

Roughing It

Eating for performance in endurance hikes

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PrecisionNutrition 

Objectives

- **Describe appropriate preparation strategies**
- **Identify specific hydration strategies to improve performance during day hikes**
- **Identify specific nutrition strategies to improve performance during day hikes**
- **Describe effective recovery strategies**
- **Describe individualization strategies**

Water

- How much do you need?
 - Estimating fluid needs based on body weight
 - 1 oz. (30mL) per kg of body weight
- Symptoms of dehydration include:
 - thirst
 - dry skin
 - fatigue and weakness
 - increased body temperature
 - muscle cramping
 - headaches
 - nausea
 - darker-colored urine
 - dry mucous membranes (mouth, nose, eyes)
- Severe dehydration can also include:
 - muscle spasms
 - vomiting
 - dark urine
 - vision problems
 - loss of consciousness
 - kidney and liver failure

Hydration chart

1		Good
2		Good
3		Fair
4		Dehydrated
5		Dehydrated
6		Very dehydrated
7		Severe dehydration

Hydration Strategies

- Before:
 - Make sure you are meeting your fluid goals in the days leading up to your hike
 - Consume about 500mL of fluid at least 30 minutes prior to exercise/hike
- During:
 - Fluid and electrolyte replacement
 - Needs will vary: temperature, training intensity, body size, etc.
 - Consider carbohydrate/electrolyte solutions for prolonged activity
 - Consider protein
- After: rehydrate and refeed-eat well balanced meal 1-2 hours after hike

What to Eat?

- Nutrition goals:
 - sustain energy
 - boost performance
 - hydrate
 - preserve muscle mass
 - speed recovery
- Eat a meal within 3 hours prior to your hike

Protein, Carbohydrates and Fats 2-3 hours prior

- **Protein**

- Helps maintain or even increase muscle size
- Decreases markers of muscle damage
- Provides Amino Acids

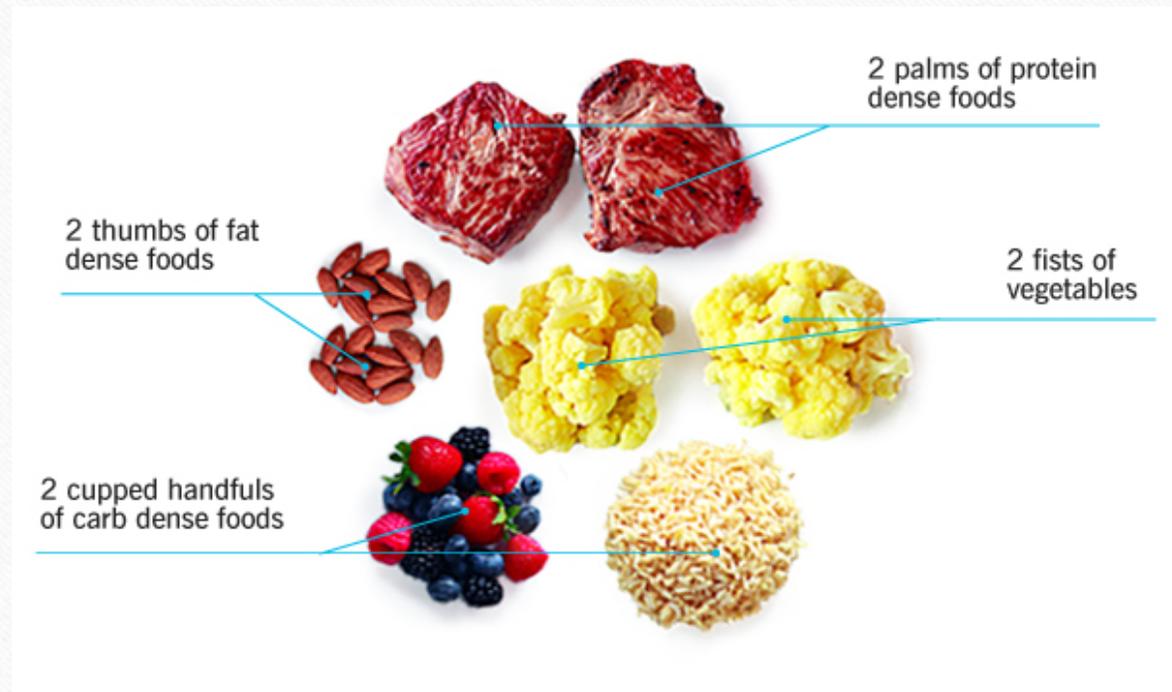
- **Carbohydrates**

- Fuels performance, aids recovery
- Preserves muscle and liver glycogen
- Stimulates the release of insulin

