

## **Come Back Stronger Webinar Series**

November 4th, 2020





## American Dairy Association North East



# REFUEL with chocolate MILK

## Sports Nutrition Experts

2020 Sports Nutrition Advisory Panel





















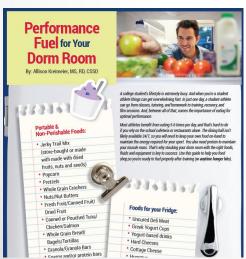






## ADANE Free Resources





## Can the **KETO DIET**Positively Impact Your Physique, Physiology and Performance?

By: Leslie Bonci, MPH, RD, CSSD, LDN

#### **PHYSIOLOGY**

#### COMPONENTS OF A KETO DIET

The goal of the ketogenic diet is to put your body into a state of ketosis where the muscle can use fat as the primary fuel source for exercise. To do this, the fat content of the diet is high, protein content is moderate (0.5-0.9 grams of protein per pound body weight per day) and carb intake is low, around 50 grams a day.

#### EQUIPMENT

Just as you have equipment for your sport, you need to be equipped to properly follow a keto diet. To make sure you are following the ketogenic diet correctly, you'll need to monitor your ketone levels. A finger prick that measures the ketones in your blood is much more accurate than testing your ruine, but it can be costly. You need a blood ketone meter that will show you whether or not you are in ketosis:

#### WHAT YOU MAY NOTICE

Adapting to the diet can take some time. It typically takes a week to adjust. You may feel fatigued, or even "flush" early on. This is due to the rapid excretion of solumn and fluids, from the body as you minimize carbohydrate intake. If you are a heavy or salty sweater, you'll need to make sure that you drink enough fluids award consume enough sodum. Keto-friendly options include salting floods, broth, or adding soy sauce. You may have to ingest 3000-5000 milligrams of sodium per day, as well as additional potassium. Since potassium is found primarily in fruits and vegetables that are restricted on the keto diet, getting enough can be challenging. Magnesium and zinc needs are also higher



#### IMPACT ON APPETITE

After the period of adaptation, you may feel less hungy throughout the day. For someone who is sedentary that may be fine, but a reduction in appetite may not be a good thing. If you train many hours a day and don't eat enough, you could end up in energy deficit, and that can negatively impact health and athletic performance.

#### IMPACT ON GUT HEALTH

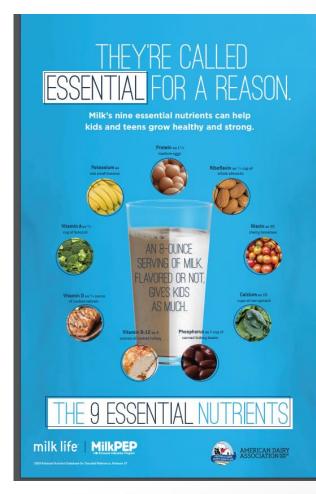
Some keto-advocates note that their digestive symptoms improve on a keto diet. While this may be reported, there is concern that inadequate intake of carbohydrates and fiber could be more harmful than helpful to the gut.

#### IMPACT ON BONE HEALTH

Active individuals need to provide their supporting structure the nutrients it needs to stay strong. That means getting enough calcium and vitamin 0 daily. Full fat dairy fits into a keto plan and provides the calcium that is necessary to support bone health. Cheese and Greek yogurt are also low in carbs, making them good options to get bone-supporting nutrients each day when following a keto diet.

#### IMPACT ON INFLAMMATION

Some studies have shown decreased markers on inflammation when following







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# FEED THE NEED: HUNGER IN THE LOCKER ROOM

- Performance 365
- Roberta Anding, MS, RDN, CSSD, CDE, FAND
- Leslie Bonci, MPH, RDN, CSSD, LDN



## Polling Question

#### Rates of food insufficiency, June 18-June 23, 2020 ND OR SD. WY NE NV UT CO CA KS MO OK AZ Below U.S. average Near U.S. average (9.7 percent) Above U.S. average Note: Food insufficiency means a respondent reported that their household sometimes or often did not have enough to eat in the previous 7 days. Source: USDA, Economic Research Service using data from the Household Pulse Survey,

U.S. Department of Commerce, Bureau of the Census.

