

Elevating Soccer Game with Nutrition

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Why Nutrition?

- Performance
- Injury prevention
- Body composition
- Recovery from workouts
- Muscle health and recovery
- Cognitive performance
- Recovery from injuries



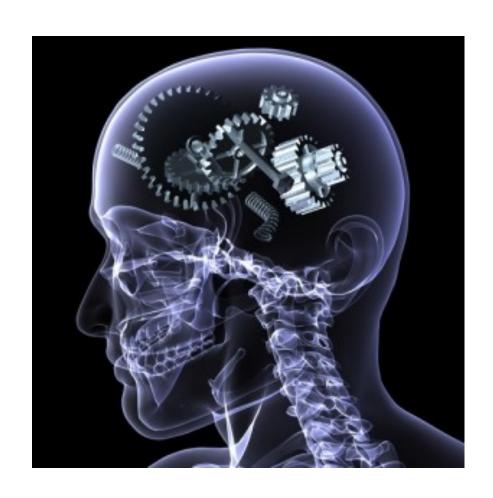


When do we perform well?

Physically fit

Mentally fit

Nutritionally fit





Demands of soccer



- In a soccer match a player will:
 - cover about 6-7 miles, ~2 -2.5 miles for goal keeper
 - 150-250 brief intense actions
 - movement changes every 4-6 seconds
 - lose an average of approximately 2-8lb (4-16c) of fluids
 - expand about 2000-2500 calories
- Skills: endurance, speed, strength, agility, mental focus

Carbohydrate = energy for your muscles & brain





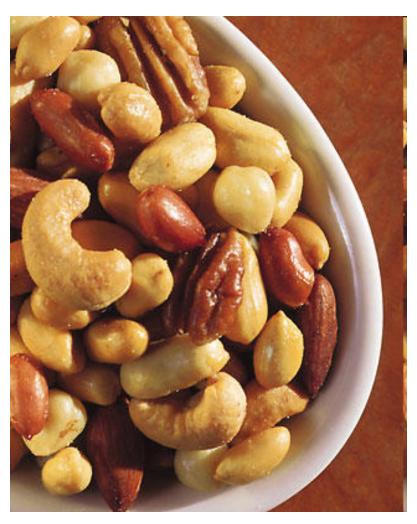
Protein = muscle repair & recovery



Exercise	Grams/pound
Moderate Exercise	0.5-0.65 grams
Heavy Exercise	0.65-0.8 grams
Ultra Exercise	0.8-1 grams



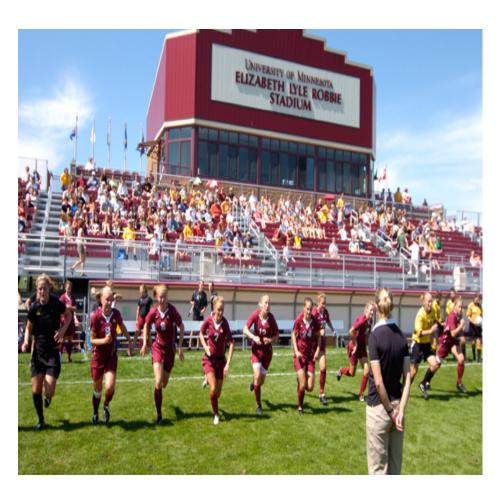
Fat = anti-inflammation, brain development, nerve functioning, cell structure





"It would be dangerous to see all fats as harmful."

