

GOALS of PERFORMANCE NUTRITION



INCREASE ENERGY
ENHANCE RECOVERY
OPTIMIZE PERFORMANCE

OPTIMAL NUTRITION IS BROKEN DOWN INTO:

1. EVERYDAY NUTRITION AND HYDRATION

The Foundation to Performance Nutrition

2. TRAINING AND RECOVERY

Recovery is a limiting factor to performance

3. GAME DAY NUTRITION

Staying hydrated and fueled optimizes performance



WHY NUTRITION?

Adequate nutrients and the right blend of fuel to:

- Maximize Energy and Prevent Fatigue
- Gain/Maintain Lean Body Mass
- Improve Performance
- Prevent Dehydration
- Enhance Recovery
- Prevent overtraining

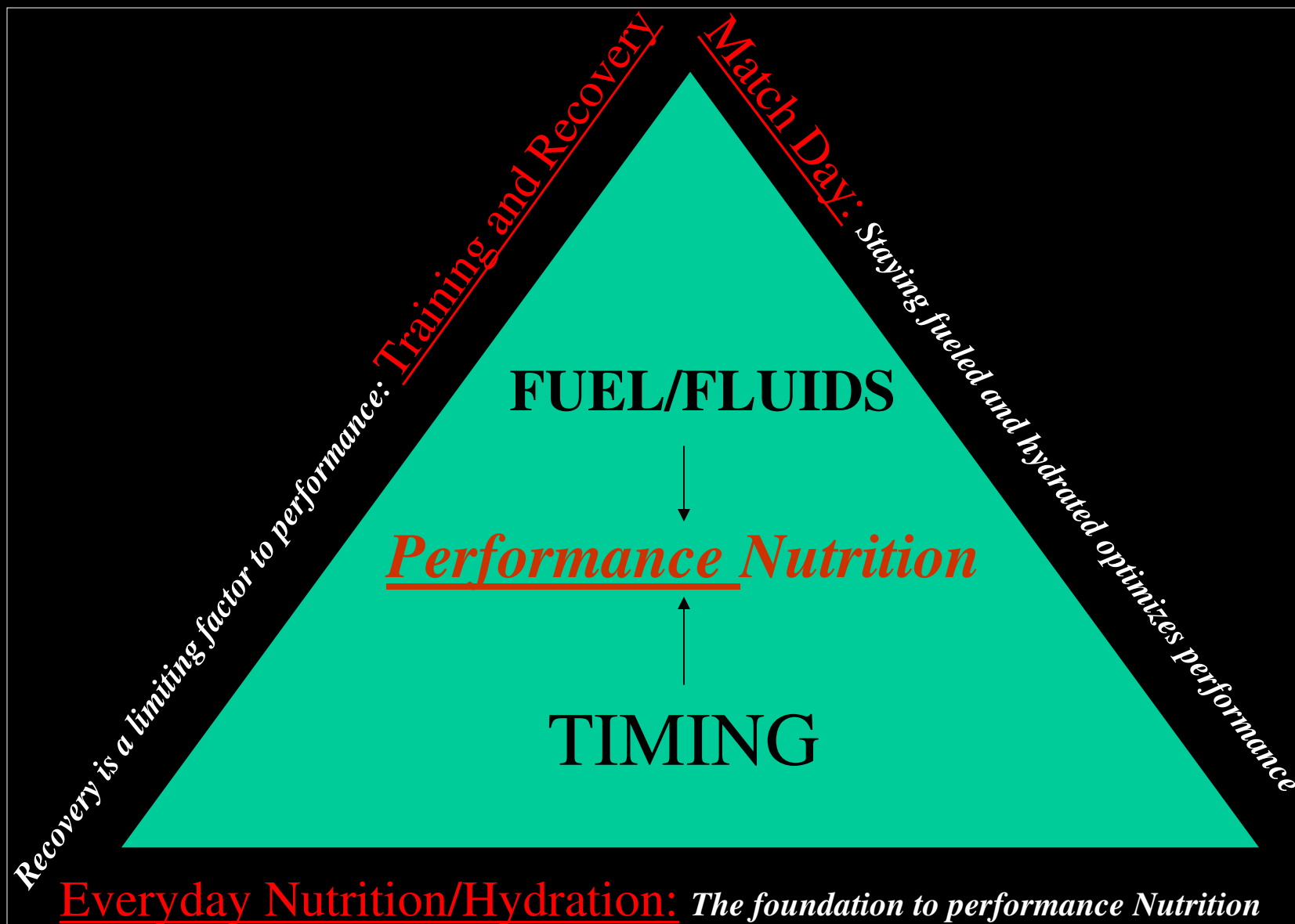
SOCCER DEMANDS

- Field players may cover a large distance during the duration of a 90-minute game
- Soccer drains energy stores (glycogen) and breaks down muscle protein
- The stop and go nature of soccer often impairs performance near the end of competition and after periods of intense effort
- Soccer players lose an average of 1.5L of fluid over the course of a game, which impairs performance

Improve Performance and Recovery



- Soccer players who are under-fueled (don't eat enough) tend to cover less ground in the second half
- Soccer players who are optimally fueled are able to perform 33% more HIGH intensity running during games and practices
- Soccer players who are just slightly dehydrated experience
 - Slower running speeds
 - Deteriorated dribbling skills
