

SJ Fit NUTRITION AND HYDRATION TALK 2019

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I. INTRODUCTION:

A. Best performance on race/long run days results from DAILY maintenance including:

1. Sleep, Stress-reduction, mindfulness
2. Consistent Hydration
3. Healthful meal-planning

There is nothing you can do on race day that will make up for 6 days of poor maintenance

B. Find what works for you

- a. Start Now to experiment. You have 25 weeks.
- b. Ask coaches
- c. Nothing new right before race day

II. HYDRATION

A. Keeping hydrated optimizes performance

1. Fluid loss of 2% of body weight lowers endurance, increases body temperature, and increases exertion
2. Symptoms of dehydration: Fatigue, muscles soreness, mood changes, light-headedness, headaches, confusion
3. MAINTENANCE: Drink Daily, but especially in the days BEFORE a run. Amount per day= body weight (lbs) / 2 = ounces per day
4. BEFORE RUN (not too much so you don't slosh around):
 - a. 30 minutes before a run drink 4 to 6 oz
 - b. 60-90 minutes before a run drink 16 oz
5. DURING RUN: Smaller sips regularly (Again, avoid the slosh)

- a. 4 to 6 oz every 20 to 30 minutes
 - b. Or 1 oz (couple gulps) every ½ mile marker
6. AFTER RUN: Replace 110% of what you lost
- a. Weigh yourself before and after run
 - b. For each pound lost, drink 2 cups of water throughout the rest of the day

1 POUND = 16 OZ (2 cups) of water

III. ELECTROLYTES

- A. Important to maintain water balance in and out of cells, proper muscle and organ function, and to retain fluids.
- a. Symptoms of electrolyte deficiency: Muscle cramps, fatigue, headache, dizziness, vomiting
- B. Need to replace Electrolytes
- a. For longer (1 hour +), hotter, humid, intense runs
 - b. Lose mainly sodium in sweat, but also potassium, Calcium, Magnesium, and Phosphate
 - c. Maintain Osmolality (Concentration of dissolved particles in blood and urine). **Plain water won't help**
 - i. If your electrolytes are low, your body won't take in water because plain water will dilute electrolytes even more.
Need to replace electrolytes so water can follow.
- C. What to Use to Replace Electrolytes
- a. Powders, tablets, capsules, drinks, shots, beans.
 - b. Beware of sugary drinks that can cause nausea

IV. FOOD

- A. DAILY Healthful Meal-planning:

- a. Balance of Macronutrients (CHO, Protein, Fats)
- b. Plate Method
- B. Carbohydrates or “starches”=Energy source
 - a. Break down into sugars to fuel your cells
 - b. Unused gets stored as glycogen in muscle and liver
 - c. Choose high quality, complex, or “SLOW” carbohydrates:
Whole grains, beans, fruits, and vegetables, high fiber
- C. Protein: Building blocks for growth and repair
 - a. Choose lean, low fat
 - b. Plant based: Quinoa, nuts, seeds, legumes, soy, lentils
- D. Fats:
 - a. Necessary for vitamin absorption, nerve and cell function
 - b. Stored form of energy
 - c. Good choices: polyunsaturated and Omega 3 fatty acids
(fish, vegetable oil, nuts, flaxseed, leafy veggies), nuts,
seeds, avocado
- E. BEFORE RUN
 - a. “FAST” carbs (aka simple or refined) easily digestible-
pasta, white rice & bread, potatoes, yogurt, fruit
 - b. Low fiber, low fat to avoid indigestion
 - c. 30-60 grams of carbs taken 30-60 minutes before run
 - d. Examples: PB on toast, bananas, Bagel, Cereal + Milk
- F. DURING RUN, especially if over 90 minutes
 - a. 100-250 calories per hour. Use Fast carbs
 - b. Take first carbs 30 minutes into run to allow for
absorption
 - c. Small amounts: 100 calories every 30 minutes

d. Examples: Potatoes with salt, peanut butter-filled pretzels, beans, chews, bloks, Gu, Sports drinks.

G. AFTER RUN: Restock glycogen stores and repair muscles

a. Within the first 30 to 45 minutes

b. Eat Protein plus carbohydrate

i. Ratio 1:3 or 1:4 grams of Protein to grams of Carbs

c. Examples: Chocolate Milk, PBJ Sandwich, Yogurt + granola, Banana or Oranges (potassium) with pita and hummus, omelet and potatoes

H. Other considerations

a. Carb-loading? Not effective to have a big meal the night before. Instead, build up stores of glycogen gradually over preceding days by increasing carb intake (45-65% of daily calories). Over-loading leads to bloating and indigestion.

b. NO NEW FOODS right before race day

i. Don't try out samples at the Expo