

Watermelon Performance Hub

Evidence Notes: Hydration & Recovery Reference Chart

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Brief evidence notes for the claims made in the Hydration & Recovery Reference Chart handout. All nutrient values are sourced from USDA Food Data Central and current peer-reviewed literature.

Hydration from Food

1. The Mayo Clinic confirms that approximately 20 percent of daily fluid intake comes from food sources. The CDC similarly confirms that total daily water intake includes water consumed from both beverages and food.

Mayo Clinic. (2022). Water: How much should you drink every day? <https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/water/art-20044256> | CDC. Fast Facts: Water Consumption. <https://www.cdc.gov/nutrition/php/data-research/fast-facts-water-consumption.html>

Watermelon Nutrition and Fluid Contribution

2. Watermelon is 92 percent water by weight. A 2-cup serving (280g) provides approximately 8 to 10 ounces of fluid, 314mg of potassium, 23mg of vitamin C (25% Daily Value), 12.7mg of lycopene, and beta-carotene expressed as Vitamin A at 8% of the Daily Value.

U.S. Department of Agriculture, Agricultural Research Service. FoodData Central. Watermelon, raw (FDC ID: 2747675). <https://fdc.nal.usda.gov/food-details/2747675/nutrients>

Antioxidant Compounds and Exercise Recovery

3. A controlled study in elite taekwondo athletes found that watermelon juice consumption was associated with improvements in aerobic capacity (VO₂max) and plasma antioxidant markers. Researchers attributed the antioxidant effects to naturally occurring compounds in watermelon including lycopene and vitamin C.

AghabeigiAmin, et al. (2025). Effects of watermelon juice on VO₂max and antioxidant capacity in elite taekwondo athletes. Sport Sciences for Health, 21, 923-929. <https://doi.org/10.1007/s11332-025-01329-6>

Post-Workout Recovery

4. A randomized controlled trial in men undergoing endurance training found that watermelon juice consumption was associated with improved exercise performance and reduced muscle soreness compared to the control group.

Norouzzadeh, M., et al. (2025). The effects of watermelon juice on muscle hypertrophy, exercise performance, and muscle soreness in non-athlete men undergoing endurance training. Food Science & Nutrition, 13(10). <https://doi.org/10.1002/fsn3.71070>

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