 - Training and play seemed harder



Rules to Live By

Athletes
PERFORMANCE

1. **COME BACK TO EARTH:** Try to choose the least processed forms of food. Fruits, veggies, whole grains, and high fiber carbohydrates.
2. **EAT A RAINBOW OFTEN:** Eat Fruits or Vegetables with each meal. Choose a wide variety of colors for the biggest benefit.
3. **LESS LEGS THE BETTER:** Include a LEAN protein source with each meal.
4. **EAT FATS THAT GIVE SOMETHING BACK:** Include healthy fats in your diet like olive oil, nuts, seeds, avocado, fish, and flaxseeds.
5. Eat **BREAKFAST** every day!
6. **THREE FOR THREE:** Eat smaller portions more often, spread evenly across the day. No excuses --- you should be eating 5-6 meals/day! Aim for all three nutrients, every three hours.
7. **STAY HYDRATED** (1/2 – 1oz/lb/d) by drinking non-caloric beverages (water/green tea).
8. **DON'T WASTE YOUR WORKOUT:** Have a pre-workout snack and post-workout shake or meal immediately after your training
9. **Consider adding a safe/pure multivitamin** with anti-oxidant complex and a **fish oil** supplement into your daily routine.
10. **SLEEP:** Get some rest. The body recovers and repairs best when it is sleeping.



MEAL TIMING

- **“Three for three”**

- Have a meal or snack every three hours
- This should contain a carbohydrate, lean protein, healthy fat and add fruit or vegetables.