RATES OF FOOD INSUFFICIENCY JUNE 2020

#### STATE OF THE PLATE



## The Current State of Food Insecurity in America

In 2018, 11% people in the US were food insecure and lacked consistent access to enough nutritious food options. That equals 37 million food insecure people.

#### Recent surveys during COVID-19 found:

- 38% of households reported moderate to high levels of food insecurity
- 20% of children are experiencing food insecurity

#### COVID-19 IMPACT ON FOOD INSECURITY

Food Insecurity projections	Scenario A	Scenario B	Scenario C	
Child food insecurity rate, pre-	15.2%	15.2%	15.2%	
COVID-19 (2018)	(1 in 7)	(1 in 7)	(1 in 7)	
Projected increase to child food	11%	38%	61%	
insecurity rate (%)	1170	36%	0170	
Projected child food insecurity rate	16.8%	21.0%	24.5%	
Projected child food insecurity rate	(1 in 6)	(1 in 5)	(1 in 4)	
Food-insecure children, pre-COVID-	11.2 M	11.2 M	11.2 M	
19 (2018)	11.2 11	11.2 11	11.2 11	
Projected increase to number of	1.2 M	4.2 M	6.8 M	
food-insecure children	1.2 14	4.2 11	0.0 14	
Projected number of food-insecure	12.4 M	15.4 M	18.0 M	
children	12.4 11	15.4 11	16.0 14	

Source: Pre-COVID-19 rates and numbers are taken from <u>Household Food Security in the United States in 2018</u>. All other figures are based upon calculations by Dr. Craig Gundersen.

#### FOOD SECURITY DEFINITIONS

#### High Food Security

 "No reported indication of food access problems of limitation, access by all people at all times to sufficient food for an active and healthy life"

#### Marginal Food Security

"one or two reported indications- typically of anxiety over food sufficiency or shortage of food in the house."

#### FOOD INSECURITY DEFINITIONS

- Low Food Security
- Reports of reduced quality, variety or desirability of diet. Little or "no indication of reduced food intake
- Very Low Food Security
- "reports of multiple indication of disrupted eating patterns and reduced food intake."

#### HOW AND WHY FOOD INSECURITY OCCURS

- Situational Food Insecurity
  - •loss of job
  - working hours cut back
    medical expenses
    affordable childcare

  - affordable housing
  - •natural disasters (Hurricanes, Tornadoes, COVID-19)
  - death of family member
  - college student
- The face of hunger is constantly changing in U.S.

#### Lack of adequate food consumption impacts health outcomes

#### Chronic Conditions

Low access to nutritious food can lead to obesity, asthma, high blood pressure, heart disease, kidney disease, hypertension and diabetes.

Food security
status is often a
stronger predictor
of the top chronic
conditions than
income.

#### **Mental Distress**

Depression, anxiety, and suicidal ideation have all been associated with food insecurity.

## Food Deserts vs Food Swamps

- Food deserts- limited access to fresh fruits/vegetables and much smaller selection of foods at a higher price
- Food swamp- increased availability of high calorie, high fat foods usually via increased fast food availability