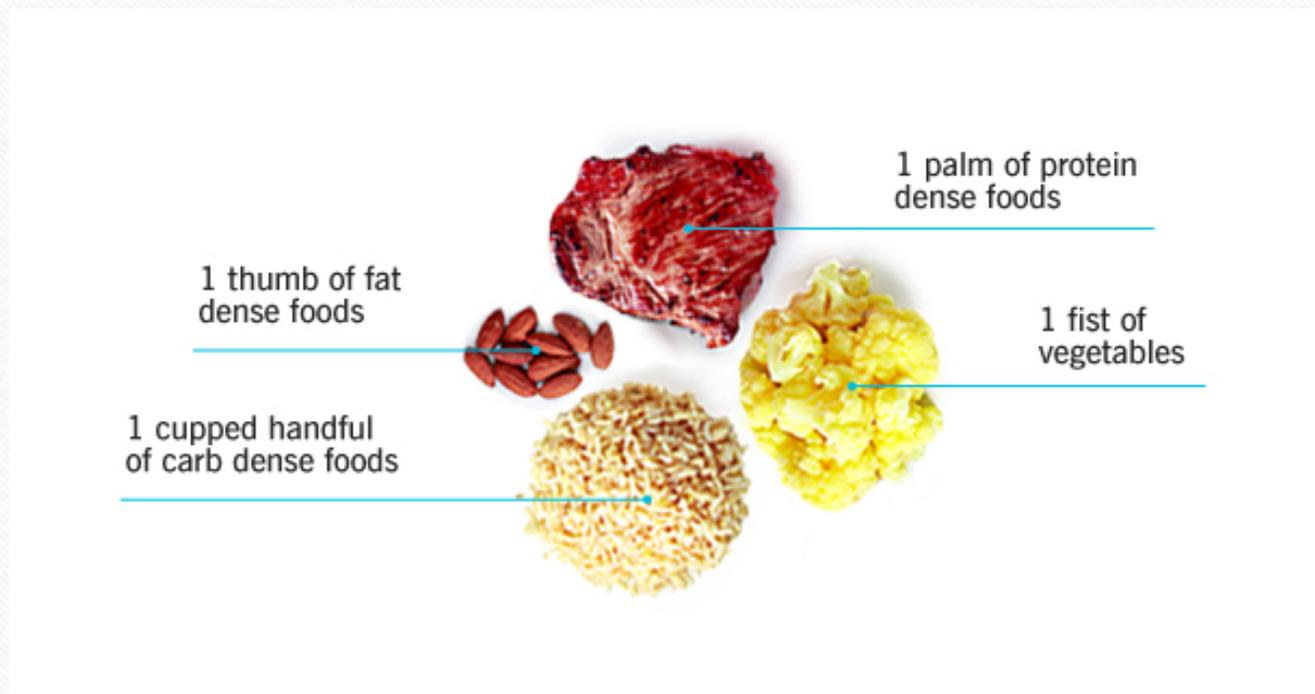
Protein, Carbohydrates and Fats 2-3 hours prior

- Fats
 - Neither improve or diminish sport performance
 - Slow digestion
 - Provide some vitamins and minerals

Men



Women



0-60 minutes prior

- Faster digesting and easily absorbed
- 1 scoop protein powder
- 1 fist of veggies (spinach works great in smoothies)
- 1-2 cupped handfuls of carbs (berries or a banana work great)
- 1 thumb of fats (like mixed nuts or flax seeds)
- low-calorie beverage like water or unsweetened almond milk

Here's a delicious example:

1 scoop chocolate protein powder

1 fist spinach

1 banana

1 thumb peanut butter

8 oz. chocolate, unsweetened almond milk

Sweet Potato Protein Bars



Ingredients

1 large cooked sweet potato

½ cup (125 mL) of vanilla pea protein powder (or rice protein, or casein protein powder)

1 tbsp (15 mL) of date syrup (or agave syrup or honey)

1 tbsp (15 mL) of coconut flour

1 tbsp (15 mL) of golden flaxseed (a.k.a. linseed)

2 tbsp (30 ML) of milk or coconut milk

½ bar of 90% dark chocolate

Serving size

4 bars

Preparation time

75 minutes total (15 min preparation time + 60 min freezing time)

Instructions

In a bowl, blend all the ingredients (except for the chocolate) together. Shape the mix into four little bars and put aside.

Melt your chocolate either in a *bain marie* (i.e. a glass bowl on top of a pot of boiling water) or in a small non-metal bowl, using low power, in the microwave.

Once melted, dip your bars in the chocolate until they're fully coated. Place them on a cookie sheet lined with wax or parchment paper, or into a large plastic or freezer-safe glass container.

Transfer them to the freezer for an hour, or the fridge overnight, and voilà!

Questions?



Eat, move, and live... better.