- **This will help to:**

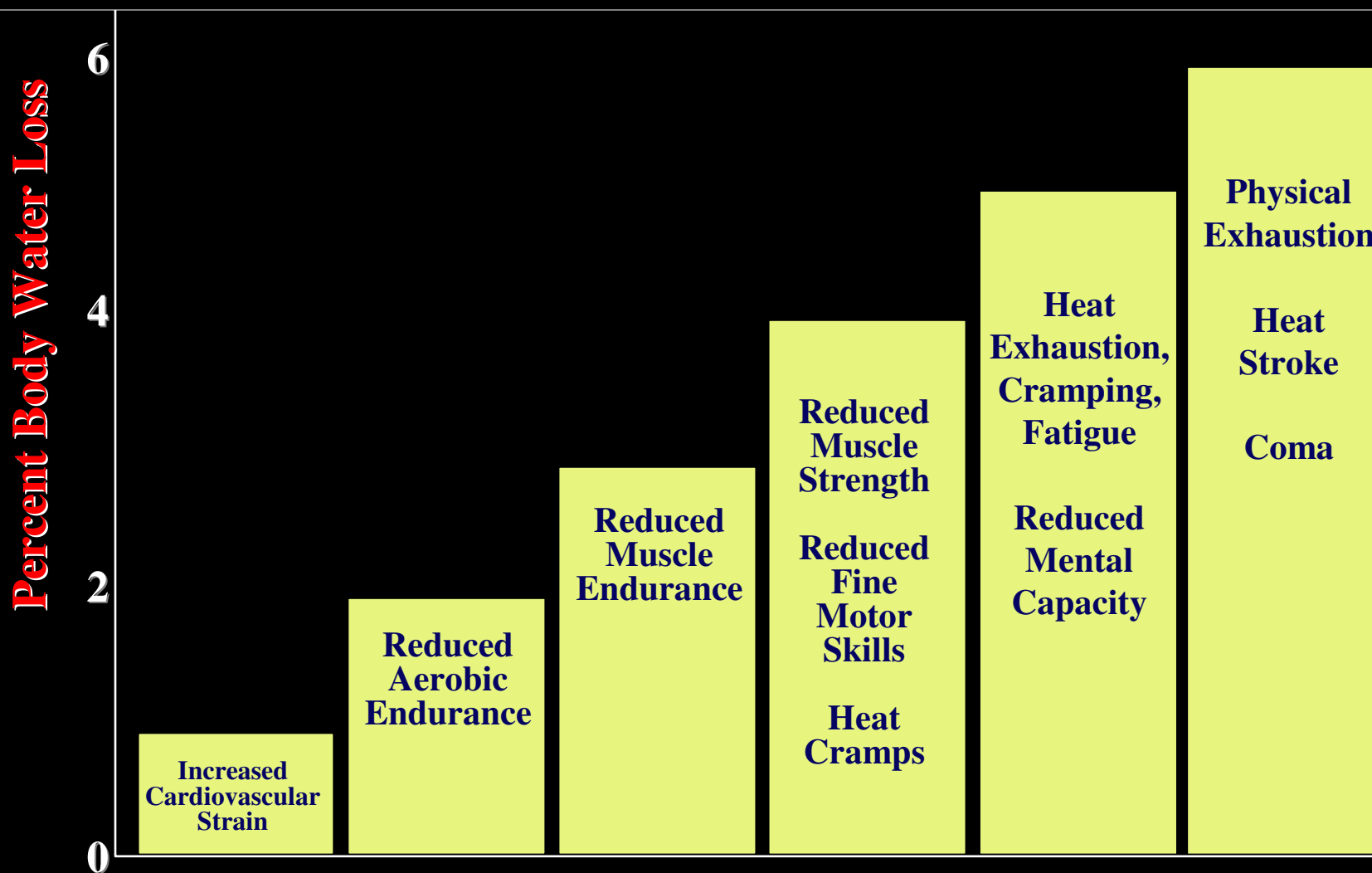
- Increase energy levels and metabolism
- Maintain or gain lean muscle mass
- Ensure you are getting enough fuel for play

HYDRATION

- Body is made up of ~65% water
- 2% loss in body mass from water can decrease performance up to 25%
- Players who hydrate properly with water and a sports drink have:
 - **improved efficiency of movement**
 - **improved shooting by 10%**
 - **7% (3 seconds) faster on a sprint- compared**
- Drink fluids throughout the day, with a goal of $\frac{1}{2}$ - 1oz per pound day.
 - Example: 150 pound athlete
 - 75 – 150 ounces of fluid per day
 - 2.25 – 4.5 Liters per day
 - 33 ounces = 1 L

Prevent Dehydration!

Timing	Amount
Pre-Exercise 1-2 hours before	17-20 oz of fluid
Immediately Before	7-10 oz of water or Gatorade
During Every 10-15 minutes	7-10 oz or 4-6 gulps of water or Gatorade
Post exercise	16-24 oz for every pound lost



Effect of Dehydration on Physical Performance

TRAINING AND RECOVERY

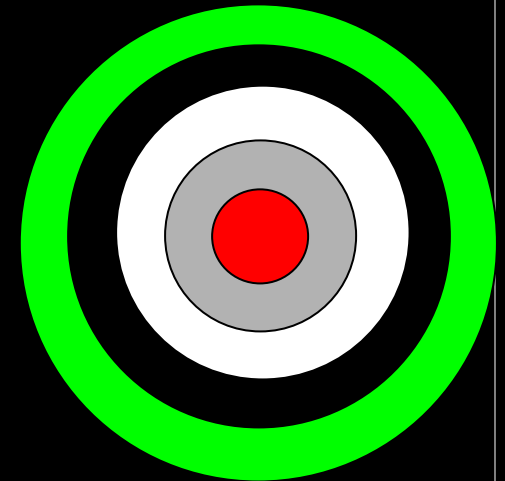
- Window Open for Nutrient Delivery to Muscle/Cells:
 - 1.2-1.5g/kg Repletion Factor provided by
 - Carbohydrate and Protein Immediately after activity
 - 0.14g/pound for Protein
 - 0.45 g/pound Carbs
 - Shake/M meal Within 10 Minutes of Finishing Workout
 - Re-hydrate
 - Decrease Core Temperature
 - Replace Fuel Stores
 - Repair Muscle Tissue