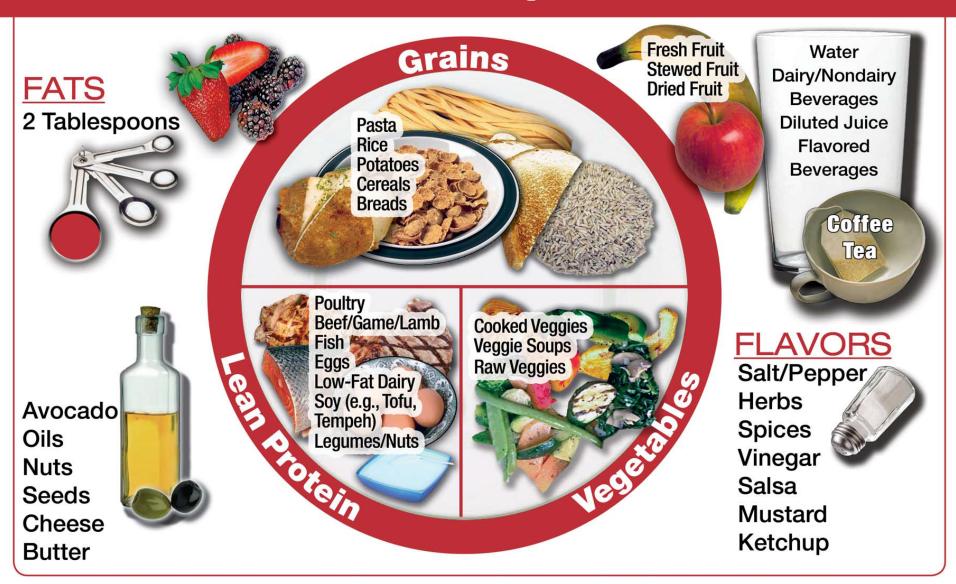
Tell me how to apply it in the practice



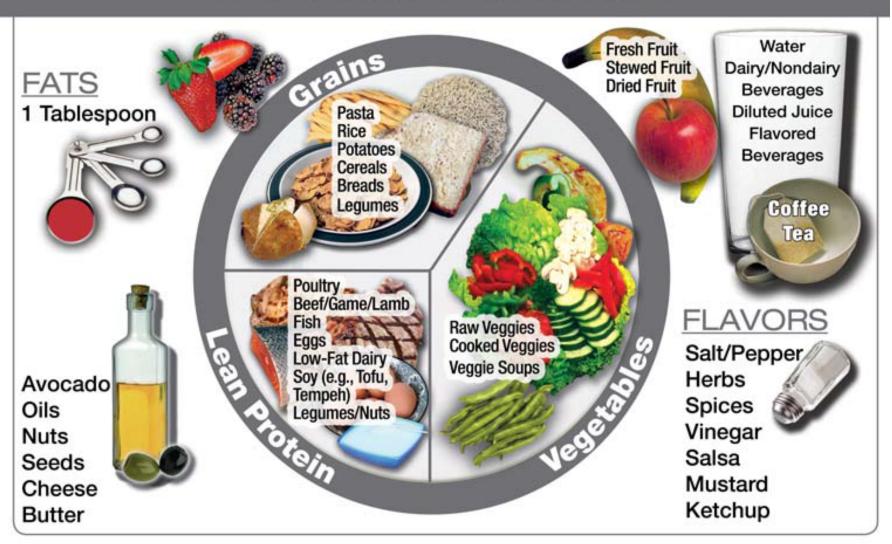




HARD TRAINING / RACE DAY:

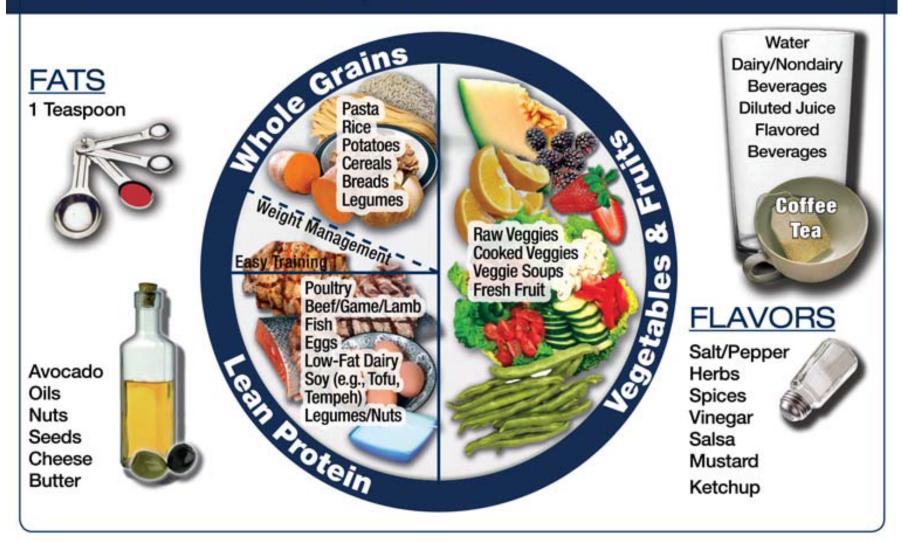


MODERATE TRAINING:



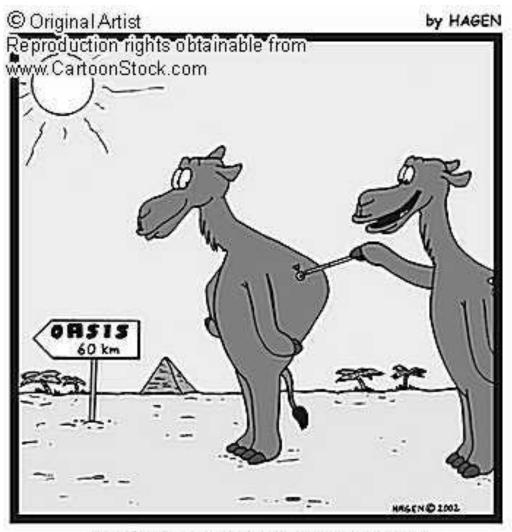


EASY TRAINING / WEIGHT MANAGEMENT:



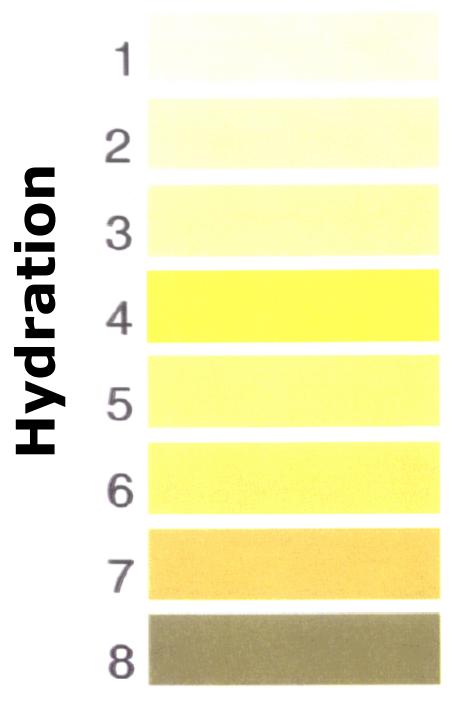


Hydration



That's alright Kenny, your dipstick says you've still got half a tank left...





This urine color chart is a simple tool your can use to assess if you are drinking enough fluids throughout day to stay hydrated.

If your urine matches the colors numbered 1, 2, or 3 you are hydrated.

If your urine matches the colors numbered 4 through 8 you are dehydrated and need to drink for more fluid.

Be Aware! If you are taking single vitamin supplements or a multivitamin supplement, some of the vitamins in the supplements can change the color of your urine for a few hours, making it bright yellow or discolored.

If you are taking a vitamin supplement, you may need to check your hydration status using another tool like Handout #15: Hydration Check: Body Weight Log.



Meal/nutrient timing







Before a soccer match or practice

- Good hydration
- Test different pre-competition foods/meals during your practices and use these foods/meals before competition

Time before Competition	Recommended Food or Liquid	Pre-Game Meal Ideas
30-60 min	mostly liquids	sports drink and water
1–2 hours	small snack and liquids	cereal bar, grapes, apple, juice, water
2-3 hours	small meal and liquid	½ turkey sandwich, banana, sports drink, and water
3-4 hours	2/3rds the size of regular meal or regular size meal and liquids	Pasta and meat sauce, salad and low-fat dressing, bread, orange juice, and water

Game time fueling



viverant

So what should I do during a game?

