

# CHAPTER 1

## INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

Food colouring, or additive colouring, is a colorant, pigment, or substance that gives colour when added to food or drinks. The product comes in various forms consisting of liquid, powder, gel, and paste. Food colouring is used in commercial food production and household cooking. Food colouring is also used in a variety of non-food applications, including cosmetics, pharmaceuticals, home craft projects, and medical devices.

The author will make oil-based food colouring from natural ingredients because the author is looking for colouring materials that can be used by all dishes, especially chocolate, because chocolate can only use oil-based food colouring. Mostly all dyes use synthetic dyes on average and it is not very good for the body, therefore the author makes oil-based food colouring which is made from natural ingredients where no one has made it yet.

The author choose several main ingredients for the manufacture of this dye such us ; red from beets, orange from carrots, green from suji leaves, blue from red cabbage, etc.

Over time the author was confused about what new product to make, so she asked my tutor and he gave me an idea to make oil-based food colouring from natural ingredients. Then the author looked for some references on google and finally the author got the formulation. Then she practiced at home until 5 times failed and the 6th succeeded. Then she consulted again with her supervisor and she asked, where is the best colour for this colour, and the author had an idea to try it on red velvet cake where red velvet cake is famous for its red colour. The author finally decided to make a red velvet cake but the vegan one is healthy too.

For the process is very long, all the ingredients are coarsely grated, then dried through by dehydrator or can use the heat of the sun by drying to dry for approximately 3-5 days. If it's dry, the ingredients are put in a grinder to make

a powder. If it's a powder, it can be mixed with vegetable oil or solid oil and the food coloring is ready.

Nutrition fact is there are 3 calories in a 1 gram (1.000g) serving size of Pure Natural Food Coloring. The calorie breakdown is 0% fat, 94% carbs, and 0% protein.

Natural food color is good for health. Need for addition of color to food Make food more attractive and informative as that helps the consumers to identify their desired food products. Also make food more appetizing.

Food colors influence appetite and choice of food. Offsetting color loss due to light, air, extremes of temperature, moisture, and storage conditions, masking natural variations in color, enhancing naturally occurring colors, and providing identity to foods are all essential in the quest to make food attractive and informative.

The main advantage of natural food coloring is that it doesn't contain common allergy-prone ingredients and may even add to food's nutritional value. For instance, beets, which is the main ingredient for natural red food color, are rich in nitrates that promote a healthy cardiovascular system.

Natural ingredients such as beets, carrots, purple cabbage, telang flower have many benefits and vitamins. One of them Beets contain very important nutrients, such as a source of fiber, folate (vitamin B9), manganese, potassium, iron, and vitamin C. In addition, beets also contain low fat and calories, do not contain saturated fat, and antioxidants. Furthermore, carrots also have a series of other nutrients contained in carrots, such as fiber, vitamin K, potassium, vitamin C, folate, phosphorus, potassium, protein, and calcium, carrots are also good for eye health. Then there is pea tea. The nutritional content in it, among others, contains vitamins A, C, and E which can resist oxidation, beautify the skin, improve the mucous membranes of the eyes, increase immunity, and improve blood circulation. and purple cabbage which contains 7 grams of carbohydrates, vitamins K,C, B6, and 11% protein which can function for bone health, overcoming Inflammation, digestive Health, relieve Breast Pain, breastfeeding Mothers, helps Maintain Heart Health.

The author chose a red velvet vegan cake product. Because red velvet uses red dye, therefore the author includes the main product, namely red dye from beets which in my opinion the color of beets is very beautiful. The characteristics of vegan red velvet cakes are somewhat different from red velvet cakes in general. This vegan red velvet cake has a steamed sponge-like texture, moist, slightly sticky when chewed, and has a slightly earthy smell, due to choosing the color from beets, where beets are famous for their earthy aroma.

## **1.2 THE OBJECTIVE OF THE STUDY**

1. Know that natural ingredients can also be used as food colourings whose colours are no less beautiful than synthetic dyes.
2. Explore what plants and fruits can be used as food colouring.
3. Become a form of business as a new product in the field of entrepreneurship.