Healthy eating learning experiences



'The heart of a child' by Worimi Artist Lara Went **Good for kids** Good for life



Contents



- 1. Playdough
- 2. Home corner
- 3. Craft activities
- 4. Books and stories
 - 5. Games
 - 6. Mathematics
 - 7. Technology
 - 8. Kitchen skills
 - 9. Science
 - 10. Gardening





Quality area 2.1: Healthy eating and physical activity are promoted and appropriate for each child (page 152).

Assessors may sight: Program planning including cooking experiences that promote healthy eating and knowledge of nutrition.





Playdough allows children to creatively explore and represent different foods, promoting awareness of healthy eating in a fun and engaging way. This supports the early years learning framework (EYLF), outcome 2: children are connected with and contribute to their world, by encouraging children to explore concepts of nutrition and make connections between food choices and their well-being through hands-on learning experiences.

Resource ideas



2. Home corner



Using the home corner provides an ideal space for children to engage in role-playing scenarios that mimic healthy eating practices, fostering learning through imaginative play. This aligns with the early years learning framework (EYLF), outcome 3: children have a strong sense of well-being, by promoting positive health practices and supporting children's development of self-care skills in a familiar, interactive environment.



- Cutlery, chop sticks and plates
- Pots, pans, wok, and cooking utensils
- Wooden, plastic or felt play food 0
- Dolls and bottles

School



- Lunchboxes о
- Table or picnic rug 0
- Platters and tongs о
- Recycled food cartons

Supermarket



- Cash register
- Shopping basket
- Shopping lists
- Play food



Farm



- Wooden, plastic or felt play food
- Animal feed bag
- Egg cartons and milk pail
- Animal and farmer dress ups





Craft activities offer children a hands-on way to explore healthy foods and nutrition through creative expression, such as making fruit and vegetable collages or constructing food models.

This approach aligns with the early years learning framework (EYLF), outcome 5: children are effective communicators, as it encourages children to express their understanding of healthy eating while developing fine motor skills and enhancing their ability to communicate ideas through art.



Imaginative



Mulga The Artist



Megan Coyle

Still life



Frida Kahlo



Lucy Culliton



Polly Jones



4. Books and stories



Books are an excellent way to introduce children to healthy eating by providing stories and illustrations that depict nutritious foods and healthy habits in a relatable way. This supports the early years learning framework (EYLF), outcome 5: children are effective communicators, by encouraging children to discuss and reflect on food, while expanding their vocabulary and understanding of nutrition through reading and storytelling.



JANE YOLEN & MARK TEAGUE

How do dinosaurs eat their food?



Which food will you choose?



Handa's surprise



Eating the alphabet



What happens when you eat?



Off to the market



Where does my food come from?

What happens when you eat? Emily Bone (author), Stefano Tognetti (illustrator)

Packed with interesting facts underneath liftable flaps, this book explores what your body does with different foods, and what different nutrients do for your body.



Investigation questions:

- What different parts of our body help us eat?
- How do they help us eat?
- What are our five sense?
- What do our senses help us do?
- What foods help us poo?
- Why do they help us poo?
- What foods do we keep in the fridge?
- Why do we keep them in the fridge?
- Where do we get foods from?





Learning experiences:

- Drawing bodies
- Using your senses to explore different foods
- Ask a dentist for an incursion to discuss how to keep your teeth healthy
- Prepare a cooking experience and involve the children to safely mash, cut, and grate the food
- Use technology to further investigate what happens when you eat.
 For example: <u>science.org.au/curious/where-</u> <u>does-my-food-go</u>

Outcome 5:

Children express ideas and make meaning using a range of media.



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FYLF

Outcome 4:

Children transfer and adapt

what they have learnt from one context to another.

Off to the market Alice Oehr

Learn about different produce as you journey through market stalls filled with vibrant foods. After reading **Off to the market**, it's time for the rainbow food adventure.



The rainbow food adventure experience

Explore the "eat a rainbow" challenge, where children taste many different, everyday foods in all the colours of the rainbow.

Foods can be surprising

Sometimes, food might look funny or different, and we might think we don't like it. But sometimes food can surprise us.

