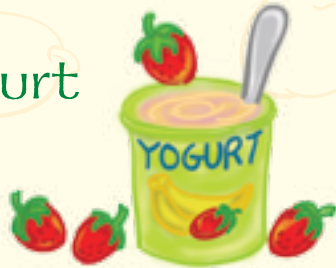




POWER UP WITH PROTEINS

Yogurt



Nuts



Peanut Butter



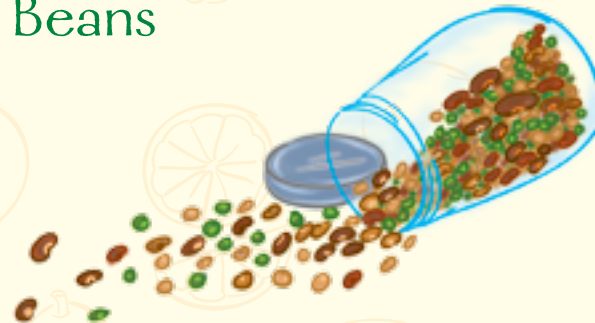
Cheese



Eggs



Beans



YOGURT

- 🍓 Yogurt is a good source of protein. One cup of yogurt provides eight to nine grams of protein.
- 🍓 Yogurt is easy to digest. Yogurt may be better tolerated than fluid milk because it contains less lactose.
- 🍓 Low-fat or nonfat yogurt is a good substitute for sour cream in most recipes.





Nutrition Activity—Making Yogurt Sundaes

Objective: Children will develop an awareness that yogurt is a good source of protein and is a healthy snack.



Materials:

Ingredients for Yogurt Sundaes


A Bowl for Each Child


Appropriate Utensils


Spoons (*for serving*)

- 1) Set up a table with bowls and yogurt sundae ingredients (*see list on the right*) lined up with the appropriate serving utensils. Label ingredients with words and pictures.
- 2) At circle time explain the nutrition activity and describe the ingredients.
- 3) Allow children to move through the line, filling their bowls to create their own yogurt sundae.
- 4) Eat the sundaes at snack time and have the children name the ingredients they chose.

Related Activities or Ideas

 Homemade yogurt

 Yogurt dip (*See the broccoli lesson in the “Wonderful Winter Fruits and Vegetables” section.*)

 Yogurt smoothie (*See the smoothie lesson in the “Spring Snacking” section.*)

Yogurt Sundaes

Choose at least two items from each category.

Yogurt	Grains/nuts	Chopped Fruit
Berry	Bran flakes	Apples
Lemon	Finely chopped nuts*	Apricots
Orange	Granola	Bananas
Peach	Sesame seeds ¹	Berries
Plain Vanilla	Wheat germ	Peaches
		Pears

***CAUTION:** Omit peanuts if children are allergic to them. ¹ Possible choking hazard.



Mathematics

Learning Experiences:

Directionality

Sequencing

Quantity

Questions to Support Mathematics Experiences:

How many flavors of yogurt do we have?

What will you put in your bowl first (second, third)?

How many bananas, berries, and so forth did you put in your bowl?

How many berries do you think it will take to change the color of the yogurt?

What did you choose to put in your bowl?



Learning Experiences:

Comparison (taste and texture)

Sensory awareness

Color

Questions to Support Science Experiences:

Do you think the different choices of yogurt will all taste the same?

What texture is your yogurt?

Which ingredients are crunchy?

What color do you think the yogurt will turn when we add fruit?

What color did the yogurt turn when you mixed in berries?

What does it taste like? Or how does it taste?

What happens to the fruit in the yogurt?

What is yogurt made from?



Literacy

Vocabulary Builders:

Calcium	Ingredients	Smooth
Crunchy	Milk	Soft
Dairy	Nuts	Yogurt
Grain	Protein	

Books:

It Looks Like Spilt Milk by Charles G. Shaw (1988)

The Milk Makers by Gail Gibbons (1987)

Activity to Support Literacy





Collect empty yogurt containers.

