



LEARNING OBJECTIVES

- + Gain a basic understanding of EXOS Nutrition System.
- + State the 5 Nutrition Mantras and 10 Coaching Keys.
- + Identify each of the macronutrients and summarize their roles in fueling the athlete.
- + Describe daily and exercise hydration recommendations.
- + Identify recovery nutrition recommendations in the post-workout period for fluid, carbohydrate and protein.

01

AUTHENTIC INTEGRATION

FOUR INGREDIENTS FOR A PERFORMANCE GAME PLAN



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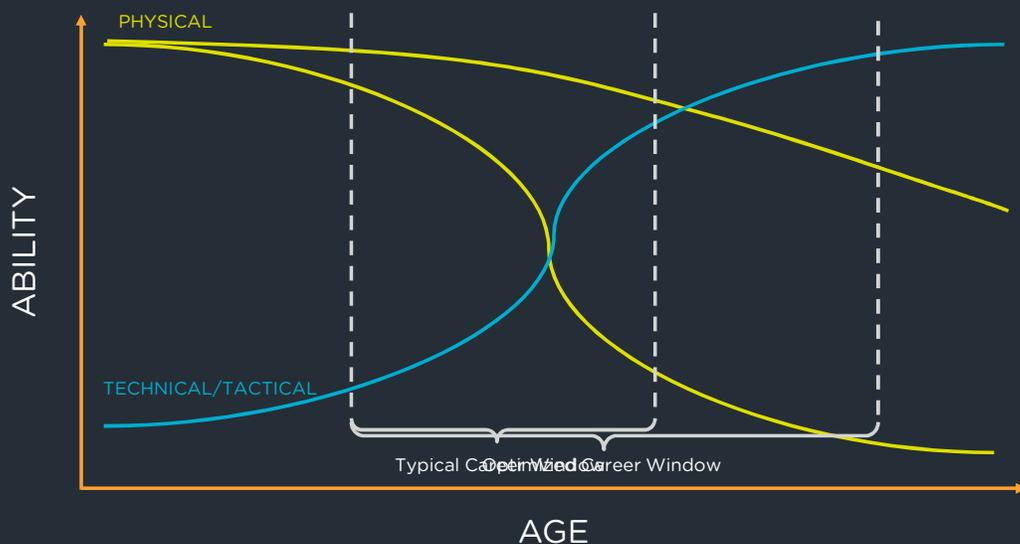
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METHODOLOGY BACKED IN SCIENCE

UNIVERSITIES	GOVERNMENT BODIES	PEER REVIEWED LITERATURE
HARVARD UNIVERSITY OF ARIZONA DUKE IOM	ACSM NSCA AND/CPSDA	IOM AMA ISSN
INDUSTRY		MEDICAL COLLEAGUES
SCIENTIFIC ADVISORY BOARD PRODUCTS RESEARCH		MAYO CLINIC JEFFERSON HOSPITAL MASSACHUSETTS GENERAL
PUBLISHED MODELS		RESEARCH COLLEAGUES
HEALTH PERFORMANCE INFLAMMATION MORE...		ARIZONA STATE DELAWARE HARVARD MIT
RELATABLE INFORMATION MEANINGFUL INSIGHTS		INTUITIVE SYSTEMS SUPPORTIVE FEEDBACK