First, try two common and familiar foods: sultanas and cut up grapes. Before tasting them, let's make some guesses: Which one do you think will taste better? The sultanas or the cut grapes?

Then, taste both and see if the guesses were right. Maybe the grapes taste bitter, and the sultanas are sweeter.

This exercise can show children that we should try something before deciding if we like it or not.

Different types of foods

Next, try more foods the children might not know or like yet, like beetroot or zucchini. You'll see, the more children try and have exposure to different foods, the more fun food can be.

How do we feel about new foods?

Every time we try something new, think about how it tastes. Does it taste sweet, sour, salty, or bitter? Does it smell nice? We could put a sticker or draw a picture on a special chart to show if we liked it, don't like it (or don't like it yet), or if we haven't tried it yet.

Extending the activity

You can also do a fun activity sorting different fruits and vegetables into three piles:

"I haven't tried it yet." (Foods we still want to try) "**No, thank you.**" (Foods we don't like yet)

"Yes, please." (Foods we like)

You may need to offer a new food up to **15** times for children to accept it.

At the end of the rainbow food adventure, ask: "Did some foods move to the "Yes, please." pile? That means we've learned to like new foods."







Outcome 4: Children transfer and adapt what they have learnt from one context to another.

Outcome 5: Children express ideas and make meaning using a range of media.

How do dinosaurs eat their food? Jane Yolen (author), Mark Teague (illustrator)

A fun read which runs through the gamut of mealtime bad behaviour, concluding with an excellently behaved dinosaur at mealtimes.

- **(**)
- What noises do the children think dinosaurs made while eating?
- What noises do the children make?
- What noises do their pets make?
- What causes the different noises while eating?
- Is it the shape of the tongue, the size of the teeth, the texture of the food?
- It might be a fun experiment to find out which foods cannot be eaten quietly.



- How would a dinosaur with a big tail sit on a chair?
- How would it hold a fork or a cup in his big hands with its big claws?
- Would the children like to design some dinosaur furniture and cutlery?



- What do dinosaurs eat?
- What do children eat?
- Is there a meal they would like to share with a T-Rex?
- Investigate the difference between herbivores, carnivores and omnivores.
- Do you know which category other animals belong to?



Ages: 3 to 5 years



EYLF Outcome 4:

Children transfer and adapt what they have learnt from one context to another.

Outcome 5:

Children express ideas and make meaning using a range of media.



Science technology engineering mathematics

With a focus on body systems and construction concepts, **how does a dinosaur eat their food** can lead to further learning about measurement, building, body exploration and science.

Eating the alphabet Lois Ehlert

Learn the alphabet with fruit and veg from around the world. This colourful book is packed with a variety of fruit and vegetables from A to Z.

Oral language

Read the title of the book and make a prediction as to what this book might be about.

You might ask "How can you eat the alphabet?" or "What do you think will happen in this story?"

Ages: 3 to 5 years



Phonological awareness, letter knowledge

As you read the book together, ask the children to identify the food on the page that begins with the same sound as the alphabet letter.

You might say, "Touch a food that begins with the same sound as letter "c", the /k/ sound."

If the children hesitate or touch food with a different sound, you can start to name the foods and emphasize that beginning sound.

You might say:

"I see the /k/ /k/ currant, /k/ /k/ corn, and /k/ /k/cucumber. Do you hear the /k/ sound in /k/ /k/ cabbage, /k/ /k/ carrots, /k/ /k/cauliflower?"

Beginning writing

Create an "alphabet plate" of foods that the children like to eat.

- 1. Provide each child with a paper plate or a piece of paper cut in a circle like a plate.
- 2. Invite the children to draw pictures of their favourite foods.
- 3. Make the beginning sound of the foods together and write the letter next to the food.
- 4. You may like to invite the children to trace the letter you wrote with a marker or a crayon.





I hear a pickle Rachel Isadora

The book **I hear a pickle** by Rachel Isadora is a great resource to explore the senses with younger children.

