What's your fitness fuel?

Build-Your-Own Bulletin Board Classroom Activity

New England Dairy

About

This is a fun, educational classroom activity that involves creating an interactive bulletin board highlighting important nutrients for fitness and sports nutrition, and the differences between milk and plant-based beverages. Students will learn about key nutrients and how they promote healthy bodies to fuel physical activity.

Materials and Supplies

- Bulletin Board
- Construction paper and print out of true/false questions
- "What's in your glass" infographic - Link to infographic: http://www.newenglanddairy.com/wp-content/uploads/NDC_MilkComparisonChart_FINAL.pdf
- Arrows with nutrient information to place around infographic
- Graphics for top of board
- Recovery snack ideas for bottom right of board
- Pictures to place all around the board for design
- Smoothie recipe for bottom right of board – print as handouts for board or indicate that students/teachers/parents can snap a photo to make at home!
- Colored construction paper
- Glue stick or stapler
- Scissors

Instructions

See below sections for instructions.

Smoothie handouts with class activity idea!
Have the students come up with their own smoothie flavor ideas that have 20 grams of protein per serving; students will each submit a smoothie flavor combination, once all submissions are received allow the students to vote for their favorite! Using a sheet of construction paper, craft a "pocket" on the board (by stapling the left, right, and bottom of the sheet). Compile the top smoothie recipes as voted on by the class on a handout and place in the "pocket". For additional smoothie recipes follow the link on the last page.

Finished Example

What's Your Fitness Fuel?

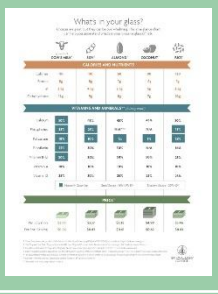
True or False

Athletes must drink protein powder to their protein goals for the day.

True or False

FALSE: Most teen athletes can meet protein needs by having 3 servings of dairy or other high-quality protein per day.

What's in your glass?



Add nutrient fact arrows here

Best recovery and smoothie recipes here - add food pictures around the board. Encourage students to take a picture of the recipe to make at home!

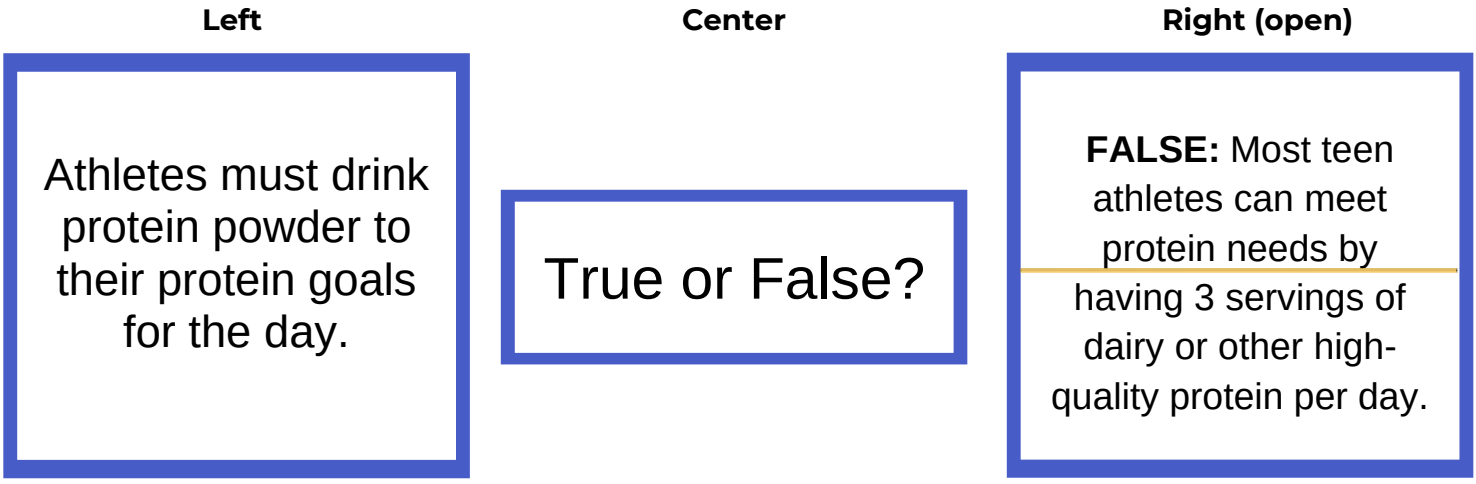
Recovery snacks

Smoothie recipes

True or False Instructions

Place statement to the left side of the section and on the right place a folded piece of paper that reads: TRUE or FALSE? On the top, with the answer and explanation on the inside of the flap.