EXTENDING THE CAREER WINDOW

Increasing years of high performance



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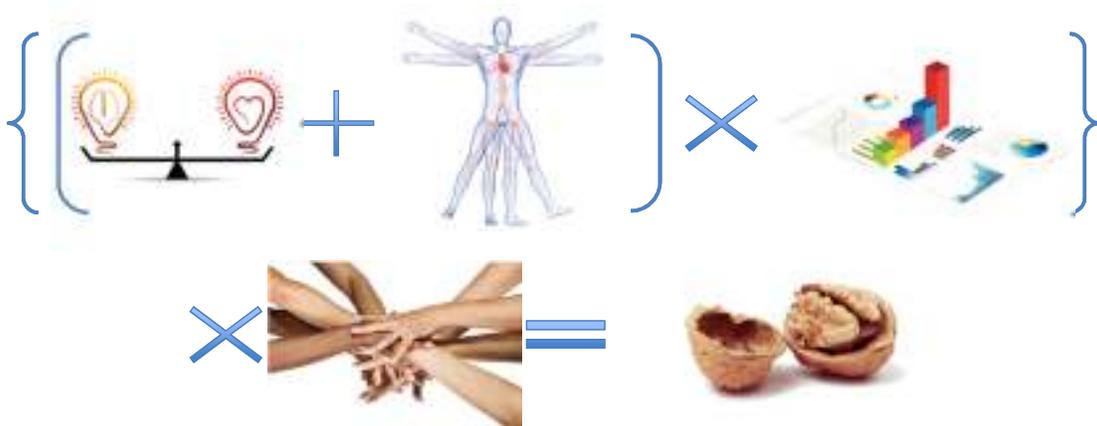
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02

TRANSFORMATIVE CHANGE

BEHAVIOR CHANGE



03

NUTRITION METHODOLOGY

APPLYING THE SCIENCE TO PEOPLE

Meeting the needs / goals of elite athletes.

OUR KEY GOALS

- Improve energy
- Improve endurance
- Improve strength
- Improve capacity
- Improve skill
- Improve speed
- Improve recovery
- Improved body composition

TO HELP ATHLETES

- Endure the season
- Play more minutes
- Be more explosive
- Feel less fatigue
- Achieve more catches, goals, tackles,
- Feel better—less sore, more motivated



EVERY DAY IS GAME DAY

Think Differently. Healthy Eating → Performance Fueling

TO MOTIVATE OR SIMPLIFY?



“Nutrition is often the **LIMITING** factor to performing your best. Those who **OPTIMIZE NUTRITION**, optimize performance.”

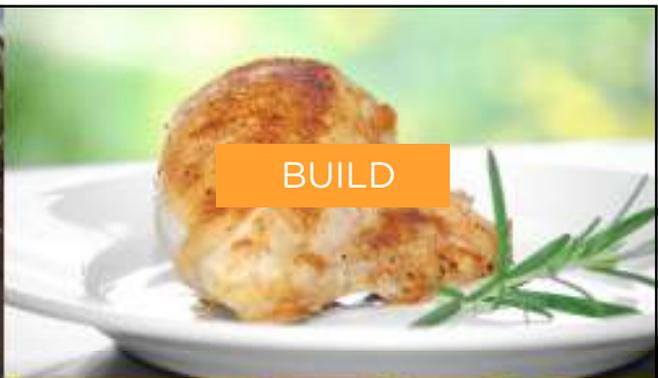
MINDSET



SIMPLE CHOICES BECOME PART OF YOUR DAY

create rituals + start simple + establish perspective





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SOURCES FOR FUEL



Oatmeal



Brown Rice



High Fiber Cereal



Quinoa



100% Whole
Wheat Bread

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SOURCES FOR BUILD



Tuna/Fish



Chicken/Turkey Breast



Lean Red Meat



Low Fat Dairy



Eggs

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SOURCES FOR PREVENT



COLOR CODE OF RESTORATIVE NUTRITION

THE BENEFITS OF EATING COLORFUL FOODS

Heart and lung health	Brain, heart and cellular health	DNA protection and skin health	Eye and bone health	Immune system
Red: Cherries Beets Tomatoes	Deep Blue/Purple: Blueberries Plums Eggplant	Orange: Carrots Ginger Sweet potatoes	Yellow/Green: Broccoli Spinach Pineapple	White: Garlic Onions Cauliflower

