

Performance Nutrition



FoodisFuel101 on Instagram

Is My Nutrition Sharp?

- How am I performing in the pool/dryland?
- How is my general energy level?
- How is my mood?



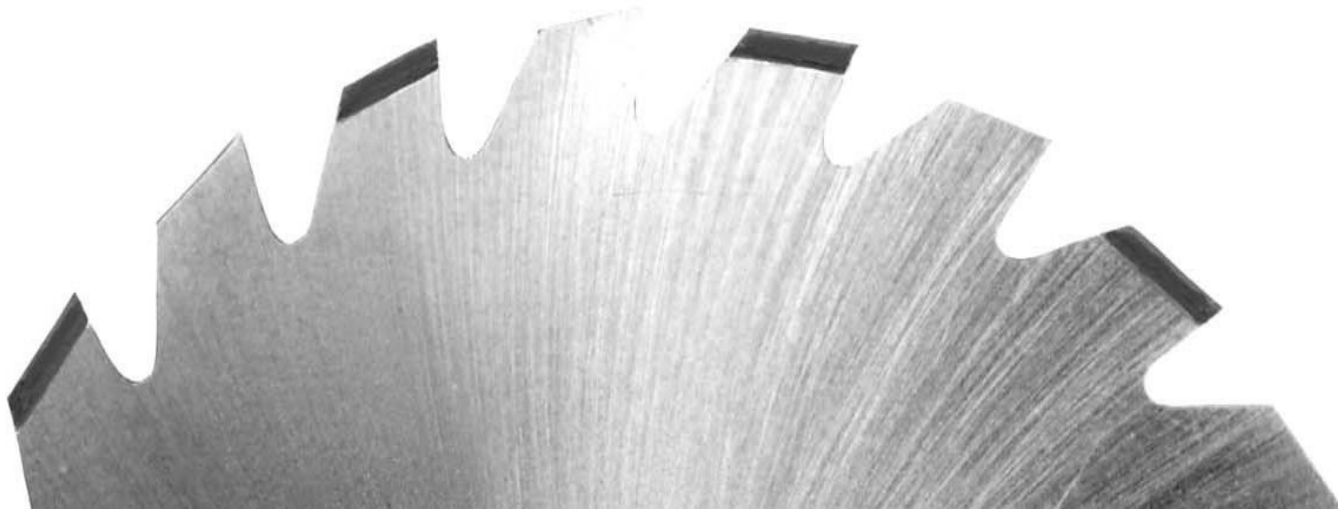
NUTRITION

Sharpening the Tool

WHAT? – Choosing the Right Fuel

WHEN? – Timing It Right

HOW? – How Much Do I Need?



Meals – Choose Good Fuel WHAT & WHEN?

US OLYMPIC COMMITTEE – ATHLETE’S PLATES

EASY TRAINING / WEIGHT MANAGEMENT:

FATS
1 Teaspoon

Whole Grains
Pasta
Rice
Potatoes
Cereals
Breads
Legumes

Lean Protein
Poultry
Beef/Game/Lamb
Fish
Eggs
Low-Fat Dairy
Soy (e.g., Tofu, Tempeh)
Legumes/Nuts

Vegetables & Fruits
Raw Veggies
Cooked Veggies
Veggie Soups
Fresh Fruit

FLAVORS
Salt/Pepper
Herbs
Spices
Vinegar
Salsa
Mustard
Ketchup

Water
Dairy/Nondairy
Beverages
Diluted Juice
Flavored
Beverages

Coffee
Tea

Avocado
Oils
Nuts
Seeds
Cheese
Butter

MODERATE TRAINING:

FATS
1 Tablespoon

Grains
Pasta
Rice
Potatoes
Cereals
Breads
Legumes

Lean Protein
Poultry
Beef/Game/Lamb
Fish
Eggs
Low-Fat Dairy
Soy (e.g., Tofu, Tempeh)
Legumes/Nuts

