**CHAPTER I**

**INTRODUCTION**

* 1. **Background Study**

The soybean, soy bean, or soya bean (*Glycine max*) is a species of [legume](https://en.wikipedia.org/wiki/Legume) native to [East Asia](https://en.wikipedia.org/wiki/East_Asia), widely grown for its edible [bean](https://en.wikipedia.org/wiki/Bean), which has numerous uses.

Traditional unfermented food uses of soybeans include [soy milk](https://en.wikipedia.org/wiki/Soy_milk), from which [tofu](https://en.wikipedia.org/wiki/Tofu) and [tofu skin](https://en.wikipedia.org/wiki/Tofu_skin) are made. Fermented soy foods include [soy sauce](https://en.wikipedia.org/wiki/Soy_sauce), [fermented bean paste](https://en.wikipedia.org/wiki/Fermented_bean_paste), [nattō](https://en.wikipedia.org/wiki/Natt%C5%8D" \o "Nattō), and [tempeh](https://en.wikipedia.org/wiki/Tempeh). Fat-free (defatted) soybean meal is a significant and cheap source of protein for animal feeds and many [packaged meals](https://en.wikipedia.org/wiki/TV_dinner). For example, soybean products, such as [textured vegetable protein](https://en.wikipedia.org/wiki/Textured_vegetable_protein) (TVP), are ingredients in many meat and [dairy](https://en.wikipedia.org/wiki/Dairy) substitutes.

Soy beans contain significant amounts of [phytic acid](https://en.wikipedia.org/wiki/Phytic_acid), [dietary minerals](https://en.wikipedia.org/wiki/Dietary_minerals) and [B vitamins](https://en.wikipedia.org/wiki/B_vitamins). [Soy vegetable oil](https://en.wikipedia.org/wiki/Soybean_oil), used in food and industrial applications, is another product of processing the soybean crop. Soybean is the most important protein source for feed farm animals (that in turn yields animal protein for human consumption).

Soybeans can be processed to produce a texture and appearance like many other foods. For example, soybeans are the primary ingredient in many [dairy product](https://en.wikipedia.org/wiki/Dairy_product) substitutes (e.g., [soy milk](https://en.wikipedia.org/wiki/Soy_milk), [margarine](https://en.wikipedia.org/wiki/Margarine), [soy ice cream](https://en.wikipedia.org/w/index.php?title=Soy_ice_cream&action=edit&redlink=1), [soy yogurt](https://en.wikipedia.org/wiki/Soy_yogurt), [soy cheese](https://en.wikipedia.org/wiki/Soy_cheese), and soy cream cheese) and meat alternatives (e.g. [veggie burgers](https://en.wikipedia.org/wiki/Veggie_burgers)). These substitutes are readily available in most supermarkets. Soy milk does not naturally contain significant amounts of digestible [calcium](https://en.wikipedia.org/wiki/Calcium). Many manufacturers of soy milk sell calcium-enriched products, as well.

Soy products also are used as a low-cost substitute in meat and poultry products. Food service, retail and institutional (primarily school lunch and correctional) facilities regularly use such "extended" products. Extension may result in diminished flavor, but fat and cholesterol are reduced. Vitamin and mineral fortification can be used to make soy products nutritionally equivalent to animal protein; the protein quality is already roughly equivalent. The soy-based meat substitute [textured vegetable protein](https://en.wikipedia.org/wiki/Textured_vegetable_protein) has been used for more than 50 years as a way of inexpensively extending [ground beef](https://en.wikipedia.org/wiki/Ground_beef) without reducing its nutritional value.

The oyster mushroom is one of the more commonly sought wild mushrooms, though it can also be cultivated on straw and other media. It has the bittersweet aroma of [benzaldehyde](https://en.wikipedia.org/wiki/Benzaldehyde) (which is also characteristic of bitter almonds).

The oyster mushroom is a choice [edible](https://en.wikipedia.org/wiki/Edible_mushroom), and is a [delicacy](https://en.wikipedia.org/wiki/Delicacy) in [Japanese](https://en.wikipedia.org/wiki/Japanese_cuisine), [Korean](https://en.wikipedia.org/wiki/Korean_cuisine) and [Chinese cuisine](https://en.wikipedia.org/wiki/Chinese_cuisine). It is frequently served on its own, in soups, stuffed, or in [stir-fry](https://en.wikipedia.org/wiki/Stir-fry) recipes with [soy sauce](https://en.wikipedia.org/wiki/Soy_sauce). Oyster mushrooms may be used in sauces, such as [oyster sauce](https://en.wikipedia.org/wiki/Oyster_sauce#Vegetarian_oyster_sauce). The mushroom's taste has been described as mild with a slight odor similar to [anise](https://en.wikipedia.org/wiki/Anise). Oyster mushrooms are used in the [Czech](https://en.wikipedia.org/wiki/Czech_cuisine) and [Slovak](https://en.wikipedia.org/wiki/Slovak_cuisine) contemporary cuisine in soups and stews in a similar fashion to meat. The oyster mushroom is best when picked young; as the mushroom ages, the flesh becomes tough and the flavor becomes acrid and unpleasant.

The reason behind picking soybean and oyster mushroom is many people still don’t know about the benefits from soybean, and the texture of mushroom is the same as meat. And it rarely used together. Our target of costumer is ovo-vegetarian which doesn’t consume dairy product and meat but still consume eggs.

The nutrition and health benefits are as follow:

1. Soybean cake has isoflavones. These are chemicals called phytoestrogen that have cancer-fighting and antioxidant properties.
2. Improve cholesterol.
3. Lowering blood pressure.
4. Improve insulin resistance.
5. Lower inflammation.
6. Promote bone health.
7. High protein.
   1. **Objectives of the Study**
8. Requirements to continue to internship program.
9. Explore the benefit of Soybean and Mushroom.
10. Making new tasty healthy food.
    1. **Benefits of the Study**
11. Benefit for Students

Became one of the creative business ideas in the future

1. Benefit for OTTIMMO

Enrich database of vegetarian healthy food through Research & Development program

1. Benefits for readers

As an idea to create new healthy and tasty food.