Put various sizes of empty containers and lids out on a table. Have the children match lids, stack them, and arrange by height. Read the brands and flavor of each yogurt. Talk about their favorite flavors.

Put the containers in the house area after they are washed.

Song: "Do You Like Your Yogurt?"

PEANUT BUTTER

-  The style (texture) of peanut butter (smooth, crunchy, chunky) does not affect the nutritional value.
-  Two cups of shelled peanuts makes about one cup of peanut butter.
-  Peanuts are actually legumes, not nuts.
-  Peanut butter should not be given to infants under one year old and should be spread thin for young children to prevent choking.

CAUTION:

DO NOT allow children with known peanut allergies to participate in this activity.



PEANUT BUTTER



Nutrition Activity—Making Peanut Butter

Objective: Children will learn that peanuts are high in protein and that it takes a lot of shelled nuts to make peanut butter.



Materials:

Ingredients and Recipe for Peanut Butter

Peanuts in the Shell (unsalted)

Blender or Food Processor Rubber Spatula

Bowls Spoons (*for tasting*)

Empty Clean Jars Trays

- 1) Set up tables with piles of unsalted peanuts in the shell.
- 2) Put out bowls and trays to separate shells and nuts. Have children crack and sort into appropriate containers.
- 3) Discuss the characteristics of peanuts (shape, size, number of nuts in the shell, etc.).
- 4) Put shelled and skinned peanuts in empty jars and ask children to estimate (guess) how many peanuts it will take to make one cup of peanut butter.
- 5) Bring out a blender or food processor and follow the recipe. Make peanut butter in small batches

and put in the jar. Provide spoons for sampling. Make sure children dip their spoons into the jar only once.

6. Serve at mealtime with bread, crackers, or apples.

Extension: Save peanut shells for tracing shapes on paper.

Related Activities or Ideas

- 🥜 Ants on a log (celery filled with peanut butter and topped with raisins)
- 🥜 Peanut butter smoothies (*See the smoothie lesson on page 121.*)
- 🥜 Peanut butter breads or muffins
- 🥜 Other nut butters

Peanut Butter

(Makes 27 one tablespoon servings)

3 cups Unsalted Peanuts, Shelled and Skinned

3–6 T. Oil Salt

Put 1 cup of peanuts in blender jar. Add 1-2 tablespoons salad oil and a pinch of salt. Blend until smooth or crunchy. Repeat.



Mathematics

Learning Experiences:

Counting

Spatial sense

Quantity

Sequencing (*following recipe . . . first, second, next, last*)

Questions to Support Mathematics Experiences:

How many peanuts are in your shell?

Do they all have the same number of peanuts?

Do you think this jar of peanuts will make a jar of peanut butter?

What is the difference in the shape of your shell?

How many more peanuts will it take to fill the jar?

How many parts are there to the peanut?



Science

Learning Experiences:

Sensory awareness

Cause and effect

Observation skills

Questions to Support Science Experiences:

Do we need to take the shells off?

Do the shells and the peanuts smell the same?

How do we get the peanut out of the shell?

Where do peanuts come from and how do they grow?

What color are peanuts and are they all the same color?

Why is there a skin on the nut?

How does the texture change as we blend or process the peanut butter?

How does the peanut butter smell?

What happens to the peanut butter after it sits for over an hour?



Literacy

Vocabulary Builders:

Blender	Peanut	Skins
Chunky	Peanut butter	Smooth
Crack	Protein	Taste
Crunchy	Salt	Unshelled
Oil	Shell	

Kinds of Peanut Butter:

Chunky	Creamy	Crunchy
--------	--------	---------

Books:

The Meat and Protein Group by Helen Frost and Gail Saunders-Smith (2000)

The Peanut Butter Kid by Gertrude Stonesifer (1995)

Activity to Support Literacy

Write the words to the song “Peanut Sat on a Railroad Track,” underlining the rhyming words. Have the children take turns filling in the time the train came down the track in order to expose them to vocabulary used with time concepts. Repeat throughout the week.

