

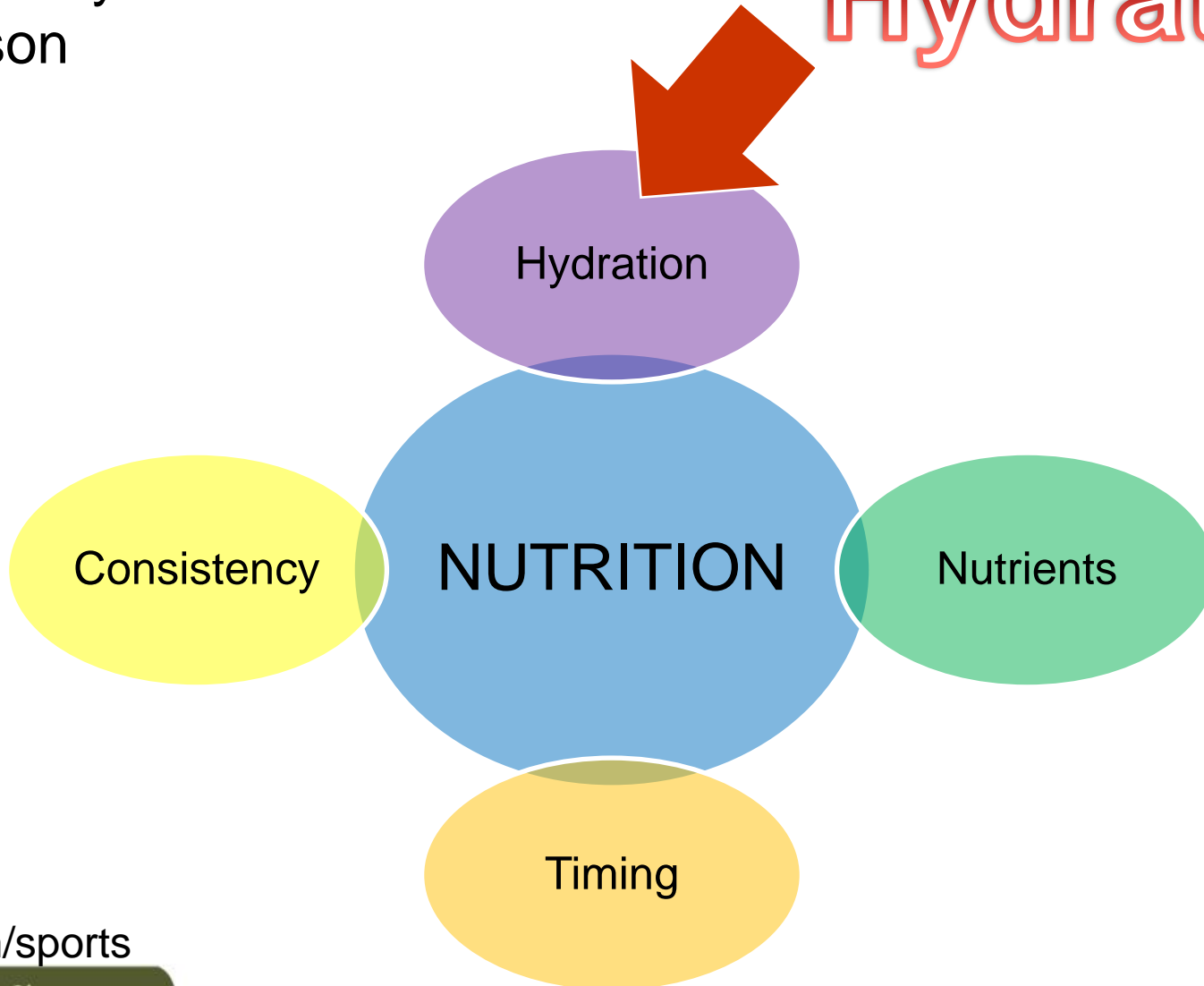
Hydration Needs for the High School Athlete

Mary Andrae, MS, RD
Regional Program Manager
Wisconsin Milk Marketing Board



Focus on Hydration
Dr. Gibson

Hydration



What drink choices do you have?



What's in an Energy Drink?

