

Managing Hypertension in Athletes

Athlete Scenario

I am a runner with hypertension training for my first marathon. I know I need to replace electrolytes (specifically sodium) during training and racing, but I'm confused as to what that means for me. Should I consume sports drinks or skip them? What else can I do?

Goals for Athletes with Hypertension

- Choose lifestyle strategies that reduce high blood pressure (hypertension)
- Follow hydration guidelines during exercise to maintain performance

Nutrition Strategies

- Reduce sodium intake to 1,500–2,300 mg/day on non-exercise days. Read nutrition facts labels and limit fast food, canned goods, and highly processed foods.
- Increase sodium intake before, during, and after training and competition to replace sweat losses (e.g. increase to ~2,000–4,000 mg sodium/day).
- Choose potassium-rich foods like avocados, bananas, dried beans, potatoes, spinach, and tomatoes daily.
- If overweight, weight loss may reduce blood pressure. Work with a registered dietitian nutritionist to understand your fueling needs.

Hydration Strategies

- Athletes lose ~300–2,400 mg sodium/hour during exercise, depending on sweat concentration and rate. Replenish with sports drinks containing 110–200 mg sodium/8 oz when exercising intensely >1 hour or in extreme environments.
- Pretzels, higher-sodium gels, and electrolyte supplements can be great additions to your hydration plan.
- Prevent excessive dehydration (>2% weight loss) (see *Exercise Hydration* fact sheet).

Lifestyle Strategies

- Manage stress with daily relaxation techniques (e.g. breathing exercises, yoga, meditation).
- Avoid excessive caffeine (e.g. >400 mg/day) and stimulant-containing supplements (e.g. weight loss or energy-enhancing products).
- Abstain from tobacco.

Medication Considerations

- Work closely with your physician, communicating health and performance goals.
- Thiazide diuretics: banned by USOC & NCAA; not recommended for endurance or collegiate athletes.
- Beta-blockers: contraindicated for endurance athletes; banned in precision sports.



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Tips to Take With You

1. Athletes with mild to moderate hypertension can safely exercise once blood pressure is well-controlled (generally defined as <130/80 mmHg).
2. A reduced-sodium, potassium-rich diet and weight management help lower and control blood pressure.
3. During endurance exercise, hydrate with sports drinks to maintain electrolyte balance.
4. See a sports registered dietitian nutritionist (RDN) for personalized energy requirements, meal planning, weight loss, and individualized blood pressure lowering strategies.

Contact SCAN:
www.scandpg.org
800-249-2875

Written by SCAN registered dietitian nutritionists (RDNs) to provide nutrition guidance. The key to optimal meal planning is individualization. For personalized nutrition plans contact a SCAN sports dietitian or Board Certified Specialist in Sports Dietetics (CSSD) by accessing "Find a SCAN Dietitian" at www.scandpg.org.

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