2:1 or 3:1 Carb to Protein

15-25g Protein

45-75g Carbs

10 min.
30 min.
60 min.
90 min.
120 min.



Carb + Protein Snack Immediately After **Athletes** PERFORMANCE

- RESTORE energy and fuel
- REBUILD muscle
- REDUCE muscle damage
- Keep you HEALTHY
- SPEED muscle repair
- IMPROVE PERFORMANCE the next time you train, play or practice

Chocolate Milk

8 oz + Banana:

56g Carbs

8g Pro

16 oz + Banana:

82g Carbs

16g Pro

Trail Mix

**1/4 c Kashi Go
Lean**

2 tbsp raisins

**.5 oz Oberto beef
jerky**

1 tbsp dried mango

0.5 oz peanuts

252.5 kcal

12.5 g protein

36.5 g carbs

7.75 g fat

Trail Mix 2

**1/3 c Kashi Go Lean
cereal**

**2.5 tbsp Sun Maid
raisins**

**0.5 oz planters
peanuts**

**0.5 oz Emeralds
almonds, 1 oz Oberto
beef jerky**

363 kcal

20.5 g protein

41.4 carb

14.83 g fat

Game Day Nutrition

Five Game Day Categories:

1. The night before competition
2. Three to four hours before competition
3. One to two hours before competition
4. During competition
5. Post Competition

Game *DAY* NUTRITION

Athletes[™]
PERFORMANCE

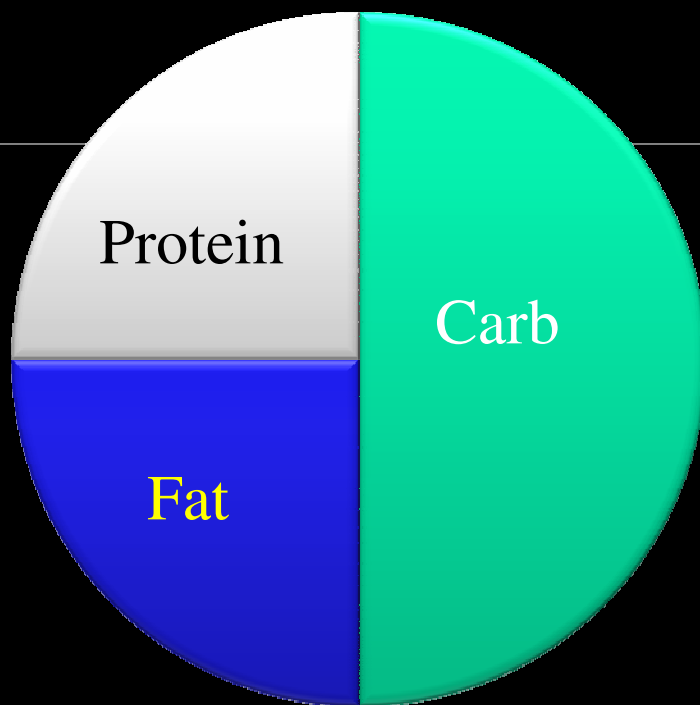
Inadequate Nutrition =  glycogen (energy)