Example



Other TRUE/FALSE Questions:

It is best to have a lot of protein right after a workout to build muscle.
FALSE: Including protein evenly throughout the day is best for muscle building and repair.

Whole milk has the same protein content as skim milk.
TRUE! Regardless of the fat content, an 8-ounce glass of milk has 8 grams of protein.

A whole chicken breast or a whole steak is considered one serving of protein.
FALSE: 3 ounces of meat (about the size of the palm of your hand) is considered one serving of protein and contains around 20 grams of protein.

Plant protein may not contain all the essential amino acids.
TRUE! Animal protein contains all the essential amino acids required for overall health, and plant protein may be missing some –plant sources need to be paired together to get complete protein (ex. Beans and rice)

As an athlete, I only need to focus on extra protein to build muscle.
FALSE: Carbohydrate is just as important for the serious athlete to replenish muscle energy stores.

Greek yogurt, eggs, and milk are considered high-quality protein sources.

TRUE! Animal protein sources are considered high-quality sources because they contain all the essential amino acids that are readily usable by the body.

Resources for Information: https://www.newenglanddairy.com/wp-content/uploads/NED_Protein-HS-Athletes.pdf

What's in Your Drink?

Link to Infographic and on next page: http://www.newenglanddairy.com/wp-content/uploads/NDC_MilkComparisonChart_FINAL.pdf

Blurbs to place next to the infographic – arrow cut outs provided on the following pages.

CALCIUM: Helps build and maintain strong bones and teeth.
VITAMIN D: Helps build and maintain strong bones and teeth.
POTASSIUM: supports blood pressure, bone strength, and muscle strength.
VITAMIN B12: Helps with normal blood functions; helps keep the nervous system healthy.
RIBOFLAVIN: Helps your body use carbohydrates, fats, and protein for fuel
PHOSPHORUS: Helps build and maintain strong bones and teeth; supports tissue growth.

What's in your glass?

Choices are great, but they can be overwhelming. This at-a-glance chart can help you understand what's in your 8-ounce glass of milk.

(Low-Fat)
COW'S MILK[1]

SOY[2]

ALMOND[2]

COCONUT[2]

RICE[3]

CALORIES AND NUTRIENTS

	Cow's Milk[1]	Soy[2]	Almond[2]	Coconut[2]	Rice[3]
Calories	110	110	60	80	120
Protein	8g	8g	1g	<1g	1g
Fat	2.5g	4.5g	2.5g	5g	2.5g
Carbohydrates	12g	9g	8g	7g	23g

VITAMINS AND MINERALS** *(% Daily Value*)*

	Cow's Milk[1]	Soy[2]	Almond[2]	Coconut[2]	Rice[3]
Calcium	30%	45%	45%	45%	30%
Phosphorus	25%	25%	N/A***	N/A	15%
Potassium	10%	10%	1%	1%	15%
Riboflavin	25%	30%	30%	N/A	N/A
Vitamin B-12	20%	50%	50%	50%	25%
Vitamin A	10%	10%	10%	10%	10%
Vitamin D	25%	30%	25%	25%	25%

Naturally Occurring *Good Source = 10%–19% DV* *Excellent Source = 20%+ DV*

PRICE[4]

	Cow's Milk[1]	Soy[2]	Almond[2]	Coconut[2]	Rice[3]
Per ½ Gallon	$2.05	$3.37	$3.28	$4.99	$3.46
Per 8oz. Serving	$0.26	$0.42	$0.41	$0.62	$0.43

1. Cow's Milk levels are per the USDA National Nutrition Database (NDB No.01083 SR-27): available at: http://ndb.nal.usda.gov/
2. Silk Original Soy Milk, Original Almond Milk, and Original Coconut Milk. Nutritional information per Silk® website www.silk.com
3. Rice Dream Enriched Refrigerated Original. Nutritional information per Rice Dream® website www.tastethedream.com
4. Based on gallon volume equivalents per IRI DMI Custom Database Data for 2014 (Jan-Dec) – National Average (Cow's milk based on conventional white milk)
**The percent Daily Value (DV) provides nutrient information based on a caloric intake of 2,000 calories for adults and children four or more years of age.*
***Nutrient information not listed here can be found on the product website*
****Nutrient not listed on product website*

NATIONAL DAIRY COUNCIL

Bulletin Imagery

CALCIUM Helps build and maintain strong bones and teeth.