Depicting familiar sounds, smells, objects and foods, the author makes each sense relatable and establishes the connection between a sense and the feelings and associations it evokes.

Our 5 senses connect us with the world and with ourselves. Newborns use their senses with no conscious effort, led only by their primary needs. Toddlers, fuelled by their innate curiosity, explore their surroundings more consciously by intentionally investigating the sound, smell, look, feel and taste of things.

- Before reading the book, you could ask the children what they can do with their ears, nose, eyes, hands and mouths. Can they taste with their ears? See with their nose? Smell with their eyes? Watch their reactions and listen to their comments.
- Do the children have a favourite sense?
- Does a banana taste differently when they eat it with closed eyes?
- Does the room look different when the lights are turned off?
- Do they know that some people can read with their hands?
- Which animal has a great sense of smell?
- Can fish hear?
- How do nocturnal animals see in the dark?

Science technology engineering mathematics

With a focus on body systems, **I hear a pickle** can lead into fun conversations about the importance of sensory exploration.

Spot the STEM in I hear a pickle: littlescientists.org.au/resources/i-hear-a-pickle/











and

Taste It. Too!)

The very hungry caterpillar **Eric Carle**

Join the very hungry caterpillar as he munches his way through the week. This colourful book also provides the opportunity to teach children about the lifecycle of a caterpillar, counting, and the days of the week.

Craft exploration

Draw different foods or cut and paste images of food from a magazine or catalogue for children to:

- Create a menu to feed their pet caterpillar, or
- Build their own lunchbox or picnic.



- What is this fruit called?
- How many plums did the very hungry caterpillar eat?
- How many oranges did the very hungry caterpillar eat?
- Cover your eyes no peeking. Are you ready to count?
- How many bites can you see?
- What will happen after he comes out of the cocoon?

Outcome 4: Children transfer and adapt what they have learnt from one context to another.

Outcome 5: Children express ideas and make meaning using a range of media.

Tuesday - 2 pears

Monday - 1 apple

Wednesday - 3 plums

Thursday - 4 strawberries



Friday - 5 oranges

Saturday - 1 piece of chocolate cake, 1 ice cream, 1 pickle,

1 slice of swiss cheese, 1 slice of salami, 1 lollipop, 1 piece

of cherry pie, 1 cupcake and 1 slice of watermelon



Sunday - 1 green leaf



Use the days of the week to ask children what food they ate the night before

Ages: All ages







by Eric Carl

Wombat stew Marcia Vaughan and Pamela Lofts

When dingo catches a wombat, he decides to make wombat stew. To save their friend, the other animals trick dingo into adding mud, bugs, flies, gumnuts and feathers into the stew.

Materials:

- Wombat stew by Marcia Vaughan and Pamela Lofts
- Natural materials (sticks, leaves, mud, gumnuts gathered with children)
- Large tub or bucket
- Hose or watering can, filled with water
- Paper and pen

Steps:

- 1. Read the book at group time
- 2. Gather natural materials
- 3. Fill the bucket halfway with water
- 4. Encourage each child to grab their own material to place in the bucket
- 5. Children then take turns stirring once all the ingredients are added
- 6. Document the materials placed in the bucket
- 7. Create a recipe with the children

Science technology engineering mathematics

With a focus on sinking and floating, mixing and dissolving, **wombat stew** can lead into fun explorations of important scientific concepts such as buoyancy and chemical reactions.

Investigating water - Books that inspire STEM exploration

EYLF Outcome 4: Children transfer and adapt what they have learnt from one context to another.

Outcome 5:

Children express ideas and make meaning using a range of media.







Ages: 18 months to 5 years











5. Games



Games, such as board games, are an engaging way to teach children about healthy eating by incorporating food-related questions, challenges, and decision-making into play. This supports the early years learning framework (EYLF), outcome 4: children are confident and involved learners, by encouraging problem-solving, critical thinking, and collaboration while promoting awareness of healthy food choices in an enjoyable and interactive way.



Guess in 10 - food we eat



Fun food bingo



Healthy eating snap cards



Shopping list



Crazy chefs



Lunch box game

Core food groups bingo **DIY** games

Learning

Bingo is a fun way to teach children to identify and recognise foods from the core food groups.

