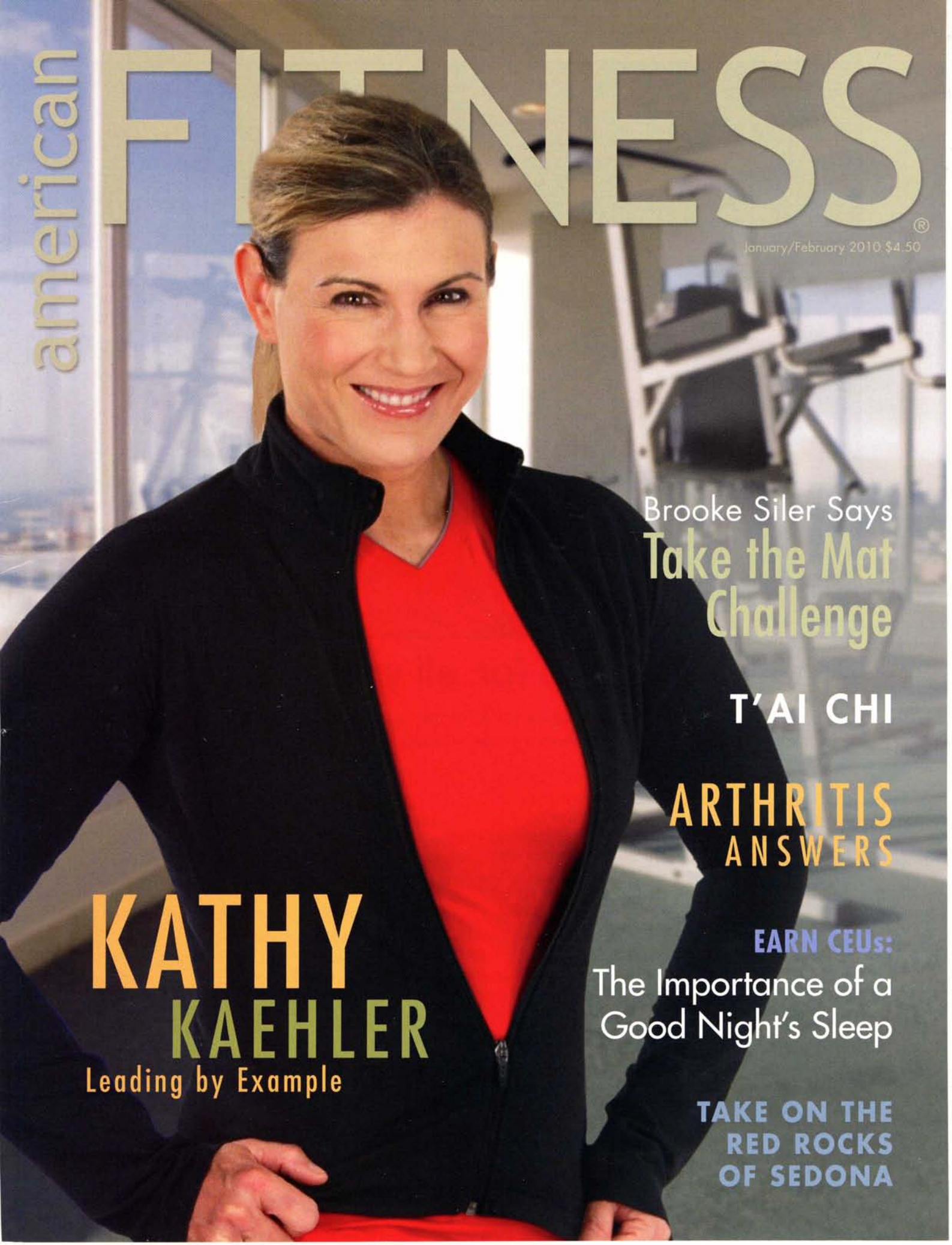
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AFQ&A

BY MATT BRZYCKI

Why do skin fold measurements need to be corrected for age?

Suppose that your skin fold measurements are the same at age 40 as they were when you were 20. Since your measurements are the same, shouldn't your percentage of body fat be the same?

The short answer is no. One reason has to do with the distribution of body fat. Remember, skin fold calipers measure external (or subcutaneous) body fat. In younger individuals, about half of their body fat is stored as external fat and half as internal fat; in older individuals, a higher percentage of their body fat is stored as internal fat. So left uncorrected, the skin fold values of older individuals would underestimate their percentage of body fat.

Researchers in Australia cite two additional possibilities: a decrease in skin thickness and an increase in skin fold compressibility. Technically, skin fold calipers measure the thickness of a double layer of skin and compressed external fat. So skin that's thinner or fat that's more compressible will affect skin fold measurements.

Regardless of the reason, skin fold measurements must be corrected for age in order to improve the accuracy of the estimated percentage of body fat. There are calculators available to determine these adjustments such as the one at www.naturalphysiques.com/tools.php?itemid=31.

How many calories are used in the recovery period after strength training?

One study had 15 women do one set of nine exercises to muscular fatigue in an average of 21.3 minutes. Researchers determined that in the two hours post-exercise, the women used about 22.4 calories above their baseline values. Or look at it this way: During the two hours post-exercise, the "after burn" was about 1.05 calories per minute of activity.

Interestingly, the study also had the same 15 women do three sets of nine exercises to muscular fatigue in an average of 63.1 minutes. Researchers determined that in the two hours post-exercise, the women used about 22.6 calories above their baseline values. So during the two hours post-exercise, the "after burn" was about 0.36 calories per minute of activity.

Another study had seven men do six sets of 10 exercises to muscular fatigue in 90 minutes. It was estimated that in the two hours post-exercise, the men used 34.0 calories above their baseline values. During the two hours post-exercise, then, the "after burn" was about 0.38 calories per minute of activity which is strikingly similar to the previous study that investigated a multiple-set protocol.

So after strength training, there's an increased expenditure of calories above baseline values. Nonetheless, it isn't as much as might be thought.

Does eating regularly have any effect on metabolic syndrome?

Metabolic syndrome is a cluster of risk factors for cardiovascular disease. The risk factors include central obesity, hypertension, dyslipidemia (elevated levels of blood lipids) and glucose intolerance.

Researchers in Sweden looked at the eating habits of 3,607 subjects (aged 60). The subjects were divided into "regular eaters" (who usually or always ate breakfast, lunch and dinner) and "irregular eaters" (who sometimes or never ate breakfast, lunch and dinner).

In comparison to regular eaters, irregular eaters had significantly greater weight, waist circumference, body mass index and triglycerides. What's more, a significantly higher percentage of irregular eaters met the criteria for metabolic syndrome. Also worth noting is that those who were irregular eaters had a considerably lower intake of fruits and vegetables.

Based on the results of this study, it appears that eating on a regular basis is associated with a lower risk of cardiovascular disease. Establishing meal regularity, then, should be part of behavior modification for weight management.

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