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VITAMIN B12 Helps with normal blood functions; helps keep the nervous system healthy.

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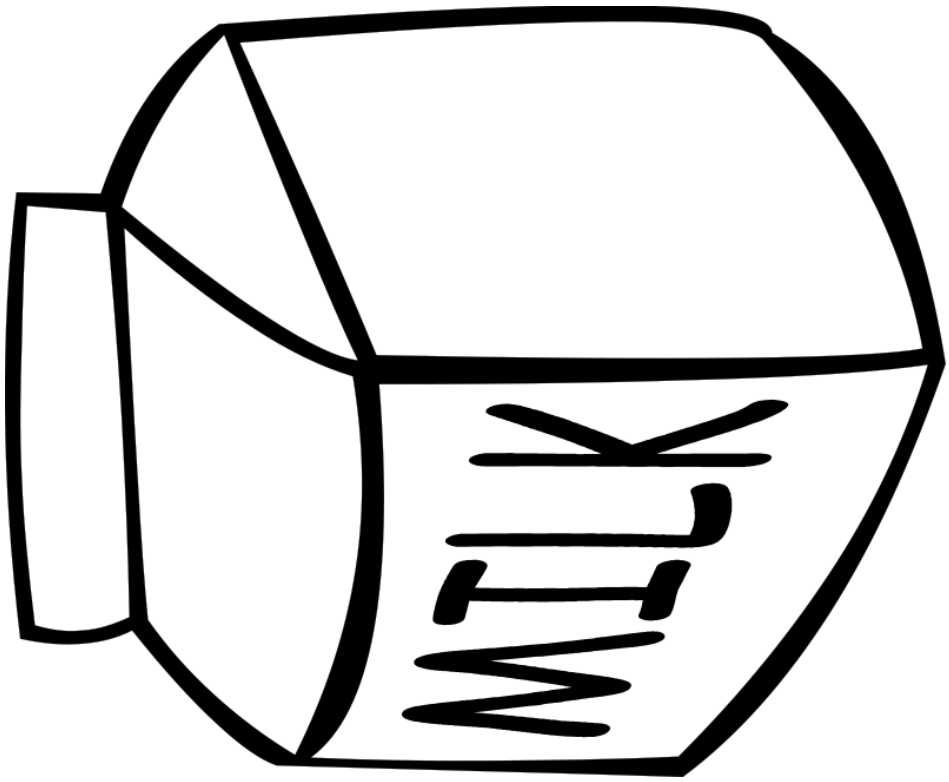
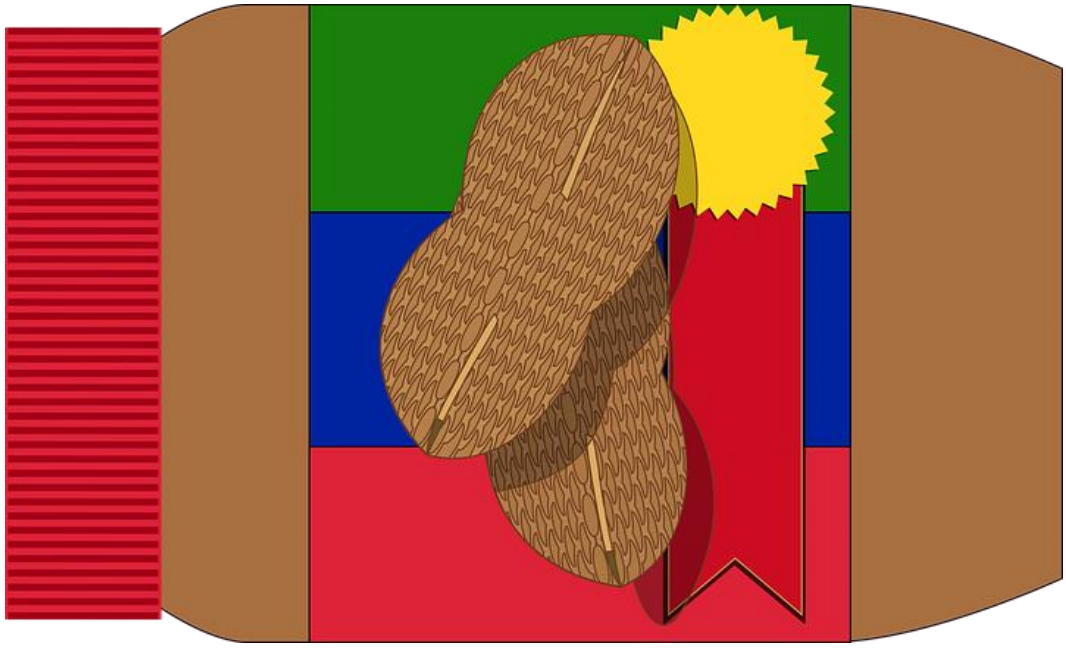
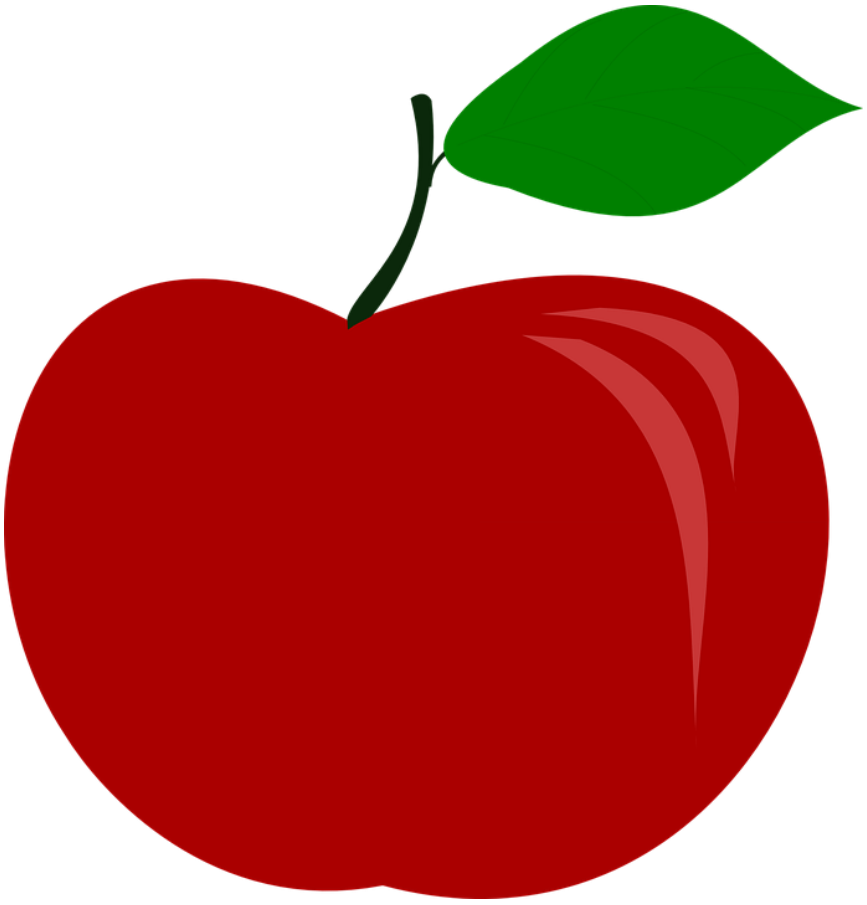
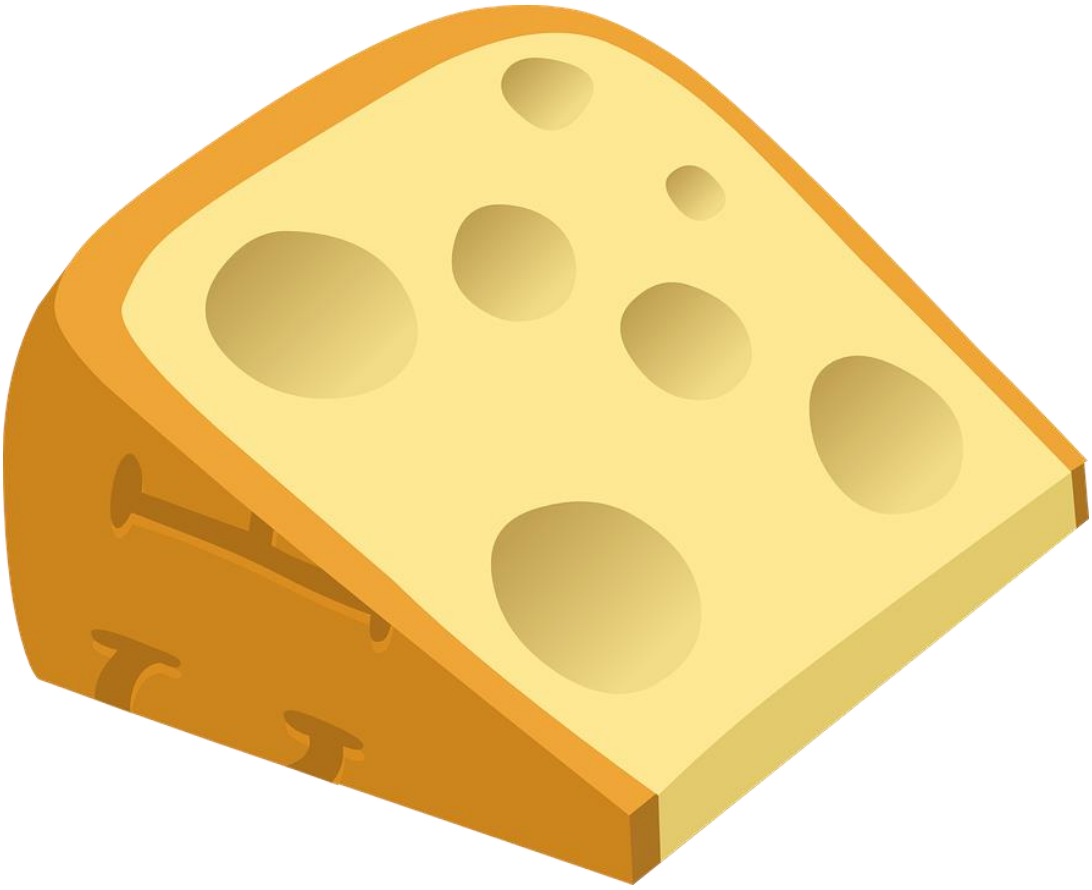
