Half Marathon Nutrition

FUELING FOR LONG RUNS & RACE DAY



Presented by

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About Me

Runner

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Why Nutrition Matters

- Energy, performance, recovery, injury prevention
- Underfueling can result in:
  - Nutrient deficiencies, cravings/overeating at night, poor energy, frequent illnesses and injuries, decreased immune function, muscle & bone loss, poor performance & hitting the wall, poor exercise recovery, irregular/loss of period in female athletes 🚩🚩🚩🚩🚩🚩🚩🚩🚩🚩🚩🚩



Mindset

- You don’t have to be elite to fuel like an athlete- eating enough should be a part of your training
- You don’t need to "earn" your food
- Underfueling ≠ a more disciplined runner
- Lighter, smaller body ≠ faster
  - NOT the time to focus on weight loss
- More training = more fuel needed, calories & carbs
  - Should not be eating the same now as your first week of training
  - You should be eating more than non-runner friends/fam

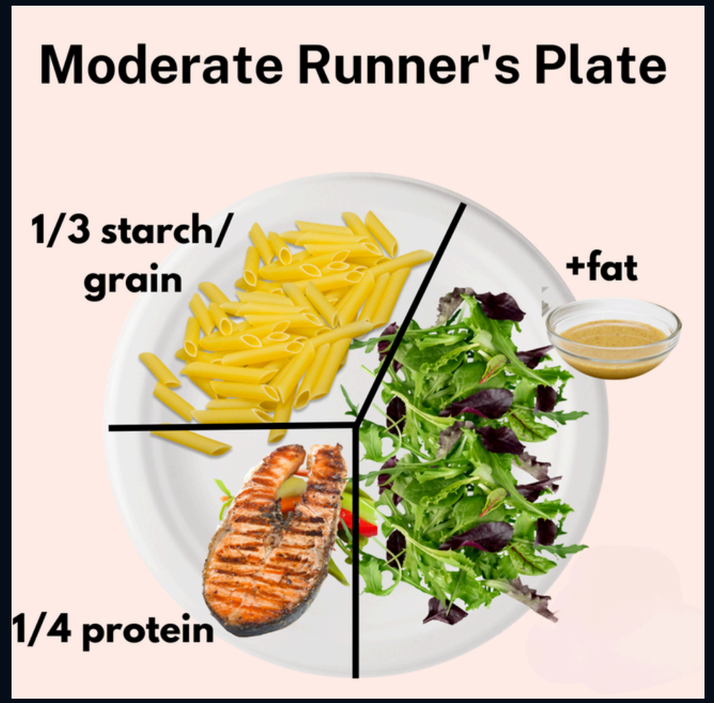


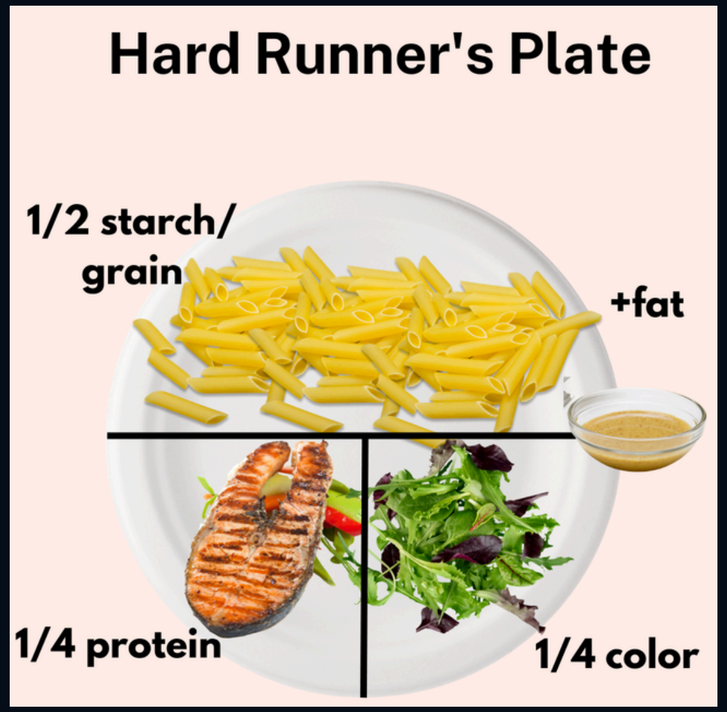


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Everyday Nutrition

- Meals:
  - Goal: 3 per day *breakfast should be as big as other meals
  - 30-60 mins/day average: MODERATE runner’s plate
  - >60 mins/day average + day before and day of long run
    - HARD training plate
  - DO NOT EAT LESS ON REST DAYS
  - Carb + calorie needs increases as training increases





Everyday Nutrition

- Snacks:
  - 1-3 snacks/day
    - May be helpful to increase when training increases
    - Carbs + protein
  - Practical hunger

