

active living for all ages

# In Motion

A PUBLICATION OF THE AMERICAN ORTHOPAEDIC SOCIETY FOR SPORTS MEDICINE



# IN MOTION PROMOTES HEALTHY LIVING AT ANY AGE

As a world leader in sports medicine education, the American Orthopaedic Society for Sports Medicine (AOSSM) is pleased to provide you with a complimentary copy of *In Motion: Active Living for All Ages*. We have designed *In Motion* to highlight relevant information for multiple age groups, from exercise and rehabilitation tips to nutrition and psychology.

This important educational tool is published quarterly and can be purchased in bulk for a nominal fee for distribution in waiting rooms and other public areas. As an added incentive to purchase copies in bulk, AOSSM is offering a "buy three, get one free" offer. Purchase 50 or more copies of any three issues and you'll receive the fourth set of issues FREE!

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# New Physical Activity Guidelines Announced for Americans

ew physical activity guidelines from the U.S. Department of Health & Human Services further highlight the benefits of exercise for people of all ages and physical conditions. According to the recent report released in October 2008, adults gain substantial health benefits from two-and-ahalf hours a week of moderate aerobic physical activity, and children benefit from an hour or more of physical activity a day.

AOSSM staff participated in a series of meetings to help market and deliver the guidelines in conjunction with other nonprofit organizations, including the American

> Heart Association, National Athletic Trainers'

> > Association, and the American College of Sports Medicine. The guidelines are designed so people can easily fit physical activity into their

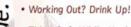
"It's important for all Americans to be active, and the guidelines are a roadmap to include physical activity easily," says U.S. Department of Health & Human Services Secretary Mike Leavitt. "The evidence is clear — regular physical activity over months and years produces long-term health benefits and reduces the risk of many diseases. The more physically active you are, the more health benefits you gain."

The new guidelines suggest the following benefits:

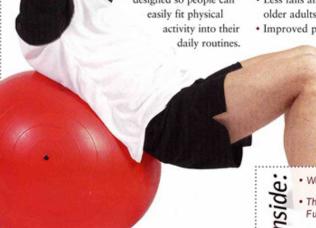
- Improved fitness and bone health, and reduced symptoms of depression in children and adolescents.
- Lower risk for coronary heart disease, stroke, high blood pressure, type 2 diabetes, colon and breast cancer, and reduced depression in adults.
- Less falls and better cognitive abilities in older adults.
- · Improved pain management, function,

and quality of life for people with arthritis or other rheumatic conditions affecting the joints.

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- Think Safe While Having Fun in the Snow
- How to Sneak Exercise Into Your Day



#### WORKING OUT? DRINK UP!

Do you drink enough water when you exercise? Test your knowledge.

 During physical activity, people lose about four cups of fluid an hour.

#### TRUE FALSE

People only need to drink fluids before exercising.

#### TRUE FALSE

Drinking when you're thirsty will prevent dehydration.

TRUE FALSE

#### How Did You Do?

- True. Dehydration results if that fluid is not replaced.
- False. It's important to drink fluids before, during, and after exercise:
  - Before: Drink at least two cups of fluid two hours before exercise.
     About five to 15 minutes before you begin, drink another two cups.
  - During: Drink one-half to one cup every 15 to 20 minutes.
  - After: Drink two cups for every pound of water you lose through physical activity and continue to drink throughout the day.
- False. By the time you feel thirsty, you're already becoming dehydrated.
   Other warning signs of dehydration include headache, appetite loss, dry mouth and eyes, fatigue, and lightheadedness.





New Physical Activity Guidelines continued from page 1

Some physical activity is better than none — the more physically active you are, the more benefits you reap. Additional health benefits occur as the intensity, frequency, and duration of physical activity increases.

Children and adolescents should participate in one hour or more of moderate or vigorous aerobic physical activity per day. They should participate in vigorous physical activity and muscle-strengthening activities, such as push-ups, sit-ups, and tug-of-war, three days a week. In addition, children should incorporate bone-strengthening activities, such as jumping rope, hopping, or running, at least three days a week.

Adults gain substantial health benefits from two-and-a-half hours a week of moderate aerobic physical activity or an hour and 15 minutes of vigorous physical activity. Aerobic activity, such as brisk walking, water aerobics, ballroom dancing, jogging, and jumping rope, should be performed in episodes of at least 10 minutes. Increasing moderate activity to five hours a week or increasing vigorous activity to two-and-a-half

hours a week results in more extensive health benefits. Adults should do musclestrengthening activities, such as weight training, push-ups, sit-ups, carrying heavy loads, and heavy gardening, at least two days a week.

Older adults generally should follow the guidelines for adults. If chronic conditions limit their ability to do two-anda-half hours a week of moderate aerobic activity, they should be as physically active as their abilities and conditions allow.

The Physical Activity Guidelines for Americans are the most comprehensive of their kind. They are based on the first thorough review of scientific research about physical activity and health in more than a decade. A 13-member advisory committee appointed in April 2007 by Secretary Leavitt reviewed research and produced an extensive report.

#### STAY ACTIVE, STAY HEALTHY

For more specific recommendations on activities for each age group and a free tool kit on how to become more active, visit www.health.gov/paguidelines.



News from The American Journal of Sports Medicine (AJSM)

## GENDER AFFECTS INJURY RATE IN BASKETBALL PLAYERS

Female basketball players appear to get hurt more frequently than male players, according to a study published in the September 2008 issue of AJSM.

