

# ASK AHSC

## ANSWERS TO HEALTH QUESTIONS

From The University of Arizona Health Sciences Center (AHSC) in Tucson

**Q** What are some guidelines for how much water to drink during hot weather? *B.G., Tucson*

**A** First of all, thirst is not a good indicator that you need to drink water. By the time you feel thirsty, you're already well on your way to dehydration. So drinking to quench thirst isn't enough -- you need to drink past thirst.

Studies have shown that drinking to satisfy thirst only replenishes two-thirds of the amount of water a person should drink when working or playing in the Arizona sun. Through perspiration, a person can lose about two quarts of water an hour.

That's a significant amount of fluid. To replace that loss you need to drink about a glass of water every 10 minutes.

A better way to tell if you're drinking enough water is urine output. If you urinate your normal amount and frequency, the body is well-hydrated, provided you don't have kidney disease. If you urinate small amounts of dark-colored urine, you need to drink more water until the urine is consistently pale-colored. I think that's a better gauge of how much water you need to drink than how thirsty you feel.

And what you drink may make a difference. Caffeine and alcohol

are natural diuretics and drinks containing them cause the body to lose fluid by increasing the amount of water lost in the urine.

Other signs of water depletion include dry lips and tongue, dry-looking skin that has lost its elasticity, increased heart rate and breathing, dizziness and confusion. Signs of salt depletion as well include lethargy, headache, cramps and pallor.

In general, it's better to drink plain water than any other fluid, like sports drinks, which contain



electrolytes. Sweat contains far more water than electrolytes, so replacing water is most important. But if you lose a lot of sweat for hours then you'll need to replace electrolytes as well.

In the long run, whether drinking a sports drink or just water, the primary issue still is hydration, so be sure to start drinking before you get thirsty.

—*Harvey Meislin, M.D.,*  
*director, Arizona Emergency*

*Medicine Research Center, The University of Arizona Health Sciences Center, Tucson*

**Q** Are there any options for treating fibroids that don't involve surgery? *P.M., Tucson*

**A** There is a new option for the treatment of fibroids — a non-surgical procedure called uterine artery embolization that shrinks the tumors by cutting off their blood supply.

About 40 percent of women older than 40 have fibroids, which are noncancerous tumors that grow on or in the uterus. They can cause very heavy menstrual cycles (abnormal uterine bleeding); press on adjacent organs, such as the bladder; and cause pelvic and back pain.

When symptoms don't respond to treatment with non-steroidal anti-inflammatory drugs or birth control pills, the only alternative until now has been abdominal surgery — either hysterectomy (removal of the uterus) or myomectomy (removal of the individual fibroids).

Uterine artery embolization can be performed on an out-patient basis as an alternative to major surgery.

During the procedure, tiny polyvinyl particles are injected into the artery that supplies blood to the fibroid until the artery is embolized, or blocked off. (Other blood vessels continue to supply blood to the remaining healthy uterine tissues.)

Deprived of their blood supply, the fibroids shrink or wither away altogether in about 6 months in approximately 80 percent of patients.

**Continued on next page**

---

---

# ASK AHSC

---

*Continued*

Recovery from the procedure takes about one week, versus 4 to 6 weeks recovery from surgery. Embolization is performed under local anesthesia, minimizing the patient's 'down-time.'

The procedure doesn't cause blood loss, and there is no risk of developing adhesions.

Early figures from studies in the U.S. and Europe suggest that fibroids do not recur after embolization.

While the long-term effects of the procedure on fertility and

pregnancy are not known, there have been cases of patients successfully delivering healthy



babies after embolization. Until the long-term effects are known, the procedure is generally best

suitable for women who are at the end of their reproductive lives or for those who aren't candidates for myomectomy and would face infertility with any other fibroid surgery.

Should embolization not be effective, surgery still remains an option.

—*Julie Zaetta, M.D., assistant professor of radiology, Division of Vascular and Interventional Radiology, University Medical Center Department of Radiology, Tucson*