SOURCES FOR PROTECT

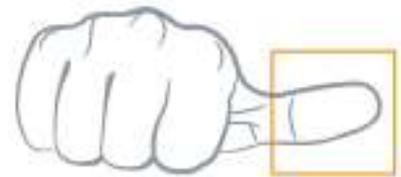
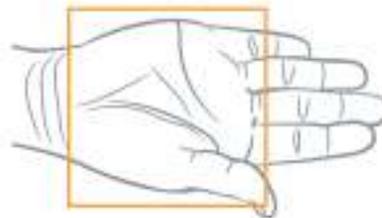


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PORTION SIZES - SIMPLE STRATEGIES



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EAT OFTEN



EFFECTS OF SKIPPING MEALS



(Deutz et al., Med Sci Sports Exerc, 2000)



- + Fuel through the day
- + Sustained high performance

EAT OFTEN - SIMPLE START

- + EAT EARLY
 - Start with Breakfast within 1 hour of waking
 - Ensure you include a protein and high fiber carbohydrate
 - Round out with color and healthy fats
- + EAT OFTEN
 - Fuel roughly every three hours

4-6

meals
per day



>1800

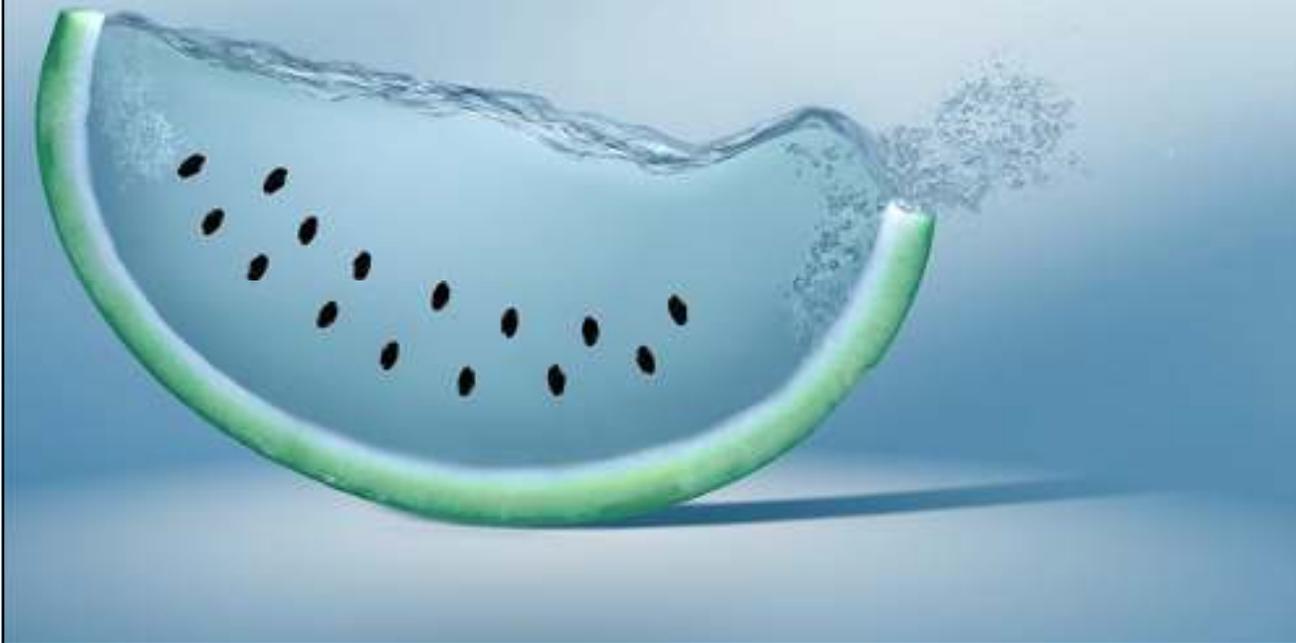
fueling opportunities
per year

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HYDRATE



HYDRATE - SIMPLE START

- + HALF YOUR BODYWEIGHT
 - Ounces of water per day
- + HYDRATE WITH FOOD, TOO
 - Include fruits and vegetables

