

High School Cross Country
Nutrition Management Resource

Published with permission from Dr. Jeff Messer

TABLE OF CONTENTS

Cover:	Title Page
Page 1:	Table of Contents
Page 2:	General Principles of Sport Nutrition
Page 3:	The Food Guide Pyramid
Page 4:	Example of Principle-Based Meal Selections
Page 5:	Sample Foods / Beverages / Meals - Breakfast
Page 6:	Sample Foods / Beverages / Meals - Lunch
Page 7:	Sample Foods / Beverages / Meals - Dinner
Page 8:	Allied Nutritional Considerations & Strategies
Page 9:	Concluding Principles & Recommendations

GENERAL PRINCIPLES OF SPORT NUTRITION

- 1) **Consume a diverse diet emphasizing at least three (3) of the five food groups for each meal**
 - **Avoid an unnecessarily repetitive diet of the same foods each week**
 - **Incorporating diversity in food and beverage choices will promote corresponding diversity in vitamin, mineral, and other required nutrient intakes**
 - ***Example:* Consume two to three different cereals each week with two to three distinct fruit combinations**

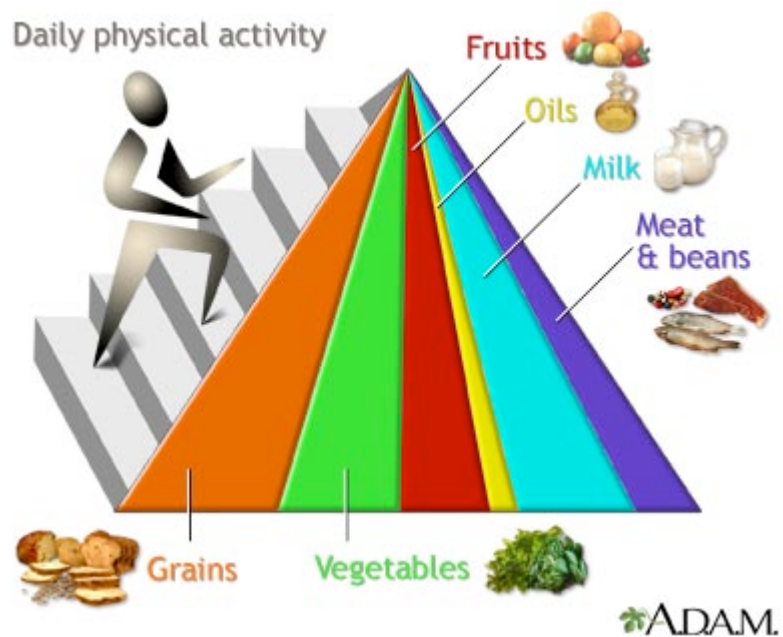
- 2) **Select and consume foods in their natural state**
 - **Foods in their natural (*i.e. unprocessed or lightly processed*) state have greater overall nutritional value**
 - **Foods in their natural (*i.e. unprocessed or lightly processed*) state contain less sodium, trans fat, and other undesirable constituents**
 - ***Examples:* Oranges instead of orange juice, bananas instead of energy bars, and whole-wheat bread instead of white bread**

- 3) **Emphasize moderation**
 - **The foundation of an excellent diet is healthful foods**
 - **Occasional, moderate consumption of somewhat lower nutritional quality foods and beverages can be a component of a nourishing nutritional program**
 - ***Example:* Eighty-five (85) to ninety (90) percent of nutritional intake should emphasize high quality foods / beverages while approximately ten (10) percent could be represented by foods / beverages of slightly lesser nutritional quality / density**

THE FOOD PYRAMID

Five Primary Food Groups:

- 1) Grains
- 2) Fruits
- 3) Vegetables
- 4) Dairy (*Milk*)
- 5) Protein (*Meats & Beans*)



EXAMPLE OF PRINCIPLE-BASED MEAL SELECTION

<u>Food Group</u>	<u>Breakfast</u>	<u>Lunch</u>	<u>Dinner</u>
Grain	Oatmeal	Whole-wheat Wrap	Pizza Crust
Fruit	Banana	Apple	Green Peppers
Vegetable		Lettuce & Tomato	Tomato Sauce
Dairy	Low-fat Milk	Low-fat Yogurt	Cheese
Protein	Almonds	Turkey	

SAMPLE FOODS / BEVERAGES / MEALS

Breakfast

Cereals

Total^R
Frosted Mini Wheats^R
Grape Nuts^R
Raisin Bran^R
Honey Nut Cheerios^R

Additional / Other Foods

Whole Wheat Bagel
Instant Oatmeal
Low Fat Yogurt
Raisins
Graham Crackers

Beverages

Orange Juice
Low Fat Milk
Water

Fruits

Orange(s)
Apple(s)
Banana(s)
Grapefruit

Sample Meal

One-and-one-half (1.5) cups of Total topped with one sliced banana
One (1) low fat yogurt
One (1) glass orange juice