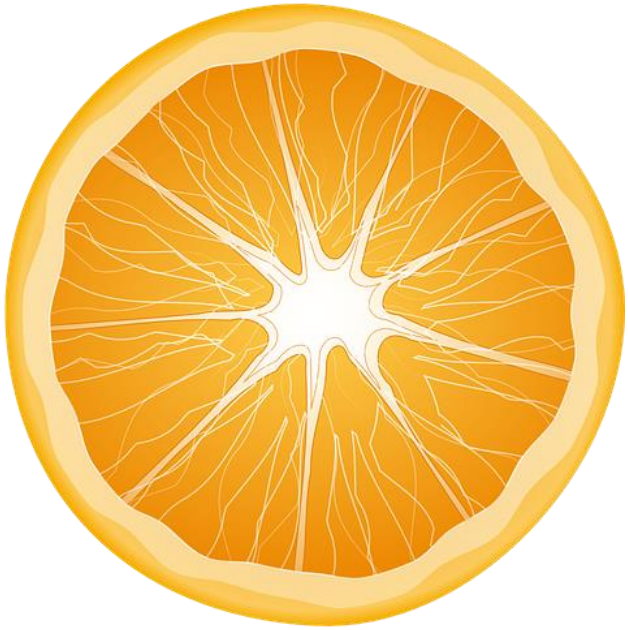
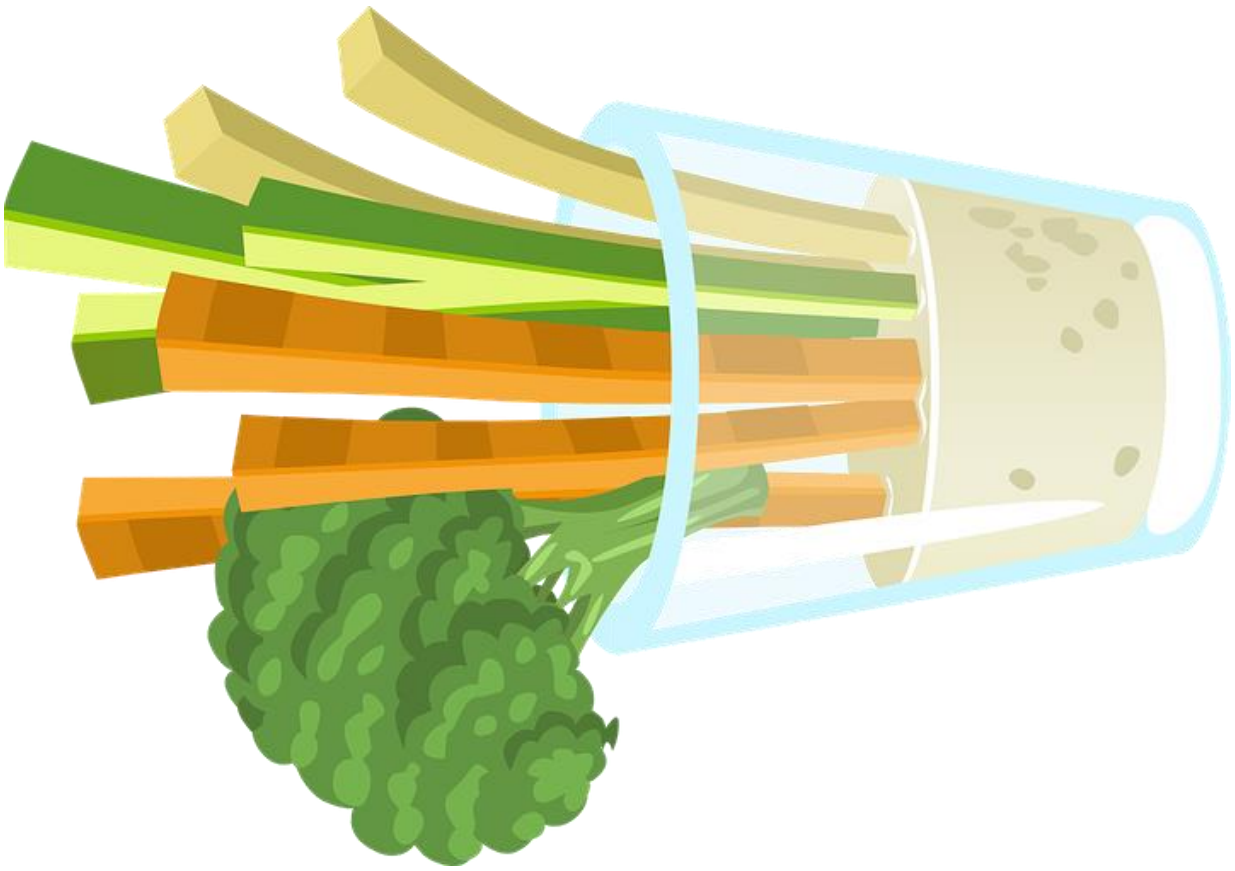

MILK











Workout Recovery Snack Ideas!

After a vigorous workout or practice it is important to replenish your energy stores in your muscles and body with a balanced snack:

- Chocolate milk and an orange
- Apple or pear slices with cheese
- Smoothie made with milk, yogurt, and frozen fruit
- Pita chips and carrots dipped in hummus
- Lean deli meat sandwich with pepper slices
- Yogurt with fruit slices for dipping
- String cheese and a piece of fruit
- Peanut butter and banana sandwich

SMOOTHIE RECIPES

Other smoothie ideas:
https://www.dropbox.com/s/0w8y9yshf99wffh/Recipe-Guide-Marketing-Tips-updated.pdf?dl=0

Pineapple Mango Smoothie

¼ cup frozen pineapple and mango mixed
1 medium frozen banana
2 Tablespoons orange juice
6 oz Vanilla non-fat Greek yogurt
1 cup low-fat milk

1 serving = ~ 25 grams protein

Activity Idea:

Have students come up with their own recovery smoothie using whole foods (avoid protein powders) to equal ~ 20 grams of protein and have the students vote on their favorite.