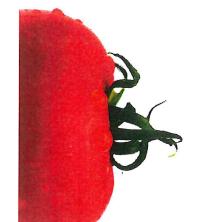


Practical

Performance Nutrition

Sports Nutritionist Aaron Carbuhn, MS/MS, RD, CSSD, SCCC



1. High Performance Foods Know Your Options!

Performance Foods Most Athletes are Willing to Eat or at Least Try!

GRAIN	GRAINS/STARCHES	PROTEINS	VEGETABLES	FRUITS	FATS
Cold Cereals	Veggies, Beans, Potatoes	3oz Salmon	Raw Vegetables	1 small Apple	Choose Often
3/4 cup Cheerlos	1/2 cup Say Beans or Edamame (cooked)	3oz Tuna (canned in water)	1 cup Celery	1/2 cup Applesauce (unsweetened)	1 thsp Peanut Butter
1/2 cup Frosted Mini Wheats	1/2 cup Peas (cooked)	3oz Chicken Breast	1 cup Cucumber	1.25 cup Strawberries	
1/2 cup Kashi Go Lean Cereal	1/2 cup Pinto Beans (cooked/canned)	3oz Ground Turkey (cooked)	1 cup Green Veggle Salad	1/4 cup Watermelon	7 Walnut Halves
1/2 cup Raisin Bran	1/2 cup Black Beans (cooked/canned)	3oz Dell Turkey, Ham	1 cup Spinach	1/2 med. Grapefrult	
1/2 cup Total Cereal	1/2 cup Kidney Beans (cooked/canned)	3oz Beef (95% lean ground chuck)	1/2 cup Lettuce	1 med Orange	2 tbsp Flax Seeds
Hot Cereals	1/2 cup Black Eyed Peas(cooked/canned)	1.5oz Beef Jerky	1 cup Carrots	1/2 Large Banana	1/4 med. Avocado
1/2 Packet Instant Oatmeal	1/2 cup Corn (fresh or frazen, coaked)	3oz Beef Tenderloin Steak	1 cup Bell Peppers	3/4c Pineapple chunks (own Juice)	3 tbsp Guacamole
Breads/Tortillas/Rolls	1/2 cup Sweet Potato (cooked)	3az Pork Chop (grilled)	1/2 cup Tomato	1 cup Blackberries	10 Large Black Olives
1 slice Whole Wheat Bread	1 small Baked Potato (Computer Mouse)	160z 1% Milk	Cooked Vegetables	3/4 cup Blueberrles	2 tbsp Sunflower Seeds
1/4 Whole Wheat Bagel	Crackers/Granola Bars	1/2 cup Greek Yagurt	1/2 cup Asparagus	14 Grapes	1.5 tsp. Olive Oil
1/2 English Muffin	1 Kashi Granola Bar	1/2c 1%Low-fat Cottage Cheese	1/2 cup Broccoli	2 tbsp	2 thsp. Vinaigrette salad dressin
1/2 6 inch Sub Bread	1 Bar Nature Valley Granola Bar	2 2% String Cheese	1/2 cup Green Beans	1 small Klwi	Choose less Often
Pasta/Rice	3/4 cup Pretzels	2 E885	1/2 cup Stir Fry Vegetables	1/2 cup Fruit Cocktail (own Juice)	1 thsp - Butter (whipped)
1/3 cup Brown Rice (cooked)	2 Rice Cakes (4" diameter each)	4 Egg Whites	1/2 cup Steamed Vegetables	1 cup Mixed Berries (fresh/frazen)	1 slice Cheese slice
1/2 cup Cooked Wheat Pasta	5 Reduced Fat Triscults	2 rbsp. Peanut Butter	1/2 cup Tomato Sauce (Canned)	1 thsp Fruit Jam (assorted)	3 tbsp_reduced-fat cream che
1/3cup Quinoa		1/2 cup Tofu	6 oz Vegetable Juice		4 thsp Reduced-fat Sour Crea

