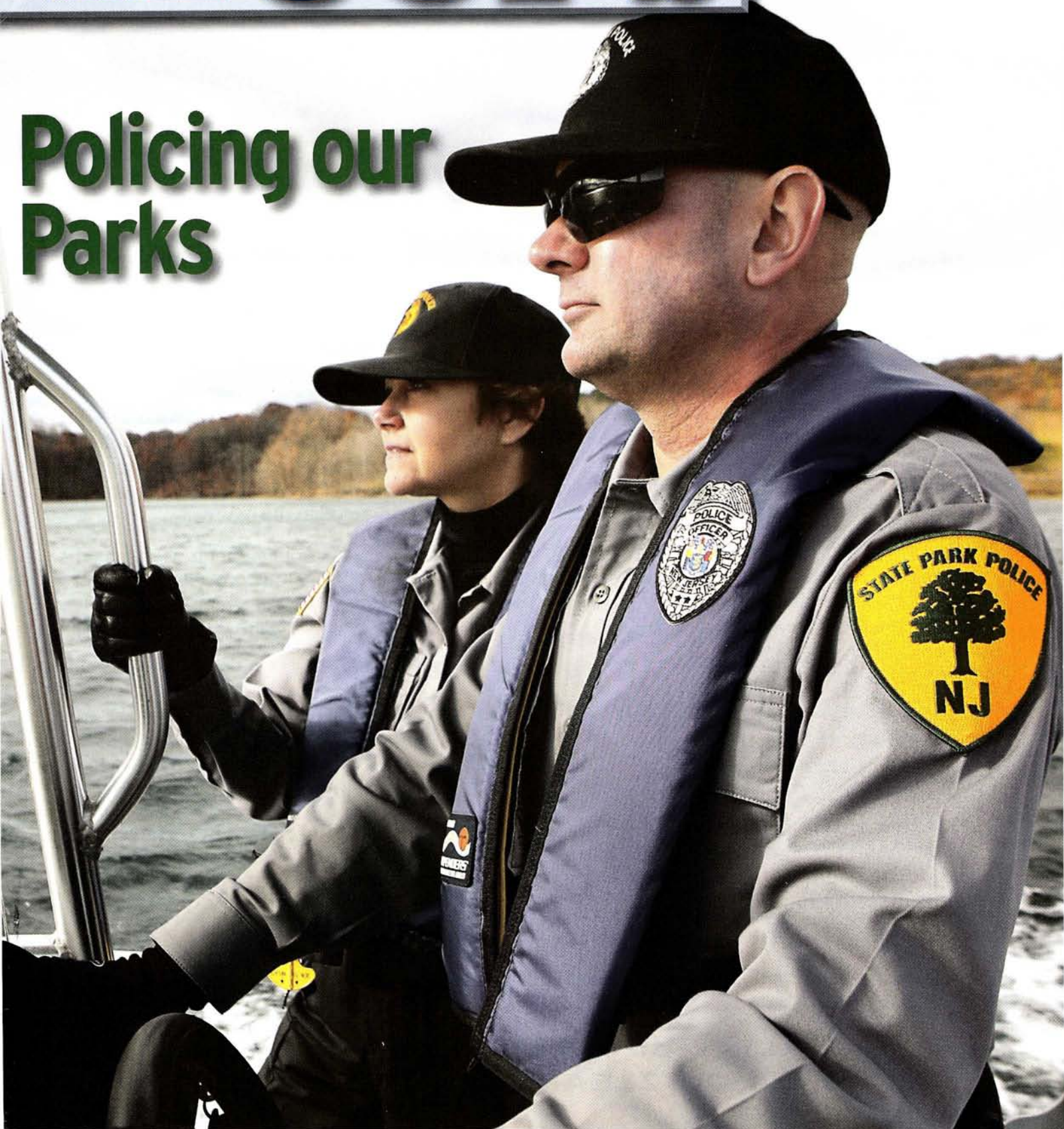


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Strength training for children

■ BY MATT BRZYCKI

We may not be kids ourselves anymore, but a number of you volunteer your time at local Police Athletic Leagues where youths may inquire about strength training. And many of you have young children of your own who may also have an interest.



Matt Brzycki

A growing body of research has shown that youths who are less than 10 years of age can do strength training without risk of injury, provided that certain guidelines are followed. Let's take a look at those guidelines.

Supervision: First and foremost, youths must be supervised closely. Furthermore, they should receive adequate instruction in the proper performance of all exercises/activities.