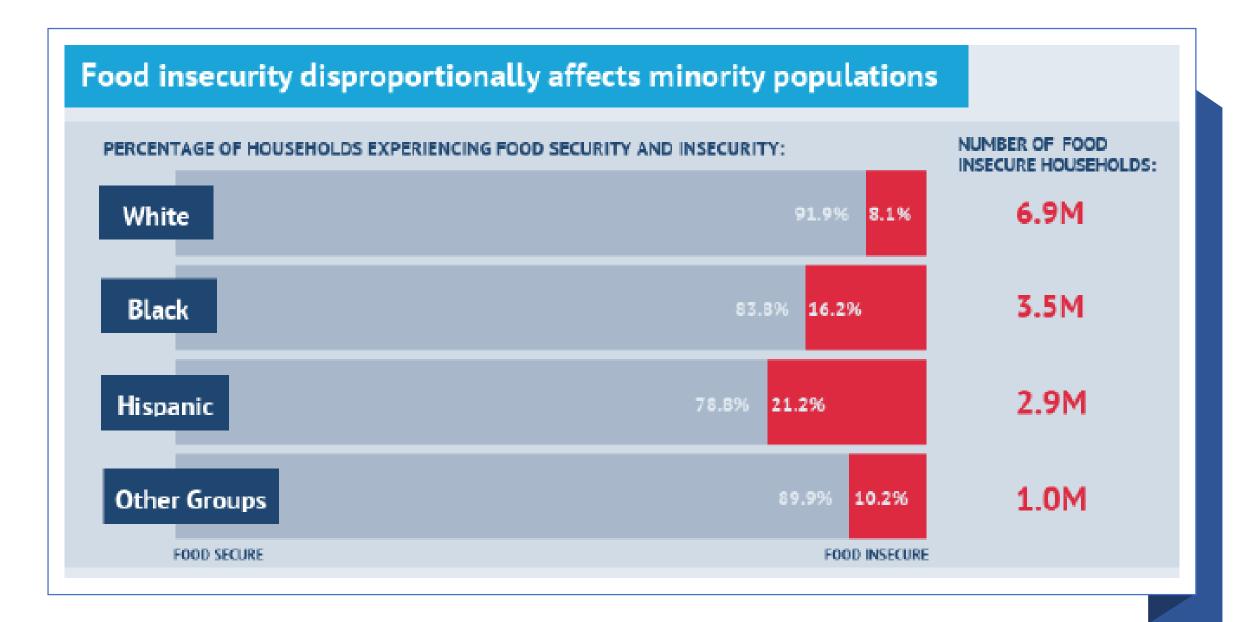


#### HARSH REALITY

 Prior to the pandemic: 1 in 7 kids in the US lived with food insecurity

 $\bullet$  With the pandemic 1 in 4 kids in the US could face hunger

•1 in 8 households do NOT have enough to eat



#### Barriers and risk factors that affect food security

#### What barriers prevent access to food?

- Income level and employment
- Physical access to affordable and nutritious foods
- Transportation options
- Disability and mobility status

#### Who is at risk of being food insecure?

- Households with children
- Single parent households
- Households below the poverty line
- Minority households

## HUNGER

- How to define
- Enough
- Inadequate amounts
- Inadequate amounts as an athlete
- Impact of hunger
- Cognitive
- Physical
- Performance
- Health

# Can Students and their Families Meet the Dietary Guidelines for Americans (DGA)

- The DGA provide nutritional guidance for Americans over 2 and are updated  $^{\sim}$  every 5 years
- What are the barriers?
  - Food deserts and swamps
  - Knowledge deficit- what really is good nutrition?
  - Lack of cooking skills
  - Lack of time- going to school and working
  - Limited financial resources- made worse by the pandemic
  - Lack of time
  - High calorie needs to fuel growth and development and physical activity
  - National School Lunch program provides between 750-850 calories for lunch (high school)

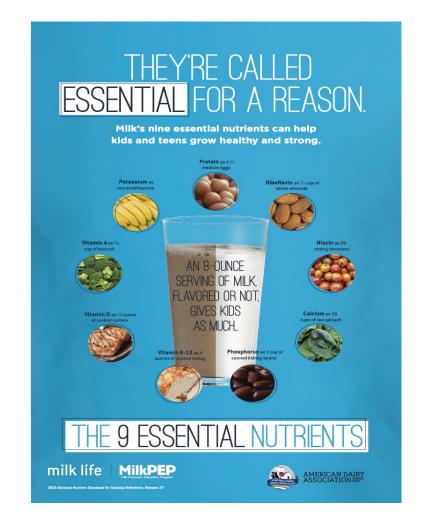
## Calorie and Protein Needs for Adolescent Athletes- moderate activity

Age (yr)	RDA (Median)	Kcal/cm (Median)	Protein RDA	Pro g/cm
11-15	2500	15.9	45	0.29
<b>15-18</b>	3000	<b>17.1</b>	59	0.34
19-22	2900	16.4	58	0.33
11-15	2200	14	46	0.29
15-18	2200	13.5	44	0.27
19-22	2200 SOURCE: Adapted from the Dietary Re	13.4 ference Intakes Nation	<b>46</b>	0.28

Academies Press. Copyright 2004, by the National Academies of Sciences.