SAMPLE FOODS / BEVERAGES / MEALS

Lunch

Sandwiches

Turkey Sandwich
Peanut Butter (& Jelly) Sandwich
Tuna Sandwich
Bean Burrito

Additional / Other Foods

Low Fat Yogurt
“Sports” Salad (*Emphasize selections such as Romaine lettuce, spinach, tomato, corn, carrots, peas, green peppers, cooked rice, orange sections, diced apples, raisins, banana slices, toasted croutons, and / or whole grain bread slices*) (w/ low-fat or no salad dressing)
Pretzels
Whole Wheat Bagel
Low Fat Bran Muffin
Low Fat Granola Bar
Trail Mix

Beverages

Low Fat Milk
Water
Gatorade

Fruits

Orange(s)
Apple(s)
Banana(s)

Sample Meal

One (1) Turkey Sandwich
One (1) Low Fat Bran Muffin and / or Low Fat Granola Bar
One (1) to two (2) glass(es) Low Fat Milk

SAMPLE FOODS / BEVERAGES / MEALS

Dinner

Main Course

Chicken Breast

Lean Hamburger

Turkey Burger

English Muffin Pizza

Tuna Sandwich

Spaghetti

Bean Burrito (*frozen, or made with canned refried beans, salsa, and tortilla*)

Whole Wheat Pasta topped w/ tomato sauce, spinach, and / or vegetables

Baked, Steamed, or Broiled Fish

Additional / Other Foods

Wheat Crackers

Peanut Butter

Tomato Soup

Oatmeal

Plain, Steamed Rice

Pretzels

Broth-based Soups (*vegetable, chicken & rice, etc.*)

Beverages

Low Fat Milk

Water

Vegetables

Broccoli

Spinach

Squash

Sample Meal

Whole Wheat Pasta topped w/ tomato sauce, spinach, and / or vegetables

One (1) Cup of Chicken Soup

One (1) Glass Low Fat Milk

ALLIED NUTRITIONAL CONSIDERATIONS & STRATEGIES

Nutritional (i.e. Vitamin and / or Mineral) Supplementation

1) Supplementation Research

- **Optimal nutrition is fundamentally predicated on consumption of whole foods and corresponding beverages**
- **There is no evidence that relatively high intakes of vitamins and / or minerals improve athletic performance**
- **Collectively, available evidence therefore suggests that vitamin and / or mineral supplementation may serve as dietary “insurance:” supplementation supports an already adequate diet yet cannot correct a nutritionally deficient diet**

2) Recommendation

- **Aim for average daily dietary intake of 1,300 milligrams (*mg*) of calcium**
- **Consider daily or every-other day supplementary intake of a calcium supplement such as Os-Cal^R**
- **Corresponding Vitamin D supplementation is likely unnecessary assuming regular consumption of Vitamin D fortified milk**
- **Consider daily or every-other day supplementation with a multi-vitamin / multi-mineral supplement such as Centrum^R Multivitamin / Multimineral supplement**

Hydration

1) Water Intake

- **A student-athlete should seek to consume 1.0 to 1.5 milliliters of water per dietary calorie of average daily energy expenditure**
- **Example: A student-athlete expending 3,000 dietary calories per day should consume 3,000 milliliters or, equivalently, 3.0 liters of water per day (*approximately 100 fluid ounces per day*)**

2) Recommendation

- **In order to secure an individualized daily water consumption goal, provide Coach Messer with the following information: a) weight (*lbs.*) b) height (*inches*) c) age (*years*) and d) average weekly training volume (*miles per week*); your coaches will subsequently calculate and provide the aforementioned individualized daily water consumption goal**

CONCLUDING PRINCIPLES & RECOMMENDATIONS

- 1) **Maintain your existing commitment to consuming three (3) quality meals each day based on the various food and beverage options previously listed in this resource**

- 2) **Do not focus on measuring your weight but rather focus on managing your weight through consumption of a diet based on the various food and beverage options previously listed in this resource**

- 3) **Always be aware of and, ideally, always incorporate both the general principles of sport nutrition and the complementary Food Pyramid when specifically considering food / beverage choices and generally considering overall dietary construction**

- 4) **Mineral (*such as calcium*) and / or multivitamin / multimineral supplementation may be unnecessary if the aforementioned commitment to quality nutrition is consistently emphasized and maintained; nevertheless, consumption of a mineral and / or multivitamin / multimineral supplement may provide a measure of dietary “insurance” as one seeks to optimize overall nutrient intake and associated micronutrient status**

- 5) **Sustain a daily commitment to adequate, individualized water intake that reflects consideration of physical activity level (*i.e. training*)**