

DEVELOPING UNDERSTANDINGS ABOUT NUTRITION AND INGREDIENTS. DECONSTRUCTING OLD FAVOURITES AND CREATING NEW IDEAS.

ESSENTIAL QUESTION: IS ALL HEALTHY FOOD COLOURFUL?

WHAT ARE WE LEARNING?

- Enhance personal well-being with knowledge and understandings of the Health Star Rating.
- Appreciate that food science and knowledge changes over time.
- Investigating the difference between artificial vs. natural colours.

TRY THIS WITH

- Year 7-8
- Students who have dreams of being able to eat a pill for dinner.
- Students who love food.

find

Choose
What
Listen

Identify
Record
Where

Ask: Could you eat the same thing every day? Collect a classroom set of favorite family recipes of parents and grandparents. Support students to have conversations regarding the story behind the recipe. Categorise and re-categorise recipes by date, origin, ingredients, colour, preparation time, sugar content etc. Use Timetoast to timeline the ideas from the Evolution of Diet. Add key developments in kitchen technology. Watch the Jetsons and Sun Warriors to see different ideas about pills as food. Ask: How accurate were these movies in their predictions of the future? Choose one colour to work with from 5+ a Day. Create a Pinterest board of fruits and vegetables of your chosen colour. Add natural and processed foods, ingredients and additives that you find in this colour. Visit your local supermarket and photograph images of food for your board. Keep an eye out for Health Star Rating foods. Read about the differences between artificial vs. natural colours.

apply

Experiment
Identify
Group

Predict
Isolate
Differences

Conduct the Stroop Effect Test and identify a Class Stroop Champion. Create a collaged colour spectrum using a vast number of images of raw food. Reflect on the challenges of the Stroop Effect. Set up a mystery food challenge using raw and processed foods (sago, red egg, candy floss, sour cream). Challenge students by manipulating texture, shape and colour against their expectations. Use the idea of the Stroop Effect to test whether what we see tricks our taste buds. Bake six vanilla cupcakes. Use food colouring to make three of the cupcakes a different colour. Use flavour essence to make three of the cupcakes a different flavour. Record predictions for cupcake flavour based on what the volunteers see before tasting. Ask what flavours they have tasted after eating.

produce

Invent
Test
Model

Modify
Compare
Transform

Collect examples of molecular gastronomy that trick your mind and taste buds. Explain to students that they are to create two cupcakes of the same "flavour". Support students to think of ways to create a natural and an artificial version of the same taste. Model an example by providing blueberries, blueberry flavouring and blue colouring. Create the two cupcakes - one natural and one artificial. Vote on flavour and appearance. Compare the nutritional value of each using Health Star Rating and Food Composition. Extend an invitation to a celebrity judge such as your Principal to cast the final vote. Investigate the conventions of 'deconstructed food' and its photography. Analyse the 'Deconstructed Cupcake' image. Consider the viewpoint of the components, their placement and the grouping. Use pic-monkey to re-create the image with the winning cupcakes as the subject.



success criteria

Students can check they have successfully completed the task by:

- Making use of knowledge of food of the past in creating new ideas.
- Showing evidence of the benefits of colour.
- Creating power-packed food that is convenient and nutritional.

PRINCIPLES	VALUES	KEY COMPETENCIES	LEARNING AREAS	WORD BANK	KEY CONCEPTS
Learning to Learn Future Focus	Respect for themselves Ecological Sustainability	Thinking Managing self	Health Food Technology	Artificial Nutrition Evolution De-constructing Futurism	Evolution in the Kitchen De-constructing Ingredients Super Foods

WHAT FUELS ME?

ENERGY IS THE FUEL YOUR BODY USES TO FUNCTION

You get energy from nutrients found in food and drink in the form of **CARBOHYDRATES, PROTEIN AND FATS**

DAILY ENERGY RECOMMENDATIONS FOR A TEENAGER

FEMALE
7600kJ

MALE
8300kJ

KILOJOULE (kJ) IS THE MEASUREMENT OF ENERGY

1g of carbohydrate or protein = 17kJ
1g of fat = 37kJ
1 Calorie = 4.186kJ

 Sleeping burns approx 184kJ per hour

 Walking to class burns approx 816kJ per hour

FATS
are essential for life: they provide insulation and protection for your organs.

CARBOHYDRATES

provide the major source of energy that we need to live, grow and thrive. They are found in milk, fruit and refined sugar as well as bread, crackers, pasta and rice.

PROTEIN

is made up of amino acids that help in the formation of muscle. The best sources include poultry, fish, eggs and legumes.



FIBRE

is important too. Good sources are legumes, whole grains, vegetables and fruit.