


Topics: My garden, Healthy me, Fruit bowl, On my plate.	Primary 1/2 Age 4-6	Title: Browning Apples
Science skill focus Predicting	Curriculum link: Change over Time Materials can be changed in a variety of ways which may alter their look or feel (CoT1,2)	
Progression Focus <ul style="list-style-type: none"> • Can children predict which apple will turn brown first? • Can children explain their prediction? 		
<p>Activity <i>Today we are food technologists.</i></p> <p>Example context: The school kitchen needs to prepare healthy snacks early in the morning, but the apples go brown – what liquid could they use to stop this? (e.g. water, milk, lemon juice, apple juice, vinegar etc).</p> <p>Ask pupils to select liquids to test and make predictions (with reasons)</p> <p>Set up the investigation with the children e.g. each group cut 1 apple into quarters and use different brushes to apply the liquids (3 liquids and 1 control). Could observe the apples at 10 minute intervals on 3 occasions, then leave until end of day/overnight. Record with photographs.</p> <p>Discuss what was found and how this compares to the predictions. (Expect: control to brown quickest, lemon juice the least). What did the children observe at the end of the day or the following morning?</p> <p>Adapting the activity</p> <p>Support: Discuss examples of when an apple has been cut but they has browned e.g. fruit bags, fruit salad. Print pictures taken at each stage so the children can make direct comparisons at the end of the experiment.</p> <p>Extension: Other juices that have a low pH that might be worth testing are: lime, cranberry, grape and grapefruit. Try combining juices to find a tasty way to serve sliced apples while preventing them browning.</p> <p>Other ideas: What will happen if we try different types of apple/fruit?</p> <p>Questions to support discussion</p> <ul style="list-style-type: none"> • What do you think will happen? Why? • Which do you think will go brown first? Last? Why? • What did we find out? • Which apple changed colour the most? Least? • Was it what we expected? Which surprised us? 		
<p>Progression Indicators</p> <p>Not fully achieved: Pupils make suggest ideas, but find it difficult to explain their reasoning e.g. <i>the juice will be best.</i> They focus on their own ideas rather than results e.g. <i>I was right.</i></p> <p>Achieved: Pupils make simple predictions, which may include comparisons between the liquids or explanations using prior experience e.g. <i>I think the juice will be better than the water because you just wash things with water. I think the juice will be the best because we put juice in the fruit salad.</i></p> <p>Exceeded: Pupils make a range of predictions. They begin to look for evidence e.g. <i>look, that one is browner where it didn't have any juice.</i> They may consider real life applications e.g. <i>vinegar did the best but it wouldn't be good to taste so you need to use a really strong juice.</i></p>		

