

TAKING POSITIVE ACTION IN FOOD SELECTION AND PREPARATION. ASSESSING THE IMPACT OF SUBSTITUTING VEGETABLES FOR MAIN INGREDIENTS IN A TRADITIONAL RECIPE.

ESSENTIAL QUESTION: HOW MANY VEGETABLES CAN YOU HIDE IN A CAKE?

WHAT ARE WE LEARNING?

- Gathering, sorting and displaying whole number data as part of the statistical inquiry cycle.
- Undertaking planning to identify the key stages and resources required to develop an outcome.
- Understanding how the nutritional makeup of a recipe can be altered and modified.

TRY THIS WITH

- Year 7-8
- Students who love being competitive.
- Students who dislike vegetables.

find

apply

produce

Recognise
Identify
Label

Select
Classify
Give examples

Ask each student what colour the last vegetable or piece of fruit they ate was.
Graph the results to see which colour is the most popular.
Using Instagram, give students 10 minutes to find different coloured foods.
Classify the foods as either natural or artificial, and find out how they get their colour.
Discuss the nutritional value of an orange vs Vitamin C pill.
Ask: Does the Vitamin C in a pill come from oranges or something else?
Search Instagram for #vegetable and attempt to label all the vegetables that appear.
Research the health benefits of each colour and vegetable.
Use the Quick App text tool to label each photograph, e.g. zucchini, VitaminC, healthy bones.
Repost to instagram.
Talk about the impact of too much sugar in our diets.
Research sugar content in vegetables.

Make use of
Differences
Experiment

Practice
Examine
Analyse

Make and send an invite to another class saying you'll shout them morning tea.
Explain to students they must create a cake that contains hidden vegetables.
Taste possible vegetable preparations for cake recipes, e.g. pureed, grated etc.
Identify which vegetables and which preparations you wish to test.
Use this recipe as the control cake for experimentation.
Use Easy Diet Diary to calculate the nutritional makeup of your control cake.
Make the base cake batter and divide into five equal parts.
Add different combinations of vegetable preparations to each part in line with your hypothesis.
Spoon into cupcake cases and bake according to instructions.
Use brightly coloured vegetables to make natural food colours for icing.
Predict what has happened to the nutritional value of your cake.
Taste and make flavour adjustments, (lemon juice, honey or vanilla).

Innovate
Create
Judge

Award
Influence
Recommend

Ask: How can we fairly test our normal version against our vegetable version?
Create a fair test for the traditional and modified versions of the recipe.
Remind students that the morning tea needs a control cake to test the others against.
Cocreate a simple rating system (such as stickers) based on looks and taste.
Support students to create their cakes for judging using knowledge gained from the testing phase.
Use Easy Diet Diary to calculate the approximate nutritional value of each cake.
Host the invited class for the morning tea shout.
Ask students from the visiting class to write the vegetables they think are in the cake on a card.
Explain the rating system to the visiting students so the other class can score each cake.
Reveal the secret vegetable ingredients of each cake and establish an overall winner.
Ask: What did vegetables actually do to the cake? Did they make the cake healthier?



success criteria

Students can check they have successfully completed the task by:

- Creating a Quickapp Text overlay that accurately identifies the health benefits of a vegetable.
- Creating a prototype cake and identifying an element of the prototype that requires modification.
- Create a cake for the final morning tea shout that makes an honest attempt to hide vegetables.

PRINCIPLES	VALUES	KEY COMPETENCIES	LEARNING AREAS	WORD BANK	KEY CONCEPTS
Community engagement Future focus	Community and participating Respect Innovation, inquiry and curiosity	Thinking Using language, symbols and texts Participating and contributing	Health and physical activity Food technology	Nutrition Prototype Puree Hauora	Nutritional Makeup Substitution Design process Fair Test

MY VEGGIES ATE MY HOMEWORK

HOME LEARNING ACTIVITIES TO TRY FOR TERMS 1, 2, 3 AND 4.

TRY IN AUTUMN

GO UNDERCOVER AND ADD SOME GERRILLA TO A GARDEN

Use vegetable or herb seeds to make seed bombs. Identify an unused space that you think would make a great site for your seed bomb. Leave a seed bomb at the space you found. It will germinate when the right conditions occur.

LEARNING: COMMUNITY ACTION, GERMINATION

TERM 3

MATARIKI ATUA KĀ EKE MĀI I TE RĀNGI E ROĀ, E WHĀNGĀINGĀ IHO KI TE MATA O TE TĀU E ROĀ E.

