

The Watermelon Fueling Plate

Building a balanced plate for performance with watermelon at the center.



Watermelon Nutrition per 2-Cup Serving¹

Nutrient	Amount
Calories	85
Carbohydrates	21g
Natural sugars	17g
Water content	~8 to 10 oz per 2-cup serving
Vitamin C	23mg (25% DV)
Potassium	314mg per 2-cup serving
Lycopene	12.7mg
Vitamin A (beta-carotene)	8% DV

Source:USDA FoodData Central FDC ID 2747675¹

Carbohydrate Needs Around Activity

Timing	Goal	Carb Target
3 to 4 hrs before	Topoff glycogen	3 to 4g/kg BW
1 to 2 hrs before	Quick fuel	1 to 2g/kg BW
30 to 60 min before	Light fuel	0.5 to 1g/kg BW
During (>60 min)	Maintain blood glucose	30 to 60g/hr
Within 30 min after	Begin glycogen repletion	1.0 to 1.2g/kg BW Balanced meal
2 hrs after	Continue recovery	

BW = body weight. Targets vary based on intensity, duration, and individual needs.

Why Watermelon Works for Fueling

Carbohydrates are the body's preferred fuel source during physical activity. Watermelon provides 21 grams of natural carbohydrates per 2-cup serving, delivered alongside fluid, making it one of the most practical whole-food fueling options you can recommend.¹ Research has explored watermelon as a carbohydrate-containing food option during prolonged exercise, performing comparably to a standard carbohydrate sports beverage for maintaining blood glucose during endurance activity.²

Build Your Watermelon Fueling Plate

Your carbohydrate and hydration source	For muscle support	For sustained energy	For fiber and micronutrients
2 cups fresh watermelon 21g natural carbohydrates 92% water content - Lycopene, vitamin C, beta-carotene - Available year-round	- Chicken, turkey, or fish (3 to 4 oz) - Greek yogurt (3/4 cup) - Eggs (2 to 3 whole) - Shrimp (3 to 4 oz) - Aim for 20 to 40g protein	- Brown rice (1/2 cup cooked) - Quinoa (1/2 cup cooked) - Sweet potato (1/2 cup) - Whole grain bread (1 slice) - Oats (1/2 cup cooked)	- Leafy greens - Shredded cabbage - Cucumber - Roasted or raw carrots - Bell peppers

Watermelon Performance Hub watermelon.org/performance



Watermelon Fueling Activity

Pre-Workout	During Activity	Post-Workout
1 to 2 hours before activity Focus on easily digestible carbohydrates. Low fat, low fiber. Watermelon options: • 2-cup serving of fresh watermelon (21g carbs) • Watermelon chia pudding with Greek yogurt • Watermelon and banana smoothie <i>Tip: A 2-cup serving about 60 minutes before activity provides practical carbohydrate fuel.</i>	For activity lasting 60+ minutes Maintain blood glucose and hydration. Watermelon options: • Frozen watermelon cubes (easy to carry, refreshing mid-effort) • Watermelon electrolyte concentrate mixed into water • 2 tablespoons of concentrate per 8 to 12 oz water <i>Research has explored watermelon as a carbohydrate source during prolonged exercise, performing comparably to standard carbohydrate beverages.²</i>	Within 45 minutes of finishing Combine carbohydrates and protein for recovery. Watermelon options: • Chili lime shrimp and watermelon bowl with roasted sweet potato • Watermelon Tajin nice cream as a post-activity treat • Watermelon glazed turkey meatballs over brown rice <i>Target: 1.0 to 1.2g carbohydrates per kg body weight + 20 to 40g protein.</i>

Watermelon Year-Round: A Practical Fueling Staple

Watermelon is available year-round at most grocery stores, making it a practical whole-food recommendation in any season and on any training calendar. Pre-cut watermelon is widely available in the produce section or can be purchased fresh and frozen at home for use throughout the year.

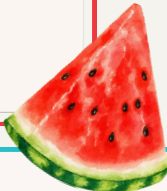
- Fresh: available year-round in most grocery stores
- Frozen: cut and freeze your own in zip-lock bags
- Pre-cut: widely available in produce sections year-round
- Concentrate: make a batch and refrigerate for up to 2 weeks

A Note for Health Professionals

Watermelon is a practical, accessible whole-food recommendation that works for nearly every active client. It is affordable, widely available, and backed by a growing body of research on hydration, carbohydrate fueling, and post-exercise recovery.⁴

People who eat watermelon regularly have been found to have higher overall diet quality, with greater intake of potassium, magnesium, and vitamins A and C, and lower amounts of added sugar and saturated fat.³

Simple fruit. Real results.



References

¹ U.S. Department of Agriculture, Agricultural Research Service. FoodData Central. Watermelon, raw (FDC ID: 2747675). <https://fdc.nal.usda.gov/food-details/2747675/nutrients>

² Shanely, R.A., Nieman, D.C., et al. (2016). Comparison of watermelon and carbohydrate beverage on exercise-induced alterations in systemic inflammation, immune dysfunction, and plasma antioxidant capacity. *Nutrients*, 8(8), 518. <https://doi.org/10.3390/nu8080518>

³ Norouzzadeh et al. (2025). The effects of watermelon juice on muscle hypertrophy, exercise performance, and muscle soreness. *Food Science & Nutrition*. <https://doi.org/10.1002/fsn3.71070>

⁴ Fulgoni, K., & Fulgoni, V.L. III. (2022). Watermelon intake is associated with increased nutrient intake and higher diet quality in adults and children, NHANES 2003-2018. *Nutrients*, 14(22), 4883. <https://doi.org/10.3390/nu14224883>

Note: This handout is for educational purposes. Individual fueling needs vary based on body size, sport, training volume, and health status. Consult a registered dietitian for personalized guidance.