Better Grain/Starches

									-	-		_					
May do Can	1/2 cup Cooked Wheat Pasta	1/3 cop Brown Nie (cookel)	Pasta/Rice	1/2 6 Inch Sub-Bread	1/2 English Muttin	1/4 Whole Wheat Bage!	Like Whole Wheat Bread	Breads/Tortillas/Rolls	1/7 Pathetimiant Galment	Hot Cereals	1/2 tup Total Cereal	1/2 cup Rassin Brain	1/3 cup Kasha Golean Cereal	1/2 con Frosted Mira Wheats	1/4 sup Cheerlus	Cold Cereals	GRAINS
9	5 Reduced Fat Triscolls	2 Also Cabes (4" Summers away)	3/4 cup Pretteh	1. Bar Nature Valley Grandle flar	1 kath Granda Bar	Grackers/Granola Bars	3 (mail: Baked Potato (Computer Mouse)	1/2 cup Sweet Patato (cooked)	1/2 cap. Com (fresh or frozen, cooked)	1/2 cup Black Eyed Peastcoaked/carned]	1/2 coo Fidney Beam (conted/conveil)	1/7 (up Black Beans (cooked/canned)	1/2 cop Pinto Beam (cooked/carned)	1/2 cup Peas (uniked)	1/2 sup Say Beans or Edamanie (souted)	Veggies, Beans, Potatoes	GRAINS/STARCHES
1/1 con July	Filipp Feared Butter	4 LAWRENCE	3 lm	2 Passing theese	The 180 with College Olivers	1/2 top Green togot		har Park Chaptgrilesh	July Beef Fenderson Weak	1 San Beet Day	1.1 Bud Steampoon South	for the futer him.	or Ground Ludge (more of)	for cracken breast	or Tuna (canaed in water)	Tel Salmon	PROTEINS
6 nt Vegetable Juice	1/2 (up. Tomato Sauce (Carred)	1/2 cup Steamed Vegetables	17 ton Stirfty Vegetables	1/2 cup. Green beam	1/1 cap Broccoll	VI cup Assertation	Cooked Vegetables	1/7 cap Tomato	1 sup Bell Peppers	Trup Carrots	Man letter	Loop Spenich	Toun Green Vegate Salad	Line Committee	1 (Lap Celtry	Raw Vegetables	VEGETABLES
	Libth Full landamented)	Trap Mired Berner (headburn)	1/3 cup Fruit Cocksel (own Julie)	Lynul Rief	1 thsp. Doted Fruit (residu etc.)	14 Grapes	3/4 cup. Blueberries	Losp Bleaterries	1/4c Pincapple chinha (own juice)	1/1 Large Barrans	I med Draige	1/2 and suspetiuit	D'A tup Watermelan	1.25 cup Strawberries	1/2 cap. Applessance (universitered)	Lumal Apple	FRUITS
Albert And and for feel Comm	Total distribution continues	The Committee of	Titus Butter (with the	Choose less Often	Clinia Name and State of the Contract	10 800 0111	Titles Swiftman Middle	17 14 10 November 17 17 17 17 17 17 17 17 17 17 17 17 17	10m Carphan	Ut not bounds	Filled From Smith	1 Principles	The world frames	II Amerik	10th physical physics	Choose Often	STAR

GRAINS/STARCHES

Cold Cereals

3/4 cup Cheerlos
1/2 cup Frosted Mini Wheats

1/2 cup Kashi Go Lean Cereal

1/2 cup Raisin Bran

1/2 cup Total Cereal

Tot Cereals

1/2 Packet Instant Oatmeul

Breads/Tortillas/Rolls

I slice Whole Wheat Bread

1/4 Whole Wheat Bagel

1/2 English Muffin

1/2 6 inch Sub Bread

1/3 cup Brown Rice (cooked)
1/2 cup Cooked Wheat Pasta

1/3 cup Cous Cous

Weggies, Beans, Potatoes

1/2 cup Soy Beans or Edamame (cooked)

1/2 cup Peas (cooked)

1/2 cup Pinto Beans (cooked/canned)

1/2 cup Black Beans (cooked/canned)

1/2 cup Kidney Beans (cooked/canned)

1/2 cup Black Eyed Peas(cooked/canned)
1/2 cup Corn (fresh or frozen, cooked)