=  average speed

=  ground covered

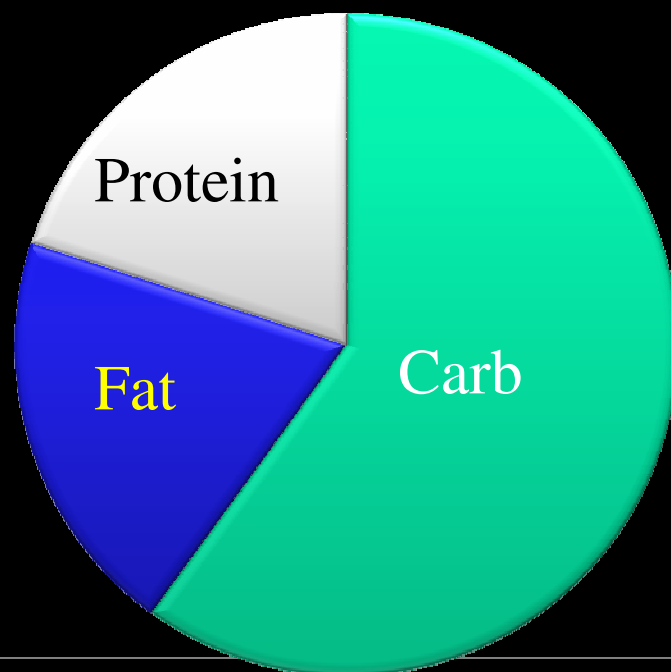
=  decreased performance

The night before: 200- 300g Carbs and a lean protein source



General Day Plate

- 50% Carb
- 25% Protein
- 25% Fat



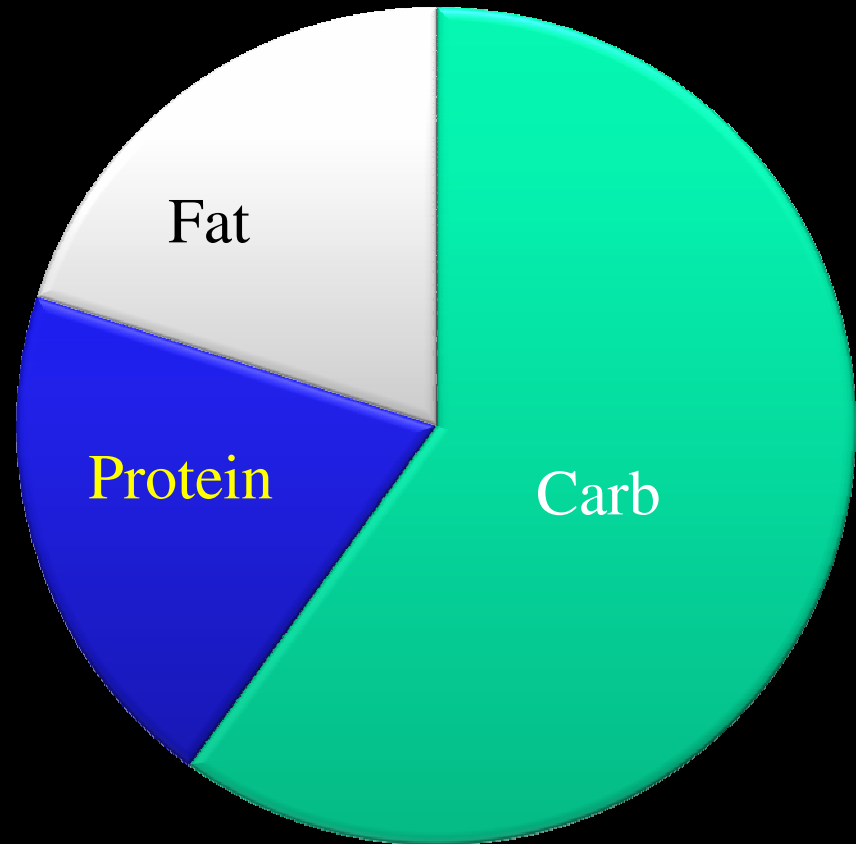
Heavy Training/Game Day Plate

- 60% Carb
- 20% Protein
- 20% Fat

1) Night Before

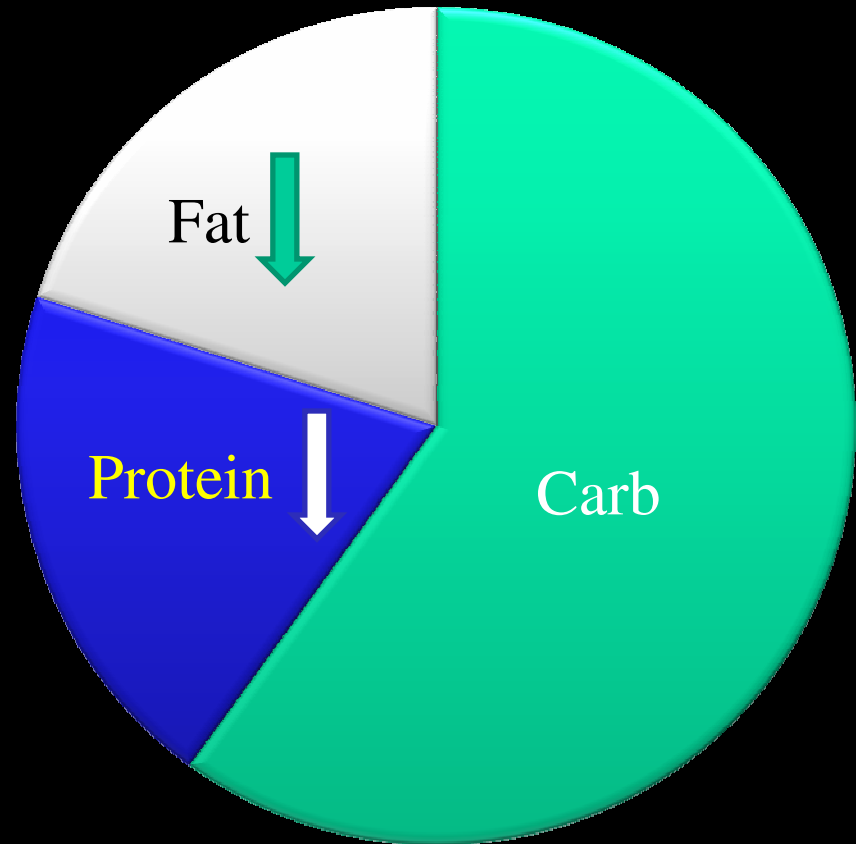
200 - 300 g Carbs

- 3_cups (fists) Pasta or Rice
- 2 Dinner rolls
- Protein of choice (Palm of Hand)
- 1 Fruit , 10 oz 100% Fruit Juice
- 1 Yogurt
- Vegetables/Salad
 - w/dressing
- Plenty of Fluid



2) 3-4 hours before

- 2 - 3 cups Pasta or Rice
 - 2 slices of bread
 - 1 chicken breast
 - 1 fruit
 - 10 oz of 100% Fruit Juice
- Limit fat, fiber and protein.



3) 1-2 hours before

- 2 bread with Jam or Honey
- 1 Granola bar
- 1 banana
- Plenty of fluid

- Other options:

- Cereal
- Tolerated fruit
- Juice
- Sports drinks
- Sports bars
- Crackers.

