

CHAPTER 1

INTRODUCTION

1.1 Background Study

Dragon fruit, also known as pitaya or the strawberry pear, is a beautiful tropical fruit that is sweet and crunchy. The plant the fruit comes from is actually a type of cactus of the genus *Hylocereus*, which includes about 20 different species. Originally popular in Southeast Asia and Latin America, dragon fruit is now grown and enjoyed all over the world. Though it may look intimidating with its pinkish red skin and light green scales, preparing this unusual fruit is easy. You can enjoy eating it in fruit salads, it can be used to create tasty drinks and desserts, and it is a wonderful, healthy snack on its own.

The varieties are *Stenocereus* fruit (sour pitayas) are a variety that is commonly eaten in the arid regions of the Americas. They are more sour and refreshing, with juicier flesh and a stronger taste. Other than sour pitayas, there are 3 kinds of sweet pitayas; *Selenicereus undatus* (Pitaya blanca or white-fleshed pitaya, also known as *Hylocereus undatus*) has pink-skinned fruit with white flesh. This is the most commonly seen "dragon fruit". *Selenicereus costaricensis* (Pitaya roja or red-fleshed pitaya, also known as *Hylocereus costaricensis*, and possibly incorrectly as *Hylocereus polyrhizus*) has red-skinned fruit with red flesh. *Selenicereus megalanthus* (Pitaya amarilla or yellow pitaya, also known as *Hylocereus megalanthus*) has yellow-skinned fruit with white flesh.

As the nutrient content of raw pitaya has not been thoroughly analyzed or published as of 2019, the USDA FoodData Central database reports one limited product label entry from a manufacturer of a branded product, showing that a 100-gram (3+¹/₂-ounce) reference serving of dried pitaya provides 1,100 kilojoules (264 kilocalories) of food energy, 82% carbohydrates, 4% protein, and 11% of the Daily Value each for vitamin C and calcium.

Also Dragon fruit or pitaya contain several types of Antioxidants, Betalains: Found in the pulp of red dragon fruit, these deep red pigments have been shown to protect “bad” LDL cholesterol from becoming oxidized or damaged. Hydroxycinnamates: This group of compounds has demonstrated anticancer activity in test-tube and animal studies. Flavonoids: This large, diverse group of antioxidants is linked to better brain health and a reduced risk of heart disease.

Soya milk known as soy milk or Soy Milk, is a plant-based drink produced by soaking and grinding soybeans, boiling the mixture, and filtering out remaining particulates. It is a stable emulsion of oil, water, and protein. Its original form is an intermediate product of the manufacture of tofu. Originating in China, it became a common beverage in Europe and North America in the latter half of the 20th century, especially as production techniques were developed to give it a taste and consistency more closely resembling that of dairy milk. Soya milk may be used as a substitute for dairy milk by individuals who are vegan or are lactose intolerant.

A cup (243 ml) serving of a generic unsweetened commercial nutrient-fortified brand of soy milk provides 80 calories from 4 g of carbohydrates (including 1 g of sugar), 4 g of fat and 7 g of protein. This processed soy milk contains appreciable levels of vitamin A, B vitamins, and vitamin D in a range of 10 to 45% of the Daily Value, with calcium and magnesium also in significant content.

Why I choose to use Soy Milk and Dragon fruit? Because I never find people that make something using these 2 ingredients, also people who sell silky pudding always use dairy milk or non-fat milk, so if I use the same milk it will be really common. Then most people use Dragon fruit as jam, and I wanna make something different that's why I choose to make a compote.

1.2 Objective of the Study

1. Requirement to continue for Internship.
2. Acknowledge about Soy Milk & Dragon fruit benefits.
3. Explore new or uncommon product.

1.3 Benefits of the Study

1. Benefits for Student
 - Give idea so they can make another unique product in the future .
2. Benefits for Ottimmo
 - Enrich Data on library,Refferences for another research and development project.
3. Benefits for Readers
 - Idea to create healthy but tasty drinks using indonesian fruit.