

HYDRATION AND NUTRITION: Fuel and Fluid for your Engine

1. Introduction
 - a. This is **CRUCIAL**—no successful runner messes this up
 - b. It's **SIMPLE** and something you can control
2. An Image—Engine of a Car needs Gas and Fluid otherwise it breaks down-**SIMPLE**
3. **HYDRATION- 4 considerations**
 - a. **Safety**—You can **DIE** if you are poorly hydrated under extreme heat
 - b. **Performance**- a 2% loss of fluids due to sweat leads to decline in performance.
 1. Blood is fluid—loss of fluid through sweat thickens blood- it's harder for heart to pump blood out to muscles- they deplete of oxygen and don't work as well.
 - c. **How Much?** – Several ways to consider amounts
 1. **IN ADDITION TO NORMAL**—16 oz before, 16 oz during 16 oz after
 2. 1/3 body weight in ounces is goal for workout before, during and after
 3. Urination test—color of urine should be light—not clear too much water, Not yellow -too little fluids
 4. Too much is not good either—flushes all electrolytes out
 - d. What to drink?
 1. Replace Sodium and Potassium lost in sweat Sports Drinks will do this
 2. NOT just water alone—no Sodium and Potassium
 - e. When?—Aside from all day?
 1. Try to hydrate properly and stop 15 min before exercise
 2. Trick—take swallow—swish in mouth-spit—Scientific—tricks mind but you do not feel full after.
- 4 **NUTRITION-Fuel for your Engine—NO GAS NO GO**
 - a **What? Roughly 60 % Carbs 20% protein 20% fat**
 1. **NO NON-FAT DIETS**-you need Fat for injury prevention and energy
 2. **Complex Carbs**(whole grains, veggies, potatoes) provide your key energy source
 3. **Protein**-rebuilds and strengthens muscles, replaces damaged cells from work
 - B **When? Varies depending on workout or race times**
 1. A big meal should be 2 hours before race
 2. For am races and workouts—21-50 grams of carbs within 2 hours(bagels, banana, wheat toast, energy bars)
 3. Post-race or workout is crucial too—within 15 minutes—low fat chocolate milk or sports drinks with some protein too
 4. Within 2 hours of Race or workout—fuller meal
 - c. snacks—healthy—fruit, veggies, smoothies!! Nuts, eggs, protein bars

- d. **Do a Food Log—Take a week and write down what you eat and drink daily including snacks—Then go to a website and found a calorie/nutrition counter And crunch your numbers to see how you are doing with the 60 20 20 goals**

DON'T MAKE EXCUSES-There are none

If you think you can go without water (it makes me full!) YOU CANT

If you think you can go without fuel YOU CANT

Experiment, explore but work at it

RESOURCES

www.active.com Nutrition Tips for New Runners by Scott Gray

Nutrition for Runners by Jeff Galloway

Performance Nutrition for Runners-Runners World