Materials:

- Core food groups bingo cards
- Printer •
- Scissors
- Blocks for children to use as markers

Steps:

- 1. Print out the cards
- 2. Cut the cards along the dotted lines (pages 3 to 6)
- 3. Laminate the cards (optional)
- 4. Select a group of 6 children and hand each child their own bingo card (pages 7 to 12) Example bingo card for the child:



- 5. An educator picks out a card (from pages 3 to 6) and tells the children what the food is
- 6. Children then try to find the food on their card
- 7. If the food is on their card, they use a block to mark the food
- 8. The game ends when a child has a marker on all foods on their card

Download the cards here:



goodforkids.nsw.gov.au/earlychildhood-services/healthyeating/educator-resources





The heart of a chill by Worimi Artist

Learning outcome 5:

Children engage with a range of texts and gain meaning from these texts.

Variation:

You may like to ask the children a question about the food selected:

- What colour is the food?
- What shape is the food?
- What does this food taste like?
- Did you eat this food today?

Letter of the day

DIY games

Learning

This game provides the opportunity for children to learn about different fruits and vegetables whilst learning the alphabet and expanding their vocabulary.

Steps:

- 1. Ask the children to pick a letter
- 2. Then, ask the group if they know a fruit or vegetable beginning with that letter
- 3. Ask the children to describe that fruit or vegetable
- 4. Repeat with other fruit or vegetables beginning with that letter

Variation:

- For children under 3 years, use images to initiate the conversation and sound out the beginning letter of the image
- Start by asking open questions, for example:
 "What does the banana look like?"
 - "What does a banana taste like?"
- If the children aren't sure, use a closed question instead, for example:
 - "Is the banana soft or hard?"









EYLF Outcome 4: Children transfer and adapt what they have learnt from one context to another.

Fishing for food DIY games



Learning

This game supports the development of hand-eye coordination and fine motor skills while allowing children to engage with everyday foods in a fun way.

Materials:

- Pictures of everyday foods
- Scissors
- Paper clips
- A stick, wooden dowel, or cardboard roll
- Magnets (+/-sticky tape or glue)
- String or yarn
- Optional: cardboard box, container or tray

Steps:

- 1. Cut out pictures of everyday foods, including fruit and veg options
- 2. Laminate the food pictures (optional)
- 3. Attach a paper clip to each food picture
- 4. Place the pictures on a table or in a low cardboard box, empty container or tray (optional)
- 5. Create "fishing rods" by attaching a magnet to one end of a piece of string or yarn. Tie the other end of the string or yarn to the end of a cardboard roll, wooden dowel or a stick
- 6. It's time to start fishing. Use the fishing rod to 'catch' the food

Once the children catch the food, they may like to sort them into different food groups or colours.





NQF Quality standard 2.1: Each child's health and physical activity is supported and promoted.

EYLF

Learning outcome 5:

Children engage with a range of texts and gain meaning from these texts.



Tip: Turn this game into a fun craft activity by asking children to draw or colour in the everyday food pictures, or cut out food pictures from grocery catalogues.

Fruit and vegetable guessing bag DIY games

Learning

This fun game supports children to identify, recognise, and potentially learn about new fruits and vegetables by exploring through touch.

Materials:

- Fruit and vegetable toys
- A bag or pillowcase

Steps:

- 1. Place the fruit and vegetable toy/s inside an empty bag or pillowcase
- 2. Ask the children to reach inside the bag and feel for the food toys. What food/s do they think are inside?
- 3. After everyone has had the bag, have the group guess what is in it



Tip: Make it easier by limiting to one food toy in the bag at a time and/or provide children with hints such as the colour of the food toy, and whether it's a fruit or vegetable item.





NQF Quality standard 2.1: Each child's health and physical activity is supported and promoted.

EYLF

Learning outcome 5:

Children engage with a range of texts and gain meaning from these texts.

Variation:

Using music, ask the children to pass the bag or pillowcase around whilst sitting in a circle. When the music stops, ask the child holding the bag or pillowcase to guess the food inside.



