



# Sport Nutrition for the Endurance Athlete

Jenna Waters

# What's the point?



=



“Nutrition is more important than you can imagine...it's the missing link that so many athletes forget about. I have had NFL guys come back to me years later wondering what took them so long, because they have noticed such a difference when they finally got serious about it.”

-Derek Dooley, UT football coach

# Which one will you be?



# The Basics

- ◉ What is a calorie?
  - > Unit of energy
- ◉ Sources of calories?
  - > Sources
  - > Functions

# Breakfast

- Improved grades, reduced hyperactivity, decreased absence and tardy rates, improved psychosocial behaviors
- People who eat breakfast consume less fat throughout the day
- Research shows people who skip breakfast are 4 x more likely to be obese
- Jump-starts your metabolism ...makes your body ready to eat throughout the day.

# Excuses, excuses, excuses...

- **I don't like breakfast**

- > You haven't given yourself a chance. Try anything, even non-traditional breakfast foods.

- **I don't have time**

- > Yes you do. Put your breakfast on the counter the night before.

- **I can't eat in the morning**

- > Then try to drink something. Yogurt smoothies, chocolate milk, carnation instant breakfast, Boost.

- **I would rather sleep in**

- > You still can. Plan ahead.

- **I don't know what to eat for breakfast**

- > You will in a second

- Morning practice: eat 30-35 minutes before

# Build your breakfast!

Protein	Carbohydrate	Fat	Fruit	Dairy
Eggs	Bread	Peanut butter	Banana	Milk (skim, 1%, chocolate)
Turkey bacon	Bagel	Nuts	Frozen berries	Cheese
Deli ham/turkey	Dry cereal	Butter/margerine (w/ heart healthy fat)	Apple	Cottage cheese
Peanut butter	Hot cereal		Orange	Low-fat yogurt
Nuts	Waffles		Applesauce	
Protein bar	Pancakes		100% fruit juice	
			Dried fruit	
			Fruit cup	

- Oatmeal w/ nuts & raisins, milk, glass of OJ
- Cereal, milk, fruit
- PB&J on wheat, fruit, milk
- Breakfast lean pocket, yogurt, fruit juice
- Make-you-own parfait: yogurt, frozen fruit, granola
- Bagel w/ PB, fruit, chocolate milk



# Build your Lunch!

Protein	Carbohydrate	Fat	Fruit	Veggies	Dairy
Deli meat (ham, turkey)	Bread/roll/bagel	Peanut butter	Banana	Microwave steam veggies	Milk (skim, 1%, chocolate)
Packaged fish (tuna , salmon)	pasta	Nuts	Frozen berries	carrots	Cheese
Grilled chicken	potato	Butter/margerine (w/ heart healthy fat)	Apple	Sandwich veggies	Cottage cheese
eggs	Granola bar	mayo	Orange	salad	Low-fat yogurt
edamamae	Rice	Salad dressing	Applesauce		
		Veggie dip	100% fruit juice		
			Dried fruit		
			Fruit cup		

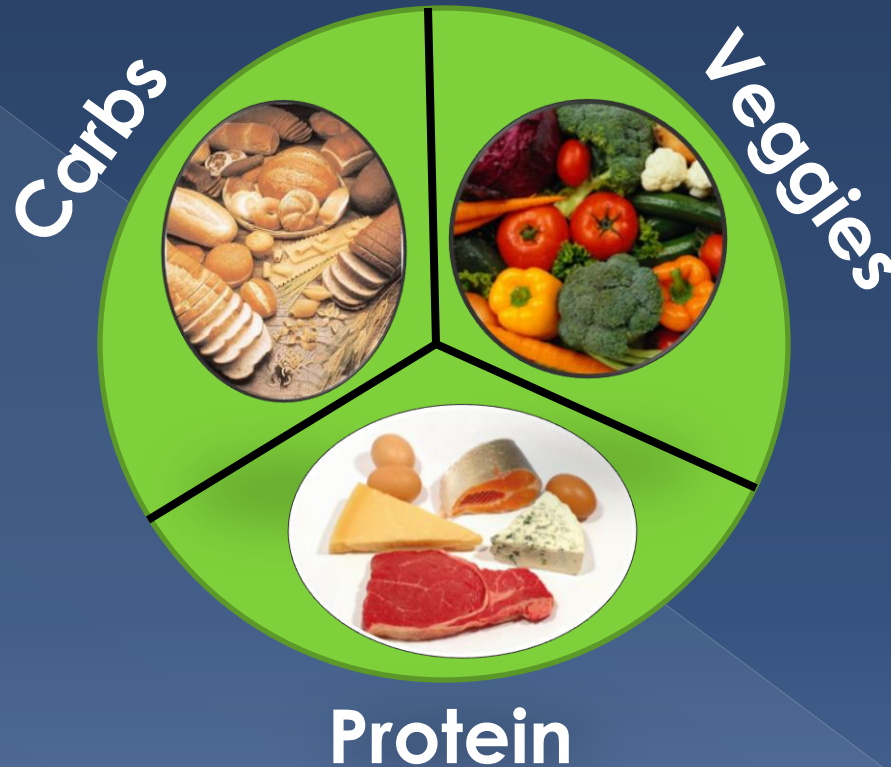
- School lunch has good options too!
- Bring a sandwich and buy the rest at school
- Pack entire lunch



