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DECEMBER 2008

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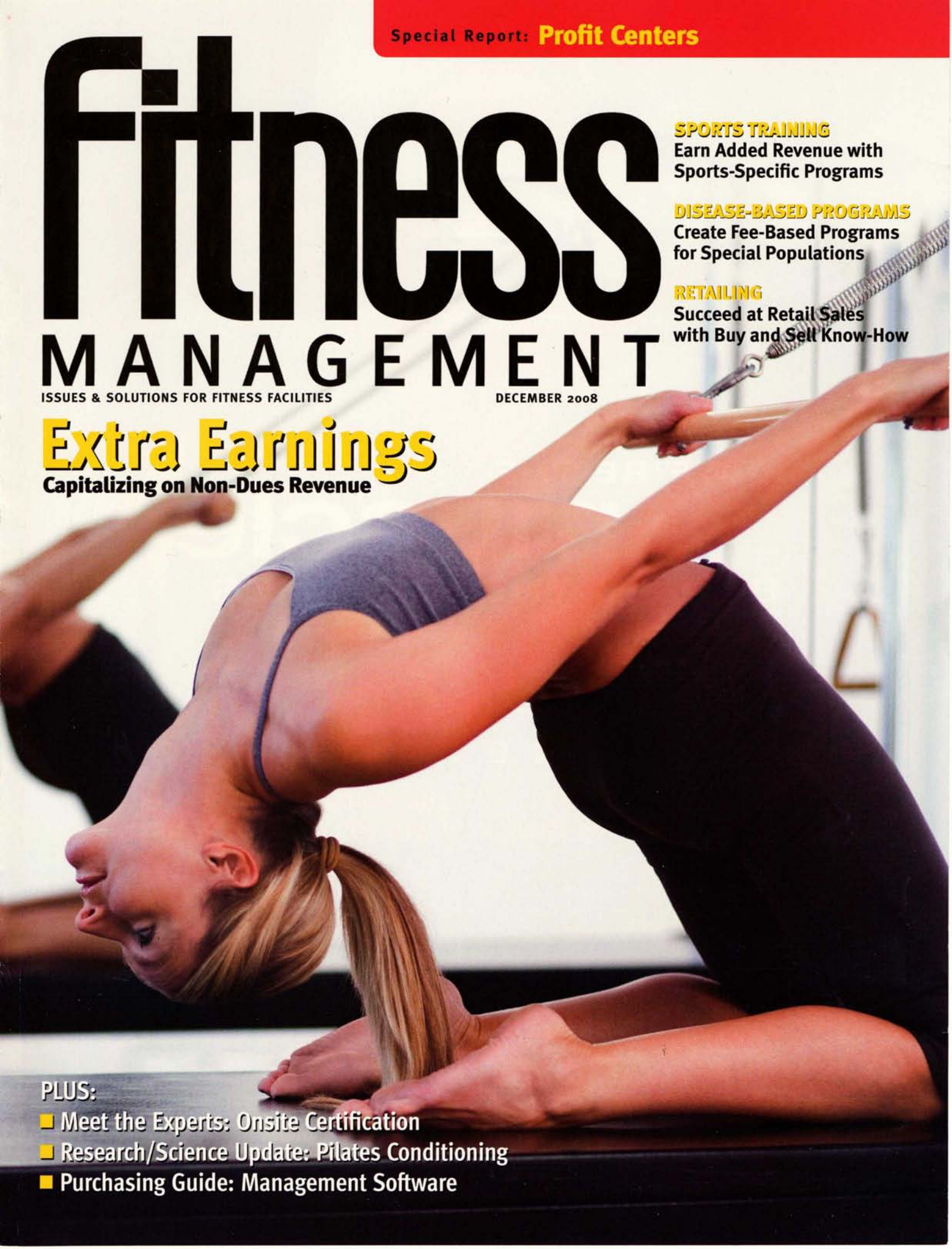