- Caffeine
- Sugar



Energy Drinks

WIAA Performance Enhancing Substances

The WIAA is against the use of anabolic-androgenic steroids and other performance enhancing substances (PES).

DISCOURAGED--The WIAA identifies 'Restricted' substances. These restricted substances can be legally purchased, but are prohibited in connection with school programs. They include: Creatine, Caffeine-enhanced products, Energy drinks (e.g., Red Bull, Amp, Advance by PowerAde, Coke Blak), Herbal Caffeine, No Doz, Protein Powders and other substances as identified in the materials.

<http://www.wiaawi.org/Health/PerformanceEnhancingSubstances.aspx>

WIAA

What's in a Sports Drink?

- Electrolytes
- Sugar





CONSUMER DAIRY GIFT CATALOG ON THE FARM CORPORATE MEDIA FOODSERVICE RETAIL

WISCONSIN WHO WE ARE EVENTS PRODUCERS CHEESE COMPANIES WISCONSIN DAIRY COUNCIL PROCESSORS COUNTY DAIRY LEADER GROUPS BOARD OF DIRECTORS

LOGIN SIGN UP

In This Section

- Overview
- Fuel Up To Play 60
- Chocolate Milk Has Muscle
- School Nutrition
- Teachers
- Free Materials for WI Schools
- Sports Nutrition
- Nutrition Links
- WMMB Contacts
- Cheese and Dairy Gear
- Nutrition Fast Facts



©2013 Fuel Up is a service mark of National Dairy Council.
©2013 National Football League Players Incorporated.

Wisconsin Dairy Council

Chocolate Milk: Nature's Recovery Drink

Athletes need an ideal ratio of carbohydrate to protein to replenish energy used during exercise and support muscle recovery. Recent studies show, and coaches agree, low-fat chocolate milk naturally provides this winning ratio of nutrients more effectively than most sports drinks. ([View Study](#))

Click a Drink to Compare >



Low-Fat (1%) Chocolate Milk

Low-fat chocolate milk helps athletes refuel after a workout by providing protein, carbohydrate and electrolytes (calcium, potassium, sodium and magnesium). While many other beverages contain both carbs and electrolytes, most lack the added benefit of protein found in low-fat chocolate milk. Low-fat chocolate milk provides a source of easily digested high quality whey protein to promote protein synthesis. Low-fat chocolate milk is naturally rich in bone-building calcium and fortified with vitamin D and it has the right mix of carbohydrate to protein. Low-fat milk contains 3 grams of fat per serving.

Before:

- Drink fluids throughout the day
- 1st choice should be water
- Avoid soda and fruit drinks with little nutritional value
- Watch out for sweet coffee drinks
- Body absorbs fluid better with smaller amounts rather than all at once – drink throughout the day

During:

- Drink sports drinks only during INTENSE (1 hour or greater) exercise

After:

- Refuel with low-fat chocolate milk – the right mix of carbs and protein for recovery

If you are thirsty you are already dehydrated.

Your fluid needs a minimum of $\frac{1}{2}$ oz. per pound per day

120 lb. needs (60 oz. or minimum of 7.5 cups of fluid/day from all fluid sources) 8 oz. = 1 cup

