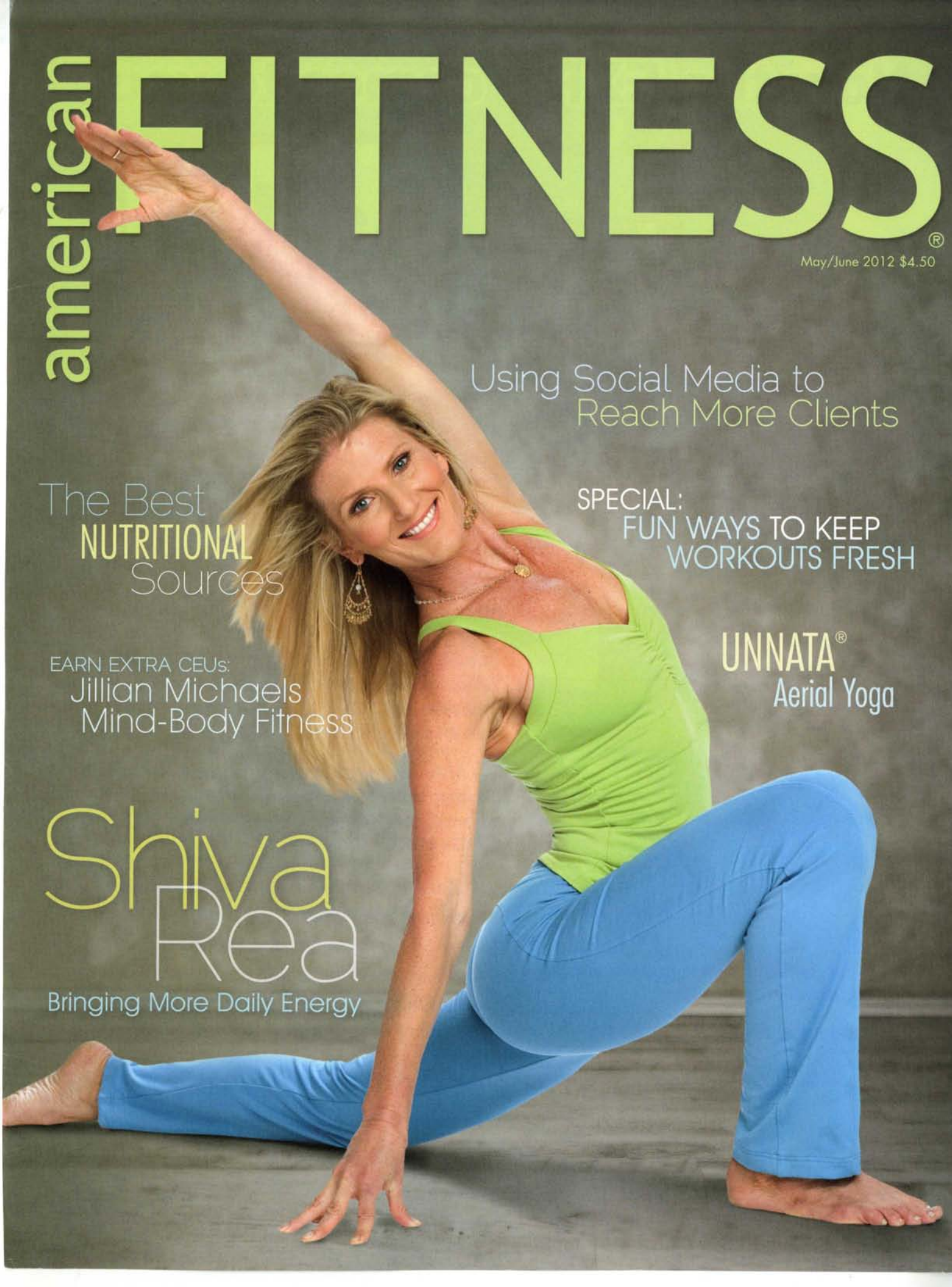
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AF Q & A

BY MATT BRZYCKI

Do video games that require kids to be active improve their body composition or fitness level?

Most kids fall short of the recommended amount of daily physical activity. The new generation of video games that simulate playing sports or doing activities allows kids to get "screen time" yet be active. But does this "exergaming" yield any favorable results?

Researchers in Auckland, New Zealand, randomly assigned 322 overweight or obese children (aged 10 to 14), who were users of video games, to two groups: One group received an upgrade package of active video games and the other group served as a control and continued with their normal gaming.

After 24 weeks, the group that used active video games decreased their percentage of body fat by 2.3% and the control group decreased by 1.4%; the group that used active video games lost 3.3 pounds of fat and the control group lost 1.1 pounds. No significant changes were made by either group in physical fitness or the time that was spent doing activities of moderate-to-vigorous intensity.

Although active gaming uses more calories than sedentary gaming, nothing can take the place of actually participating in a real sport or activity.

Can people who exercise "get away" with poor food choices compared to those who don't exercise?

Researchers divided 14 subjects into two groups: One group had engaged in physical activity three or more times per week for at least 30 minutes per session at a moderate intensity or higher, and the other group had engaged in less than 30 minutes of moderate physical activity per week.

All subjects were fed the same high-fat breakfast meal. The meal provided 960 calories of which 46% came from fat (48 grams of fat including 16.5 grams of saturated fat and 4.5 grams of trans fat), 280 milligrams of cholesterol and 2,220 milligrams of sodium.

One of the areas that the researchers looked at was the diameter of the brachial artery. After the high-fat meal, the diameter of the brachial artery decreased in the less active group—there was greater obstruction of blood flow—while the more active group experienced no change. Also of note is that after the high-fat meal, both groups had an increase in triglycerides. But while the more active group increased their triglycerides by 47%, the less active group increased by 184%.

So it may be true that people who exercise can "get away" with unhealthy food choices, but this isn't a license for them to eat poorly on a regular basis.

Is it better to use a trap bar for dead lifts than a standard bar?

The dead lift is a multi-joint movement that addresses an enormous amount of muscle mass all in one exercise: the hips, legs and lower back. The main drawback of the exercise is that the lower back is exposed to large compressive forces that can lead to injury, particularly if it's done with poor technique.

In an attempt to reduce these forces, Al Gerard, an accomplished power lifter, invented the trap bar in the mid-1980s. His bar was diamond shaped but since then, other shapes have arisen including hexagonal and rectangular. Regardless of the shape, the design allows the lifter to stand within the confines of the bar and position the load closer to the joints.

To test the effectiveness of the bar, researchers had 19 male competitive power lifters perform the dead lift with a variety of loads using a standard bar and a hex-shaped trap bar. The study found that, in comparison to a standard bar, a trap bar produced significantly less force in the lower back as well as the hip and ankle joints. However, the trap bar produced significantly more force in the knee joint.

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