

Volleyball: nutrition and sugar free beverage assignment



Volleyball is a quick, explosive, power driven sport. Energy, primarily anaerobic muscle energy, is used for serving, spiking, blocking, digging, and rolling. Long rallies and training sessions are fueled by a combination of anaerobic glycolysis and aerobic metabolism. Protein, fats, and carbohydrates from a balanced diet and the breakdown of glycogen in muscles is what fuels aerobic metabolism. If you want the best performance, you need to have fuel for these processes before, during, and after the sport.

According to Fitday. com, with my age, weight, height and gender I should burn 208 calories per hour playing competitive volleyball. For noncompetitive play, I would burn 138 calories per hour. I typically will play more competitive volleyball, but for the sake of those that play noncompetitively, I included it. A high carbohydrate diet of approximately 50-65% of total calories fuels both anaerobic and aerobic energy needs.

The type of high carbohydrate foods that meet these needs include fruits, veggies, whole grain cereals, breads, and pastas, and low-fat dairy. Mineral rich carb choices should be advised to manage electrolyte losses from sweating. Ten to twenty five (10-25%) of calories from protein provides additional power strength for muscle repair. Main meal foods such as lean meats, chicken, turkey, fish, nonfat cheeses, dairy and egg whites, egg beaters, protein fortified smoothies or trail mixes can meet these daily needs.

Less than 30% from healthy fats are recommend for managing ideal competitive weights and can be met through “ seasonings” or snacks of nuts, nut butters, fish oils, avocado, soy, and vegetable oil based salad

dressings. Most importantly, the typical volleyball player can lose up to one or more pounds during practice or the equivalent of 16 oz of fluid. Because of this, a minimum of 2 cups of fluid prior to playing, 4-6 oz of fluid every 15 minutes of play and an additional 2 cups of fluid after practice should be drank to manage symptoms of dehydration.

This is especially important if you are playing in warmer environments like outdoors or a poorly cooled gym. I found a neat meal plan specifically for volleyball players: Morning Citrus fruit or juice or cup of strawberries or blueberries Egg white omelet with green veggies, tomato and nonfat cheese 1 small bowl oatmeal, whole grain cereal or slice of whole grain bread 2 tsp nut butter Water AM snack Low fat breakfast bar or sport bar Water or sugar free beverage Afternoon Turkey wrap or sandwich with low fat whole wheat tortilla or bread 3-4 oz turkey lettuce/tomato 2 tsp mayo 1 small bag baked chips 1 apple or pear Water or sugar free beverage PM snack Fresh fruit smoothie with low fat yogurt Or low fat yogurt with fresh fruit and granola sprinkle Water or sugar free beverage Evening Grilled chicken salad with whole grain roll or Fresh grilled fish with veggies and baked potato or Sushi with soup and salad or Pasta with veggies and light red sauce Water or sugar free beverage Evening snack Frozen low fat yogurt with fresh fruit topping or air blown popcorn with a parmesan sprinkle