



Discover the health benefits of yoga!

- Yoga can lower your blood pressure by learning breathing techniques.
- Yoga decreases stress, tension and fatigue.
- Yoga can increase strength and flexibility.
- Deep breathing in yoga improves lung capacity, which improves sports performance and endurance.
- Yoga improves your posture and balance. And this means you're less likely to injure yourself in other physical endeavors.

Yoga at Liberty Hospital's Outpatient Rehab Clinic

Classes are offered on Mondays from 5 to 6:15 p.m. and Wednesdays from 5:30 to 6:45 p.m. \$14 per class or \$66 for a six-class session.

Register at www.libertyhospital.org or call 816-407-2302.

LETTER FROM THE DIRECTOR



Larry Briscoe

For more than 10 years, WorkHealth Solutions has been committed to treating injured workers. Fortunately for all, these injuries have been steadily declining both nationally and locally over about the same time period, but our involvement in improving the overall health of the work force has been steadily increasing within that time period as well.

Having gained a few years of perspective in occupational medicine, it's great to see almost everyone progressing from just addressing a single injury to injury prevention and disease management. I believe that the cost of providing health insurance, absenteeism, productivity and our aging work force are some of the reasons for this shifting emphasis. Through a variety of on-site and clinic-based programs, we have partnered with our companies and clients to address the long-term health concerns of their respective employees. As part of a community-based organization, we value working closely with our neighbors in the region. Please let us know if we can be of help to you!



OCCUPATIONAL HEALTH ADVISOR

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Tired of getting burned?



Sunshine, warm weather, barbecues and water parks mean that summer is almost here. But your summer can quickly turn into a bummer if you get a sunburn. Sunburn is the skin's reaction to the ultraviolet (UV) radiation in sunlight. You can see sunlight and sense heat but you can't see or feel UV radiation.

There are three types of UV radiation, based on their wavelength, UV-A, UV-B and UV-C. The earth's atmosphere absorbs nearly all of the most dangerous type, UV-C, before it reaches the ground. UV-A and UV-B radiation are both involved in sunburn, but skin reacts differently to each one. UV-A radiation penetrates into the deeper skin layers and damages the site where new skin cells are born.

Wrinkles, age spots and sagging skin are the results of long-term exposure to UV-A radiation. UV-B affects the surface skin layer. The skin responds by releasing chemicals that dilate blood vessels. This causes fluid leakage and inflammation – better known as sunburn.

Sunburn can occur in minutes and can take a few days or even weeks to heal depending on severity. According to the Center for Disease Control (CDC), about one-third of adults and about two-thirds of children in America get burned each year.

Proper sun protection can help prevent skin damage and wrinkles and reduces the risk of developing skin cancer. Are you using the proper type of sun protection?

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Here are a few tips from the CDC to help pick the proper type of sun protection and prevent sunburn:

1. Pick a broad-spectrum sunscreen that protects against UV-A and UV-B rays and has a sun protection factor (SPF) of at least 15.
2. Follow this table to pick out the best SPF for your skin tone:
3. Read product labels. Look for a water-proof brand if you will be sweating or swimming.
4. Be aware of the expiration date. Some sunscreen ingredients might degrade over time.
5. For best results, apply sunscreen approximately 30 minutes before sun exposure.

6. Be sure to apply enough! As a rule of thumb, use an ounce (a handful) to cover your entire body. Apply thickly and thoroughly.
7. Reapply sunscreen liberally every one to two hours for adequate protection. You should reapply sunscreen especially after swimming or heavy perspiration.

DESCRIPTION	SKIN COLOR	SPF
Always burns, never tans	White	25-30
Always burns, tans minimally	White	25-30
Burns minimally, tans slowly	White	15
Burns minimally, tans well	Olive	15
Rarely burns, tans profusely/darkly	Brown	15
Rarely burns, always tans	Dark Brown/Black	15

How does that work?



The thermometer is a simple tool that we have been exposed to since our first fever as a child. We have all gone through the process of placing it under our tongues and waiting for the “beep” signaling our calculated body temperature. However, this process can be time-consuming and sometimes inaccurate.

The temporal thermometer is a system with advanced infrared technology. This device takes quick and accurate measurements by simply swiping it over the forehead and the temporal artery. The thermometer is programmed to capture naturally emitted infrared heat from the arteries and lock in the highest temperature it senses. At the same time, the system measures the temperatures of the surrounding areas. The software then combines the two separate readings to determine the overall body temperature.