~ Should primarily consist of carbohydrates and fluids.

~ Limit fat, fiber and protein.

4) During Competition

30-60g Carbs/hour

1st half

- Water + 30 – 60g Carbs with electrolytes (16-32 oz Gatorade)

Half time (options)

- Gatorade (20oz = 35g Carbs)
- Fruit (30g Carbs)
- Granola Bar (15g Carbs)

2nd half

- Water + 30 – 60g Carbs with electrolytes (16-32 oz Gatorade)

5) *Post-Game*

- (1) Protein to Rebuild: 15-25g Protein
- (2) Carbs to Re-fuel: 45-75g Carbs
- (3) Eat a meal an hour after your Recovery Snack

Chocolate Milk

8 oz + Banana:

56g Carbs

8g Pro

16 oz + Banana:

82g Carbs

16g Pro

Trail Mix

1/4 c Kashi Go Lean

2 tbsp raisins

.5 oz Oberto beef
jerky

1 tbsp dried mango

0.5 oz peanuts

252.5 kcal

12.5 g protein

36.5 g carbs

7.75 g fat

EAS

Myoplex Lite Shake/Bar

Gatorade

Banana

CLIF

Clif Builder Bar

Gatorade

Banana

- Continue to eat smaller meals throughout the day.
- Always stay hydrated! Remember hydration is key.