1/2 cup Sweet Potato (cooked)

1 small Baked Potato (Computer Mouse)

Crackers/Granola Bars

1 Kashi Granola Bar

1 Bar Nature Valley Granola Bar

3/4 cup Pretzels

2 Rice Cakes (4" diameter each)

S Reduced Fat Triscuits

Better Proteins

														- 1	-	2	
1/7 sup Coun Cour	1/2 cup Cooked Wheat Parts	Ul cup Brown Aire (cooked)	Pasta/Rice	1/2 Giren Saphread	1/2 English Multin	1/4 Wrote Wheat Bagel	I vike Whole Wheat Bread	Breads/Tortillas/Rolls	1/2 Palket Instant Datescal	Hot Cereals	1/2 cup Total Cereal	1/7 cup Raisin Bran	3/2 cup hatha Go Lean Cereal	172 cup Fronted Ming Wheats	3/4 cup Chrestos	Cold Cereals	GRAINS
	5 Reduced fat Frigues	3 Rite Cates (4" staneter each)). But Nation Making Granula But		Crackers/Granola Bars	Lymail Baked Folsto (Gergades Abace	1/2 cop Sweet Fotato (cooked)	1/2 cap Corn (fresh or frozen, cacked	1/2 cup. Black Eyed Peast on And Caran	1/2 cap Aidney Beam (cooked/caree-	1/2 cup Black Beans (cooked/canned	1/2 cup Foto Beans (rookes)/canned	1/2 con Pear (unided)	1/2 sup. Say Beant of Education (cooks	Veggles, Beans, Potatoes	GRAINS/STARCHES
mil tenti	Filtrip Territor Butter	4 (MWH)	2 100	3 - 38 Minig Chiese	1721 INDAMENTAL COTTAGE COLORS	1/1 say these traject	100 18 101	the fire of the one of the	Total Beet fundament to ac-	Action (18)	Total Bert (1908 and procedure)	for Eul Turkey Ham	the second section of	THE CHARLES THE	for Tanatapandin water	Applies not	PROTEINS
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6 01 Vegetable June	Josep Tomato Sauce (Canaed)	/Drup Steamed Vegetables	17 cap Stir Fry Vagetables	Wasp Green Beams	1/2 mp Brossoll	1/2 tub Atharagut	Cooked Vegetables	V/Loup Tomato	Junp Bell Peppers) tup Carrett	1/2 cup terriare	Loop Spinisch	Loup Green Vegge Salul	Trup Curamiter	Trup Celety	Raw Vegetables	VEGETABLES
601 Vegetable lune	Jean Tomato Sauce (Canned) Titish Front Jam (assured)	Trup Steamed Vegetables Trup Mixed fremes (freuchinse)	1/2 rup Stirfiy Vegetables 1/2 rup Fruit Coukras (own John)	1/2 trip. Green Beins. 1 small blad		1/2 to a charges 12 Grapes	Cooked Vegetables Varup Numerica	1/2 cup Tomato 2 cup blackberries	Total Rell Peppers 1/4c Pineapple charles (care jour)	Trup Carrott 1/2 large hanana		Loop Spinish 1/2 med Grapetrals	Loop Green Vergee Salud 1/4 cup Watermelon	Trup Consenter 125 rup Strawbornes	Trup Celery 1/2 cup Appleration (ontwestened)	Raw Vegetables	VEGETABLES FRUITS

PROTEINS

3oz Salmon

Boz Tuna (canned in water)

3or Chicken Breast

3az Ground Turkey (coaked)

30z Deli Turkey, Ham

302 Beef (96% lean ground chuck)

1.5oz Beef Jerky

3oz Beef Tenderfoln Steak

3az Pork Chap (grilled)

1602 1% Milk

1/2 cup Greek Yogurt 1/2c 1%Low-fat Cottage Cheese

2% String Cheese

Eller .