This process is much easier than the familiar routine we went through as children. The temporal thermometer also provides much more accurate measurements. This quick and accurate device saves time for both you and your doctor and gives you a measurement that correctly reflects your body temperature. Want to know how something else works at WorkHealth Solutions? Call us at 816-407-2300.



Meet the staff

Denise Anderson
Secretary

Anderson grew up north of the river and has been working in the health-care field for 15 years. She joined WorkHealth Solutions in 2008 as a secretary and referral assistant.

She and her husband Philip live in the Kearney area where they divide their time between a home-based business, volunteer work, family and multiple hobbies.

Support bone and joint health with exercise



Osteoarthritis is a bone or joint inflammation and is a growing concern as our population and work force ages.

This common ailment affects 24 percent of American adults or 27 million people. Characterized by the breakdown of protective cartilage that covers the ends of bones in the joints, it is unfortunately progressive and in severe cases can result in the often termed “bone-on-bone” situation.

This advanced phase currently requires joint replacement (hip and knees are the most common) to relieve the grinding and pain. Less severe cases may be managed with exercise, stretching, medication or joint fluid therapies. These interventions are best discussed with a physician to assess how appropriate they may or may not be for any particular case.

So what causes it? The causes of osteoarthritis are generally considered to be related to general wear and tear of the joints, but some new information is becoming available that could shed new light on the causes, contributing factors and progression of the disease and will provide us with possible interventions to reduce the occurrence and severity of the problem.

Prior injury to the joint followed by continued load bearing or stress can accelerate the deterioration of joint cartilage. There is still considerable debate as to how much normal exercise and running can reduce or increase your chances of developing osteoarthritis. The latest studies indicate that unless you have previously lost cartilage due to injury, normal exercise and running actually decreases your risk of arthritis and improves the health of your joints. Your risk appears to increase, however, if the exercise is excessive or if you continued to engage in strenuous weight-bearing exercise after suffering an injury to the joint that caused cartilage loss.

While the controversy regarding exercise and joints is still ongoing, the role of obesity in arthritis is becoming very clear. Population and cross-cultural studies indicate that overweight people are at a significantly greater risk of developing osteoarthritis. For each unit increase in BMI (body mass index), there is an 11-percent increase in an individual's chance of developing arthritis. (Recommended BMI ranges from 18.5 to 25.) Additionally, cartilage loss can become rapid with weight gain. Most experts agree that additional body weight increases the daily strain, wear and tear on the joints.

Conversely, loss of body weight has been measured to reduce joint pain, decrease the rate of cartilage loss and improve the activity level of those suffering from arthritis. On a more complex cellular level, the hormone leptin, produced by fat cells, has been found to activate the inflammatory responses of the immune system. This response is a possible contributor to joint inflammation and cartilage loss.

Although much remains to be discovered regarding arthritis, we can reduce our risk and improve our health by managing body weight and engaging in regular exercise.

REFERENCES

Timothy M. Griffin, Janet L. Huebner, Virginia B. Kraus, and Farshid Guilak. **Extreme Obesity Due to Impaired Leptin Signaling in Mice Does Not Cause Knee Osteoarthritis.** *Arthritis & Rheumatism*, October 2009 DOI: 10.1002/art.24854.

Linda J. Sandell. **Obesity and Osteoarthritis: Is Leptin the Link?** *Arthritis & Rheumatism*, October 2009 DOI: 10.1002/art.24862.

Ng et al. **Efficacy of a progressive walking program and glucosamine sulphate supplementation on osteoarthritic symptoms of the hip and knee: a feasibility trial.** *Arthritis Research & Therapy*, 2010; 12 (1): R25 DOI: 10.1186/ar2932.

Elizabeth Badley and Hina Ansari. **Arthritis and arthritis-attributable activity limitations in the United States and Canada: A cross-border comparison.** *Arthritis Care & Research*, 2010; NA DOI: 10.1002/acr.20100.

Risk Factors for MRI-detected Rapid Cartilage Loss of the Tibio-femoral Joint over a 30-month Period: the MOST Study. *Radiology*, July 2009.

Rush University Medical Center (2009, July 15). Study To Assess Hip Exercises As Treatment For Osteoarthritis In The Knee Joints. *ScienceDaily*. Retrieved April 27, 2010, from <http://www.sciencedaily.com/releases/2009/07/090716094150>.