The study, conducted in 100 U.S.

high schools between



were 50 percent more likely to require surgery. Girls were also twice as likely to sustain a concussion.

"The awareness of sport-specific injury patterns could help athletic trainers, coaches, and researchers develop targeted injury prevention interventions," says Ellen E. Yard, M.P.H., study author from the Center for Injury Research and Policy, Research Institute at Nationwide Children's Hospital.

#### ELITE BASEBALL PLAYERS AND SWIMMERS AT RISK FOR DISK DEGENERATION

Athletes who have trained in baseball and swimming from youth were found to experience higher rates of disk degeneration (DD), a study published in the October 2008 issue of AJSM reported.

Athletes who competed in baseball, basketball, kendo, running, soccer, or swimming for more than five years and nonathletes who did not participate in any competitive sports activity more than three times per week, were studied.

"This study suggests that athletes who continuously trained from youth are more likely to have DD compared with non-athletes," says lead

author of the study, Mika Hangai, M.D., Ph.D., University of Tsukuba, Japan.

# Think Safe While Having Fun in the Snow

hen snowflakes start falling, some people's thoughts instantly turn to winter sports such as skiing, snowboarding, snowmobiling, and sledding. "Think safety while enjoying winter sports, use your head, and wear a helmet no matter your skill level. These simple and inexpensive items save lives," says John Campbell, M.D., Bridger Orthopaedics, Bozemen, Montana.

Some other tips on winter safety include:

#### SKI AND SNOWBOARD SAFELY

- Get in shape before the snowboard and ski season starts.
- Wear a helmet designed for skiing or snowboarding — it could prevent or reduce the severity of a head injury by 44 percent for adults and 53 percent for children younger than 15. Also, wear wrist guards and knee pads.
- Take lessons from a qualified instructor.
- Use equipment that's in good condition and properly adjusted.
- If you feel like you are snowboarding or skiing out of control, fall on your side or bottom.
- If you go down a slope that is too hard for you, side step down the hill.

#### SNOWMOBILE DEFENSIVELY

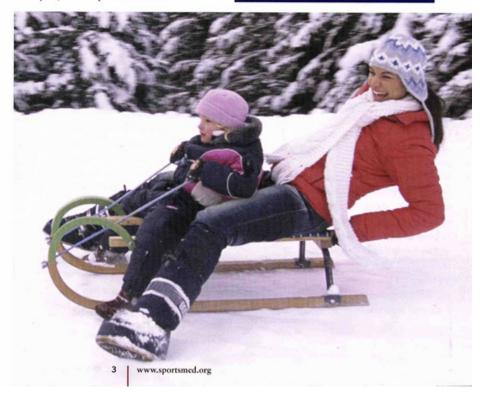
- Stay at a speed that allows you enough time to react to any situation.
- Travel around not over frozen lakes, rivers, and streams unless you are certain that the ice is strong enough to support you.
- Bring someone with you. If you must snowmobile alone, tell someone where and when you'll be out.
- Be careful at the top of hills. Slow down and check for cliffs or other dangers.

#### SLED WISELY

- Don't sled in areas with trees, fences, and other objects you could crash into. Also, don't sled down hills that end near traffic, bodies of water, or other dangerous areas.
- · Always face forward on a sled.
- Choose a sled that has runners and that you can steer. These are safer than toboggans.

#### AVOID INJURY THIS WINTER

For a FREE tip sheet on winter sports injury prevention, visit www.sportsmed. org or e-mail your name and address to inmotion@aossm.org. Reference "Snow Sports" in the subject line.



# In Motion

Medical Editor, AOSSM

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#### **HOW TO SNEAK EXERCISE** INTO YOUR DAY

Can't find half an hour a day to exercise? Just take short exercise breaks whenever you can. It all adds up. Here are some sugges-



tions from health experts:

- · Strengthen your thigh muscles the next time you're in the kitchen. Put your hands on the counter and squat repeatedly.
- · Leave your free weights near the TV and do some lifting while you watch your favorite shows.
- · To improve your balance, stand on one foot and then the other while talking on the phone. Try not to hold on to anything for support.
- . To boost balance and strength, lean slightly forward and rise from your chair without using your hands.
- . Try to walk a few extra steps every day. Buy a pedometer to help you track your progress.

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## Three Tips for Better Breathing

roper technique is important during any type of exercise. There's even a right and wrong way to breathe.

Here's how to check your breathing form:

- · Are you exercising at the right pace? You can let your heart rate guide you, or you can use your breathing for a simpler approach. Ideally, your breathing should be harder than when you're resting, but you still should be able to carry on a conversation.
- · Are you holding your breath when you shouldn't? Sometimes, we "forget" to breathe when we're using our muscles or straining, especially when lifting weights. But that can be bad for your cardiovascular system - it can slow down your heartbeat and increase your blood pressure. So, here's the rule: Breathe out during the more difficult parts and inhale during the easy parts. For example, exhale when you lift weights, and breathe in when you relax.
- · Do you find it harder to breathe during or after exercise? During exercise, the amount of air you inhale can exceed 200 liters per minute. This can be a problem for people with exercise-induced asthma. They may experience shortness of breath, chest tightness, coughing, and other symptoms during and after exercise. Researchers think increased breathing causes temperature and moisture changes in the airways to the lungs, which may trigger asthma.

If you have these symptoms when you work out or other breathing problems, talk with your doctor. A



#### DID YOU KNOW?

If you have trouble breathing or feel faint or weak, you're working too hard. Take a break.