



Why Eat Anything?



- ▶ If your event or training is in the morning, your liver glycogen and blood sugar are likely to be low
- ▶ Exercising with low blood sugar may result in early fatigue, lightheadedness and generally poor performance
- ▶ While a pre-exercise meal won't increase your glycogen stores, (you've got to depend on what you already have), it will elevate blood glucose, providing energy to working muscles. This has a significant impact on exercise lasting over one hour.
- ▶ Hunger impairs performance – eating first can prevent this.

What Kind of Food to Eat?

Practice good nutrition every day – Pre-competition meals and snacks **ONLY** have an impact if you are eating properly – they can't make up for poor overall nutrition or other unhealthy patterns.

HIGH CARBOHYDRATE FOODS ARE BEST BECAUSE:

- ▶ They provide ready energy to working muscles
- ▶ They are digested quickly
- ▶ They fuel anaerobic and aerobic activities, especially those at higher intensities.

LIQUID MEALS WORK WELL FOR SOME ATHLETES BECAUSE:

- ▶ They empty quickly from the stomach
- ▶ They can be taken closer to event time
- ▶ They are a good source of carbohydrate
- ▶ They work well for the “nervous athlete” whose digestion is slowed by stress, and has trouble with solid food before competing
- ▶ They are perfect for multi-event competitions (like triathlons), tournaments and day-long activities

WHY NOT HIGH PROTEIN?

- ▶ It doesn't provide quick energy
- ▶ It elevates resting metabolism, which could impair the body's ability to cool off – this is problematic in hot weather
- ▶ Excess protein contributes water loss and may accelerate dehydration
- ▶ Many high protein foods are also high in fat, which slows digestion further

How Much to Eat and When?

- ▶ 3 to 4 hours prior to exercise allows enough time for a meal to leave the stomach
- ▶ The size of the meal (or snack) should decrease the closer it is taken to the event

AMOUNT		TIMING
3-5 grams of carbohydrate/kg	150-300 grams (≥600 calories)	3-4 hours before event
2 grams of carbohydrate/kg	100-200 grams (400-500 calories)	2-3 hours before
1 gram of carbohydrate/kg	<100 grams (200-400 calories)	1-2 hours before
Liquid meal		1-2 hours before
.5 gram/kg or less	200 calories or less	1 hour or less

Lean sources of protein are fine to add to the pre-game meal in moderate amounts

RECOMMENDED FOOD CHOICES			
• breads	• cereals	• bagels	• skim milk
• fruits	• potatoes	• rice	• low-fat yogurt
• juices	• pasta	• fig bars	• low-fat muffins

Foods To Avoid Pre-Game

Try new strategies during practices, to see how they feel. Never try a new eating plan before a competition or game.

- ▶ High fat foods – they take too long to digest and make most people feel sluggish
- ▶ High fiber foods may cause stomach distress; save these for another time of day
- ▶ Gas forming foods such as broccoli, Brussels sprouts, cabbage, onions, beans
- ▶ Salty foods may cause a bloated feeling
- ▶ Caffeinated beverages exacerbate water losses and may cause muscle tremors and heart palpitations

References:

- 1) Coleman, E., Nelson Steen, S. *The Ultimate Sports Nutrition Handbook*. Palo Alto: Bull Publishing 1996
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- 4) McCardle, Katch & Katch *Sports & Exercise Nutrition*. Philadelphia: Lippincott, Williams & Wilkins, 1999
- 5) Rosenbloom, C (ed) *Sports Nutrition, A Guide for the Professional Working With Active People*. Chicago: American Dietetics Assn. 3rd ed. 2000.