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Column Editor

## summary

There are many methods by which young athletes can maximize recovery from sports training and competition.

Young athletes seem to be training harder and longer than ever before. Some high school strength and conditioning programs rival those at the college level, and it is not uncommon for young athletes to train 5 days per week and compete on the weekends. Though the potential health and fitness benefits of youth strength and conditioning programs have received increased attention in recent years, the importance of adequate recovery between workouts seems to be overlooked. In fact, more has been written about how to prepare young athletes for sport than how to best recover from one workout to the next. Although a day “off” between workouts may be adequate for recreational fitness participants, sport involves higher levels of physical and psychological stress, and therefore well-planned activities are needed to maxi-

# Maximize Recovery

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mize recovery and return to an optimal performance state.

Because recovery is an integral part of the training cycle, coaches need to pay just as much attention to what is done between training sessions as to what is done during training sessions. Strength and conditioning activities place a great amount of stress on the neuromuscular system, and therefore the importance of adequate recovery needs to be reinforced regularly. This may be particularly important for high school athletes who may be unwilling to reduce the volume and/or intensity of their training program. Youth coaches and parents should realize that the “more is better” attitude is counterproductive and will likely result in injury, burnout, or poor performance. The following safe and simple practices may help young athletes recover from sports training and competition.

**Cool-down.** All games and workouts should end with an active cool-down session designed to remove lactic acid and lessen the likelihood of muscle soreness. Light jogging and stretching have proven to be effective.

**Postexercise fuel.** Take advantage of the “golden hour” after each game or workout by consuming a food snack or beverage containing carbohydrates and protein. This will quickly replenish carbohydrate stores and result in a faster buildup of muscle proteins.

**Hydration.** Replenish body fluids and electrolytes by drinking water, juice, sports drinks, and other caffeine-free beverages throughout the day, even when you’re not thirsty. Because caffeine acts as a diuretic, caffeinated beverages such as coffee, tea, and soda can increase your risk for dehydration. Stay hydrated during the game or workout by drinking cool beverages every 15 to 20 minutes. Any weight lost during the workout should be replaced during the recovery period.

**Contrast shower.** A postworkout contrast shower (alternating 30 seconds warm and 30 seconds cold for 3 to 4 cycles) may help to restore fatigued functions and minimize inflammation following intense exercise.

**Self-massage.** Foam rollers and massage “sticks” can be used to minimize muscle stiffness and promote feelings of relaxation.

Adequate sleep. Most teenagers need about 8 to 9 hours of sleep per night, and young athletes may need more. When appropriate, a “power nap” in the afternoon can help one feel re-energized.

Music. Listening to music can be a relaxing activity that can aid in the recovery process. Realize that the type of music used to maximize recovery is a personal choice.

Social time. Spend time with family and teammates, as well as with people not involved in your sport. Social gatherings at school events or parties can have a positive impact on one’s emotional and psychological well-being.

Visualization. After practice and games, take a few quiet minutes to “visualize” your body recovering from the workout. Engage in slow, deep breathing and think about getting stronger, feeling better, and removing soreness from your body.

Vary workouts. Make workouts more fun by systematically altering “hard” days and “easy” days. Some young athletes may need to learn what “easy” training feels like.

Additional information on maximizing recovery is available in (1) and (2). ♦

## References

1. Kelleman, M. *Enhancing Recovery*. Champaign, IL: Human Kinetics, 2002.
2. Siff, M., and M. Yessis. *Sports Restoration and Massage*. Escondido, CA: Sports Training Inc., 1992.

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