

# Protein 101

## Knowing Your Food and Supplements

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## Introduction

- ✓ Native of Long Island, NY
- ✓ 1995 Draft → Kansas City Royals
- ✓ Penn State Univ. 1995-1999
- ✓ Doctor of Chiropractic – NUHS 2004
- ✓ Certified Strength and Conditioning Specialist
- ✓ Certified Coach - National Pitching Association
- ✓ ASMI Baseball Injuries Conference
- ✓ Nutrition abstract Writer – NOW Foods



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## Be Ready....

You WILL be called upon to answer questions.  
There is NO hiding.....

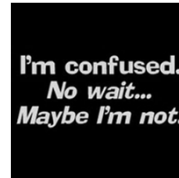


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## Why this presentation?

- ✓ From the student-athletes in my practice to patients wanting to get healthier:

## What is the truth about protein?



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## Presentation Outline

- ✓ What makes a food a protein?
- ✓ What are the differences between proteins?  
(Egg/Whey/Meat/Soy/Dairy/Pea/Hemp/Rice)
- ✓ How much protein do I need every day?
- ✓ Which proteins are best with exercise?
- ✓ Which are the good and bad protein supplements?

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## What Makes A Food A Protein?

- ✓ Protein = Muscle growth and repair
  - ✓ Nitrogen / amino acids
  - ✓ 4 calories/gram
- ✓ Carbohydrates = Quick Energy
  - ✓ Glucose = sugar
  - ✓ 4 calories/gram
- ✓ Fat = Long-term energy
  - ✓ Saturated / Unsaturated (Glycerol)
  - ✓ 9 calories/gram



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## What Are the Differences Between Proteins?

- ✓ Egg
  - ✓ “Complete” protein = all amino acids
  - ✓ “Free Range” is only type to buy
  - ✓ Grass-fed, not corn/grain fed
- ✓ Soy
  - ✓ Not a recommended protein
  - ✓ Highly allergenic
  - ✓ “Soy Story” book
- ✓ Whey
  - ✓ Most easily digestible protein
  - ✓ Best after exercise



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## Proteins Cont'd

- ✓ Dairy
  - ✓ Raw dairy only, NO pasteurized dairy
  - ✓ See 7/7/09 Newsletter
- ✓ Pea
  - ✓ Little-known protein = great for vegetarians
  - ✓ See 6/3/10 newsletter
- ✓ Hemp
  - ✓ Forgotten protein = high in fiber, omega fatty acids
  - ✓ See 2/10/10 newsletter



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## How Much Protein Do I Need Everyday?

- ✓ Disagreement among professional organizations
  - ✓ ASMI / NSCA...
- ✓ Divide weight in lbs by 2.2 = weight in kilograms
- ✓ Multiply kilograms by:
  - ✓ 2.0 g/kg of bw for teenagers / student-athletes
  - ✓ 1.8 active adults (triathlons, etc)
  - ✓ 1.5 for adults/elderly
- ✓ 200 pound high school athlete
  - ✓  $200 / 2.2 = 91 \text{ kg} \times 2.0 = 182 \text{ grams protein/day}$

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## Best Time for Protein

- Take with carbohydrate-rich meals (Breakfast)
  - Helps keep blood sugar level and avoid “crash”
  - The pitfall of Chinese Food
- Within 30 minutes of exercising
  - When your body needs it most for repair and muscle growth



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## Grass-Fed vs Corn/Grain-Fed Beef/Eggs

- ✓ Corn/Grain-fed products
  - ✓ High omega-6 fatty acids
  - ✓ Inflammation!
- ✓ Grass-fed products
  - ✓ More antioxidants / omega-3 fats
  - ✓ Less calories / no antibiotics
  - ✓ “Pasture Perfect” book



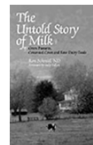
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## Raw Dairy = Super Food

- ✓ Pasteurized milk = “white death”
- ✓ Raw milk = probiotics, enzymes
  - ✓ Whey protein for muscle growth
  - ✓ Casein protein to prevent muscle breakdown
- ✓ Can drink even if lactose intolerant
- ✓ Learn about a mother and her “moo-shine”:



<http://www.foodnetwork.com/my-life-in-food/milk-and-honey/index.html>



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## Good/Bad Protein Supplements

- ✓ #1 Recommended Whey Protein Supplement
  - ✓ NOW Foods Whey Protein
- ✓ #1 Recommended Whey Protein Bar
  - ✓ 2:1 Whey Bar
- ✓ “Red Flag” ingredients
  - ✓ Vegetable/corn/soybean oil = inflammation
  - ✓ Splenda / Acesulfame-K
- ✓ Muscle Milk
  - ✓ Contains Splenda/Trans Fats/Vegetable oils
- ✓ See Protein Supplement Review Newsletter



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## Recommended Protein Shakes

- Shake #1
  - 1 Scoop NOW Foods Whey Protein Isolate
  - 1 Cup Raw Milk
  - 1 Tbspn Almond Butter
  - Ice
- Shake #2
  - 1 Scoop NOW Protein
  - 1 Container So Delicious Coconut Yogurt
  - Ice



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## Recommended Shakes Cont'd

- Shake #3
  - 1 Scoop NOW Protein - Chocolate
  - 1 Scoop Protocol for Life Balance Protomeal
    - Protomeal = Meal Replacement Powder
- Shake #4
  - 1 Scoop NOW Protein - Vanilla
  - 1 Scoop Protocol For Life Balance Protoclear
    - Protoclear = Detoxification Powder



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## Thank you!

- ✓ Please email me at [PitchingDoc@msn.com](mailto:PitchingDoc@msn.com) if you have questions
- ✓ 1 final thought:

*“The difference between history’s most staggering failures and its greatest accomplishments is often, simply, the diligent will to persevere.”*

-Abraham Lincoln

Best of luck to you

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