

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Vegan Fermented Mayonnaise is made to make a new alternative of vegan product mayonnaise using tempeh as a main ingredients. the author want to make another type of mayonnaise and make a new vegan product so vegan people can enjoy vegan friendly mayonnaise.

Mayonnaise is cold sauce originating in French cuisine, an emulsion of raw egg yolks and vegetable oil. As the yolks are continuously beaten, oil is added little by little until a thick cream results. Plain mayonnaise is flavoured with lemon juice, mustard, or vinegar. But in this mayonnaise are going to use vegan friendly ingredients namely Tempeh to replace the egg yolk as a main ingredients to make mayonnaise and the author also going to use soya oil to emulsify later with the tempeh mixture.

Nakajima *et al*, 2005 describe tempeh is a traditional fermented soybean food originally from Indonesia, has gained attention for its superior nutritional qualities and metabolic regulatory functions. It is recommended to vegetarians because of its high protein, vitamin B12, ergosterol, and mineral content. It's made from partially cooked soybeans and fermented with a type of mold called rhizopus as a tempeh yeast. If look closely, will notice a fuzzy white substance holding tempeh together. That is a safe by product of the fungus, called mycelium. Tempeh has a strong, nutty flavor. It also tends to absorb the flavors of any food or sauce to which is added, making it a versatile choice for many sorts of dishes.

Tempeh has a lot of nutritional content, the highest nutritional content in tempeh is protein (min 16% of the weight) than carbohydrates, fat and fiber. Tempeh is typically cooked before eating, and some of commercial products are also pasteurised, meaning they are unlikely to retain the beneficial bacteria

known as probiotics, despite being a fermented product. However, tempeh is rich in fibre – in particular, the type of fibre known to be prebiotic. Because of the fermentation procedure, tempeh contains probiotics, which can help to enhance gut hygiene and digestion. Taking tempeh could also help to decrease cholesterol and regulate blood glucose levels, according to research. Soy products, that are abundant in minerals, may also improve brain health, particularly when taken as part of a whole-foods-based diet.

Vegans also need to get probiotics content for their body which usually can be found on animal based products. By this case the author decided to make vegan friendly product that contain probiotic inside the product. Lactobacillus is the most commonly found probiotic, it can be found in fermented plant-based foods.

Soybean oil is a vegetable oil extracted from the seeds of the soybean. It is one of the most widely consumed cooking oils and the second most consumed vegetable oil. As a drying oil, processed soybean oil is also used as a base for printing inks and oil paints. Soybean oil is a versatile cooking oil and can be used for everything from salad dressings to deep frying. Because of its versatility, it remains one of the most commonly consumed cooking oils around the world. Its neutral taste makes it an easy substitute for other vegetable oils in most recipes. In this product the author will using this soya oil to substitute the other vegetable oil to emulsify with the tempeh mixture. From this the mayonnaise will be created by this two main ingredients without changing the definition of the mayonnaise itself.

1.2 THE OBJECTIVE OF THE STUDY

- a. Make alternative product of mayonnaise that is healthier from other mayonnaise which is vegan fermented mayonnaise
- b. Vegan still can consume mayonnaise
- c. Lift up values of tempeh product
- d. Promote local product of Indonesia