Note: This activity is a great transition to mealtime.

Song: “Peanut Sat on a Railroad Track”



EGGS

- Eggs are a high-protein food. Each egg has about 6.25 grams of protein.
- To tell if an egg is cooked hard, spin it. If it spins easily, it is cooked hard. If it wobbles, it is raw.
- To clean up a raw egg dropped on the floor, generously sprinkle with salt, then wipe up.





Nutrition Activity—Peeling and Eating Hard-cooked Eggs

Objective: Children will be able to peel a hard-cooked egg and name its parts.



Materials:

Bowl

Plate (*for each child*)

Knives

Raw eggs

Hard-Cooked Eggs (*at least one per child*)

- 1) Crack raw eggs into a bowl. Have the children look in the bowl and describe the eggs.

Caution: If any child touches the raw egg, make sure the child's hands are washed immediately.

- 2) Bring out unpeeled hard-cooked eggs to the table along with plates and knives.
- 3) Provide at least one egg per person, preferably with several extra eggs in case children want more.
- 4) Allow children to crack, peel, and cut their egg.
- 5) Name each part of the egg and discuss the differences between the yolk and the white of the egg.

- 6) Eat along with the rest of the meal.

Optional: Provide egg slicers at the table to cut eggs into slices.

Related Activities or Ideas

- Top salad with sliced hard-cooked eggs
- Frittata (*Have children beat eggs*)
- Deviled eggs
- Egg salad



Mathematics

Learning Experiences:

Numbers and operations

Comparison (size and shape)

Characteristics/shapes

Questions to Support Mathematics Experiences:

How many layers do you have to peel off to get to the yolk?

How many eggs are in a dozen? In a half dozen?

Are all the eggs the same size?

What shape is an egg? What else is that shape?

What shape is the yolk?

What shape is the egg when we cut it?



Science

Learning Experiences:

Cooking

Sensory awareness

Questions to Support Science Experiences:

How do you cook an egg? How does it change?

Where do eggs come from?

What other animals lay eggs besides chickens?

What other ways do we eat eggs other than hard-boiled?

What will (does) the egg look like when cooked?

What do the yolk and white taste like? Which do you like best?

Why are some eggs brown? Are they different inside?

What can we do with egg shells?



Literacy

Vocabulary Builders:

Boiled

Fried

Scrambled

Crack

Half dozen

Shells

Dozen

Membrane

White

Eggs

Peeling

Yolk

Kinds of Eggs:

Duck

Hen (brown)

Quail

Goose

Hen (white)

Books:

An Extraordinary Egg by Leo Lionni (1998)

Green Eggs and Ham by Dr. Seuss (1960)

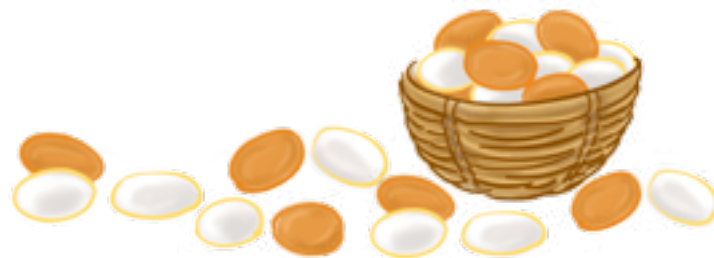
Horton Hatches the Egg by Dr. Seuss (1940)

Activity to Support Literacy







Humpty Dumpty sat on a wall,
Humpty Dumpty had a great fall.
All the king's horses and all the king's men,
Couldn't put Humpty together again.

Recite "Humpty Dumpty" at several circle times during the week of the egg nutritional activity so that children learn it well. Post the words on a chart tablet or poster board and follow along as you repeat the rhyme. Teachers can point out rhyming words or underline them on the chart. The children will enjoy repeating the rhyme when they crack their hard-cooked egg at mealtime.