Page 19

Plant or animal

DIY games

Learning

The aim of this activity is for children to learn that all food comes from a plant or animal. Children sort a selection of food according to its source as a plant or animal.

You will need a selection of food and/or food packaging such as:

- Apples
- Onions
- Carrots
- Cabbage

Listen and respond

1. Show the children a selection of food, food packaging or the food images from the **where do I come from** cards. Ask the children to name each food and say where it comes from.

encourage them to think about where it comes from before it arrives at the shops.

Question the children about each food:

- What is this (plant or animal)?
- Where does it come from?
- Have you tried this food before?
- What else did you/could you eat with this food?
- 2. Instruct the children to collect a food, food package or food image card and then find a space.
 - Based on the food they are holding, task the children to sort themselves into 'food from plants' and 'food from animals'. Give them a minute to group themselves.
 - Check if the children have sorted themselves correctly and question them to see if they can explain more about the food they have. Is it a fruit or a vegetable? Is it a meat or fish? What does it taste like?
 - Finally, summarise that all our food comes from a plant or an animal.

Make sure the packaging is safe for children to handle. Children should not handle packaging from raw meat or fish or opened cans. If you are unable to source food and/or food packaging, use the **where do I come from** cards. Access a copy of the cards here: <u>goodforkids.nsw.gov.au/media/3465/munch-move-where-do-i-come-from-healthy-eating-learning-experiences.pdf</u>





A clean empty milk carton

A clean empty yogurt tub

• A can of tuna (unopened)

pod?

- Pears
- Tomatoes
- Broccoli
- Image of an egg carton



Mathematics provides opportunities for children to explore concepts such as difference in sizes, counting food items, and measuring ingredients, which helps them understand the key learning areas for successful cooking skills later in life.

Water play:



Scales:

Pretend money:

Sharing:

[(\$)

- Provide children with a range or measuring cups, jugs and spoons
- Count how many cups it takes to fill a small bucket

 Weigh foods at afternoon tea and compare what foods are heaviest and lightest

- Use pretend money (for example \$1, \$2) to purchase foods from the home corner
- Use mealtimes to count pieces of fruit in a sharing tray
- Discuss what would happen if someone took too many pieces, how many friends would not have food?
- **Measuring length:**



 Measure real or toy fruit & veg, and sort in order of length. If you have a herb or veggie garden, you could measure the length of produce over time



NQF Quality standard 1.2.1: Educators are deliberate, purposeful, and thoughtful in their decisions and actions.

EYLF

Learning outcome 4:

Children develop a range of learning and thinking skills and processes such as problem solving, inquiry, experimentation, hypothesising, researching and investigating.





Technology allows educators and children to explore healthy eating topics through ageappropriate videos, and online research, helping them gain a deeper understanding of healthy eating. This aligns with the early years learning framework (EYLF), outcome 4: children are confident and involved learners, by encouraging curiosity, exploration, and the development of digital literacy skills as children research and engage with content on healthy eating.

Research topics

Explore food processing

Where do these foods come from or how are they made?

- Cheese
- Milk
- Bread
- Honey
- Canned vegetables





Explore farm life

Where does our food come from?

- Chickens and eggs
- Cows and beef
- Sheep and lamb
- Pigs and pork or bacon



NOF Quality standard 1.2.1: Educators are deliberate. purposeful, and thoughtful in their decisions and actions.

EYLF

Learning outcome 5:

Children engage with a range of texts and gain meaning from these texts.