Vegetables
Raw Veggies
Cooked Veggies
Veggie Soups

FLAVORS
Salt/Pepper
Herbs
Spices
Vinegar
Salsa
Mustard
Ketchup

Water
Dairy/Nondairy
Beverages
Diluted Juice
Flavored
Beverages

Coffee
Tea

Avocado
Oils
Nuts
Seeds
Cheese
Butter

HARD TRAINING / RACE DAY:

FATS
2 Tablespoons

Grains
Pasta
Rice
Potatoes
Cereals
Breads

Lean Protein
Poultry
Beef/Game/Lamb
Fish
Eggs
Low-Fat Dairy
Soy (e.g., Tofu, Tempeh)
Legumes/Nuts

Vegetables
Cooked Veggies
Veggie Soups
Raw Veggies

FLAVORS
Salt/Pepper
Herbs
Spices
Vinegar
Salsa
Mustard
Ketchup

Water
Dairy/Nondairy
Beverages
Diluted Juice
Flavored
Beverages

Coffee
Tea

Avocado
Oils
Nuts
Seeds
Cheese
Butter

5 Smaller Athlete’s Plates Every 3-4 Hours

OR

3 Full-Size Athletes Plates for Breakfast, Lunch, Dinner

Meals – Easy Training

EASY TRAINING / WEIGHT MANAGEMENT:

FATS
1 Teaspoon

Avocado
Oils
Nuts
Seeds
Cheese
Butter

Whole Grains
Pasta
Rice
Potatoes
Cereals
Breads
Legumes

Lean Protein
Poultry
Beef/Game/Lamb
Fish
Eggs
Low-Fat Dairy
Soy (e.g., Tofu, Tempeh)
Legumes/Nuts

Vegetables & Fruits
Raw Veggies
Cooked Veggies
Veggie Soups
Fresh Fruit

Beverages
Water
Dairy/Non-dairy Beverages
Diluted Juice
Flavored Beverages

Coffee
Tea

FLAVORS
Salt/Pepper
Herbs
Spices
Vinegar
Salsa
Mustard
Ketchup

- Recovery Training
- Days Off
- Breaks in Training
- Taper

Meals – Moderate Training

MODERATE TRAINING:

FATS
1 Tablespoon

Grains
Pasta
Rice
Potatoes
Cereals
Breads
Legumes

Lean Protein
Poultry
Beef/Game/Lamb
Fish
Eggs
Low-Fat Dairy
Soy (e.g., Tofu, Tempeh)
Legumes/Nuts

Vegetables
Raw Veggies
Cooked Veggies
Veggie Soups

Fresh Fruit
Stewed Fruit
Dried Fruit

Water
Dairy/Nondairy
Beverages
Diluted Juice
Flavored
Beverages

Coffee
Tea

FLAVORS
Salt/Pepper
Herbs
Spices
Vinegar
Salsa
Mustard
Ketchup

Avocado
Oils
Nuts
Seeds
Cheese
Butter

- 1-Hard Session
- 1-Hard + 1-easy
- Most Training Days

Meals – Hard Training

HARD TRAINING / RACE DAY:

FATS

2 Tablespoons



Avocado
Oils
Nuts
Seeds
Cheese
Butter



Grains

Pasta
Rice
Potatoes
Cereals
Breads



Fresh Fruit
Stewed Fruit
Dried Fruit



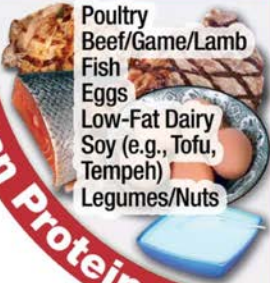
Water
Dairy/Nondairy
Beverages
Diluted Juice
Flavored
Beverages



Coffee
Tea

Lean Protein

Poultry
Beef/Game/Lamb
Fish
Eggs
Low-Fat Dairy
Soy (e.g., Tofu,
Tempeh)
Legumes/Nuts