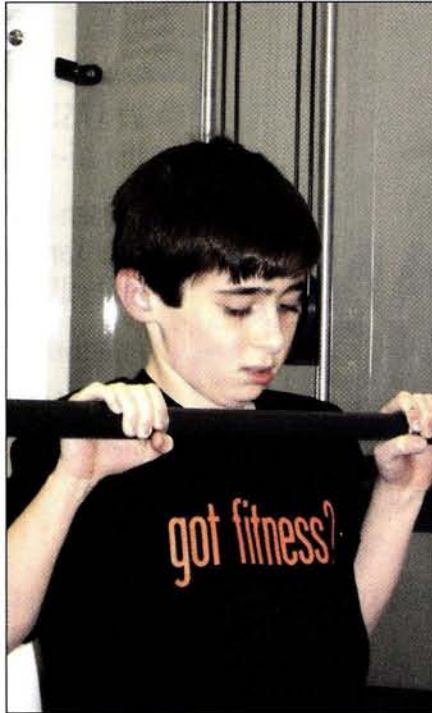
Intensity: An age-appropriate level of intensity (or effort) must be used. Because of their physical and mental immaturity, children should stop a few reps short of muscular fatigue. As children get older and more mature, they should gradually increase their level of exertion.

Progression: To get stronger, an attempt must be made to increase either the resistance used or the reps performed in relation to a previous workout. Increases in resistance should be made in small increments, preferably no more than about 5 percent.

Sets: There's no consensus as to how many sets of an exercise should be done by youths. Most of the recommendations for youths, though, are between one and three sets.

Reps: Children should do about 20 - 25 reps for exercises involving their hips, 15 - 20 reps for their legs and 10 - 15 reps for their torso. As they get older and more mature, those ranges can be reduced over time to about 15 - 20 reps for their hips, 10 - 15 reps for their legs and 8 - 12 reps for their torso.

Technique: Youths should raise and lower the resistance in a deliberate, controlled manner. Also, they should



do each rep throughout a full range of motion. The emphasis should be on how the weight is lifted not how much weight is lifted.

Time: Workouts of children should be limited to about 20 to 30 minutes; workouts of adolescents should be limited to about 30 to 40 minutes. Lengthy workouts can lead to disinterest and dissatisfaction which will decrease adherence to a program.

Frequency: Children should do strength training one or two days per week. As they age and mature physically, strength training can be increased to two or three days per week.

Volume: Children should perform about nine exercises (one set each) per workout. As they get older and more mature, the volume can be increased to about 14 exercises (one set each) per workout. The focus of these exercises should be their major muscles: the hips, legs, torso and mid-section. If multiple sets of an exercise are done, the total number of exercises should be reduced accordingly so as to stay within the aforementioned boundaries.

Records: The importance of keeping records cannot be overstated. This is a valuable tool for monitoring progress

and making workouts more meaningful.

Equipment: Many studies have shown that strength can be improved with different types of equipment. However, it may be difficult for children and smaller adolescents to fit properly on some machines. With barbells and dumbbells, one size fits all. Youths can also benefit from doing exercises that involve their own bodyweight (such as push-ups and sit-ups/crunches) as well as using resistance bands.

A PRACTICAL APPLICATION

I've been training my 11-year-old son, Ryan, on a regular basis since a few months before he turned 10. Right now, his goal is to do somewhere between 10 and 20 reps in each exercise. (He does one set of each exercise.) Every workout or two, he tries to increase his reps by one. When he gets to 20 reps, we increase the resistance by the smallest amount available for his next workout and he starts back with 10 reps.

In the lat pulldown, for example, Ryan was using 37.5 pounds and in his last five workouts with that weight did 16, 17, 18, 19 and 20 reps. Then, we increased the weight to 40 pounds. In his first five workouts with that weight, he did 10, 11, 12, 13 and 14 reps. Six workouts later, Ryan had progressed to 20 reps with 40 pounds. At that point, we increased the weight to 42.5 pounds and he went back to doing 10 reps.

THE BOTTOM LINE

Strength training for kids can be safe and effective as long as they adhere to certain guidelines and their workouts are supervised closely. ♥

Matt Brzycki is the Assistant Director of Campus Recreation, Fitness at Princeton University in Princeton, New Jersey. He has authored, co-authored or edited 16 books on strength and fitness, including SWAT Fitness (available at www.optac-international.com).