1/2 to 1 oz

1 lb of BW

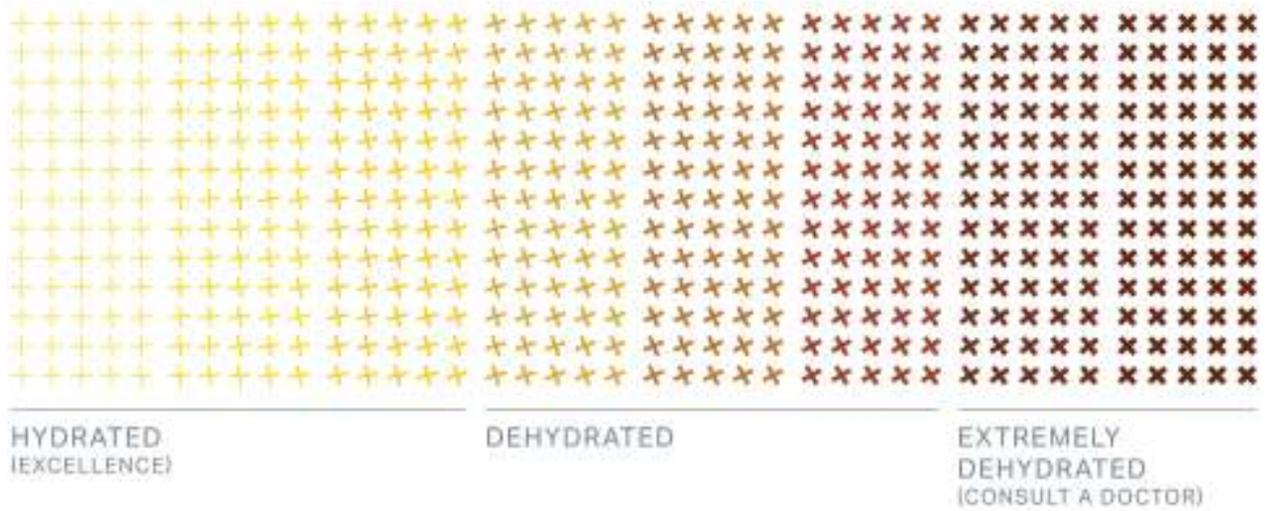


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AN EASY GUIDE

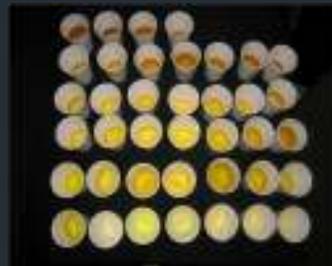


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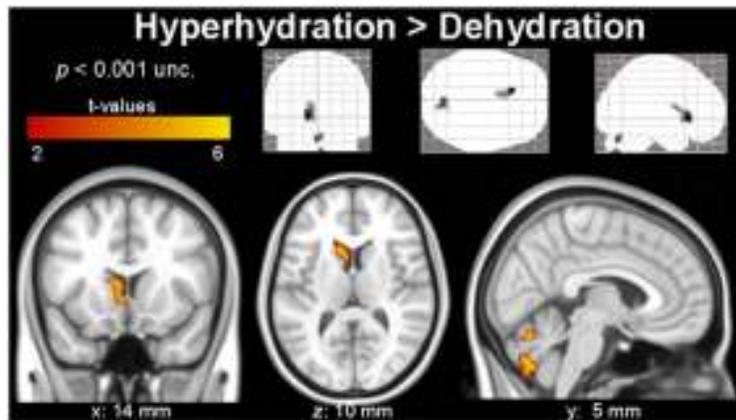
QUANTIFYING DEHYDRATION



URINE SPECIFIC GRAVITY VALUE	HYDRATION STATUS
<1.010	WELL HYDRATED
1.011-1.020	MINIMAL DEHYDRATION
1.021-1.030	SIGNIFICANT DEHYDRATION
>1.030	SERIOUS DEHYDRATION

Armstrong, L.E., Journal of the American College of Nutrition, 2007

DEHYDRATION AND THE BRAIN



Segmented clusters of the gray matter with significant extension during hyperhydration compared to dehydration in caudate nucleus and cerebellar regions (indicated by the color code) obtained with VBM.