# School Lunch

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
		1 PORK B-B-Q CORN BAKED BEANS SALAD BREAD FRUIT MILK	2 CHICKEN CALIFORNIA BLEND POTATOES SALAD BREAD FRUIT MILK	3 PIZZA PINTO BEANS MIXED GREENS SALAD BREAD FRUIT MILK
6 CHICKEN RICE ORIENTAL VEG. SALAD BREAD FRUIT MILK	7 HAM BROCCOLI POTATOES SALAD BREAD FRUIT MILK	8 RIB HOAGIE FRIES CORN SALAD BREAD FRUIT MILK	9 BAKED LASAGNA GREEN BEANS POTATOES SALAD BREAD FRUIT MILK	10 PIZZA MACARONI AND CHEESE PINTO BEANS/CABBAGE SALAD BREAD FRUIT MILK
13 CHICKEN CORN MASHED POTATOES SALAD BREAD FRUIT MILK	14 BURRITO/CHILI RICE CASSEROLE ORIENTAL VEG SALAD BREAD FRUIT MILK	15 CHICKEN PATTY GLAZED CARROTS POTATOES SALAD BREAD FRUIT MILK	16 SPAGHETTI GREEN BEANS PINTO BEANS/MAC&CHEESE SALAD BREAD FRUIT MILK	17 PIZZA MACARONI AND CHEESE PINTO BEANS SALAD BREAD FRUIT MILK
20 CHICKEN NUGGETS CORN POTATOES SALAD BREAD FRUIT MILK	21 TURKEY POTATOES BROCCOLI SALAD BREAD FRUIT MILK	22 HOT SPICY CHICKEN FRIES CORN SALAD BREAD FRUIT MILK	23 TACO POTATOES CALIFORNIA BLEND SALAD BREAD FRUIT MILK	24 PIZZA CAULIFLOWER CORN SALAD BREAD FRUIT MILK
27 CORN DOG FRENCH FRIES GREEN PEAS SALAD BREAD FRUIT MILK	28 HAM AND CHEESE HOAGIE POTATOES BROCCOLI SALAD BREAD FRUIT MILK	29 PORK B-B-Q CORN BAKED BEANS SALAD BREAD FRUIT MILK	30 CHICKEN CALIFORNIA BLEND POTATOES SALAD BREAD FRUIT MILK	

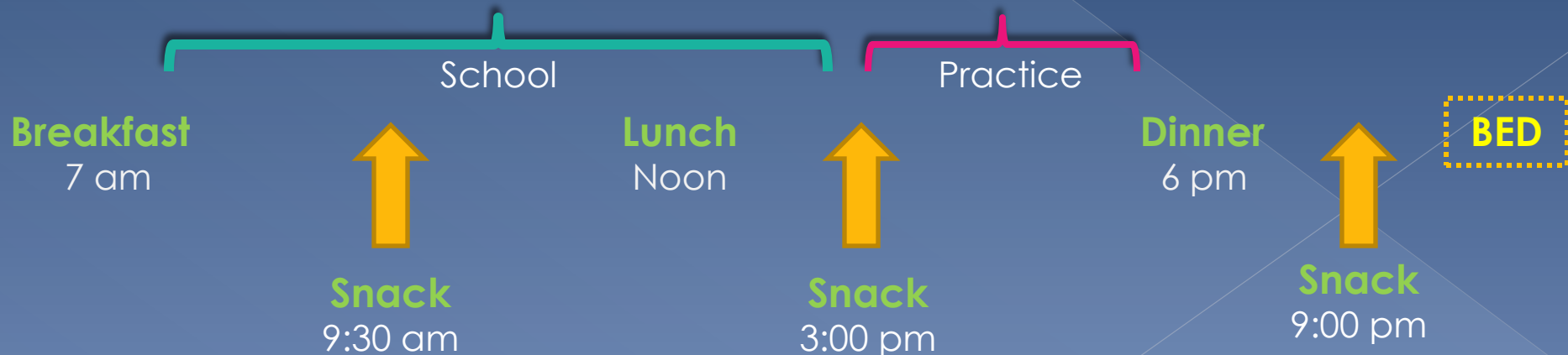
# Dinner in Peace...