- Daily hydration:
  - Half of your body weight (oz/day)- baseline



Running Nutrition

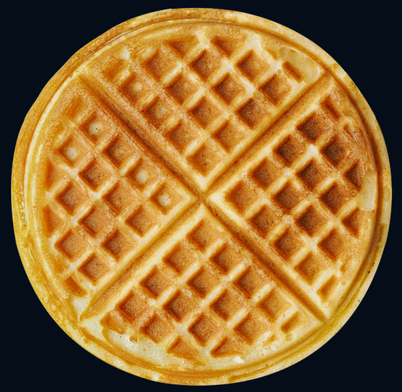
- Pre-, during, post-
- Enhances energy, performance & recovery
- Use these guidelines and personalize them
  - FIGURE HOW MUCH + TIMING DURING TRAINING!
  - Becomes your race day nutrition plan



Pre-Run Nutrition

- FUEL BEFORE ALL WORKOUTS, even early AM, strength & xtraining
- For workouts that are <1 hour with <1 hour to digest= low fiber carbs







Pre-Run Nutrition

- For workouts that are >1 hour
  - Need to eat more to sustain you!
  - Goal= carb-rich (+ some protein if you have the time to digest)
  - Hydrate- may be smart to include electrolytes
  - Aim for 1.5-2+ g carbs/kg body weight before long runs & races
  - Need time to digest
  - Test out before long runs
  - Pre-long run nutrition & timing turns into your race day breakfast & timing



Pre-Run Nutrition

- If you have a really hard time eating early AM..
  - Low fiber carb snack + carb-rich sports drink
    - 2 scoops of Skratch Labs Sport + 3 graham cracker rectangles= 73 g carb
    - 1 pouch of Tailwind High Carb Fuel (90 g carb) + toaster waffle= 104 g carb
    - 2 cups apple juice + banana= 87 g carb
- WE ARE NOT GOING TO BE AFRAID OF SUGAR





During Run Nutrition

- 3 parts to build into your plan for long runs + race day
- Long run plan becomes your race day plan



+



+



1
CARBS

2
FLUIDS

3
ELECTROLYTES

During Run- Carbs

- Carbs
  - Low fiber/sugar is best
  - Less blood flow to gut
- 3 options: food or gels/chews/carb sports drink or a combo
- What's on race course:
  - Tailwind Rapid Hydration (strawberry lemonade) at start + every water stop at miles 2, 4, 6, 7, and 9-12
  - Noogs Energy Chews (lemon & apple) & GU energy gel (vanilla & strawberry banana) at mile 7 ***NOT ENOUGH TO FUEL A HALF MARATHON- bring more fuel***
  - Junk Food Stops at mile 9 ***nothing new on race day***
  - Pickle Juice at mile 10 ***source of sodium, not fuel***
  - **USE ALL PRODUCTS DURING TRAINING IF PLANNING TO TAKE FROM COURSE**





During Run- Carbs

- For short runs <1 hour, fueling isn't neccessary but pay attn to how body feels & intensity of run
- <2.5 hours: 30-60+ g carbs/HOUR
- >2.5 hours: 60-90+ g/carbs/HOUR
  - During long runs too!
  - Hit this within first hour & every hour after
  - Carb-rich sports drink + gels/chews/food
  - Choose a blend of carb types for better absorption & tolerance
  - Maltodextrin + fructose or fructose + glucose



Vanilla Bean Energy Gel

Naturally Flavored

Nutrition Facts

8 servings per container

Serving size
1 Packet (32g)

Calories per serving 100

Amount Per Serving	%Daily Value*
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 60mg	**3%**

Amount Per Serving	%Daily Value*
Total Carbohydrate 22g	**8%**
Dietary Fiber 0g	**0%**
Total Sugars 7g	
Includes 7g Added Sugars	**14%**
Protein 0g	

Vitamin D 0mcg 0% • Calcium 20mg 2% • Iron 0mg 0%
Potassium 40mg 0%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: MALTODEXTRIN, WATER, FRUCTOSE, L-LEUCINE, POTASSIUM CITRATE, SODIUM CITRATE, CITRIC ACID, CALCIUM CARBONATE, L-VALINE, SEA SALT, NATURAL FLAVOR, GREEN TEA (LEAF) EXTRACT (CONTAINS CAFFEINE), GELLAN GUM, L-ISOLEUCINE, SUNFLOWER OIL, SODIUM BENZOATE (PRESERVATIVE), POTASSIUM SORBATE (PRESERVATIVE).

During Run- Carbs

- For a 2 hour half marathon:



+



1 whole pack of Noogs chews= 38 g carbs

6 cups of Tailwind Rapid Hydration per hour= 13 g carbs

= 51 g carbs

- Eat 6 chews every 25-30 mins (for 1 whole pack/hour) + drink 6 cups of Tailwind Rapid Hydration per hour on course (can double up on course)
- Work on building up to your targets over time DURING training!