Streitbürger D-P., et al., PLoS ONE, 2012

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HYDRATION & ACTIVITY

TIMING	AMOUNT
PRE-EXERCISE: 1-2 HOURS BEFORE	17-20 oz / 0.5 LITER
IMMEDIATELY BEFORE	7-10 oz / 250 mL WATER OR SPORTS DRINK
DURING: EVERY 10-15 MINUTES	7-10 oz / 250 mL OR 4-6 GULPS
POST EXERCISE (WEIGH IN & WEIGH OUT)	20 oz FOR EVERY POUND LOST

Sawka et al., Med Sci Sport Exerc, 2007

RECOVER



RECOVERY NUTRITION: Post Training

STATE OF BREAKDOWN
(CATABOLIC)



STATE OF BUILDING
(ANABOLIC)

- + Dehydrated
- + ↓ Blood insulin
- + ↑ Cortisol
- + ↓ Immune system
- + ↓ Muscle & liver glycogen
- + ↑ Proteolysis

- + Rehydrate
- + ↑ Blood insulin
- + ↓ Cortisol
- + ↑ Immune system
- + ↑ Muscle & liver glycogen
- + Stimulate muscle protein synthesis and tissue repair

Chandler et al., J Appl Physiol, 1994

REFUEL & REBUILD

- + Make Post-Workout Nutrition part of the routine.
- + In order to recover efficiently and effectively, you need a combination of carbs and protein as quickly as possible after your training session.
- + Depends on SIZE and INTENSITY
- + Key Nutrients to Consider
 - Carbs
 - Protein (leucine)
 - HMB



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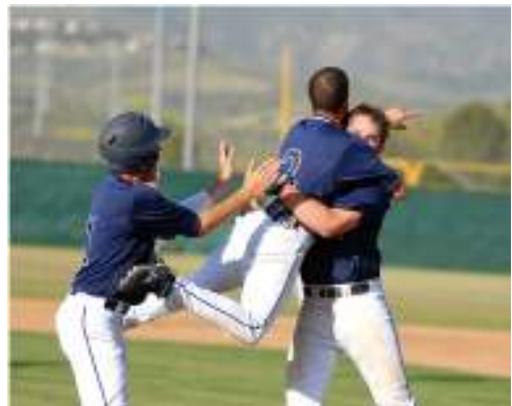
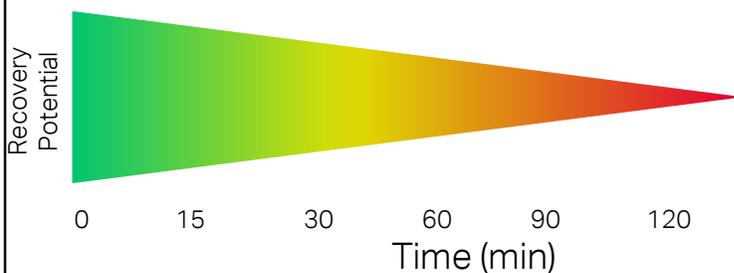
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DON'T WASTE YOUR WORKOUT

Window Open for Nutrient Delivery to Muscle Cells

- + Shake/Meal ASAP after Finishing Workout
 - Re-hydrate
 - Decrease Core Temperature
 - Replace muscle glycogen



Protein: 0.3-0.4g/kg LBM or body weight (10-30g)

Carbs: 0.6-1.2g/kg LBM or body weight (30-90g)

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Stout, J (2007), J Appl Physiol, 1994, 76: P. 839-845