Song: "Crack, Peel, and Eat (an Egg)"



NUTS

-  Walnuts are a good source of vitamin E and omega-3 fatty acids.
-  Even though nuts are high in fat, 90 percent of the fat is mono- or polyunsaturated. Most nuts are relatively low in artery-clogging saturated fat.
-  Nutritional values of one ounce of nuts: protein, 2.5–7 grams; calories, 165–200; and fat, 13–21 grams.
-  Nuts vary in fiber content from 2 to 5 grams per one-ounce serving.
-  Put unshelled nuts in the freezer for an hour to make them easier to crack.
-  Store shelled nuts in the refrigerator or freezer to prevent them from getting rancid.

CAUTION:

DO NOT allow children with known allergies to nuts to participate in this activity. Nuts can also be a potential choking hazard for younger children. The activity should be closely supervised in a small group. Nuts should be chopped or broken before being served.





NUTS



Nutrition Activity—Cracking and Tasting Nuts

Objective: Children will compare different types of nuts, then taste them, and express their preferences.



Materials:

Variety of Nuts in the Shell

Nutcrackers

Paper Place Mats (*for each child*)

Tray with Dividers (produce trays, egg cartons)

Tray/Cutting Board

Spreader Knife (*for teacher*)

- 1) Set up a table with a tray of assorted nuts in the shells, one of each nut out of the shell, a nutcracker, and paper place mats.
- 2) Distribute unshelled nuts to each child.
- 3) Name the nuts and discuss their characteristics. Have children try to match the nuts with their shells.
- 4) Provide divided trays for sorting nuts.
- 5) Crack shells and chop nuts before allowing children to taste them. Use caution.
- 6) Talk about the children's favorites.

Extension: Have mystery bags filled with various unshelled nuts for children to squeeze. Have a tray of matching nuts available for children to look at. Let children guess which nut they are touching in the mystery bags.

Related Activities or Ideas



Nut bread



Nut butters



Mathematics

Learning Experiences:

Sorting

Characteristics/shapes

Matching

Questions to Support Mathematics Experiences:

How many different kinds of nuts do we have?

How are they the same and different?

What shapes are nuts?

Which nuts match with which shells?

Are the nuts the same shapes as their shell?



Science

Learning Experiences:

Gardening

Investigation and tools

Questions to Support Science Experiences:

How do nuts grow?

What can we do with the shells?

What kinds of things do we eat with nuts in them?

How can we chop the nuts into smaller pieces? What tools could we use?

How do we get the nuts out of the shells?



Literacy

Vocabulary Builders:

Cracking

Inedible

Protein

Edible

Nutcracker

Shell

Grinding

Nuts

Kinds of Nuts:

Almonds

Chestnuts

Peanuts

Black sesame seed

Coconut

Pecans

Black walnuts

Hazelnuts

Pistachio

Brazil nuts

Macadamia nuts

Walnuts

Cashew nuts

Pumpkin seed

Sunflower seed

White sesame seed

Pine nuts (pignoli, piñon nuts, Indian nuts)

Books:

No Nuts for Me by Aaron Zevy and Susan Tebbutt (1996)

Nuts to You! by Lois Ehlert (1993)

A Reward for Josefina by Valerie Tripp, Jeane-Paul Tibbles, and Susan McAliley (1999)

Activity to Support Literacy




Fill a basket of nuts with at least three to four kinds of nuts. Pass around the basket at circle time and let the children choose a nut. Name the nut they choose. On chart paper write the names of the nuts chosen. Call out the names of the nuts and have the children come and put their nut back in the basket.

“Which nut do we have the most and fewest of?”

Song: “The Munching Mix Song”



CHEESE

-  It takes about four quarts of milk to make a pound of cheddar cheese.
-  American processed cheese has less protein and calcium than cheddar cheese and more than twice the sodium.
-  Cold cheese grates best. For easy grating, put cheese in the freezer for 15 to 30 minutes before grating.

CAUTION:

Children with a known allergy to dairy products such as milk should not participate in this activity.