If the Matariki stars are clear and bright, it is a sign that we should plant our vegetable gardens in September as a good season lies ahead. Find someone who can talk to you about making planting, harvesting and gathering decisions according to the stars.

LEARNING: CONSTELLATIONS, CULTURAL TRADITIONS

Register to help with Community Fruit Harvesting.

NZ Community of the Year in 2016, Pickfruit coordinates the picking of unwanted fruit from gardens and sharing it with those in need. Volunteer your services for the next pick at pickfruit.co.nz.



TRY IN SUMMER

LEARNING: VOLUNTEERING, PROJECT SKILLS

Soup is easy and cheap to make. Use vegetables and herbs you have grown or buy cheap from your local vege shop. Make enough to share. Freeze the extras. Plan how to share your soup with an elderly neighbour, with a family in need or organise a food bank donation in advance.

SHARE THE LOVE WITH VEGETABLE SOUP.



TRY IN WINTER

LEARNING: COMMUNITY NEED, PRODUCT DESIGN

TRY IN WINTER

Hide as many vegetables as you can in a cake.

Transform traditional recipes by substituting core ingredients for vegetables. Beetroot, Carrot, Zucchini, Spinach, Avocado, Kumara and Pumpkin make great vegetable substitutions. See if you can fool your friends.



LEARNING: INSTRUCTIONAL WRITING, SUBSTITUTION

TERM 2



Find someone who can show you how to pickle vegetables. Pickling uses the qualities of salt and acid to reduce bacteria and extend the life of food.

LEARNING: ACIDS, BACTERIA

FIND YOUR LOCAL COMMUNITY GARDEN AND GET YOUR HANDS DIRTY FOR AN AFTERNOON.

Many communities now have a garden on a spare plot of land. All gardens rely on volunteers to weed, water dig, plant and tend. The best bit? Helping with the work means you can also help with the eating.

TRY IN SPRING

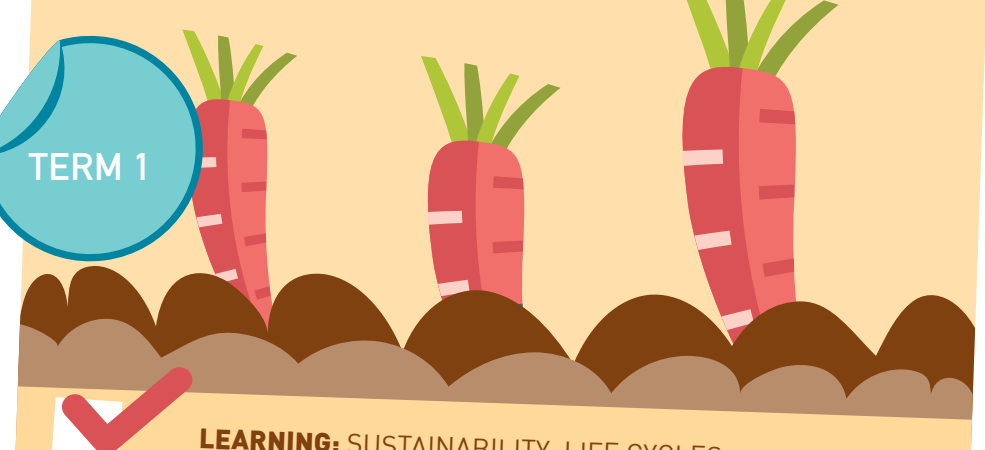


LEARNING: SOCIAL ACTION, CONTRIBUTING

Garlic, Lettuce, Carrot and Basil are all vegetables that can magically and easily regrow themselves from scraps. The ultimate green thumb reuse and recycle approach.

REGROW NEW VEGETABLES FROM YOUR OLD ONES.

TERM 1



LEARNING: SUSTAINABILITY, LIFE CYCLES

CONVINCE YOUR FAMILY TO TRY MEATLESS MONDAYS FOR A MONTH.

TERM 4



Become a Flexitarian Whanau and reduce your carbon footprint, improve your family health and save money all at the same time.

LEARNING: ENVIRONMENTAL IMPACT, ETHICAL DECISIONS

Eat your greens like they did in 1956.



In New Zealand the vegetables we eat and the way we eat them has changed a lot. Find a recipe book or a person that can help you taste what it was like to "eat your greens" 60 years ago.

TERM 3

LEARNING: SOCIAL CHANGE, RESEARCH SKILLS