Egg Whites

2 tbsp Peanut Butter

1/2 cup Tofu

Better Vegetables



VEGETABLES

Raw Vegetables

1 cup Celery

1 cup Cucumber

1 cup Green Veggle Salad

1 cup Spinach

1/2 cup Lettuce

1 cup Carrots

1 cup Bell Peppers

1/2 cup Tomato

Cooked Vegetables

1/2 cup Asparagus

1/2 cup Broccoli

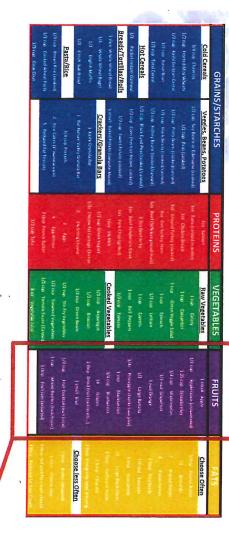
1/2 cup Green Beans

1/2 cup Stir Fry Wegetaibles

1/2 cup Steamed Vegetables
1/2 cup Tomato Sauce [Canned]

6 oz Wegetable Juice

Better Fruits



FRUITS

1 small Apple

Applesauce (unsweetened)

1.25 cup Strawberries

1/4 cup Watermelon

1/2 med. Grapefruit 1 med Orange

1/2 Large Banana

3/4c Pineapple chunks (own Julea)

1 cup Blackberries

3/4 cup Blueberries

14 Grapes

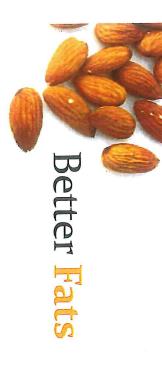
2 tbsp Dried Fruit (raisins etc...)

1 small Klwd

1/2 cup Fruit Cocktail (own Juice)

1 cup Muxed Berries (fresh/frasen)

1 tbsp Fruit Jam (assorted)



| Cold Cereals | Vergles, Barris, Potators | Vision | National Indiana | National Indiana

FATS

Choose Often

- 1 thsp Peanut Butter
- Walnut Halve
- Pecan Halves
- thsip Flax Seeds
- 1/4 med. Avocado
- 3 tbsp Guacamok
- Large Black Olives
- thsp Sunflower Seeds
- Vinaigrette salad dressing

Choose less Often

- 1 tbsp Butter (whipped
- slice Cheese slice
- thsp_reduced-fat cream cheese
- 4 tbsp Reduced-fat Sour Cream

Performance Nutrition Grocery List

		1	
	MONDAY TUESDAY		E Sweet Potatoes
	WEDNESDAY THURSDAY	Roast Beef, Turkey or Ham) © 97/3 Ground Turkey or Beef © Sirloin, Flank, or Strip Steak © Pork Chop or Tenderloin © Boneless-Skinless Chicken Breast © Whole Wheat Pasta Noodles © Whole Grain Cereal (Cheerios, Kashi, Mini Wheats, Special K, or Raisin Bran) © Oatmeal © 6 inch Whole Wheat Bread © Whole Wheat Bread © Whole Wheat Bread © Whole Wheat Bread	
	AY FRIDAY SATURDAY	€ 1% or Skim Milk € Low Fat (1%) Cottage Cheese € Reduced Fat Shredded Cheese € Greek Yogurt € Eggs € Low Fat String Cheese € Low Fat/Fat Free Yogurt € □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
<u> </u>	DAY SUNDAY	E Frozen Chicken Breast E Frozen Tilapia Filets E Frozen Strawberries E Frozen Broccoli E Frozen Green Beans E Frozen Stirfry Veggies E	FREEZER

2. Timing it Right
Putting Performance Foods into Action!



Timing it Right Hydration

Practice/Training Session	Immediately After	During Practice or Training Session	Fyery 15-20 min	30 minutes	Before	fraining:	Practice or	
	17 – 20 fl oz per pound lost		5 − 10 fl 02	5-10 fl oz		Water or Sports Drink:	Fluid Ounces of	
G OR Pound Lost				DD DAYANI	G G OR G OR		Equivalent to:	
œ	7	б 1 И	4	ω	1		9	
	7 Severely	Dehydrates		liyalatea	Lydrated			

^{*} Daily Hydration Goal – ½ Body Weight in fl oz of low calorie fluids (i.e. Water!).