Example on how to focus on fluids

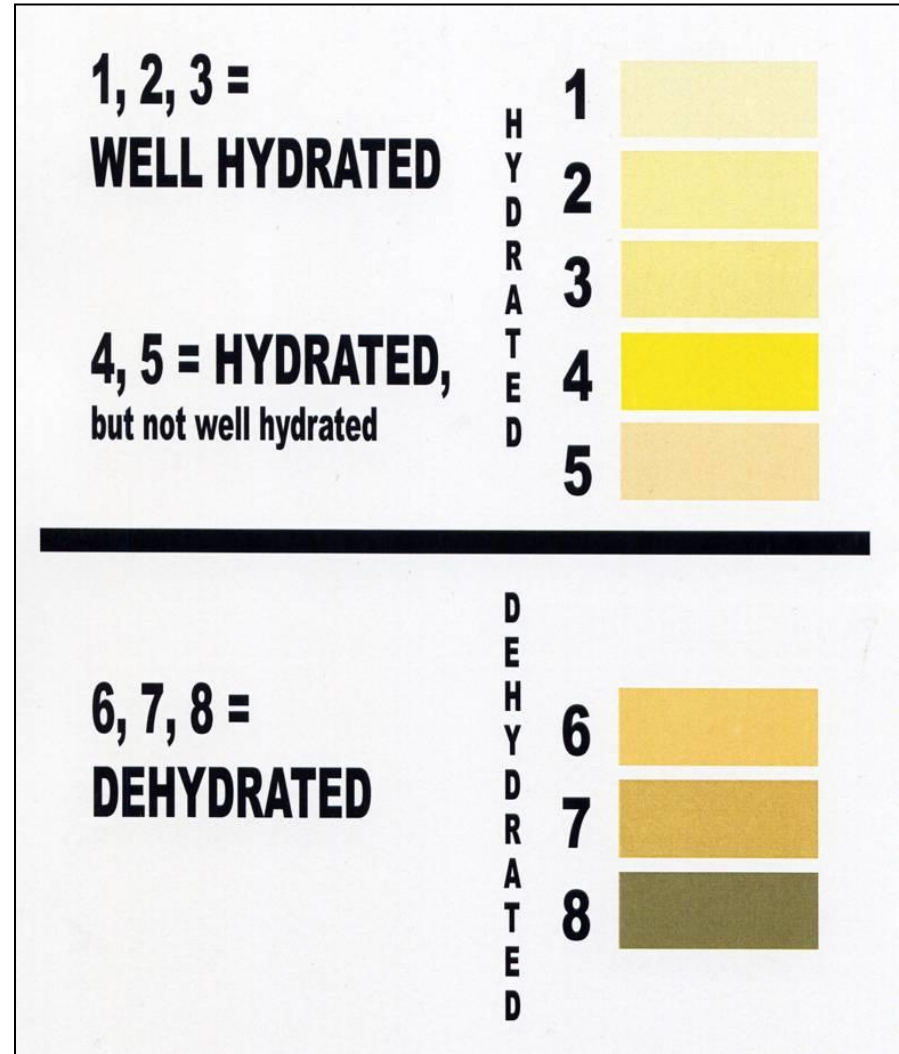
- 1.5 cups at breakfast (8 oz. milk plus 4 oz. juice)
- 1 cup water in the morning
- 1 cup with lunch (8 oz. of milk)
- 2 cups water in the afternoon (before and during practice)
- 1 cup with dinner (8 oz. of milk)
- 1 cup water in the evening

Checking urine is as simple as looking at the urine color

<http://www.cyfallsportsmedicine.com/heatawareness.html>

Dehydration Causes:

- Early fatigue
- Increased heart rate
- Increased blood pressure
- Lowers your work capacity
- Impairs your skills



Maintain hydration

Maintain electrolytes (calcium, potassium, sodium and magnesium)

5-12 oz. every 15-20 minutes (1 gulp = 1 oz.)

Thirst is **NOT** a good guide



The goal of recovery is to return to the pre-training performance baseline

Immediately: Chocolate milk within 20-60 minutes post activity

- Liquid fluid source is ideal for immediate recovery
- Repletion of fluid losses is also essential (for every pound lost replace with 16-24 oz. fluid)
- Carbs for:
 - Glycogen replenishment in liver and muscles
 - Refuel muscles
 - Restore energy
 - Aid in immune function
- Protein to:
 - Build and repair muscle and avoid muscle damage
 - More protein is not better here, studies show 20 grams or less of protein is best for recovery. Athletes will not achieve additional protein synthesis with intakes over 30 grams.

