

CHAPTER II

PRODUCT DESCRIPTION

2.1 Product Description

“KIM BA SOM” is an innovative substitution product of kimchi which is made from banana blossom as the main ingredient. (Afifah Novitasari, 2013). Mostly banana blossom was used as a complementary vegetable in food product or even some people consume it directly after the simple cooking process. “KIM BA SOM” gives the delicate texture of banana blossom and the tanginess from the result of fermentation which is very delicious.

“KIM BA SOM” is produced in a aluminium standing pouch of 250 grams. The outer label contains the product description, composition, production code, place of origin, and best before date. As a pioneer of substitution product of Korean traditional kimchi made from banana blossom, the “KIM BA SOM” product offer the same smell and give the similar flavor as the traditional cabbage kimchi. (Afifah Novitasari, 2013).

2.2. Materials

2.2.1 Banana Blossoms



Picture 1 Banana Blossom
(Source: Anonymous, 2020)

The banana flower is a large, dark purple-red blossom that grows at the end of a bunch of bananas. It is known as banana blossom or banana heart or *jantung pisang* in Indonesia or *ontong* in Javanese. The terms of “banana blossom”, “banana heart” refers to the flower’s physical resemblance to that organ. This family to whom banana belongs is called *musaceae*. It is an edible flower as it is considered as vegetable. (Anonymous, 2020).

This pointy heart shape item is the male inflorescence of the banana plant. It consists of red leaf like bracts covering rows of male flowers.

Above the “blossom” are a large number of female flowers that will mature into bananas. The male inflorescence is not needed and is often cut off and sold separately. The dark outer bracts are pulled away as the more tender inner leaves are used.

Banana blossom tastes a bit like banana peel but less bitter and astringent. The red outer bracts are not edible. Banana blossom have a similar aromatic profile with banana, but it is much less strong and more delicate when still in the blossom form.

2.2.2 Granulated Sugar



Picture 2 Granulated Sugars
(Source: Anonymous, 2020)

Granulated sugar is a white sucrose product due to the refined out of molasses which is obtained from sugar cane. It is important as a source of dietary carbohydrate, as sweetener, and preservative of other food. Granulated sugar comes from the dried, separated, and screened process of crystal centrifuge pure sugar through a granulator. Sugar is needed as an addition glucose which is used in fermentation process of banana blossom. (Anonymous, 2020).

2.2.3 Salt



Picture 3 Salt

(Source: Anonymous, 2020)

Salt is a mineral composed primarily of sodium chloride (NaCl), a chemical compound belonging to the larger class of salts; salt in the form of a natural crystalline mineral is known as rock salt or halite. (Anonymous, 2020). Salt is present in vast quantities in seawater. The open ocean has about 35 grams (1.2 oz) of solids per liter of sea water, a salinity of 3.5%. Salt is needed to draw out moistures from the vegetables and also helps the process of fermentation works.

2.2.4 Clean water



Picture 4 Clean water

(Source : Anonymous, 2020)

Drinking water is water which is safe to be used for human consumption; drinking and food preparation. It is used to blanch banana blossom.

2.2.5 USA Apple



Picture 5 Apple

(Source: Anonymous, 2020)

An apple is an edible fruit produced by an apple tree (*Malus domestica*). Apple trees are cultivated worldwide and are the most widely grown species in the genus Malus. (Anonymous, 2020). The tree originated in Central Asia, where its wild

ancestor, *Malus sieversii*, is still found today. Apples have been grown for thousands of years in Asia and Europe and were brought to North America by European colonists. Apples have religious and mythological significance in many cultures, including Norse, Greek, and European Christian tradition. Apple is used as one of the ingredients in the puree for kimchi and add sweetness and flavor into it.

2.2.6 Garlic



Picture 6 Garlic
(Source: Anonymous, 2020)

Garlic (*Allium sativum*) is a species of bulbous flowering plant in the genus *Allium*. Its close relatives include the onion, shallot, leek, chive, Welsh onion and Chinese onion. (Anonymous, 2020). It is native to Central Asia and northeastern Iran and has long been a common seasoning worldwide, with a history of several thousand years of human consumption and use. It was known to ancient Egyptians and has been used as both a food flavoring and a traditional medicine. Garlic is used as one of the ingredients in the puree for kimchi and add flavor into it. It also add anti-bacterial effect to the kimchi.

2.2.7 Ginger



Picture 7 Ginger
(Source: Anonymous, 2020)

Ginger (*Zingiber officinale*) is a flowering plant whose rhizome, ginger root or ginger, is widely used as a spice and a folk medicine. (Anonymous, 2020). It is

a herbaceous perennial which grows annual pseudostems (false stems made of the rolled bases of leaves) about one meter tall bearing narrow leaf blades. The inflorescences bear flowers having pale yellow petals with purple edges, and arise directly from the rhizome on separate shoots. Ginger is used as one of the ingredients in the puree for kimchi and add flavor and anti-bacterial effect into the kimchi.

2.2.8 Onion



Picture 8 Onion
(Source: Anonymous, 2020)

The onion (*Allium cepa* L., from Latin *cepa* "onion"), also known as the bulb onion or common onion, is a vegetable that is the most widely cultivated species of the genus *Allium*. The onion plant has a fan of hollow, bluish-green leaves and its bulb at the base of the plant begins to swell when a certain day-length is reached. The bulbs are composed of shortened, compressed, underground stems surrounded by fleshy modified scale (leaves) that envelop a central bud at the tip of the stem. (Anonymous, 2020). Onion is used as one of the ingredients in the puree of kimchi and add flavor and sweetness and anti-bacterial effect into the kimchi.

