

CHAPTER I

INTRODUCTION

1.1. Background of Study

Vegan nuggets are nuggets that has a new innovation, where there has not been a product like this before. These nuggets are made with vegan friendly ingredients. Even though this is a vegan product, where many people think that vegan products have a taste made of vegetables and weird, this product can be enjoyed by non-vegans too because we use healthy ingredients but still have a delicious taste. The main ingredients that used to use these nuggets are cauliflower, carrots, and also white beans. Nugget is a fast food that consider to people who have busy schedule.

Carrots can be one of the ingredient that good for making vegan nugget because have a variety of medical uses, including gastrointestinal cleansing, diuretic, remineralizing, antidiarrheal, general tonic, and antianemic effects. Alkaline components found in carrots help to detoxify and energise the blood. It has anti-cancer properties, which attracted a lot of interest from researchers, foodproducers, and consumers as the trend towards therapeutic and functional foods with specific health effects moves forward (Velioglu et al., ; Kahkonen et al., ; Robards et al., Surbhi S et al., ; Verma RC et al., ; Deepak R et al., ; Jain HK and Yadav, 2018). Carrots can boosting immunity for older people, can fight people from anemia, reducing acne, health for our eyes, prevent heart disease, and cleanesthe liver. Carrot growth temperatures affect the amount of sugars, carotenoids, and volatile chemicals; hence, growing in cool settings increases carrot yield and quality, whereas higher temperatures would boost terpene synthesis and produce carrots with a harsh flavor. To boost levels

of phytochemicals, improve the nutritional content of carrots, and value-add to carrot by products, it is worth while to research the growth of diverse genotypes under various environmental conditions. Tapioca has a strong adhesion compared to other flours when used as an adhesive.

White beans is a one off beans that has a lot of benefits that perfect to substitute meat in the nuggets. White beans impact on body mass. Supplementing with white beans resulted in weight reduction differences of about 1.08 kg on average. White beans impact on fat mass. White beans supplementation had a 3.26 kg average reduction in body fat. White bean tempeh is a novel cuisine that is high in protein, has an excellent nutritional profile, and has the potential to replace meat in the future. Vegetarians and those who support them can eat it. Being a superior energy-intake product, if included in a healthy diet, it may function as an intestinal regulator. White bean might be an excellent healthy eating alternative, but any recommendations for them should be supported by research that show they have positive impacts. (Rayane J. Vital, dkk)

Chickpea flour is one of the best flour to substitute all purpose flour. The second-most significant pulse crop, chickpea, offers multiple advantages to farming systems, including reduced use of synthetic nitrogen, improved soil quality, and improved livestock and human health as a result of its superior nutritional quality, which includes valuable proteins, minerals, vitamins, and fibers. However, in order for chickpea to completely provide these advantages, the crops must be more productive and climate-resilient. If successfully developed, chickpea has the potential to significantly reduce under nourishment in developing nations in Asia and Africa and meet the rising food demand of our global family. Over the past ten years, enormous strides have been made in breaking the genetic variety bottleneck caused by cultivated chickpeas' limited genetic diversity by incorporating crop wild cousins and landraces into the crop's genetic foundation.

Thanks to the essential amino acids, vitamins, minerals and food fibers contained in chickpeas, it is rightfully considered a "health grain" and recommended for use in therapeutic and preventive nutrition. The high biological value of chickpea (68 %) indicates the balance of its amino acid composition. By its biological value, this culture is superior to lentils and peas. Chickpea is a source of lecithin, riboflavin (B2), thiamine (B1), nicotinic and pantothenic acids, choline, selenium, which has an antioxidant effect, increases the body's resistance to cancer.

Chickpea seeds contain high amounts of phosphorus (290 mg/100 g of product), potassium, and magnesium (126 mg/100 g of product). One of the few legumes that supports the body's 1:1.5 calcium to phosphorus ratio is this one. A high amount of essential fatty acids, such as linolenic 30%, linoleic 60%, and oleic 23-28%, is typical for the chickpea cultivars tested. Polyunsaturated fatty acids facilitate the production of prostaglandins, which prevent the buildup of dense cholesterol on the blood vessel walls.

In addition, cauliflower has numerous health benefits, including lowering the risk of cancer and enhancing heart and stomach health. (Juliana¹., et al ; Elsa Virginia²., et al ; Vennia., et al; Yurisca³., et al; Winnie⁴, 2020). Cauliflower seeds have now been discovered for planting in the plains low that its output of results field testing is great. Cauliflower seeds are one of many vegetable crops planted in the highlands (region mountains). Cauliflower crop production in Indonesia is concentrated in Lembang, Cisarua, and Cibodas in West Java. In addition, high potassium content carrot can significantly reduce the sensitivity of the blood and the use for medicines. Additionally, the presence of calcium in wortel has the potential to aid in the prevention of toxic. Eating carrots can reduce the risk of stroke by as much as 68 percent when taken just a few times per week.

1.2 The Objectives of the study

The objectives of this study are as follows:

1. Provide information about the ingredients and benefits contained in vegan nuggets.
2. Provides information on substitutes for chicken to make vegan meat that has a nutritional content and has a texture similar to chicken meat.
3. Find out if white beans are a good substitute for meat
4. To market internationally vegan products utilizing white bean products
5. To provide inspiration to vegan consumers, recipes that are healthy and contain many benefits
6. To maximize the use of nuts.