- Large chicken breast, rice, salad w/ vinaigrette dressing
- Tacos (lean beef) on wheat tortillas, filled with veggies, side salad
- Lean steak, baked potato, vegetable
- Lasagna, side salad with veggies

# Snack attack

- Eat every 2-3 hours, especially on competition days
- This will keep metabolism running, glycogen stores full, and prevent eating large meals at any given time
- Secret to snacking is planning!
  - > Pack granola bars, trail mix, beef jerky, string cheese, PB crackers, fruit (fresh or dried), veggies



# McDonalds, and Taco Bell, and Chick-fil-a....oh my!

- Go grilled over fried
- Instead of typical side-items, opt for fruit, yogurt, or side salads
- Stay away from sweetened drinks. Opt for water or un-sweet iced tea... or diet beverages if you must!
- Get as many veggies on a sandwich or salad as possible



- Grilled chicken sandwich, fruit and yogurt parfait, water
- “Drive-thru diet”, or cantina tacos

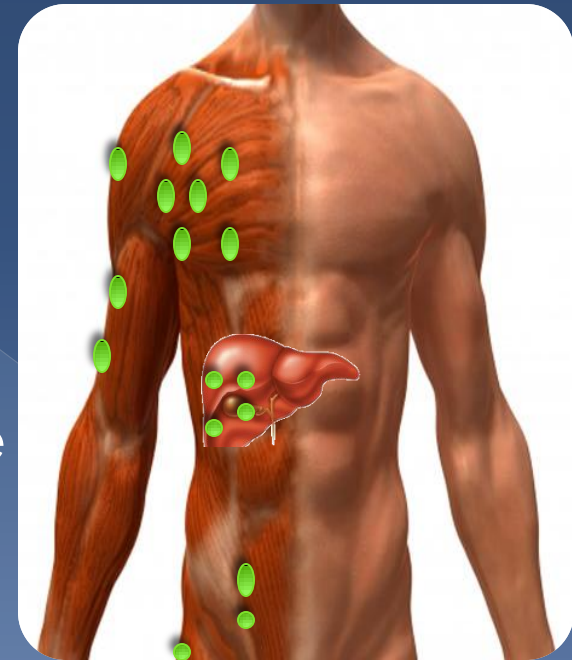
# It's go time!!

## BEFORE

- **2-4 hours before:** pre-competition meal (most likely lunch). Have little to no fat.
- **30 minutes before:** small snack to 'top off' energy stores
  - Granola bar/ nutrition bar
  - Banana w/ PB
  - Gatorade
  - Sport gel

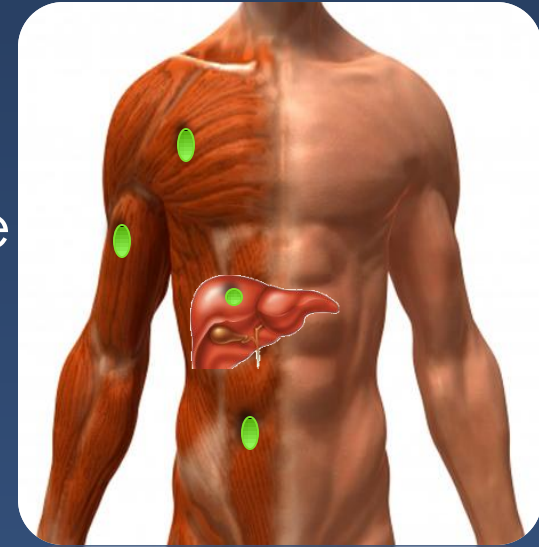
## DURING

- In between events or half-time, you can fuel if needed with carbohydrate source
  - Electrolyte chews
  - Sport gel/beans
  - Gatorade



# Recovery

- After intense workout, practice, or a race
  - > Microtears
  - > Release cortisol (catabolic hormone)
  - > Deplete glycogen stores
  - > Inflammation



- Must recover within a few hours (sooner the better)

## ***Carbohydrate/protein source***

- > Chocolate milk
- > ensure & fruit
- > protein bar & fruit
- > PB&J sandwich
- > Muscle milk shake & fruit
- > Cheese & pretzels or crackers
- > Cherry juice & bar



# Hydration

- Morning pee best indicator of hydration status



OK!



