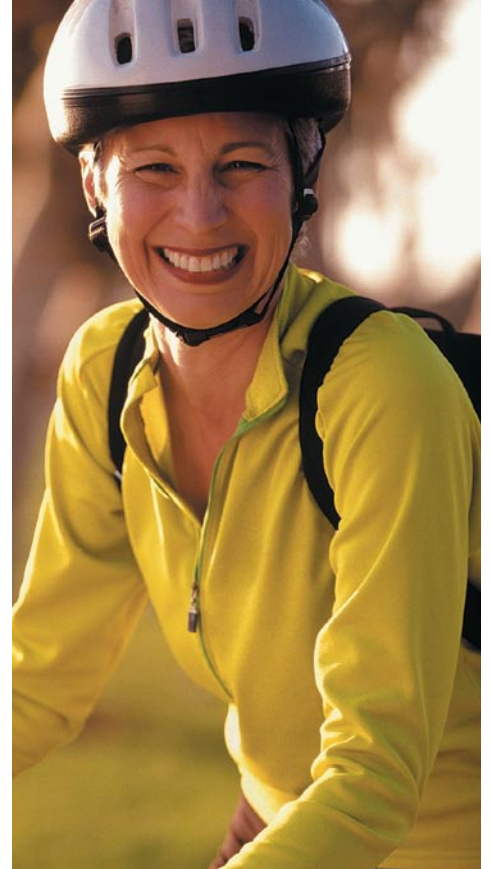
And it's never too late to start. A recent study in *Heart* found that changing from a sedentary lifestyle to an active one, even in late adulthood, strongly cut the risk for heart disease. One recent study suggests that older exercisers may face a higher risk for injury.

To play it safe, follow these simple steps:

1. **Call your doctor first.** The American College of Sports Medicine recommends a stress test for men 45 years or older or women 55 years or older before they begin a vigorous exercise program. If you've been inactive or ill, ask how you can safely increase your activity level. And be sure to consult your doctor if exercise causes chest pain or pressure, trouble breathing, dizziness, balance problems, or nausea.
2. **Take it slow.** Aerobic exercise should take effort but not be so vigorous you can't talk while doing it. For the first six to eight weeks of strength training, begin with just one set of each exercise.
3. **Seek expert help.** A personal trainer can suggest the contents and order of your workout. You want to finish with the right intensity, total work, and proper form, *without* getting exhausted or injured.
4. **Gear up.** Wear a helmet when you ride a bike, and choose good shoes for walking or jogging.
5. **Warm up.** To avoid injury, always walk or pump your arms *before* you stretch.
6. **Breathe.** Holding your breath when doing strength exercises can affect your blood pressure. Breathe out as you lift, and breathe in as you relax.
7. **Remember RICE.** If you have a sprain or strain, you need to rest, ice, compress, and elevate the affected part in the first few days after injury, to reduce pain and swelling. 

#### **2008 RESOLUTION — EXERCISE MORE!**

Start the new year off with a weight training program. For a **FREE** tip sheet on beginning a weight training program, e-mail your name and address to [inmotion@aossm.org](mailto:inmotion@aossm.org). Reference "weight training" in the subject line.



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