Timing it Right Breakfast

General Framework of a

<u>Performance Breakfast.</u>



VEGETABLES

PROTEINS

FRUITS

STATS

= encouraged depending upon training/energy needs





<u>Better Breakfast Food</u> <u>Examples</u>

Oatmeal, Kashi Cereal, Cheerios (Any Flavor) Whole Wheat Bread or English Muffin

Eggs, Cottage Cheese, Greek Yogurt, Low-fat Milk, Ham Steak

Fresh Salsa, *Omelet Add-Ons* – Spinach, Tomato, Onion, or Bell Pepper

Fresh Berries, Cantaloupe, Pineapple, Grapefruit, Orange, Kiwi, Apple, or Banana

Walnuts, Pecans, Almond Slivers, Nut Butter, Avocado, Flax Seeds

Protein Powered Pancakes Recipe

Foods Included to Meet Breakfast Framework

Old Fashion Oats

Eggs, Cottage Cheese

Add-Fresh Berries

Top w/Peanut Butter, Not Syrup

Protein Powered Pancakes

1 serving, 3 - 4" pancakes (A Short Stack)

Prep Time: 5 minutes

Cook Time: 10 minutes

Equipment Needed

- Blender
- Non-stick pan
- Measuring Spoons and Cups
- Spatula



Ingredients

- ½ cup of fat free or low fat cottage cheese
- 2 large eggs
- ½ cup of old fashioned oats
- 1 tsp of vanilla extract

Preparation

- Put all ingredients in blender (put wet ingredients in 1st for easier mixing). Blend until combined into a batter.
- Spray a non-stick cooking spray to pan. Heat non-stick pan over medium heat.
- 3. Pour onto skillet a slightly larger baseball sized pancake. Allow to cook until small bubbles form. Then flip and allow to cook for the same amount of time on other side
- . Serve with sugar free or lite maple syrup.

Nutrition

Per serving (3 - 4" pancakes): 382 calories; 16 g fat; 30 g carbohydrates; 33 g protein; 4 g fiber.

Nutrition Bonus: Add fresh berries or fruit to boost flavor and nutrient density.

Timing it Right

Pre-Workout Nutrition - 1 Hour or Less

General Framework of a Pre-Workout Snack.

GRAINS/STARCHES

VECETABLES

PROTEINS

FRUITS

FATS



= essential

= encouraged depending upon training/energy needs

Better Pre-Workout Food <u>Examples</u>

Pretzels, Dry Cereal (ex. Cheerios, Total) Oatmeal, Granola Bar, Toast, Graham Cracker,

Greek Yogurt, String Cheese, Chocolate Milk (8oz)

Banana, Apple, Applesauce, Orange, Raisins, Assorted Fruit Cups (in 100% Juice)

Timing it Right



Recovery Nutrition – Within 30 - 60min after exercise

General Recovery Nutrition Framework.



GRAINS/STARCHES









FATS





Better Recovery Food Examples

Granola Bar, Pretzels, Whole Wheat Bagel, Kashi Go Lean Cereal, Cheerios

Greek Yogurt, String Cheese, Chocolate Milk, Chocolate Soy Milk, Protein Powder

Banana, Apple, Applesauce, Orange, Raisins, Assorted Fruit Cups (in 100% Juice)

Peanut Butter, Almond Butter, Almonds, Walnuts, Pecans, Raw Nut Mix, Flax Seed Oil

Timing it Right Lunch

General Framework of a Performance Lunch.









