Performance Nutrition 101

The Basics of Fuelling Your Mind & Body

Kyle Harris, MS-AES, MS-LA

Group Training Coordinator & Hitting/Pitching Instructor

Bob Harris Baseball School



Contact Information:

Email: battersbox@yahoo.com

hossjob13@gmail.com

Twitter: @hossjob Instagram: @hossjob





FIRST PRINCIPLES OF NUTRITION & Then Some...

- Disease Prevention
- Development of Body systems & Organs
- Growth & Repair
- Health, Well-being,Longevity



- Fuelling Cognition
- Fuelling Physical Performance
- Recovery
- Enjoyment

PERFORMANCE NUTRITION GOALS

- 1. Optimize Recovery
- 2. Fuel Performance
- 3. Improve Performance
- 4. Long Term Lean Body Mass Management
 - a. Weight Gain
 - b. Weight Management
 - c. Weight Loss
- 5. Caloric Balance (Goal Determined)
 - a. Calories = Units of Energy
 - b. Balance Energy in VS Energy Out
 - i. Goal Dependent

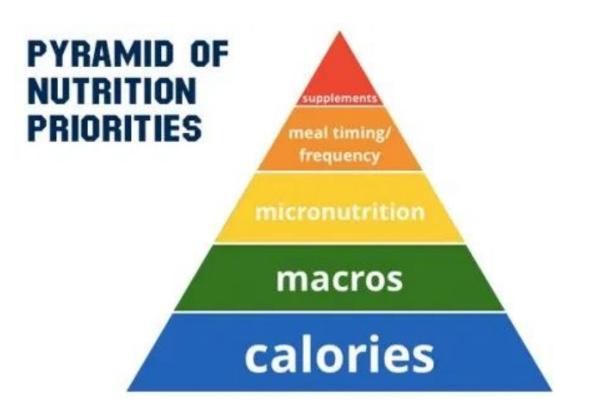








NUTRITION HIERARCHY





WEIGHT LOSS:

 Eat fewer calories than you burn

WEIGHT GAIN:

 Eat more calories than you burn

WEIGHT MANAGEMENT:

 Calories in equal calories out



CALORIC MAINTENANCE FORMULA:

Body Weight in Pounds x (10 + the number of hours you train weekly)

Ex: 185lb athlete that trains 6 hours per week:

185 x (10+6) = 2960 Cal

THIS IS TO MAINTAIN WEIGHT



MACRONUTRIENTS

Carbohydrates - Main Source of Energy for Cognition & Physical Performance

4 Calories/Gram

Protein - Maintenance & Recovery of Muscle; Body Processes

4 Calories/Gram

Fat - Endocrine System Functioning, Neurotransmitters, Body Processes, Recovery

9 Calories/Gram



Steps to Determine Calories + Macros

- 1. Determine Maintenance Calories: BW x (10+# of training hrs/wk)
- 2. Determine Goal (weight loss, maintenance, or gain
 - a. Weight Loss: Maintenance Calories 500 Calories
 - i. 1-2 Pounds Lost/Week
 - b. Weight Gain: Maintenance Calories + 500 Calories
 - i. 0.5-2 Pounds Gained/Week
- 3. Determine Protein Requirements
 - a. 0.8-1 Gram of Protein/Pound of Body Weight
- 4. Determine Fat Requirements
 - a. 20-40% of Total Calories
- 5. Determine Carbohydrate Requirements
 - a. The Remaining Amount of Daily Calories



EXAMPLE: 200 Pound Athlete Trains 6 Hours Per Week

- 1. Caloric Maintenance: 200 X (10+6) = 3200 Calories
- 2. Goal: Weight Gain 3200 + 500 = 3700 Calories/Day
- 3. Protein: 160-200 Grams/Day (640-800 Calories)
- 4. Fat: 82-164 Grams/Day (738-1476 Calories)
- 5. Carbohydrates: 356-580 Grams/Day (1424-2320 Calories)



PROTEIN CONSUMPTION

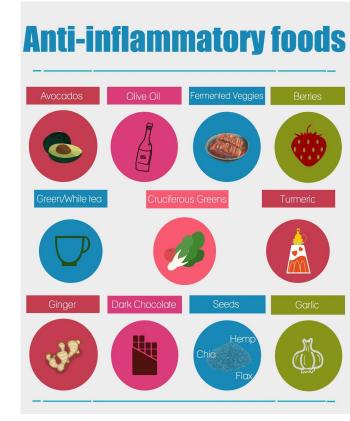
- More is not better
- Every 3.5-5 Hours
- 30-40 Grams Per Meal (3-5 meals/day)
- 30-40 Grams Pre & Post Training



MICRONUTRIENTS

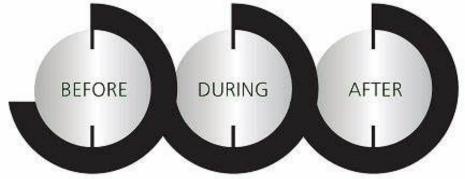
VITAMINS, MINERALS, ANTI-OXIDANTS, PHYTONUTRIENTS

- Needed for all body process, recovery, health, disease prevention, & more
- Anti-Inflammatory:
 - Fatty Fish, Whole Grains, Nuts, Green Leafy
 Vegetables, Olive Oil, Berries, Rich/Dark
 Fruits/Vegetables











SAMPLE BREAKDOWN:

200 LB Athlete, Goal - Weight Gain

Daily Totals: 3700 Calories, 200 Gr Protein, 500 Gr Carbohydrates, 100 Gr Fat

Per Meal: 40 Gr Protein, 100 Gr Carbohydrates, 20Gr Fat

- Meal 1: 4 Whole Eggs, 1 Cup Oatmeal, 150 Gr Blueberries, 8oz Orange Juice
- 60-90min Before Training: 30 Grams Whey Protein, 2 TBSP Natural Peanut Butter, 300 Grams Sweet Potato, Banana
- After Training: 5oz Chicken Breast, 1.5 Cups Rice, 1 oz Almonds, 1Cup Broccoli, 150 Grams
 Cherries
- Meal 2: 4oz Lean Beef, 1oz Cheese, 1Cup Green Beans, 50Grams Carb Drink, 200 Grams Potatoes
- Meal 3: 5oz Chicken Breast, 200 Grams Spinach, 1TBSP Olive Oil, 1.5 Grams Rice, 150 Grams Black/Raspberries, 1oz Pretzels

TOTALS: 202P, 495C, 100F

Performance Nutrition 101

The Basics of Fuelling Your Mind & Body

Kyle Harris, MS-AES, MS-LA

Group Training Coordinator & Hitting/Pitching Instructor

Bob Harris Baseball School



Contact Information:

Email: <u>battersbox@yahoo.com</u>

hossjob13@gmail.com

Twitter: @hossjob Instagram: @hossjob