Vegetable classifications



| | Classification | Information | Examples |
|-----------------------|----------------|---|---|
| er an | Bulbs | Usually grow just below the surface of the ground and produce a fleshy, leafy shoot above ground. Bulbs usually consist of layers, or clustered segments. | fennel, garlic, leek, onion, shallot, spring onion |
| E M | Flowers | The edible flowers of certain vegetables. | cauliflower, broccoli, zucchini |
| Ő | Fruits | Vegetable fruits are fleshy and contain seeds. | cucumber, eggplant, pumpkin, tomato |
| A | Fungi | When referring to vegetables, fungi are commonly known as mushrooms. | mushrooms: cup, button, portobello, shiitake |
| E | Leaves | The edible leaves of plants. | brussels sprout, cabbage, lettuce, spinach, watercress |
| A A | Roots | Usually a long or round-shaped taproot. | beetroot, carrot, celery root (celeriac), parsnip, radish |
| and the second second | Seeds | Legumes, apart from sweet corn, seeds grow in pods which are sometimes eaten along with the seed. | bean (green, French, butter, snake), broad bean, pea, sweet corn |
| | Stems | The edible stalks of plants when the stalk is the main part of the vegetable. | asparagus, celery |
| | Tubers | Vegetables which grow underground on the root of a plant. | sweet potato, potato |



Including kitchen skills provides an ideal opportunity for children to engage in hands-on learning experiences that promote healthy eating practices, fostering development through practical activities. This aligns with the early years learning framework (EYLF), outcome 3: children have a strong sense of well-being, by encouraging positive health practices and supporting children's development of self-care and life skills in a familiar, interactive environment.



Fruity face Kids in the kitchen

Ingredients

SERVES 24

- 1 kg natural yoghurt
- 6 kiwi fruit (cut into 40 slices)
- 6 mandarins (48 slices)
- 12 bananas (cut into halves, lengthways)
- 12 strawberries (cut into halves, lengthways)
- 1/2 cup or 3 x 40g snack pack sultanas

Equipment

- Child friendly knife
 - Chopping board
 - Separate bowls for each ingredient
 - Spoons or knives for spreading yoghurt (one for each child)

Method

- Collect the ingredients and equipment.
- Demonstrate the method outlined in the recipe and allow each child to make their own.
- Ask children to "taste rate" the recipe.

Safety tips

- Ensure that children and staff wash their hands before commencing any food preparation activity.
- Remember to use tongs and utensils.
- Make sure the fruit has been washed before use.

Allergen advice

This recipe is not suitable for children with dairy allergies. The recipe can be modified to suit dairy allergy by replacing with a soy-based yoghurt.





Tongs for serving ingredients

Plates (one for each child)





Ants on a log

Kids in the kitchen

Ingredients

SERVES 24* *Provides taste testing serves only

- 1 bunch celery
- 2 x 500g tubs reduced fat smooth cottage cheese
- 1/2 cup sultanas

Equipment



Plastic plates

- Plastic dessert spoons
- Serviettes to serve

Method

- Collect the ingredients and equipment.
- Demonstrate the method outlined in the recipe and allow each child to make their own.
- Ask children to "taste rate" the recipe.

Safety tips

- Ensure that children and staff wash their hands before commencing any food preparation activity.
- Remember to use tongs and utensils.

Allergen advice



This recipe is not suitable for people with **dairy allergies.** Recipe can be modified to suit dairy allergy by replacing the cottage cheese with a dairy free yoghurt.

Sustainability

Leftovers or uneaten portions can be put to good use by placing in the compost, worm farm, or feeding to the chickens.



Sandwich face Kids in the kitchen

Ingredients

SERVES 1

- 1 slice wholemeal bread
- 1 slice reduced fat cheese
- 2 slices green capsicum
- 1 slice red capsicum
- 2 slices cucumber
- 1/4 cup alfalfa sprouts
- 1/2 cherry tomato
- 2 sultanas

Equipment

- Chopping board and knife to chop the vegetables
- Serving tray
- Plate

Tongs

Method

Educators:

• Cut the vegetables and place on a serving tray.

Children using tongs:

- Place a slice of bread on the plate.
- Place the cheese on top of the bread.
- Arrange vegetables on the bread to make a face.

Allergen advice

This recipe is not suitable for people with **dairy allergies.**

Recipe can be modified to suit dairy allergy by replacing the cheese with a dairy free (vegan) cheese.

This recipe is not suitable for people with wheat allergies.

Recipe can be modified to suit wheat allergy by replacing the bread with a rice cake.



Taste cards

Kids in the kitchen

- Print this page and cut along the dotted lines.
- Give each child a sheet (card).
- Ask each child to tick, circle, or colour in the face which represents how they feel about the food they just tasted.