Practice Nutrition Like You Practice Soccer **Athletes**
PERFORMANCE

NOTHING NEW ON GAME DAY!

OPTIMAL NUTRITION

=

FOR OPTIMAL PERFORAMCE

THE PERFECT DAY....

Time	Meal
7:00 AM	Oatmeal, berries, 4 egg whites, 1 tsp Olive Oil
9:15 AM	Pre-Workout Snack
11:15	Post-Workout Nutrition
12:15	6 oz turkey, 2 slices whole wheat bread, spinach salad, low-fat dressing
3:00	Apple w/1/4c Nuts
6:00	5 oz grilled salmon, 1/2 cup whole wheat cous cous, steamed asparagus
9:30	1 cup low fat cottage cheese and 1/2 c berries

Breaking it down further:

1. Eat Clean
2. Eat Often
3. Hydrate
4. Recover
5. Mindset

TAKE AWAY POINTS:

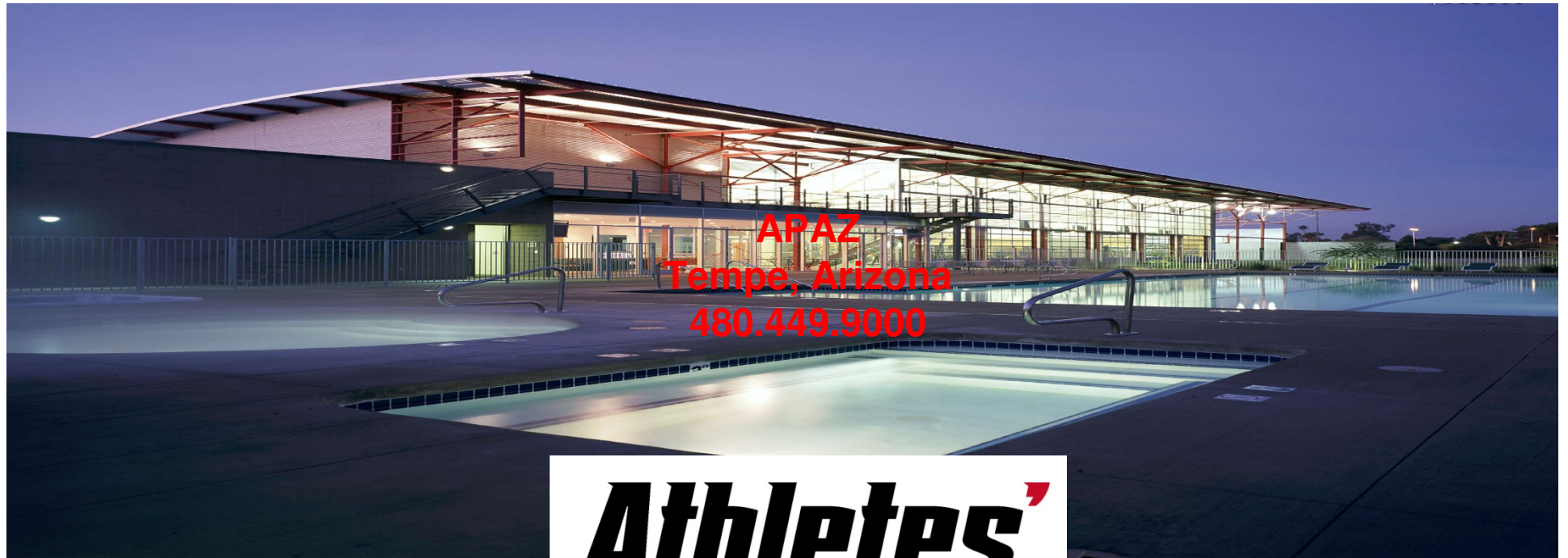


Set-up your plan to ensure the following:

- Three for three
- Hydration
- Recovery Nutrition and Rest

Best of luck!

Megan Mangano, RD, CSSD
APLA, Performance Nutritionist
(310) 630 -2290
www.athletesperformance.com



APAZ
Tempe, Arizona
480.449.9000

Athletes'
PERFORMANCE



APLA
Carson, California
310.630.2290



APFL
Gulf Breeze, Florida
850.916.3650