During Run- Fluids

- Fluids
  - Goal= avoid dehydration (>2% loss of body weight) AND avoid overhydration
  - Signs of dehydration:
    - Fatigue, headaches, nausea, vomiting, dark colored urine, dry mouth and skin and feeling really thirsty.
    - Increased body temp, at risk for heat exhaustion & heat stroke, makes your heart work harder, use more glycogen stores
  - Dangers of overhydrating (especially of dilute fluids like water)= exercise-associated hyponatremia
    - Signs: nausea, vomiting, headache, weakness, lethargy, seizures, death





During Run- Fluids

- Runs <1 hr: not necessary BUT know your body & may be necessary especially in hot, humid weather
- Runs >1 hr: you better be hydrating!!
    - Based on individual sweat rate (through sweat testing)
    - General sports rec is 14-27 oz/PER HOUR
- Hit goal within the first hour & every hour after
- Start sipping within the first 10-15 mins of running, relying on thirst isn't always reliable
- During training, practice & build to goal



During Run- Electrolytes

- Electrolytes
  - Sodium, Chloride, Potassium, Magnesium, Calcium
  - We lose the most sodium in our sweat
    - Losses can vary wildly between runners (200-2300+ mg/L)
      - Average sweat loss is 1-3L/hour
      - Average sodium sweat loss is 900-1000 mg/L



During Run- Sodium



- Important with sweat losses & to prevent exercise-associated hyponatremia
- How much do we need?
  - Based on individual sweat electrolyte composition (through sweat testing)
  - General sports rec: 300-600+ mg/hr of sodium during running
  - Heavy, salty sweaters: 600-1000+ mg/hr
- Runner’s daily sodium needs are generally much higher than general pop

During Run- Sodium

- Signs that you're a salty sweater
  - Salt crystals on skin, gritty feeling
  - White stains on the inside brim of hat
  - White stains on clothes





During Run- Sodium



- Higher sodium gels:
  - Crank Sports E-gels
  - Huma Gel Plus
  - Victus
  - Amacx
  - Carbs Fuel *__Salted__* Gel

Post-Run Nutrition

- Goal: provide your body with nutrients to support your recovery
  - Important after each workout but especially after long runs and high intensity efforts
- Intentional nutrition right after exercise= better exercise recovery
- Delayed nutrition after exercise= poor recovery & increased injury risk
- 2 options:
  - 1- Snack followed by meal
  - 2- Meal but get it in asap
- Plan ahead & be prepared!

Post-Run Nutrition

- Example:





Post-Race Nutrition

- Have a plan for refueling & hydration after the race- get carbs + protein + fluids and electrolytes in ASAP
  - Snack followed by a meal
- What to eat the rest of the day
  - Meals: Hard training plate- 50% grains/starch + 25% protein + 25% color + fat
  - Snacks: carb + protein
  - Practical hunger
    - No appetite: small frequent meals & liquid nutrition
- What to eat next 3 days:
  - EAT LIKE YOU'RE STILL HALF MARATHON TRAINING
    - Meals: Hard training plate
    - Snacks: carb + protein
- Then adjust nutrition based on what exercise looks like & goals

Carb Loading

- Race- specific
- Benefits performance for races that are >90 mins- HALF MARATHONS!
- Goal: optimize glycogen stores which has been show to..
  - Improve endurance performance by 2-3%
  - Extend the duration of steady state exercise by 20%
  - Postpone fatigue
  - Help you avoid hitting the wall during racing (along with a strong intra-race nutrition plan)



Carb Loading

- Guidelines:

Sports Nutrition Guidelines

Day	Training	Carbohydrate
1	Rest/light shake out jog	8-12 g/kg/day
2	Rest/light shake out jog	8-12 g/kg/day
3	Rest/light shake out jog	8-12 g/kg/day
4	Race day	Follow plan for before, during and after long run/race

Carb Loading

- Example: A 170 lb runner= 77 kg x 8-12 g/kg/day= 618-924 g/day
- Plan for 3 meal/day + morning snack + afternoon snack + carb-rich liquids at all meals & snacks

	Breakfast	AM Snack	Lunch	PM Snack	Dinner
Day 1 **Total carbs:**					
Day 2 **Total carbs:**					
Day 3 **Total carbs:**					
Day 4 RACE DAY					

Carb Loading



- Tips:
  - Choose low fiber carbs + protein + moderate fat + some color
    - Your plate should not be super colorful
  - Not intuitive, use practical hunger
  - Drink carbs
  - Add honey or maple syrup
  - NOT the time to focus on weight
  - Normal to feel stiff and heavy
  - Practice 1 day of your plan before a long run & make adjustments before race week

Race Day Nutrition Checklist

- 3-day carb load
- Breakfast & timing morning of
- During race fuel, fluid & electrolyte plan- amounts & timing
  - If taking cups on course know how many you need to take to meet hydration & electrolye needs
- Post-race fueling & hydration
- Eating 3 days post-race

Questions?


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