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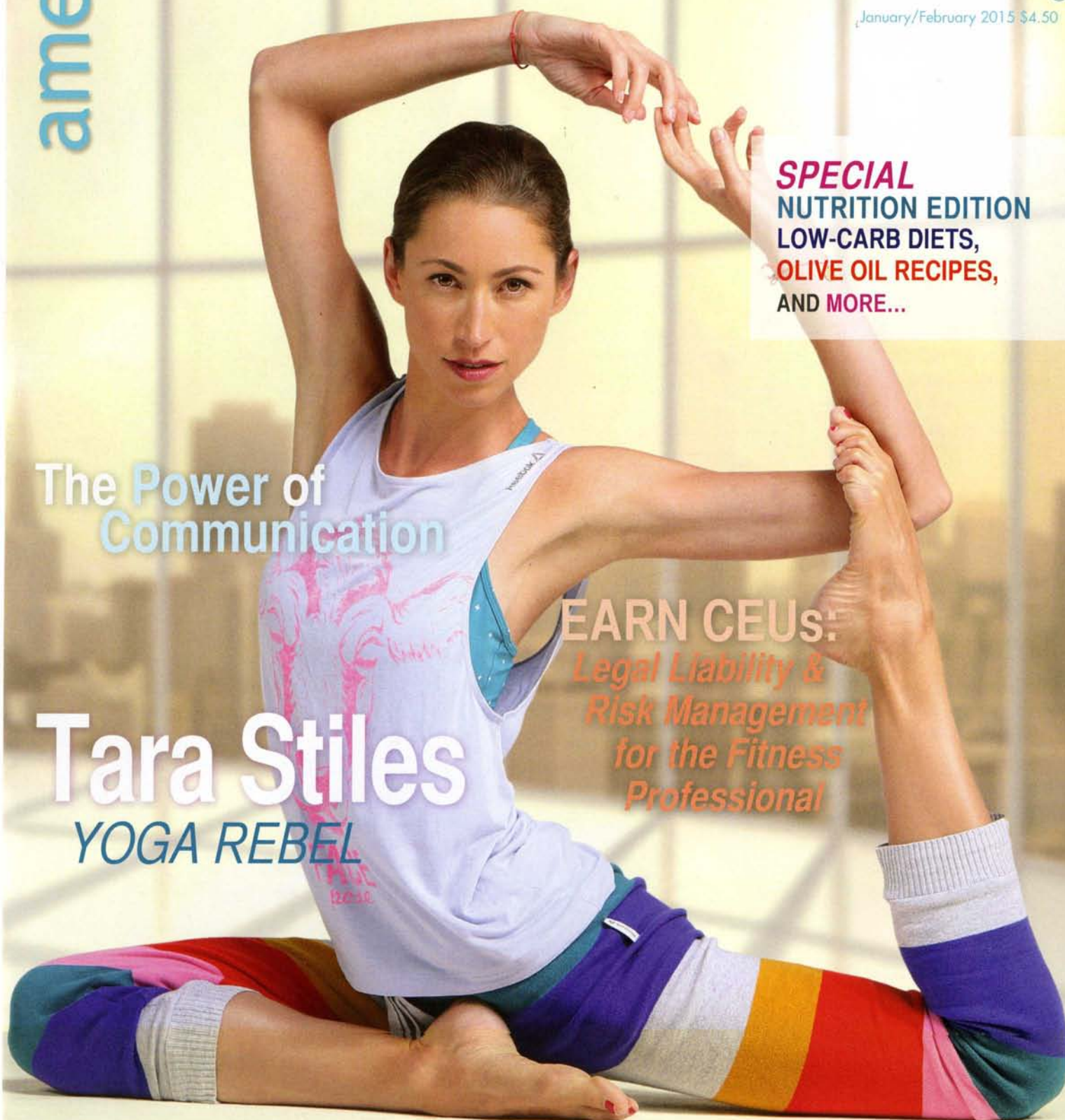
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Q&A

BY MATT BRZYCKI



DO SPICY FOODS DECREASE APPETITE?

"Spicy foods decrease appetite." Sounds like a headline you'd see in a tabloid while standing in line at the supermarket. The difference is that there's a good bit of truth to this particular notion.

A number of research studies have investigated capsaicin, an ingredient found in chili pepper; it's what makes hot peppers hot. Interestingly enough, capsaicin is also an ingredient in pepper sprays that are used in self-defense.

In a study conducted in the Netherlands, 15 subjects (average age 29.7) received four treatments in random order: 100% of their estimated daily caloric needs with and without capsaicin (from red chili pepper) and 75% of their estimated daily caloric needs with and without capsaicin. On the day after each treatment, the subjects were fed dinner that they ate *ad libitum*.

In the subjects who ingested 100% of their caloric needs, capsaicin produced significantly greater feelings of satiety and fullness. And subjects ate 30% fewer calories in the meal that was consumed the day after the treatment in which capsaicin was included.

A few words of caution: Some individuals experience gastrointestinal distress from spicy foods. Therefore, these should be avoided by anyone who suffers from ulcers and chronic heartburn.

IS MAT-BASED PILATES BETTER THAN EQUIPMENT-BASED PILATES IN TREATING LOW-BACK PAIN?

Pilates continues to be a highly accepted form of exercise. And as the popularity of Pilates grows, so does the body of research investigating its effectiveness in a number of different areas, including the treatment of low-back pain. Also being researched is Pilates on a mat compared to Pilates on specialized machines.

A study in Brazil involved 86 subjects (average age 41.2) who had low-back pain for more than three months and were referred for physical therapy. The subjects were randomly assigned to perform either mat Pilates or equipment-based Pilates. The mat-based group did exercises on the ground using a mat, Swiss ball and elastic bands; the equipment-based group performed exercises on equipment that provided resistance: the Cadillac, Ladder Barrel, Reformer and Step Chair.

All sessions lasted one hour and were done twice a week for six weeks. Individual and supervised treatments were administered by a Pilates-certified physical therapist.

After six weeks of treatment, there were no significant differences between groups in pain intensity and disability. After six months, however, the equipment-based group had a significantly greater improvement in disability than the mat-based group.

CAN MOTIVATIONAL SELF-TALK IMPROVE ENDURANCE?

During efforts that require a high degree of exertion, individuals often succumb to mental fatigue sooner than physical fatigue. In a sense, we talk ourselves out of performing longer. So can we talk ourselves *into* performing longer?

Researchers had 24 subjects (average age 24.6) pedal to exhaustion on a stationary bicycle, then randomly assigned them to two groups: One group received instruction in motivational self-talk and the other group did not. After two weeks of this instruction, all subjects were again assigned to pedal to exhaustion. While pedaling, those in the self-talk group used four statements that each subject had identified and developed, such as "feeling good" and "push through this."

The self-talk group significantly increased their time to exhaustion by nearly two minutes. Meanwhile, the control group decreased their time to exhaustion by about 12 seconds. In other words, the control group subjects reached fatigue a bit sooner than before.

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