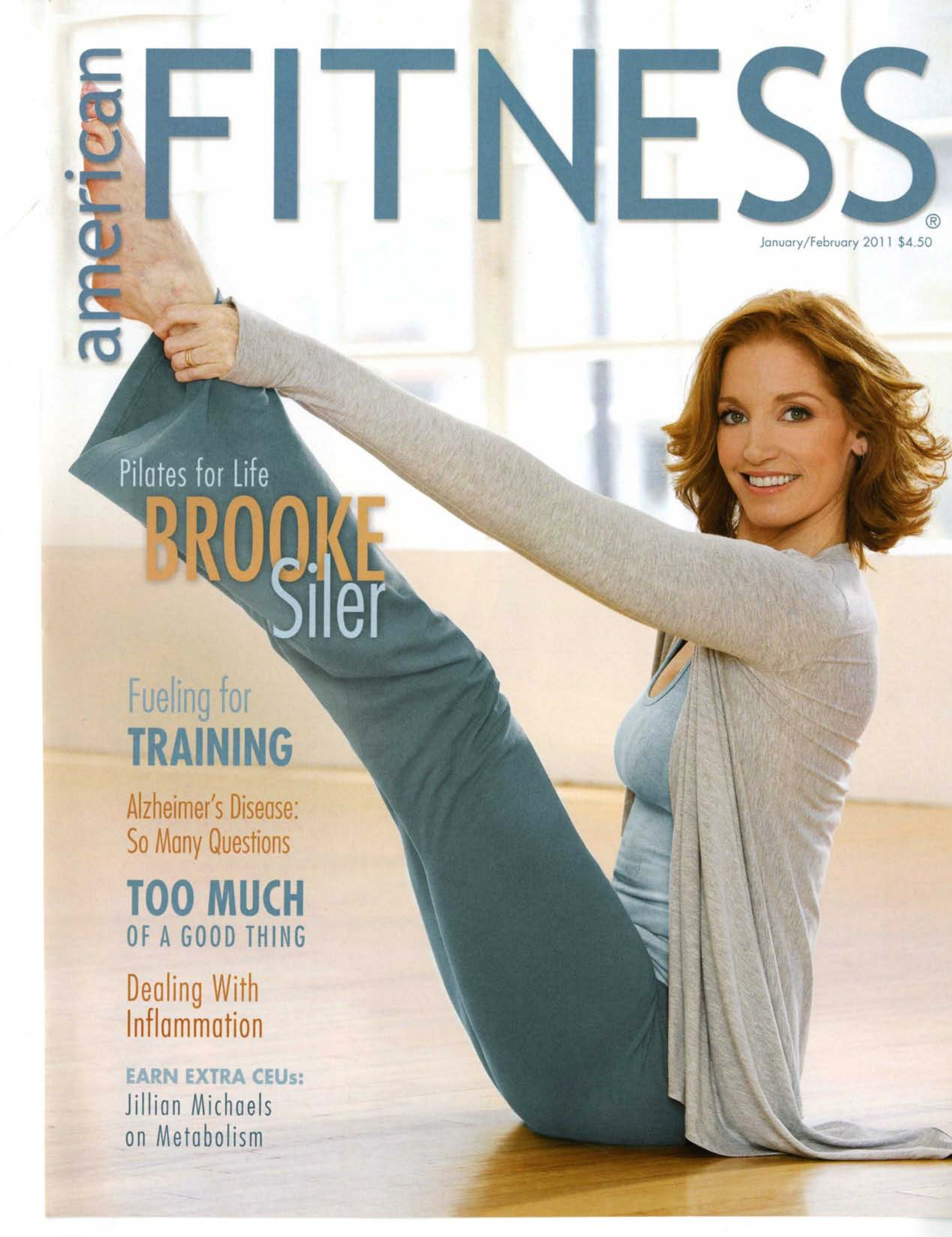
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AFQ&A

BY MATT BRZYCKI

Is it better to run with or without shoes?

Running without shoes is one of the latest movements afoot (pun intended). Proponents of barefoot running point out that before the arrival of running shoes, humans had run barefoot or with minimal footwear since breaking ranks with apes millions of years ago. But what does the research say about running barefoot?

Studies have compared the foot strike patterns of running with and without shoes. It has been shown that those who usually run with shoes tend to land on the back of their foot, while those who usually run without shoes tend to land on the front of their foot then the back of their foot. In addition, barefoot runners who land on the front of their foot produce lower impact forces than shod runners who land on the back of their foot. This may reduce the risk of impact-related injuries, but scientific evidence is lacking.

So don't shuck your shoes just yet. Besides, running outside without shoes is a risky proposition. The odds of stepping on a sharp rock, nail or shard of glass are high. And to prevent the spread of disease, it's not a good idea to run barefoot on a treadmill in a commercial setting.

Do thermogenic products really increase metabolism?

In an effort to lose weight, many individuals take thermogenic products. It's thought these pills and drinks increase resting energy expenditure (REE).

Researchers randomly assigned 18 subjects to receive either three capsules of a commercially available thermogenic product or a placebo (vitamin E). Those who consumed the thermogenic product increased their REE by 17.3%, 19.6% and 15.3% after one, two and three hours post ingestion, respectively. Meanwhile, those who consumed the placebo decreased their REE at the same time points.

But how many more calories were used as a result of the product? Well, the REE increased by an average of about 11.46 calories during the first hour, 13.54 calories during the second hour and 10.42 calories during the third hour. This amounts to about 35.42 calories over the course of three hours. That's right, a little more than 35 calories in three hours.

Losing one pound of fat (3,500 calories), then, requires roughly 300 capsules of this particular product. At $39.99 for 90 capsules, that's an investment of about $133.30 per pound of fat.

Besides, taking these products does absolutely nothing to improve health and fitness or teach good nutritional habits. It would be far better—and much cheaper—to lose calories through exercising more and eating less.

How important is it for a fitness program to be supervised?

Good news for personal trainers: Studies have shown that supervision is vital for a fitness program to be effective. In a recent study, researchers in the Netherlands randomly assigned 34 subjects to an experimental group and a control group.

The experimental group participated in a fitness program that was supervised by sports instructors. This group exercised twice a week for two hours. Their program consisted of endurance training and strength training alternated with an indoor fitness program. The control group was "advised" to exercise individually without receiving specific instructions. On request, this group could get advice and instruction from the instructors who were present at all times.

In order to avoid contact with the control group, the experimental group exercised in a separate space. And while the experimental group was "coerced" by the instructors to participate, the control group had to exercise their own initiative.

After four months, those who received supervision lost more weight (17.60 pounds compared with 6.16 pounds) and body fat (13.64 pounds compared with 3.74 pounds) than those who received no supervision.

MATT BRZYCKI *is the Assistant Director of Campus Recreation, Fitness at Princeton University. He has more than 25 years of experience at the collegiate level and has authored, co-authored and edited 17 books.*

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