CHEESE

Nutrition Activity—Cheese Tasting

Objective: Children will develop an awareness that cheese is a good source of protein, and they will taste different kinds of cheeses, learning the names of the cheeses and expressing their preferences.



Materials:

A Variety of Cheeses (at least four kinds)

“Favorite Cheese” Card for Each Child to Take Home

Plate/Paper Place Mat (*for each child*)


Knife/Labels/Pen


Tray/Platter

- 1) Cut cheeses into slices or cubes and put on a tray or platter. Write the names of the cheeses on labels and place next to the correct cheeses.
- 2) Offer each cheese to the children to taste and name. Discuss the characteristics of each kind.
- 3) Ask the children which cheese is their favorite and graph the results.
- 4) Write names of each child’s favorite cheese on a card to take home.


Extension: Leave a piece of cheese in a plastic self-seal bag in the science area and allow children to observe what happens over time. Discuss and chart their observations.

Related Activities or Ideas

 Cheese sandwiches (*Offer a variety of different cheeses and breads and allow children to make their own sandwiches.*)

 Cheese muffins

 Quesadillas

 Macaroni and cheese



Mathematics

Learning Experiences:

Characteristics

Comparison (taste and texture)

Graphing

Questions to Support Mathematics Experiences:

What is different about the various cheeses?

What colors are the different cheeses?

Which cheeses are the softest or hardest?

Children's Cheese Tasting

Name: _____

We tasted different kinds of cheese today.

My favorite cheese was:



Name: _____

We tasted different kinds of cheese today.

My favorite cheese was:



Name: _____

We tasted different kinds of cheese today.

My favorite cheese was:



Name: _____

We tasted different kinds of cheese today.

My favorite cheese was:



How many kinds of cheeses can you name?

Which cheese is your favorite?

Which cheese did the most children in the class like?

Which cheese did the fewest children like? Count and use words (most, least, less than, more than, same) to discuss preferences and graph.



Learning Experiences:

Sensory awareness

Nutrition and body awareness

Questions to Support Science Experiences:

How does the cheese smell, feel, and taste?

Where does cheese come from?

Why is cheese (or other dairy products) good for us?

What are some other ways we eat cheese?

Name dishes we eat that contain shredded, melted, and other forms of cheese.

How does cheese look after a few days at room temperature?

Cheese	Shredded	Thick
Creamy	Sliced	Thin
Dairy		

Kinds of Cheeses:

Blue cheese	Feta	Parmesan
Cheddar	Gouda	Provolone
Colby	Monterey jack	Romano
Cottage	Mozzarella	Roquefort
Cream cheese	Muenster	Swiss

Activity to Support Literacy

Write on chart paper the names of the cheeses to be sampled. Before the tasting activity, have children graph which cheese they think (predict) they will like best. After the activity, return to the graph and make a new graph according to the children's preferences. (Compare the graphs.) Count how many children liked each kind of cheese. Which cheese was liked by the most children? The least? Ask the children, "Did you like the cheese that you thought would be your favorite?" Were their predictions correct?





Song: "The Farmer in the Dell"



Vocabulary Builders:

Bones	Melted	Smell
Calcium	Protein	Taste

BEANS

-  Store beans in a cool dry spot.
-  Do not add salt or acidic ingredients when cooking beans. Salt or acid toughens beans and lengthens the cooking time.
-  Beans are a good source of protein, fiber, and iron.
-  Pureed beans can be added to soup to thicken it.



BEANS



Nutrition Activity—Sorting Beans and Making Soup

Objective: Children will develop an awareness that beans are a good source of protein and that they come in many different sizes and colors.



