

## NUTRITIONAL RECOVERY SNACKS



**MADE ESPECIALLY FOR  
ATHENS' VARSITY VOLLEYBALL**

## CARBOHYDRATES & PROTEIN

Research shows that combining protein with carbohydrate within thirty minutes of exercise nearly doubles the insulin response, which results in more stored glycogen.

One study found that athletes who refueled with carbohydrate and protein had 100 percent greater muscle glycogen stores than those who only ate carbohydrate. Insulin was also highest in those who consumed a carbohydrate and protein drink.

Protein provides the amino acids necessary to rebuild muscle tissue that is damaged during intense, prolonged exercise. It can also increase the absorption of water from the intestines and improve muscle hydration. The amino acids in protein can also stimulate the immune system, making you more resistant to infections (colds).

<http://sportsmedicine.about.com/cs/nutrition/a/asm081403.htm>

## TOURNAMENT & POST PRACTICE SNACKS



### IDEALLY:

- 10 grams of protein
- 100-150 grams of carbs
- Moderately high to high glycemic carbohydrates

## THE IMPORTANCE OF PROPER NUTRITION

Young volleyball players tend to have large energy needs to support growth and lean tissue development. Add the carbohydrate requirements of a heavy training schedule and the extra carbohydrates required for building muscle, and elite volleyball players end up with a large daily requirement for carbohydrate. All volleyball players need to consume suitable amounts of nutrient-dense carbohydrate foods. Players in heavy training need to start recovery nutrition tactics immediately after each training session. Ideally, players should aim for nutrient dense carbohydrate foods that contain protein to help facilitate muscle tissue growth and repair. Recovery snacks should be combined with fluid to replace any fluid lost during the session.

Written by: AIS Sports Nutrition, last updated August 2009. © Australian Sports Commission

### WHOLE STRAWBERRIES (2 CUPS)

- PROTEIN – 1.93g
- CARBS – 22.12g

### LOW-FAT FRUIT YOGURT (8OZ)

- PROTEIN – 9.92g
- CARBS – 43.24g

### GRAPE JUICE (1 CUP)

- PROTEIN – 0 g
- CARBS – 36.38 g

**TOTAL PROTEIN: 11.85**

**TOTAL CARBOHYDRATE: 101.74**

### TRAIL MIX (1/2 CUP)

### CHOCOLATE CHIPS, NUTS, SEEDS

- PROTEIN – 10.3g
- CARBS – 33.68g

### RAISINS (SMALL BOX)

- PROTEIN – 1.32g
- CARBS – 34.05g

### 2 FRUIT LEATHER ROLLS (LARGE)

- PROTEIN – .04g
- CARBS – 36.04g

**TOTAL PROTEIN: 11.66**

**TOTAL CARBOHYDRATE: 103.77**

**PRETZEL TWISTS (~10)**

- PROTEIN – 6.20 g
- CARBS – 47.86 g

**2 CUP OF CARROTS**

- PROTEIN – 2.26g
- CARBS – 22.69g

**1/3 CUP HUMMUS**

- PROTEIN – 3.59g
- CARBS – 14.85g

**16.9OZ BOTTLE OF NESTLE****LEMON ICE TEA**

- PROTEIN – 0g
- CARBS – 47.9g

**TOTAL PROTEIN: 11.05****TOTAL CARBOHYDRATE: 133.3****GM HONEY NUT CLUSTERS****CEREAL (1 CUP)**

- PROTEIN – 4.39g
- CARBS – 48.56g

**1% MILK (3/4 CUP)**

- PROTEIN – 6.40g
- CARBS – 9.14g

**RAISINS (SMALL BOX)**

- PROTEIN – 1.32g
- CARBS – 34.05g

**TOTAL PROTEIN: 12.11****TOTAL CARBOHYDRATE: 91.75****1 BANANA (8")**

- PROTEIN – 1.48g
- CARBS – 31.06g

**4" CINNAMON RAISIN BAGEL**

- PROTEIN – 10.29g
- CARBS – 57.96g,

**ORANGE JUICE (1 CUP)**

- PROTEIN – 0.5g
- CARBS – 33.39g

**TOTAL PROTEIN: 11.77****TOTAL CARBOHYDRATE: 122.4****1/4 BAG OF PITA CHIPS**

- PROTEIN – 7.72g
- CARBS – 44.71 g

**1/3 CUP HUMMUS**

- PROTEIN – 3.59g
- CARBS – 14.85g

**16.9OZ BOTTLE OF NESTLE****LEMON ICE TEA**

- PROTEIN – 0g
- CARBS – 47.9g

**TOTAL PROTEIN: 11.31****TOTAL CARBOHYDRATE: 107.46****CHOCOLATE MILK (1 CUP)**

- PROTEIN – 8.80g
- CARBS – 26.85g

**4 GRAHAM CRACKERS**

PLAIN, HONEY, OR CINNAMON

- PROTEIN – 3.86g
- CARBS – 43.01g

**RAISINS (SMALL BOX)**

- PROTEIN – 1.32g
- CARBS – 34.05g

**TOTAL PROTEIN: 12.66****TOTAL CARBOHYDRATE: 103.91****1 LG. BAKED POTATO**

- PROTEIN – 6.28 g
- CARBS - 63.03 g

**1 TBSP SOUR CREAM**

- PROTEIN – .25 g
- CARBS - .35 g

**CORN ON THE COB (W/BUTTER)**

- PROTEIN – 4.47 g
- CARBS – 31.94 g

**TOTAL PROTEIN: 11****TOTAL CARBOHYDRATE: 95.32**