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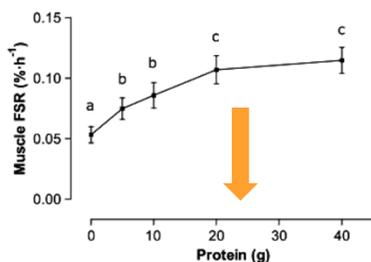
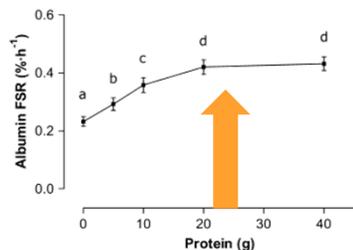
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J1 don't waste workout - timing - victory

Not about right now, but about being able to last...

John, 6/20/2014

HOW MUCH PROTEIN?



Moore et al, Am J Clin Nutr, 2009

Carbohydrate

2 - 3

0.6-1.2g/kg LBM

Protein

: 1

0.3-0.4g/kg LBM

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POST EXERCISE PROTEIN: BASED ON BODY WEIGHT

BODY WEIGHT POUNDS	GRAMS OF PROTEIN @ 0.3G/KG BODY WEIGHT	GRAMS OF PROTEIN @ 0.4G/KG BODY WEIGHT
100	14	18
120	16	22
140	19	25
160	22	29
180	25	33
200	27	36
220	30	40
240	33	44
260	35	47
280	38	51
300	41	55

Body weight lbs / 2.2 x 0.3 = grams of Protein

Body weight lbs / 2.2 x 0.4 = grams of Protein

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2:1 Carb – Protein Ratio

1 cup Greek Yogurt + ½ cup Kashi Go Lean Cereal + 1 cup berries + 8 Pecan Halves
Provides: 45g CHO, 20g PRO

1 English Muffin + 2 hard boiled eggs + ¼ avocado + 24 cherries
Provides: 60g CHO, 30g PRO

2 scoops 100% Whey + 1 Banana + 1c berries
Provides: 40g CHO, 20g PRO

3:1 Carb – Protein Ratio

24oz Chocolate Milk
Provides: 75g CHO, 25g PRO

Peanut Butter & Jelly Sandwich on Whole Wheat bread + 1 Medium Banana
Provides: 90g CHO, 33g PRO

2 scoops 100% Whey + 2 Bananas
Provides: 60g CHO, 20g PRO



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COMPLEMENTS vs. SUPPLEMENTS

Supplement Wisely: Complement your body with what it really needs

- + FOODS
- + FOUNDATIONAL MULTI-VITAMIN
 - omega-3 fatty acids
 - multivitamin
- + CONDITION SPECIFIC
 - bone health
 - heart health
 - digestive health
- + PERFORMANCE SPECIFIC
 - 3rd party tested
 - NSF for sport
 - Informed Choice



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04

BRINGING IT TO LIFE

TO MOTIVATE OR SIMPLIFY?



“Nutrition is often the **LIMITING** factor to performing your best. Those who **OPTIMIZE NUTRITION**, optimize performance.”

10 COACHING KEYS TO LIVE BY

- 01 COME BACK TO EARTH
- 02 EAT A RAINBOW OFTEN
- 03 THE LESS LEGS THE BETTER
- 04 EAT FATS THAT GIVE BACK
- 05 BREAKFAST EVERYDAY
- 06 THREE FOR THREE
- 07 STAY HYDRATED
- 08 DON'T WASTE YOUR WORKOUT
- 09 COMPLEMENT WISELY
- 10 GET SOME SLEEP

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APPLYING THE SCIENCE - BRINGING GOALS TO LIFE

Step 1

Help people see a benefit by connecting their goals to nutritional strategies.

Step 2

Provide better nutrition education.

Step 3

Give clear and concise tools to understand needs.

Step 4

When needed, help people configure individual solutions.

Step 5

Help people execute their plans.

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EVERY DAY IS GAME DAY
Think Differently. Healthy Eating → Performance Fueling

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