= encouraged depending upon training/energy needs





Better Lunch Food Examples

Brown Rice, Peas, Beans, Corn, Triscuits, Baked Sweet Potato, Wheat Bread or Pasta

Chicken Breast, Deli Turkey/Ham/Roast Beef, Eggs, Lean Ground Turkey or Beef, Tuna

Raw-Baby Carrots, Bell Pepper, Spinach Salad Cooked-Frozen Steamed Veggies, Stir Fry Veggies

Fresh Berries, Grapes, Pineapple, Grapefruit, Orange, Kiwi, Apple, Banana, or Dried Fruit

Almonds, Walnuts, Pecans, Pistachios, Avocado, Olives, Olive Oil, Vinaigrette Dressing, Cheese

Lunch Option Examples

Juarez Chicken Wrap

Whole Wheat Tortilla

Grilled Chicken Breast

Lettuce, Tomato, Onion

Avocado, Cilantro-Lime Vinaigrette

Tuscan Turkey Wrap

Tomato Basil Tortilla

Deli Turkey Breast

Lettuce, Tomato, Onion, Roasted Red Pepper

Balsamic Vinaigrette

Timing it Right

Snacks - Bedtime Included

<u>General Framework of a</u>
<u>Performance Snack.</u>





S FATS

= encouraged depending upon training/energy needs



Better Snack Food Examples

Triscuits, Oatmeal, Whole Grain Cereal, Whole Wheat Bread, Granola Bar, Rice Cakes

Greek Yogurt, Deli Meat, Eggs, String Cheese, Cottage Cheese, Low-fat Milk, Tuna Pouch, Jerky

Celery, Baby Carrots, Bell Pepper Strips, Cucumber, V8 Original Vegetable Juice

Banana, Apple, Grapes, Dried Fruit, Pineapple, Unsweetened Applesauce, Orange, Kiwi, Berries

Almonds, Walnuts, Pecans, Pistachios, Peanut Butter, Almond Butter

Timing it Right Dinner

<u>General Framework of a</u> <u>Performance Dinner</u>











= encouraged depending upon training/energy needs





Better Dinner Food Examples

Brown Rice, Corn, Beans, Peas, Sweet Potato, Baked Potato, Quinoa, Whole Wheat Pasta

Salmon, Tilapia, Chicken Breast, Beef Tenderloin, Lean Ground Turkey/Beef, Pork Loin

Raw-Baby Carrots, Bell Pepper, Spinach Salad Cooked-Steamed Veggies, Stir Fry Veggies

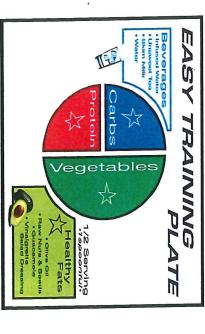
Fresh Berries, Grapes, Pineapple, Grapefruit, Orange, Kiwi, Apple, Banana, Watermelon

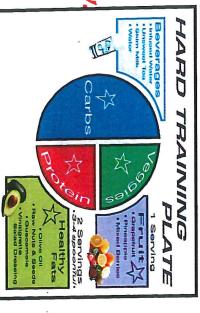
Vinaigrette Dressing, Sunflower Seeds, Walnuts, Pecans, Almond Slivers, Guacamole, Olives

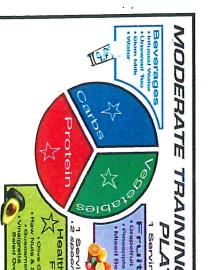
Performance Plates

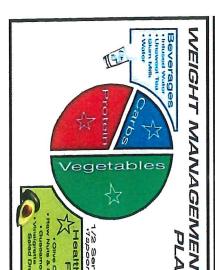
* Designed to Keep Fueling
Strategies
Simple and Practical.