2.2.9 Rice flour



Picture 9 Rice Flour
(Source: Anonymous, 2020)

Rice flour (also rice powder) is a form of flour made from finely milled rice. It is distinct from rice starch, which is usually produced by steeping rice in lye. Rice flour is a

common substitute for wheat flour. It is also used as a thickening agent in recipes that are refrigerated or frozen since it inhibits liquid separation. Rice flour may be made from either white rice or brown rice. (Anonymous, 2020). To make the flour, the husk of rice or paddy is removed and raw rice is obtained, which is then ground to flour. Rice flour is used to make “porridge” for the kimchi to provide more glucose for the fermentation process.

2.2.10 Forest Honey



Picture 10 Honey

(Source : Anonymous, 2020)

Honey is a sweet, viscous food substance made by honey bees and some other bees. Bees produce honey from the sugary secretions of plants (floral nectar) or from secretions of other insects (such as honeydew), by regurgitation, enzymatic activity, and water evaporation. Honey bees store honey in wax structures called honeycombs, whereas stingless bees store honey in pots made of wax and resin. (Anonymous, 2020). The variety of forest honey produced by honey bees (the genus *Apis*) is the best-known, due to its worldwide commercial production and human consumption. Honey is collected from wild bee colonies, or from hives of domesticated bees, a practice known as beekeeping or apiculture (meliponiculture in the case of stingless bees). Honey is used as a flavoring agent for the kimchi.

2.2.11 Gochugaru



Picture 11 Gochugaru

(Source : Anonymous, 2020)

Gochugaru, also known as Korean chili powder, is chili powder or flakes used in Korean cuisine. The name "gochugaru" derived from Korean *gochugaru* (고춧가루; *gochutgaru*), where *gochu* (고추) means "chili pepper" and *garu* (가루) means "powder". In English, gochugaru usually refers to the seedless, Korean variety of chili powder. (Anonymous, 2020). It has a vibrant red color, the texture may vary from fine powder to flakes, and the heat level from mildly hot to very hot. Traditionally made from sun-dried Korean red chili peppers (called *taeyang-cho*), gochugaru has a complex flavor profile with spicy, sweet, and slightly smoky tastes. Gochugaru is the ingredients that gives kimchi the spicy kick and red color.

2.3 Tools and Equipment

2.3.1 Knife



Picture 12 Knife

(Source: Anonymous, 2020)

A knife (plural knives; from Old Norse *knifr* 'knife, dirk') is a tool or weapon with a cutting edge or blade, often attached to a handle or hilt. One of the earliest tools used by humanity, knives appeared at least 2.5 million years ago, as evidenced by the Oldowan tools. Originally made of wood, bone, and stone (such as flint and obsidian), over the centuries, in step with improvements in both metallurgy and manufacturing, knife blades

have been made from copper, bronze, iron, steel, ceramic, and titanium. Most modern knives have either fixed or folding blades; blade patterns and styles vary by maker and country of origin. Knife is used to cut the banana blossoms and other ingredients.

2.3.2 Stock Pot



Picture 13 Stock Pot

(Source: Anonymous, 2020)

A stock pot is traditionally used to make stock or broth, which can be the basis for cooking more complex recipes. It is a wide pot with a flat bottom, straight sides, a wide opening to the full diameter of the pot, two handles on the sides, and a lid with a handle on top. Stock pot is used to boil the banana blossom.

2.3.3 Strainer



Picture 14 Strainer

(Source: Anonymous, 2020)

A sieve, fine mesh strainer, or sift, is a device for separating wanted elements from unwanted material or for characterizing the particle size distribution of a sample, using a screen such as a woven mesh or net or perforated sheet material. Strainer is used to drain the boiled banana blossom to drip all the water away.

2.3.4 Large bowl



Picture 15 Large bowl

(Source: Anonymous, 2020)

A large bowl or baskin is used to wash the boiled banana blossom to release the bitterness from the banana blossom. It is also used to mix all the ingredients together later on.

2.3.5 Blender



Picture 16 Blender

(Source: Anonymous, 2020)

A blender is a kitchen and laboratory appliance used to mix, crush, purée or emulsify food and other substances. A stationary blender consists of a blender container with a rotating metal blade at the bottom, powered by an electric motor that is in the base. Blender is used to blend the puree ingredients for the kimchi.

2.3.6 Sauce pan



Picture 17 Sauce pan

(Source: Anonymous, 2020)

Saucepans are round, vertical-walled vessels used for simmering or boiling. Saucepans generally have one long handle. Saucepan is used to make “porridge” for the kimchi.

2.3.7 Air-tight Glass Container



Picture 18 Air-tight Glass Container

(Source: Anonymous, 2020)

Air-tight glass container is a container that seals foods or ingredients inside tightly so that no air is able to get in. it is perfect for fermenting foods because there are less oxygen that gets in.

2.3.8 Refrigerator



Picture 19 Refrigerator

(Source: Anonymous, 2020)

A refrigerator maintains a temperature a few degrees above the freezing point of water. Optimum temperature range for perishable food storage is 3 to 5 °C (37 to 41 °F). The made

kimchi must be stored in refrigerator to keep the freshness and reduce the fermentation process so that it doesn't be too sour.

2.3.9 Stove



Picture 20 Stove

(Source: Anonymous, 2020)

A stove is a device that burns fuel or uses electricity to generate heat inside or on top of the apparatus. It has seen many developments over time and serves the main purpose of cooking food. A stove is used to boil the banana blossom and make the porridge for the kimchi.

2.3.10 Wooden spatula



Picture 21 Wooden spatula

(Source: Anonymous, 2020)

A long wooden spatula is needed to stir the porridge during cooking process.