Allim



9. Science



Research topics - the 5 senses

P

| Senses | Description | Experience | Describing words |
|--------|--|--|--|
| Smell | Stimulation of chemical receptors in the upper airways (nose). | Place a variety of strong smelling objects in an array of plastic cups with a piece of fabric over the top and you have smelling cups. Children can guess what is inside each cup. Flowers, onion, coffee, mint — the options are endless. | Lovely, nice, strong, fruity. |
| Touch | Stimulation that comes from touch receptors in our skin that react to pressure, heat/cold, or vibration. | Place items inside a pillow case and have children take turns identifying the object by only using their hands. | Rough, smooth, hard, soft, scratchy, squishy, furry, lumpy, hot, cold, wet, dry. |
| Sight | Stimulation of light receptors in our eyes, which our brains then interpret into visual images. | Sight is a great sense to explore while also working on early literacy and improving children's memory and observational skills. 'I spy' is simple, fun and can be tailored to different ages. Ask the chidren to describe what foods on their plate or in their lunchbox look like. | Size, shape, colour, texture. |
| Sound | Sound waves go into our ears and make tiny parts inside move, sending a message to our brain so we know what we're hearing. | Play a range of musical instruments or make different animal noises and ask the kids to identify the sound without peeking. Ask the children what sound is made when biting a food. | Loud, soft, sharp, jingly, crunchy. |
| Taste | Tiny bumps on our tongues called taste buds send messages to our brain to tell us if a food is sweet, salty, sour, or bitter. | Blindfold the children in small groups, then give them each a different food to try. | Strong, sweet, bitter, tangy, salty. |

Colourful celery DIY science



Materials:

- Glass jars (4)
- 4 celery stalks
- Water
- Food colouring
- Knife



Ever wondered how the roots of the plant carry the water to the rest of the plant?

Tiny tubes inside the stem (the xylem) draw water up from the roots like a straw by a process called capillary action. Capillary action is when water climbs up things like small tubes. Water sticks to the walls of a tube and starts to inch upward. It sticks to itself, so it pulls more water after it as it climbs. This process lets water climb up to all the different parts of a plant through the xylem tubes in the stem. This experiment shows capillary action at work through a celery's xylem.

Steps:

- 1. Gather your materials.
- 2. Cut about one inch off the bottom of 4 celery stalks.
- 3. Fill each jar halfway with water. Place a few drops of different food colouring into each glass.
- 4. Place celery stalks in the coloured water and let them sit for 20 minutes.
- 5. Come back to the celery after 20 minutes and check out the stalks. What do you see? Colour should start to appear in little dots on the ends of them.



Tip: Rip open 1 or 2 of the celery stalks to better see how the colour travels through the stalks.

Learn more:

Leave the celery overnight and return in the morning to see if the colours have reached the leafy green celery tops. Leaves help pull water up. They have little holes that let out extra water the plant is done using, so more water can come rushing up. Try comparing a celery stalk with leaves to one without — which gets colour to the top first?

Milk swirl explosion DIY science



Materials:

- Whole milk
- Food colouring
- Dishwashing soap
- Cotton swab
- Jar or cup
- Bowl

Steps:

- 1. Gather your materials.
- 2. Pour some milk into a bowl.
- 3. Squeeze a few drops of food colouring in the centre of the milk. Add several different colours for the best effect (add one drop per colour).
- 4. Squeeze a little dishwashing liquid into a jar or cup.
- 5. Dip the end of the cotton swab into the dishwashing liquid.
- 6. Touch the swab with the dishwashing liquid to the centre of the milk and watch closely.

Final result: Watch the colour explosion. You should be able to touch the swab several times before the explosions stop. If you want to try it again, you'll need to pour it out and start over.

Why do the colours burst?

The secret is in the tiny drop of dish soap. Have you ever wondered why cleaning a dish with soap is much more effective than just using water? You can try this yourself by smearing some oil onto two plates. Give yourself 30 seconds to clean one with just water, and the second with water and dish soap. The one cleaned with water will probably still feel very oily, while the one washed with soap feels much cleaner.