In a land of plenty, young adults need more:

- Vitamin A
- Folate
- Niacin
- Riboflavin
- Thiamin
- Vitamin B12
- Vitamin C
- Vitamin D
- Vitamin E
- Calcium
- Magnesium



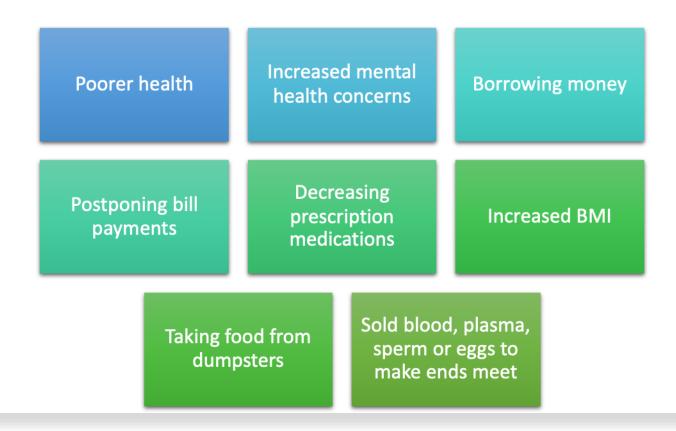
## CONSEQUENCES OF FOOD INSUFFICIENCY

- Poor ability to concentrate
- Falling asleep
- Irritability
- Lack of focus
- Poor recall of information
- Higher level math, science courses are most difficult
- Low blood sugar is the driving cause
- When food becomes available, carbohydrate is preferred- salty or sweet food preferred





### Health Consequences and Coping Strategies



#### BEING THE ATHLETE'S ADVOCATE

- Gain their trust
- Consider making energy breaks before and after practice mandatory
- Organize breakfast to go bags
- Consider establishing a "lending locker"
- Be careful of the words you use/ guidelines for students
- Encourage parents and booster club involvement

#### ARE RECOMMENDATIONS REALISTIC?

- Eat smaller more frequent meals
- Increase protein through supplements
- Limit processed foods
- Only eat fresh produce
- Avoid canned, boxed foods
- Make from scratch
- Only buy organic
- Eat clean

#### STATE OF THE PLATE

- Number of families receiving food assistance has increased exponentially
- Shortfall nutrients
- 1 in 10 consuming enough produce
- ALL forms of produce are fine
- Food choices must be available and affordable
- Must meet people where they are
- Provide resources-Recipes EatUp https://clancyharrison.com/recipes



# WEALTH ON THE SHELF

- Culinary sufficiency
  - Recipes-Videos, blog posts, texts
  - Equipment
  - Knowledge
  - Experience
  - Budgeting

## PICK WISELY: Low cost & nutrient dense

- Food choices do not need to be elite for you to compete
- Buy what you can afford
- Frozen, fresh, canned, dried produce
- Evaporated and powdered milk
- Canned meats
- Beans
- Rice, pasta, oats
- Store brand cereals

#### LOW COST AND NUTRIENT DENSE FOODS

PROTEIN	PRODUCE	GRAINS
Milk: fresh, evaporated, non- fat dry	Canned vegetables	Oatmeal
Eggs	Canned fruit	Store brand cereals
Canned fish Canned chicken	Potatoes	Rice- white or brown
Beans- canned or dry	Canned or frozen corn	Pasta
Texturized vegetable protein	Bananas	Barley
Peanut butter	Apples	Popcorn
Ground beef	Cabbage	Tortillas
Frozen shredded chicken	Canned tomatoes	Frozen pizza crusts
Frozen fish fillets	Vegetable/bean soup	Pancake mix
Large containers of yogurt	Spaghetti sauce/salsa	
Cheese		