Cooked Veggies
Veggie Soups
Raw Veggies



Vegetables

FLAVORS

Salt/Pepper
Herbs
Spices
Vinegar
Salsa
Mustard
Ketchup

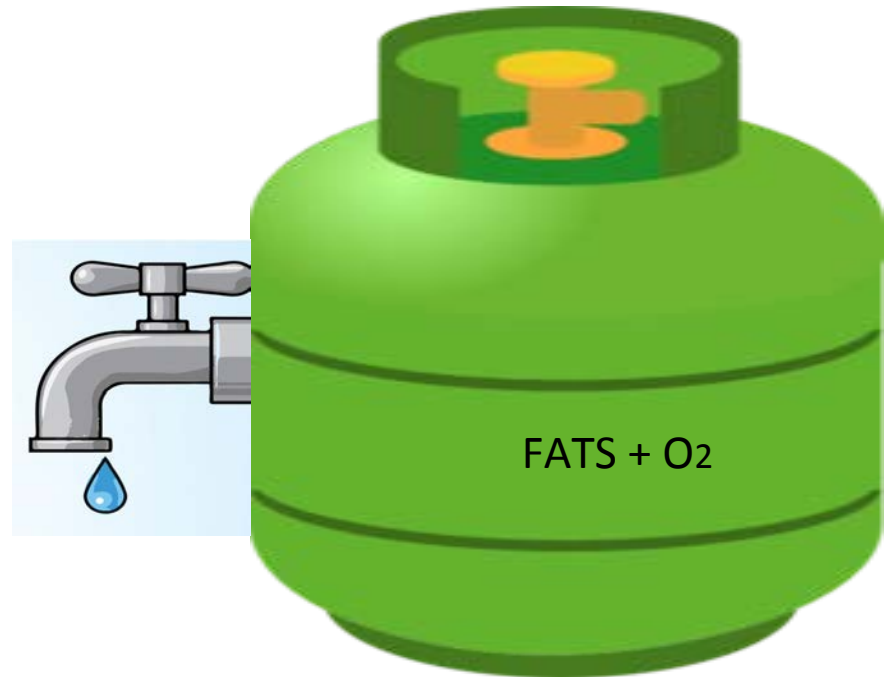


- 2+ Hard Sessions
- Summer Doubles
- Hard Dryland Days

CARBOHYDRATES + FATS  ENERGY



Small Storage "Tank"
Fast-Release Energy



Large Storage "Tank"
Slow-Release Energy

Swimmers need 60-75% of total energy (cals) from carbohydrates!

Training Fuel

BEFORE PRACTICE:

WHEN? 3-4 Hours before

WHAT? Athlete's Plate

OR

WHEN? 1-2 Hours before

WHAT? Snack: **Mostly Carbs**, Some Protein, Avoid Fat



DURING PRACTICE > 1.5 Hours of Work

WHEN? Sip/Nibble Every 20-minutes

WHAT? Easily Digestible **Carbohydrates**

- Sports Drink, Fruit, Fruit Sauces

Training Fuel - Examples



| 1-hr or less before 1 st event | 2-3 Hours before 1 st event | 4 or more hours |
|--|--|-------------------------------|
| <ul style="list-style-type: none">• <u>Easily digestible carbohydrates</u>• Raisins or Dried Fruit• Banana, Apple, Berry, other Fruits• Cereal• Pretzels (handful)• Fig bar (x2)• Fruit Puree/Sauce• Sports drink (8oz, diluted)• Toast (1 slice)• Crackers (x5)• ½ Sports Bar • WATER! | <ul style="list-style-type: none">• <u>Solid (complex) carbohydrates</u>• Small Baked potato (plain)• 1C whole grain cereal + milk• Whole grain bagel/bread + p.b.• 1C greek yogurt w/ berries & honey• Fruit/Veggie Yogurt smoothie• 1C Oatmeal + milk + fruit• Toast (1 slice) + Fresh fruit• Sports Bar • WATER! | <p><u>ATHLETE'S PLATE</u></p> |

Recovery Fuel

EASY TRAINING – Regular Meals Are Good Enough

5 Athlete's Plates, spread throughout the day

MODERATE TRAINING (NEW!)

