



“Looking back on the four years that I've been here some of the crucial things I felt that worked the best when recovering from workouts and seeing the best results are working out as hard as possible in the off season, eating healthy, protein shakes and what not after workouts, and rest.”

- Kevin Knack, Senior Baseball player

Baseball Nutrition Plan

- Kayla Slater, NFP Educator

Tips & Tricks

- Building Muscle – excess protein does not build new muscle

- Dietary Supplements – should I take dietary supplements?

- Hydration! – before, during, and after

- Alcohol – do's and don'ts

- Eating on the Road – what to eat after games when on the road

- Timing of meals and snacks is important to have enough energy for workouts and recover muscles

Nutrition goals for collegiate baseball players:

- ▶ Meet demands for energy, fluid, and nutrients imposed during low endurance, precision training
- ▶ Achieve and maintain levels of body mass, muscle mass, and body fat appropriate for athletic performance and good health
- ▶ Fuel and hydrate adequately to delay fatigue during training and competition
- ▶ Maintain normal fluid balance
- ▶ Promote recovery after training and competition with adequate fuel, food, and fluid
- ▶ Maintain and promote health and wellness
- ▶ Prevent illness and injury

- ▶ Support rehabilitation from injury

(Burke 2007, ADA 2009, Sawka 2007) – NCM

Energy:

- ▶ Carbohydrates
 - ▶ Main fuel for energy
- ▶ Protein
 - ▶ Little used, carbs more efficient to use for energy
- ▶ Fat (low)
 - ▶ Remainder of energy to meet energy needs
- ▶ Fiber

Nutrients:

- ▶ Macronutrients and micronutrients
- ▶ Carbohydrates - for 180 lbs., 572g/day

- ▶ Protein – for 180 lbs., up to 139g/day
- ▶ Fat (low)
- ▶ Fiber
- ▶ Supplements – not encouraged but can be used if allowed by NCAA and player meets with an RD

Fuel before training/workouts (off season and during season):

- ▶ Eat enough to limit hunger during workouts and provide enough energy
- ▶ Pre-exercise meal should include:
- ▶ Carbohydrates
 - 5-7 g/kg body weight: for 180 lbs., 572g/day (more during off season)
 - 3-4 hours and/or 30-60 min before competition
 - Foods: whole wheat breads; whole wheat pasta

- ▶ Protein – for 180 lbs., 139g/day (possibly more during off season)
 - Foods: meat (chicken; lean beef)
- ▶ Fat
 - Good fats (omega 3s) ex: walnuts, almonds, peanuts
- ▶ Fiber
 - Whole grains

Recovery:

- ▶ Eat within 15-60 min
- ▶ Fluids - rehydrate with sports drink
- ▶ Carbohydrates – 0.65 g/kg body weight within 30 min.
 - ▶ Minimize fatigue
 - ▶ Restore muscle glycogen
- ▶ Protein (especially important during off season)

Maintaining Fluid Balance:

- ▶ Hydrate! Hydration is very important!
- ▶ Drink water before, during, and after training/game
- ▶ Replace at regular intervals
- ▶ Do not want to lose more than 2 lbs. – for every 1 lb. lost, drink 3 c. water or 16-24 oz. for every 1 lb. lost
- ▶ Best way to check dehydration is color of urine

- ▶ Sports drinks with electrolytes are encouraged (Gatorade)

Building Muscle (during off season):

- ▶ Protein
- ▶ 1.2-1.7 g/kg body weight
- ▶ No more than 1.7g/kg body weight will be beneficial
- ▶ Meals
 - ▶ Balanced
 - ▶ High in carbs, moderate in lean protein and fat
 - ▶ Extra calories – 300-500 calories/day *eat more so do not use protein as fuel
- ▶ Timing:
 - ▶ important – recovery
 - ▶ before strength training; eat every 3-4 hours

Pre-exercise snacks/meals (off season and during the season):

- ▶ On campus (meal):
 - ▶ Stir fry with chicken and vegetables
 - ▶ Whole wheat pasta and a side of vegetables or salad
 - ▶ Whole wheat turkey sandwich
 - ▶ spinach tuna wrap

- ▶ Off campus (snacks):
 - ▶ Chocolate milk
 - ▶ Granola
 - ▶ Trail-mix
 - ▶ Fruit yogurt
 - ▶ Meal replacement shakes

Post- Exercise snacks/meals:

- ▶ Snacks:
 - ▶ Yogurt
 - ▶ Bagel with peanut butter
 - ▶ Chocolate milk
- ▶ Meal (off campus)
 - ▶ Grilled chicken sandwich
 - ▶ Turkey sub
 - ▶ Salad (grilled chicken; light dressing on side)

References

American Dietetic Association – SCAN. (2010). *Gaining Weight – Building Muscle* (Issue 8). Retrieved from http://www.scandpg.org/local/resources/files/2010/SD-USA_Fact_Sheet_Gaining_Weight_Building_Muscle_Jan_2010.pdf

American Dietetic Association – SCAN. (2009). *Eating Before Exercise* (Issue 3). Retrieved from http://www.scandpg.org/local/resources/files/2009/SD-USA_Fact_Sheet_Eating_Before_Exercise_Apr09.pdf

American Dietetic Association – SCAN. (2010). *Dietary Supplements* (Issue 11). Retrieved From http://www.scandpg.org/local/resources/files/2010/SD-USA-Fact-Sheet_Jul-2010_Dietary-Supplements.pdf

American Dietetic Association – SCAN. (2010). *Hydration* (Issue 12). Retrieved from http://www.scandpg.org/local/resources/files/2010/SD-USA_Fact_Sheet_Performance_Hydration_Jul_2010.pdf

American Dietetic Association – SCAN. (2010). *Alcohol and Athlete Performance* (Issue 9). Retrieved From http://www.scandpg.org/local/resources/files/2010/SD-USA_Fact_Sheet_Alcohol_and_Athlete_Performance_Jan_2010.pdf

American Dietetic Association – SCAN. (2009). *Eating on the Road* (Issue 2). Retrieved from http://www.scandpg.org/local/resources/files/2009/SD-USA_Fact_Sheet_Eating_on_the_Road_Apr09.pdf

My Plate. (n.d.). Retrieved November 21, 2011 from <http://www.choosemyplate.gov/>

USDA. (n.d.). Optimal Dietary Intake Guide. Retrieved November 21, 2011 from <http://www.usda.org/diet/?gclid=CMA11eu3xqwCFRAj7AodxWVYpQ>