Simply Fuel .
According
to Training Day

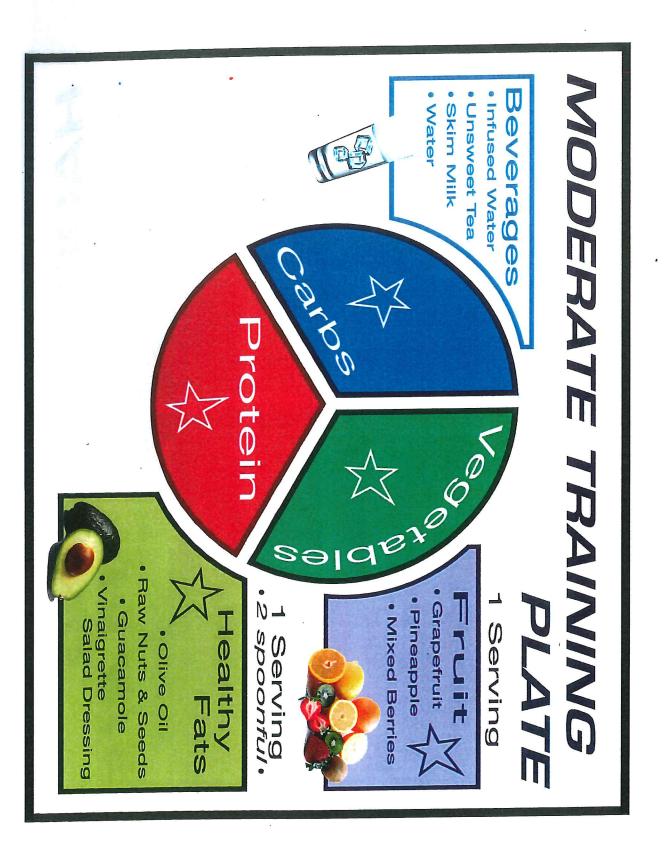


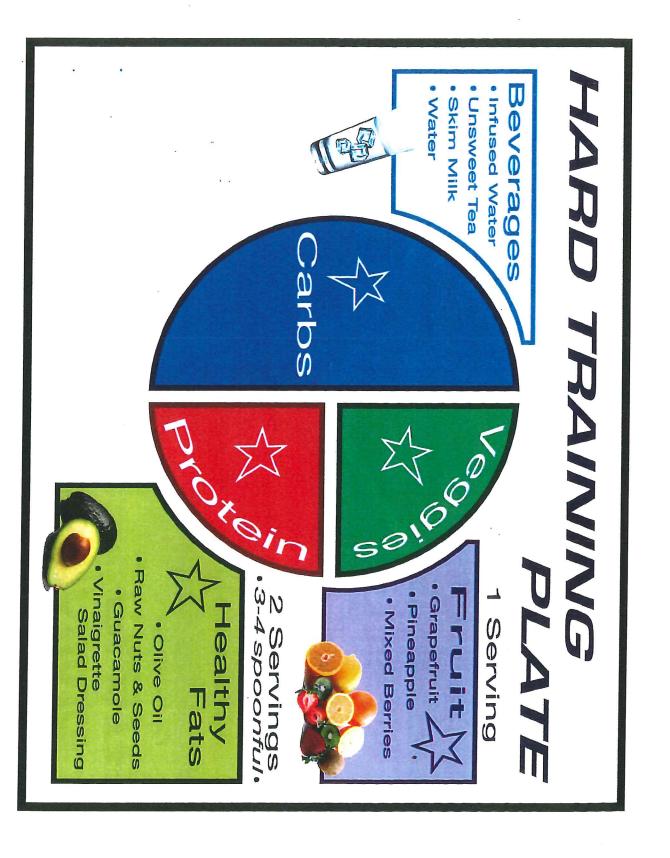














3. Performance Specific Nutrition Goals

Typical Performance Specific Nutrition Goals

Lean Out

 Lose body fat and either maintain or gain muscle weight.

Weight Gain

 Add muscle weight and on occasion body fat to increase total body weight.

<u>In a Perfect World</u>...Sigh...

Optimize Performance

- More athletes take the initiative to learn proper fueling strategies for optimum performance.
- Not just view nutrition changes necessary for leaning out or gaining weight.

Performance Specific Goals Lean Out



Lean Out Fundamentals

Lay off the Sugar!

- Drop processed food products. Need to choose bulk of foods from performance foods list.
- Eliminate sugar-laden fluids
- Better monitor dessert/treat consumption

Increase Protein and vegetables consumption

 Increase feeling of fullness and reduce energy intake.

Strictly limit Alcohol intake

Cancels out lean out goals.

