

Magic Trick!

Here is an activity to be done during **Week 2** of the 2019 *Health Challenge* (*Défi Santé* 2019), which is themed **Gourmet explorers**. Here is science that is eaten! Have fun coloring your rice vermicelli and enjoy them!



Age group:

Multiage

Ingredients:

- Rice vermicelli
- · Lemon juice or lime juice
- Red cabbage
- 3 cups of water
- 1/4 cup of baking soda*

Skills

Aspect of the overall skills developed by the student:

■ Affective

Cognitive

■ Moral

■ Psychomotor

■ Social

Educative intent:

At the end of this activity, the student will be able to understand the phenomenon of color and discoloration due to acid.

Professional expertise put forward by this activity:

- Planning and organization of activities for children and groups of children
- Planning predominantly cognitive activities

^{*} If you use more baking soda, the color will tend to be green.

Magic Trick!

Approach

- Boil some cabbage leaves in 3 cups of water.
 When the water boils, cover and simmer for 5 minutes.
- 2. Remove the cabbage leaves.
- 3. Add 1/4 cup of baking soda. Mix well. The liquid should be blue.
- 4. Add the rice vermicelli in the colored water.
- 5. Let the vermicelli rehydrate for 5 minutes in the liquid.
- 6. Meanwhile, put lemon juice or lime juice in a spray bottle.
- Rinse the vermicelli under cold water and drain well.
- 8. Serve in a dish.
- 9. Observe the color of the vermicelli.
- 10. Spray the lemon or lime juice and mix the vermicelli. They change color as soon as they come into contact with the lemon juice.
- 11. To make the experience even more magical and to avoid waste, use the pasta to make a noodle salad by adding some vegetables. Have the students spray lemon juice on the pasta just before eating their salad. Then add a vinaigrette of your choice.

12. Tell us about your experience: Don't forget to take a picture of the activity and send it to **info@ defisante.ca!**

In conclusion, how does it work?

Red cabbage is grown in acid soils, which gives it a reddish color. If grown in alkaline soil, it tends to be bluish. Those are the anthocyanins that it contains that have the property of changing color. Red cabbage works like sunflower paper: in contact with an acidic substance, it becomes pink. With baking soda, it becomes blue. When it is too alkaline (too much baking soda), it becomes green. By adding lemon or lime juice (which has an alkaline pH), the pasta turns pink.