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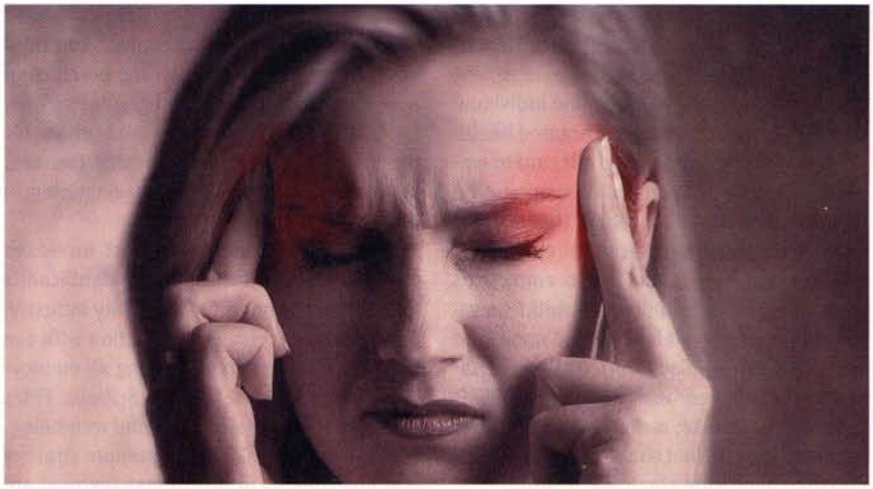
BY MATT BRZYCKI

What can be done to avoid exercise headaches?

Exercise-related headaches are somewhat common. They are triggered by many activities, including running and weightlifting. Since most of the headaches are benign and relate to exertion, they're referred to as "benign exertional headaches." During a six-month period, a group of physicians reported that their emergency department diagnosed four patients with headaches that were related to lifting weights. The headaches were described as persistent and severe: One patient said the pain was so severe that he felt as if he were "going to pass out"; another said that it was "the worst headache" of his life. In all four patients, the onset of the pain was sudden. The location of the headache varied, although most were in the occipital area of the head.

To avoid this type of headache, it's important for exercisers to employ proper breathing (no breath holding) and good technique (no excessive straining). Any activity that aggravates the condition should be avoided.

Also keep in mind that headaches could be indicative of something more serious. It's a good idea for those who experience this condition to seek medical attention. FM



What's the earliest age that a youth can begin to lift weights?

A number of years ago, youths were deemed ready to initiate strength training when they began to develop secondary sexual characteristics, such as a deeper voice and facial/body hair in boys, and wider hips and breasts in girls. These changes usually coincide with the arrival of the so-called "adolescent growth spurt." It had been believed that doing any strength training prior to this developmental stage would damage the growth plates and, thus, impair or "stunt" growth. While these fears were certainly well intended, it turns out that they are unfounded.

There's no clear-cut line for determining an appropriate age to begin lifting weights. Research has shown, though, that children as young as 10 can participate in strength training without risk of injury. Caveat: It's of utmost importance that the strength training be supervised closely by competent and qualified individuals. Also, before strength training is permitted, a youth must be able to stay focused and follow directions. FM

Does beta-alanine improve performance?

Beta-alanine is a precursor of carnosine, a molecule that's found in skeletal muscle. It's thought that taking beta-alanine supplements can buffer pH fatigue and, as a result, improve performance.

In one study, 55 men (average age 24.5) were randomly assigned to one of four groups: One group received creatine, one group received beta-alanine, one group received creatine and beta-alanine, and one group received a placebo (dextrose). The supplements were ingested for 28 days. The researchers examined eight indices of cardiorespiratory endurance on a stationary cycle. The group that received beta-alanine improved significantly in one of the indices. The group that received creatine and beta-alanine improved significantly in five of the eight indices. Improvements between groups weren't significant. A caveat is that a large distributor of nutritional supplements sponsored the study.

In another study, 15 highly successful 400-meter sprinters (average personal best of 50.45 seconds; average age unspecified) were randomly assigned to one of two groups: One group was given beta-alanine and the other group was given a placebo (malodextrin). The supplements were ingested for four weeks. Both groups significantly decreased their time to run 400 meters, and the improvements were similar. FM

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