- Carbohydrate intake 30-35 g every hour (whole wheat, crackers, fruit, PBJ, bananas w/ PB, trail mix, dried fruit)
- Incorporate some protein and fat (PB, beef jerky, turkey jerky, string cheese, chobani yogurt if cooler available)
- Drinking to replace your fluids lost (sports drinks or carbohydrate)



Eating for recovery





Guidelines for post-exercise refueling

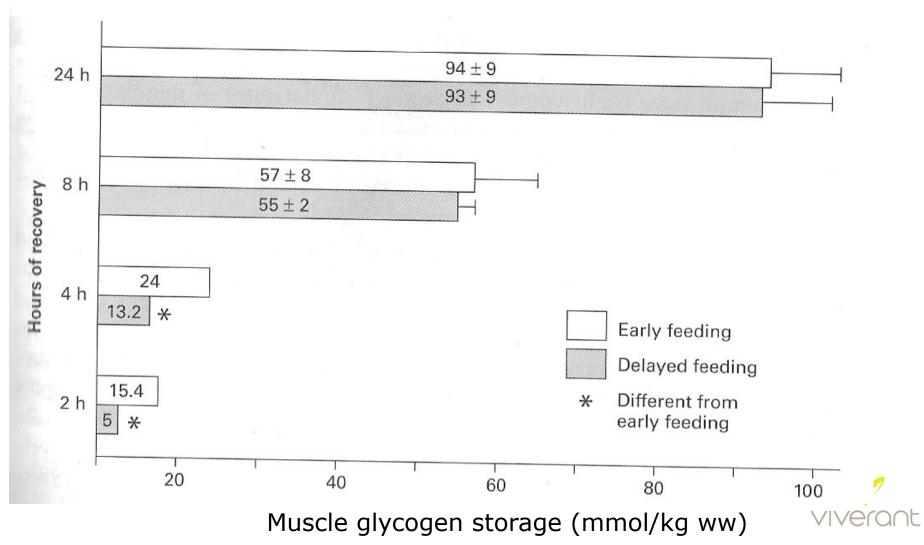
- High CHO meal within 15-30 min
- Aim for 1-1.5g/kg of CHO=50-150g
 at 2 hr intervals up to 6 hrs
- Combine CHO and PRO in your recovery meal
- Consume ~20g-30g of protein (~10g of EAA)







Effect of delaying the post-exercise snack or meal on restoration of muscle glycogen



Continuum of Nutrient Timing Importance*

MINIMAL IMPORTANCE

VARIABLE IMPORTANCE

MAXIMAL IMPORTANCE

- Overweight/obese persons seeking weight loss for general health
- Novice & intermediate trainees seeking to improve body composition
- Non-fasted resistancetraining bouts lasting 1 hour or less
- Non-competitive training sessions or events
- Goals that do not involve endurance competition
- Goals that do not involve extremes in muscle gain or fat loss

- Advanced/competitive trainees looking to push the limits of hypertrophy, strength, or fat loss.
- Exhaustive/continuous training sessions that occur shortly after an overnight fast
- Exhaustive/continuous training sessions that significantly exceed 1 hour, especially sessions that approach 2 hours

- Competitions involving more than one glycogendepleting event in a single day, separated by only a few hours
- Competitions or training bouts that significantly exceed 2 hours, especially bouts that approach or exceed 3 hours

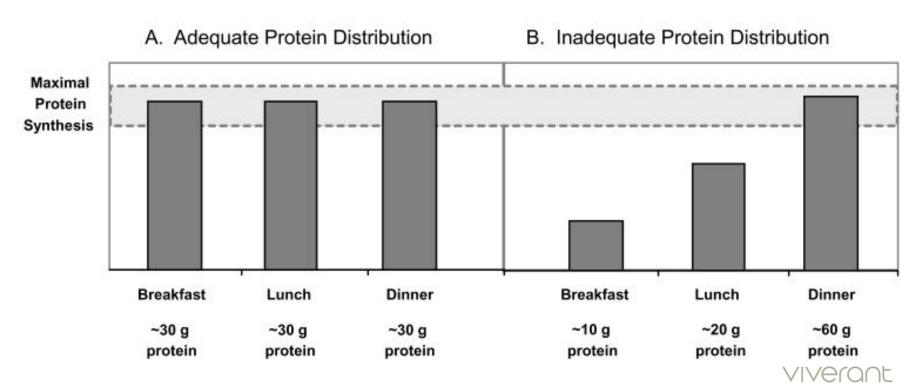
*Aragon AA. Continuum of nutrient timing importance (original schematic). NSCA Personal Trainers Conference. April 2012.







Distributing protein intake throughout the day



Paddon-Jones & Rasmussen, Current Opinion in Clinical Nutrition & Metabolic Care, 2009

Nutrition Challenges/Cases/ Questions