Soap is so good at cleaning because of a special property of the soap molecules. One end of each molecule is water-loving (easily dissolves in water). The other end is water-fearing (won't go near water molecules, but will attach easily to oil). With the water-fearing end of the soap molecule grabbing onto the oil molecules, the plate is clean in no time. That's what you're seeing happen in the milk explosion. Milk contains lots of fat and protein. Like oil, the fat and protein molecules attach easily to soap molecules. When the soap touches the milk, it grabs as many fat and protein molecules as it can. The attraction between the soap and the fat causes the molecules to move quickly, creating the colourful explosions.



Apple experiment

DIY science

Materials:

- 2 apples
- Knife
- 5 bowls
- Water
- Baking soda
- Lemon juice
- Milk
- White vinegar

Steps:

- 1. Cut each apple into 8 slices. If needed, have an adult assist with this step.
- 2. Place 2 to 3 wedges in each of the 5 separate bowls.
- 3. Add a different liquid to each of the 5 bowls to cover the apples: water, baking soda (see tip), lemon juice, milk, white vinegar.
- 4. Let the apples sit for a day. What do you think will happen?
- 5. Check the apples on the next day. Were your guesses correct?

Tip: Place 3 spoonfuls of baking soda in water to make a baking soda solution. Make your predictions - what do you think will happen to each of the apple mixtures? One of these solutions will prevent the apples from oxidizing (or turning brown). Which solution do you think it is and why? Were your guesses correct?

What's going on?

When apples are cut, an enzyme (polyphenol oxidase), that reacts with oxygen, is released, causing the apple to turn brown. Lemon juice is full of ascorbic acid, which will react with oxygen before the enzymes in the apple. Lemon juice is also very acidic (about 2.0 pH) and the enzyme in the apple oxidizes in environments between 5.0 to 7.0 pH.



Can you find other acidic ingredients that could prevent apples from browning?



Bouncy egg



Materials:

- Uncooked egg
- Clear jar
- Vinegar

Ages: 4 to 5 years







Steps:

- 1. Gather your ingredients.
- 2. Place the egg in your jar, cover with vinegar, then seal with the lid.
- 3. Now you'll have to wait for 3 to 4 days for the bouncy egg to be ready. Check back to see the progress of your egg - you should start to see the eggshell fizz.
- 4. Time to play. Drop your egg 3 to 5 inches from the table. What happens?
- 5. If you drop it from a higher spot, your bouncy egg may burst. If this happens, you can take a look at the membrane that was holding the egg together.



Tip: Try experimenting with different eggs, such as a smaller quail egg. For an extra colourful experiment, add some food colouring into the vinegar to get a colourful bouncy egg.

What's going on?

The vinegar breaks down the hard shell of the egg because of a reaction with the calcium in the shell. After a day or two, the shell disappears, leaving just the soft, rubbery membrane that holds the egg. This makes the egg squishy and bouncy.





Opportunities for learning in the garden:



Watering the garden is a wonderful experience for all ages, and creates plenty of opportunities to chat about the garden. What are the different plants? How often do we need to water it?



Planting seeds in egg cartons is suitable for all ages with the level of involvement from educators varying according to age of children. When the seedlings are big enough, help the children to transfer them carefully into the garden.



Create a worm farm or compost heap to teach your children about sustainability. It also creates awesome fertiliser.

Make 'hairy heads' by putting sprouting seeds such as alfalfa or grass seeds into old stockings or mosquito netting with some soil or sawdust. Tie it off with a rubber band then decorate the face. Rest on a plate with a little water in the bottom and watch the 'hair' grow over the coming days.



Collect produce from your garden to use in your service menu or share with your families along with a recipe suggestion.





NQF Quality standard 2.1: Each child's health and physical activity is supported and promoted.

EYLF

Learning outcome 2: Children become socially responsible and show respect for the environment.



Create a recycling centre in your garden using plastic bins. Involve the children in labelling, decorating and setting up the recycling bins and sorting plastic, paper and food scraps into the various bins.