Materials:

Bowl of Mixed Dry Beans

Ingredients and Recipe for Multibean Soup

Tape (*for labeling the jar of beans*)

Bowls/Spoons

Egg Cartons

Jar (*or clear container*)

Place Mats

Pitcher of Water

Stockpot

- 1) Set up each table with place mats and a bowl of mixed beans. Set aside a jar or clear plastic container, masking (or colored) tape, and a pitcher of water.
- 2) Give each child a scoop of beans on a place mat.
- 3) Sort, name, and discuss characteristics of beans. Use egg cartons to sort.
- 4) Put beans back in the bowl, then scoop some into the jar (about one-quarter full). Place tape on the jar at the level of the beans and write the date on it. Fill the jar with water and cover.







Set aside and check daily to observe and document any changes.

Note: Throw beans away after the project.

- 5) Have the children help measure out and put the beans in a pot for soup. Make bean soup (*see recipe*) and serve for lunch or snack. Point out different kinds of beans in the soup for children to taste.

Extension: Have empty bean cans for sorting and matching to dry beans.

Related Activities or Ideas

-  Vegetable chili
-  Baked beans
-  Cheesy bean dip
-  Bean corn salad
-  Bean dip
-  Bean and cheese burritos

Multibean Soup

(Makes 30 one and one-half ounce servings of meat alternate)

6 oz. Dry Great Northern Beans

6 oz. Dry Pink Beans

6 oz. Dry Kidney Beans

1 lb. Dry Pinto Beans

7 cups Water

(continued on next page)

(continued)

1 gal. Chicken Broth, Canned or Homemade

1 Dry Bay Leaf

¼ tsp. Dry Thyme

½ tsp. Garlic Powder

1 lb. ½" Diced Fresh Potatoes

¾ lb. Diced Fresh Carrots

1½ T. Onions, Dried **¼ tsp.** Salt

12 oz. Macaroni **⅛ tsp.** Black Pepper

2 cups Low-fat Milk, Hot **1 lb.** Frozen Corn

- 1) Soak beans in water overnight in the refrigerator. Thoroughly drain and discard water. Rinse beans and drain thoroughly.
- 2) In a pot, combine soaked beans, chicken broth, bay leaves, thyme, and garlic powder. Bring to a boil over medium heat. Reduce heat, cover, and simmer until beans are tender, about 1 hour.
- 3) Add potatoes, carrots, and onions. Simmer covered, until tender, about 20 minutes.
- 4) Add pasta, milk, salt, and pepper. Return to a simmer and cook uncovered for 15 minutes. Add corn. Cook until the corn is heated.
- 5) Remove bay leaf. Put soup into serving containers.



Mathematics

Learning Experiences:

One-to-one correspondence

Sorting

Counting

Characteristics

Questions to Support Mathematics Experiences:

How many different kinds of beans did we find?

Why did you group these beans together? What is the same or different about them?

How many beans do you have in each group?

Which bean is the smallest or biggest?



Science

Learning Experiences:

Observation skills

Absorption

Cooking

Questions to Support Science Experiences:

How did the beans change after we soaked them?

What other changes are happening?

Why do we throw the beans out after we soak them for several days?

How different do beans look after they are cooked?

What do they smell like when they are cooking?

Which bean in the soup do you like the best?

What else could we put in the soup (next time we make it)?



Literacy

Vocabulary Builders:

Absorb	Ferment	Rotten
Bean	Legume	Simmer
Dry	Protein	Soak

Kinds of Beans:

Black	Great northern	Pinto
Black-eyed peas	Kidney	Red
Cranberry	Lentils	Soy
Fava	Lima	Split peas
Flageolets	Mung	
Garbanzo	Navy	

Books:

Amanda Bean's Amazing Dream: A Mathematical Story by Cindy Neuschwander (1998)

One Bean by Anne Rockwell; pictures by Megan Halsey (1999)

Activity to Support Literacy

Eat different kinds of beans prepared in various ways throughout the week, then graph children's favorites. Let children put their names under their favorite bean dish. See "Activity to Support Literacy" in the Introduction for instructions on how to make name strips.

Bean Soup	Bean Burritos	Bean Dip	Bean Salad
Child's name	Child's name	Child's name	Child's name
Child's name			

Song: "One Little Bean"