150 lb. athlete

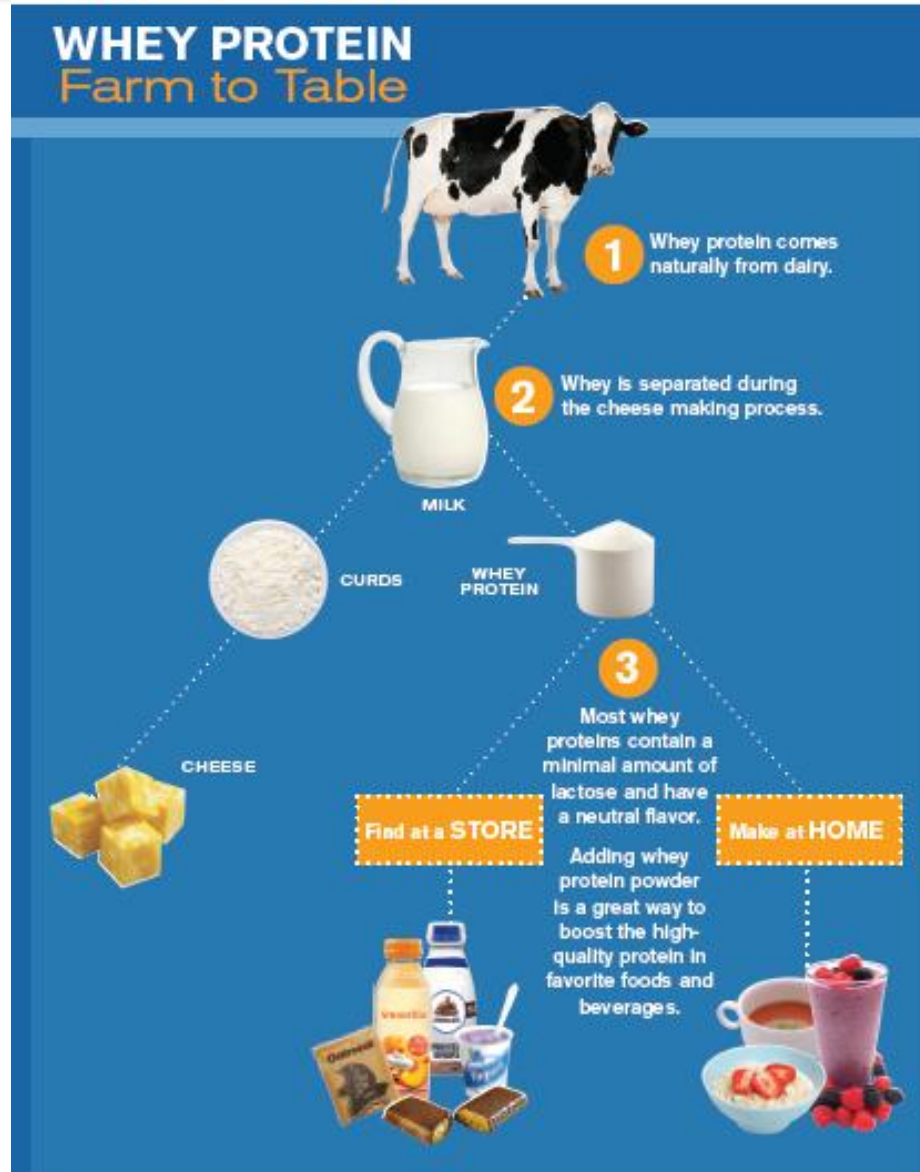
Carb: .5 gram/lb. or 75 grams

Goal: Carb: 75-100 grams of .5 gram/lb.
Protein: 15-20 grams

What can an athlete drink/eat?

- 16 oz. low-fat chocolate milk (48 grams of carb and 16 grams of protein),
- 1 banana (24 grams of carb)
- ½ bagel (25-30 grams of carb)





CHOCOLATE MILK

THE IDEAL POST-WORKOUT RECOVERY BEVERAGE

CARBOHYDRATE-PROTEIN

The right ratio of carbohydrate to protein to prevent muscle soreness, repair muscles and replenish glycogen stores. Refuel with chocolate milk.

B-VITAMINS

To convert food into energy.

YOU GET IT IN BOTH

Chocolate milk contains the same 9 essential nutrients that white milk does and it tastes great!

TIMING

Timing is critical. Recovery nutrition needs to be provided within the first hour to replenish energy stores also known as glycogen found in the liver and muscles.

CALCIUM & VITAMIN D

Calcium and Vitamin D to strengthen bones and reduce the risk of fractures.

WATER & ELECTROLYTES

To rehydrate and replenish what's lost in sweat.



Thank You
wmmb.com/sports



Outdo Ordinary™