### SCORE AT THE DOLLAR STORE





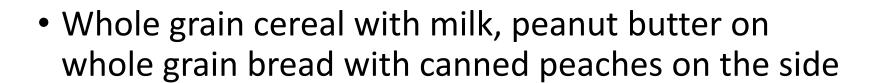




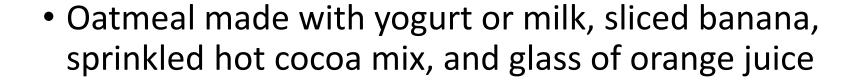
#### BREAKFAST FROM DOLLAR STORE FOODS

• Breakfast Burrito: whole grain tortilla, scrambled egg, cheese, tomato, spinach and a banana on the side













#### LUNCH FROM DOLLAR STORE FOODS

• Tuna, veggie and cheese pasta with a sliced orange



 Beef and Rice Bowl: canned beef cubes, frozen broccoli carrots, Soy sauce, rice and fruit cocktail



• Chicken patty sandwich: breaded chicken, bun, salsa, cheese and sides of canned green beans and applesauce



#### DINNER FROM DOLLAR STORE FOODS

 Chili on a baked potato: chili with ground beef or canned chili, canned black beans, corn



 Mac and cheese with pureed white beans, fluid/evaporated milk, Parmesan cheese, canned mixed vegetables



 Fish tacos with fish sticks, shredded cabbage, salsa, tacos and canned pineapple on the side



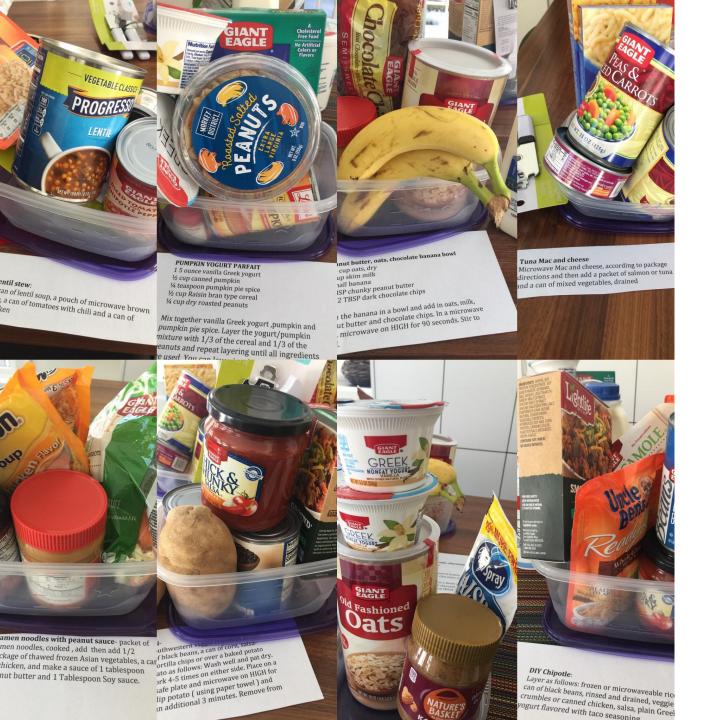
#### HIGH PROTEIN FAST FOOD MEALS < \$3.00

- Single cheeseburger & fruit /yogurt parfait (McDonalds)
- Sausage Egg McMuffin (McDonalds)
- Shredded Chicken Quesadillas (Taco Bell)
- Large Chili (Wendy's)
- Roast Beef and Value shake (Arby's)
- Crispy Chicken Sandwich (Wendy's)









#### **BUDGET BAGS**

#### HOW TO HELP

School-wide initiative-#feedtheneedteam

Cooking demos with food pantry staples with parents/food service

Athlete advocates

Meal extendershow to

Budget shoppingtour of the Dollar store

Food safety concerns

Resources

DIY vs pricey supplements to buy

Share packages



Nurturing mind and body go hand in hand.



Food insecurity impacts health, body weight, chronic disease risk and academic success.

#### **BOTTOM LINE**



Good nutrition doesn't have to be expensive - but planning is needed.



Students need help with cooking skills, understanding the finances of food and easy recipes.



#enabledtable #foodforall



## Discussion/Questions

Thank you!



#### Reminders

- Post-webinar polling questions
- •Raffle Prize Winners

- •Post Webinar E-Blast Coming Soon! Includes:
- ✓ Presentation Slides
- ✓On-Demand Webinar Link
- ✓ Handout
- ✓ Resources



Thank you!