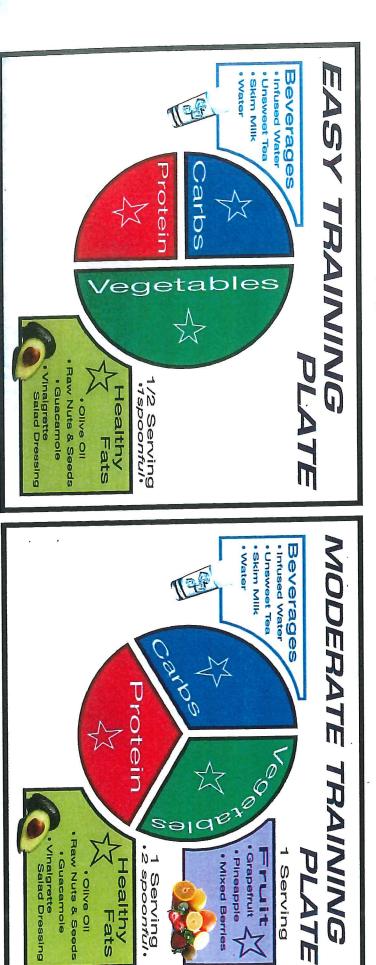
Get More Sleep!

Goal: 7 – 9 hours each night.



Lean Out Performance Plates

Still hungry? Simply rinse and repeat the plate only.



Recovery Days

Training Days

Performance Specific Goals Weight Gain



Weight Gain Fundamentals

- Increase Meal Frequency
- Eat 5 7 meals/snack each day
- Increase Intake of Healthy Fats
- Simple way to add the desired calories and boost recovery
- Ex. Olive Oil to Pasta, Trail Mix
- Add Calories from Fluids
- 2% or Whole Milk
- 100% Juice
- Sports Drink

- Get Your Sleep!
- Goal: 7 9 hours each night.
- Increase portions of complex grains/starches and protein
- Look to slowly increase portions each week.
- Be Consistent!



Weight Gain Performance Plate

Still hungry? Simply rinse and repeat the entire plate.

Infused Water

TTLIFT 1 Serving



· Water Carbs · Raw Nuts & Seeds Vinalgrette
Salad Dressing 2 Servings Grapefruit _ · Mixed Berries · Pineapple Guacamole Healthy · Olive Oll Fats

Recovery Days

Training Days

efinitely Non-Essential Supplementation **Energy Drinks**

American Academy of Pediatrics

 "Caffeine can produce harmful health effects in adolescents, including cardiovascular problems, anxiety, insomnia, digestive problems, dehydration, and others."

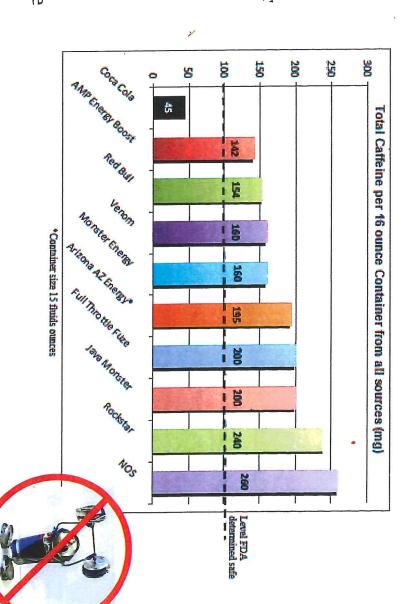
 "Rigorous review and analysis of the literature reveal that caffeine and other stimulant substances contained in energy drinks have no place in the diet of children and adolescents."

 National Collegiate Athletic Association (NCAA) and National Federation of State High School Associations (NFHS)

 State that energy drinks may pose a health and safety risk for studentathletes and are particularly worrisome if consumed before or during strenuous exercise.

What's all the **BUZZ** about?

FIGURE 1: Comparison of similar sized energy drink caffeine concentrations



Building a Performance Nutrition Mindset Keys to Breaking Those Barriers!

Food Serves Two Purposes in Life: Function and Reward.

What do you think most athletes choose food for?

- Understand these
 performance nutrition
 strategies do not mean a
 "diet". Diets don't work and
 don't last.
- Start small...Don't look at the big picture.

Be open to change...If it doesn't work the first time,

try, try again

- It is OK to mess up.
 The key is consistency,
 not perfection.
- Have a positive support system.



It may not be as easy as just saying "Eat This, Not That".