You better start hydrating!

- Water throughout day (lemon, crystal light)
- Gatorade during physical activity



# Be Aware!

## ● Nutrients of concern for endurance athletes

### > **Iron**

- Take with Vitamin C if low
- Get tested if symptoms of anemia present
- Red meat = good source

### > **Vitamin D**

- Stress fractures, broken bones
- Low in non-summer months  
(coming into track season)

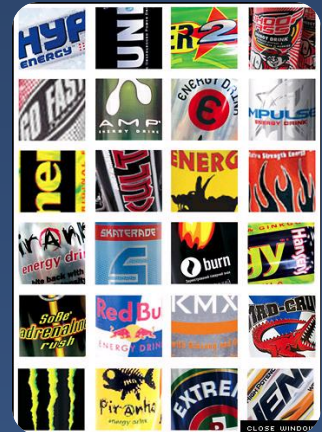


# Nutrition Supplements

- **FOOD FIRST!!**
- NOTHING before 16 years old
- Why you shouldn't take supplements:
  - > Not regulated by the FDA (never know what's in them)
  - > False claims with no scientific evidence
  - > Many manufacturers have no nutrition background
- Reputable Brands
  - > Nordic Naturals
  - > 8-ball nutrition
  - > Honey Stinger
  - > EAS
  - > Gatorade
  - > PowerBar
  - > Muscle Milk

# Energy drinks (gag me!)

- Caffeinated drinks not worth the risks vs. benefits.
  - > Caffeine + Sugar + Herbs (but then again, nobody knows for sure)
  - > Pulls calcium out of bones
  - > Diuretic-dehydrates you
  - > Banned in France, Denmark and Norway due to related deaths and caffeine levels
- If you need energy...EAT! Plus, good quality sleep is essential to athletic performance!!



# Be Informed

**Start Here** →

Check Calories

Limit these nutrients

Get enough of these nutrients

Footnotes

Nutrition Facts	
Serving Size 1 cup (228g) Servings Per Container 2	
Amount Per Serving	
Calories 250	Calories from Fat 110
	% Daily Value*
<b>Total Fat</b> 12g	<b>18%</b>
Saturated Fat 3g	15%
Trans Fat 3g	
<b>Cholesterol</b> 30mg	<b>10%</b>
<b>Sodium</b> 660mg	<b>20%</b>
<b>Total Carbohydrate</b> 31g	<b>10%</b>
Dietary Fiber 0g	0%
Sugars 5g	
<b>Protein</b> 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	2%

\*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:  
Fat 9 • Carbohydrate 4 • Protein 4

Quick guide to % DV

5% or less is low

20% or more is high

Increase risk of heart disease, high blood pressure, high cholesterol

Improves health, reduces risk of certain diseases, prevent injury

**INGREDIENTS:** WATER, CHICKEN STOCK, ENRICHED PASTA (SEMOLINA WHEAT FLOUR, EGG WHITE SOLIDS, NIACIN, IRON, THIAMINE MONONITRATE [VITAMIN B1], RIBOFLAVIN [VITAMIN B2] AND FOLIC ACID), CREAM (DERIVED FROM MILK), CHICKEN, CONTAINS LESS THAN 2% OF: CHEESES (GRANULAR, PARMESAN AND ROMANO PASTE (PASTEURIZED COW'S MILK, CULTURES, SALT, ENZYMES), WATER, SALT, LACTIC ACID, CITRIC ACID AND DISODIUM PHOSPHATE), BUTTER (PASTEURIZED SWEET CREAM (DERIVED FROM MILK) AND SALT), MODIFIED CORN STARCH, SALT, WHOLE EGG SOLIDS, SUGAR, DATEM, RICE STARCH, GARLIC, SPICE, XANTHAN GUM, CHEESE FLAVOR (PARTIALLY HYDROGENATED SOYBEAN OIL, FLAVORINGS AND SMOKE FLAVORING), MUSTARD FLOUR, ISOLATED SOY PROTEIN AND SODIUM PHOSPHATE.

“To get something you’ve never gotten, you must do something you’ve never done.”

# QUESTIONS