WHEN? Within 2-hours

WHAT? Athlete's Plate

HARD TRAINING and RACING

WHEN? Within 30-minutes

WHAT? Mostly Carbohydrates, Some Protein (4:1g)

AND

WHEN? Within 2-hours

WHAT? Athlete's Plate

Within 30-minutes

Within 2 hours

• Mostly Carbs, Some Protein (4:1)

ATHLETE'S PLATE

- Chocolate milk
- ½ bagel + hummus
- ½ turkey or PBJ sandwich
- Pretzels + hummus
- FF or LF yogurt w/ fruit
- Trail Mix

•WATER!



CARB, PROTEIN OR FAT?

Read the label. Do the Math.

Serving Size →

Total Calories →

1g Fat = 9 cal →

1g Carb = 4 cal →

1g Protein = 4 cal →

ALMONDS

Almond Nutrition Facts

Serving Size 1 ounce (28g)
or about 23 almonds

Amount Per Serving

Calories 160 Calories from Fat 120

| | % Daily Value* |
|--------------------------|----------------|
| Total Fat 14g | 22% |
| Saturated Fat 1g | 5% |
| Polyunsaturated Fat 3.5g | |
| Monounsaturated Fat 9g | |
| Cholesterol 0mg | 0% |
| Sodium 0mg | 0% |
| Potassium 200mg | 6% |
| Total Carbohydrate 6g | 2% |
| Dietary Fiber 3g | 12% |
| Sugars 1g | |
| Protein 6g | |

| | |
|---------------|----------------|
| Vitamin A 0% | Vitamin C 0% |
| Calcium 8% | Iron 6% |
| Vitamin E 35% | Folate 4% |
| Magnesium 20% | Phosphorus 15% |



*Percent daily values are based on a 2,000 calorie diet.

STAY HYDRATED



BEFORE

2-3 Hours Before Exercise - Drink 17 to 20 ounces of water

20-30 Minutes Before Exercise or During Warm-up - Drink 8 ounces of water

DURING

Every 20 min During - Drink 7 to 10 ounces of water

AFTER

< 30 Minutes After Exercise - Drink 8 ounces of water

HOW MUCH DO I NEED?!?

YOUR NUTRITION NEEDS DEPEND ON YOU!

Lisa's Training Range Mike's Training Range

| TOTAL ENERGY (cal) | CARBOHYDRATES (g) 60-70% | PROTEIN (g) 15-20% | FAT (g) 20-25% |
|--------------------|-----------------------------|-----------------------|-------------------|
| 2600 | 390-455 | 98-130 | 58-72 |
| 2700 | 405-473 | 101-135 | 60-75 |
| 2800 | 420-490 | 105-140 | 62-78 |
| 2900 | 435-508 | 109-145 | 64-81 |
| 3000 | 450-525 | 113-150 | 67-83 |
| 3100 | 465-543 | 116-155 | 69-86 |
| 3200 | 480-560 | 120-160 | 71-89 |
| 3300 | 495-578 | 124-165 | 73-92 |
| 3400 | 510-595 | 128-170 | 76-94 |
| 3500 | 525-613 | 131-175 | 78-97 |
| 3600 | 540-630 | 135-180 | 80-100 |
| 3700 | 555-648 | 139-185 | 82-103 |
| 3800 | 570-665 | 143-190 | 84-106 |
| 3900 | 585-683 | 146-195 | 87-108 |
| 4000 | 600-700 | 150-200 | 89-111 |

Fine Tuning My Nutrition?

Consider ALL of these indicators:

- How am I performing in the pool/dryland?
- How is my general energy level?
- When do I get tired during practice?
- When do I get hungry during practice?
- How is my mood?
- How is my body composition changing?
- How is my weight changing?

SPORTS NUTRITION INFO:

- [USA Swimming Nutrition](#)
- [USOC Nutrition](#)

Your
body
is a finely
tuned vehicle,
give it good
fuel and
it will
take you
places.

