

RESEARCH AND DEVELOPMENT FINAL PROJECT
BROWCOLI
(Brownies made from Broccoli flour and Condensed Soybean
Milk with many Healthy Benefits)



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ACADEMY
SURABAYA
2019

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BROWCOLI**

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ACKNOWLEDGEMENT

First of all, I would like to give thanks to my God, Jesus Christ for his blessings, wisdom, and guidance in order for me to accomplish my task which is this Research and Development report. This assignment's main purpose is to build creativity and help Ottimmo's students to be as innovative as they can be to create a whole new product that have never been existed in Indonesia.

Broccoli is one of nature's most heart-healthy foods, it's delicious and will add flavor to any meal. It is one of the reasons why I come up with the idea of making Broccoli flour. On top of that, I want to make an ingredient that can be consume by all of people, including people with a health issues and create a healthier food consumption which can be very beneficial to human's health condition.

During this process of finishing this report, I received so much guidance and support. By this, I would like to express my gratitude to the names below:

1. My parents who always support and provided me to have the best education and as a family role to help me in everything.
2. Mr. Arya Putra Sanjaya as my RnD mentor who helped me in so many things in order for me to have the best and unique ideas, until I able to produced the ideas into a real product.
3. Ms. Irra Chrisyanti Dewi as the Head of Study Program at Ottimmo International.
4. Mr. Zaldy Iskandar as the head Director of Ottimmo International.
5. Ms. Jasmine Bernadini my senior in high school who helped me a lot during my trial and gave so many alternatives.
6. Ms. Tessalonica Pinkan and Ms. Samantha Graciella, my friend who have help and gave so many inspirations, ideas and suggestions, who gave motivation and courage for me to do something.
7. Ms. Zahra Yasin who gave me her 100% supports and always reminded and support me in order for me to completing my research and help me by giving a lot of guidance and suggestions.

Surabaya, August 7th 2019

Sarah Tiffany

PLAGIARISM STATEMENT

I certify that this assignment/report is my own work, based on my personal study and/or research and that I have acknowledged all material and sources used in its preparation, whether they be books, articles, reports, lecture notes, and any other kind of document, electronic or personal communication. I also certify that this assignment/report has not previously been submitted for assessment in any other unit, except where specific permission has been granted from all unit coordinators involved, or at any other time in this unit, and that I have not copied in part or whole or otherwise plagiarized the work of other students and/or persons.

On this statement, I am ready to bear the risk/any sanctions imposed to me in accordance with applicable regulations, if in the future there is a breach of scientific ethics, or you have a claim against the authenticity of my work.

7 August 2019

Sarah Tiffany U.

EXECUTIVE SUMMARY

Broccoli is a member of the cabbage family, and is closely related to cauliflower. Its cultivation originated in Italy. When it comes to basic nutrients, broccoli is a mother lode. Ounce for ounce, boiled broccoli has more vitamin C than an orange and as much calcium as a glass of milk, according to the USDA's nutrient database. One medium spear has three times more fiber than a slice of wheat bran bread. Broccoli is also one of the richest sources of vitamin A in the produce section. But the real surprise is this vegetable's potent cancer-fighting ingredients.

This green vegetable that vaguely resembles a miniature tree is one of the richest dietary sources of sulforaphane, a phytochemical with powerful antioxidant and anti-inflammatory properties. It contains anti-inflammatory nutrients, antioxidant nutrients, detox-support nutrients, and anti-cancer nutrients amongst many other important chemicals that sustain the health of the human body.

To make this Broccoli flour, there will be three simple steps in the process of making Broccoli flour. First, cut the broccoli into thin, small pieces. Then Sun-drying process that will take around 2 weeks or you can use oven to dry it for 24 hours. The last process, the dried broccoli will be processed and packed into a zip-lock packaging. This flour will be used as a substitute of all-purpose flour in the making of brownies. This product will be using Broccoli flour and condensed soy milk as an alternative for the ingredients of brownies. The first process will be making the soybean into a milk by soaking the soy into the water for minimal 5 hours then blend the soaked soy with water and squeeze it out. Reduce the squeezed soy milk in a very low heat and put the sugar, stir it constantly to prevent the milk from having a burned taste. Lastly, pour the reduced milk into a strainer and put it into the refrigerator. While waiting for the condensed milk to cool down, sift the broccoli flour and cocoa powder into a mixing bowl then add the brown sugar. Put in the condensed soy milk and melted butter, fold the batter. Put the batter into a brownie pan, and bake it for around 45 minutes in 170°C.

For one package of Broccoli consist of 6 slices, 336 grams per pack. It will be divided into 6 servings, and each serving is 56 grams consist of 12g of fat, 57g of carbohydrate, and 5g of protein. The target market for our product is for people who want to eat healthy food in a fun and unique way without being able to see the unpleasant form of its veggies.

Broccoli is a home-based business where we sell our product through online, including social media. We will be producing 10 packs each day and 12 working days.

Keywords: Broccoli, Flour, Soybean, Brownies

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