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D'CUBY (CASSAVA LEAF JERKY) PROCESSES GREEN PLANTS INTO HEALTHY AND NUTRITIOUS SNACKS

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ABSTRACT

Dendeng is a culinary icon of Indonesia. Therefore, D'Cuby is tried to start being a business that is engaged in the culinary field with the concept of processing green plants into healthy and nutritious snacks at West Sumatra in the digital era. When we hear the word jerky, the first thing that we remember is one of the foods originated from Padang which is made from crispy and savory beef. In this product, the beef jerky that will be made coming from the basic ingredients of cassava leaves. Cassava leaf jerky is formulated and processed using special spices, besides being highly nutritious, this cassava leaf jerky does not contain cholesterol. This is because cassava leaves do not contain meat elements. Compared to normal beef jerky, D'Cuby will eliminate the use of ordinary transparent plastic which is not practical. This product is packaged in 4 flavor variants, namely Original Taste, Balado, BBQ, and Grilled Corn with a price of IDR 10,000 each. Ingredients that we need in making cassava leaf jerky is: 1)1/2 kg of cassava leaves 2) 2 eggs 3) 3 tablespoons tapioca flour 4) 3 tablespoons of flour 5) 1 teaspoon coriander 6) 6 cloves of garlic 7)1/2 teaspoon salt 8)1/2 teaspoon flavoring Antaka brand seasoning to taste

Keywords: Dendeng, Culinary, Bussiness, Nutritious snacks

1. INTRODUCTION

Dendeng is a culinary icon of the Indonesian nation. Jerky has been named as one of the most favorite foods of world tourists. In general, the main ingredient for making jerky is sliced beef that is preserved by drying or drying it in the sun [21]. To make the results even more delicious, the beef jerky is seasoned with tamarind, salt, and spices. To eat the delicious beef jerky menu, it must be redeemed at a fairly expensive price, especially when the price of meat is high. Therefore, we tried to take advantage of the popularity of beef jerky dishes by creating a processed beef jerky menu from other ingredients, one of which is cassava leaves [1][2][3].

Cassava leaf jerky is an innovative dish that uses cassava leaves as a substitute for meat. This creative dish can be a bridge for people who want to enjoy the taste of beef jerky, but are constrained by the prohibition of consuming meat because of cholesterol or because the price is not affordable [4][27].

Most residents of West Sumatra have cassava plants around their homes, besides cassava leaves being useful for vegetables, cassava leaves can also be sold directly or processed first into foods such

as tapai, tapai bread, and sweet potato crackers. This time the author took the initiative to process cassava leaves which are generally no longer used for vegetables [5][6].

The opening of a cassava leaf business, God willing, will be a big business, and the author calls this business DENCUBI (Dendeng Ubi Pucuk / Cassava Leaves). Currently, there are very few foods that do not use preservatives and ingredients that can damage the body for consumers [26]. At this time the author manages cassava leaf jerky without using preservatives and ingredients that can damage the body of the consumer. The author also makes buyers interested in attractive packaging and using various flavors such as balado, bbq, roasted corn, and original [7][8][9]. This cassava leaf jerky is no less nutritional value than beef jerky.

The nutritional content in cassava leaves is rich in protein, every 100 grams of cassava leaves, there are 3.7 grams of protein in it which is enough to meet protein needs every day. Low Calories, In 100 grams of cassava leaves, there are only 37 calories. Rich in vitamins, one of the advantages of cassava leaves is that they are rich in vitamins [10][11].

Cassava leaves also have many benefits including:

1. Power source. The source of energy in cassava leaves comes from the content of essential amino acids. These essential amino acids function to convert carbohydrates into energy for activities[14][22].
2. To maintain the body's metabolism. Cassava leaves are rich sources of vegetable protein. This vegetable protein contains B vitamins which are needed to form body cells. These cells will form enzymes that help the body's metabolic processes [15].
3. Prevent cancer. One of the benefits of cassava leaves that you can get is to prevent cancer. This is because cassava leaves contain antioxidants that can remove free radicals in the body[25].
4. Supporting diet program. Cassava leaves are also very good to consume when you are on a diet. That's because cassava leaves have low calories and high fiber and protein content [29].
5. Regeneration of body cells Another benefit of cassava leaves is that it can repair damaged cells in the body. This is due to the content of essential amino acids that maintain and regenerate cells in the body. After the damaged cells are repaired, the cells in the body function normally again [30].
6. Smooth digestion. Eating cassava leaves will make your colon healthier. That's because the fiber content needed by humans is contained in cassava leaves [23].
7. For people with anemia or lack of blood. Cassava leaves are rich in iron, which helps the body in the formation of red blood cells.
8. Lowering cholesterol levels, The fiber content in processed cassava leaves is believed to reduce levels of bad cholesterol or LDL in the blood. However, to get this benefit, you should

not mix cassava leaves with coconut milk. Although cassava leaves are rich in fiber, the content in coconut milk actually increases cholesterol levels [16][17].

Some of the vitamins contained in cassava leaves, including: vitamin A, vitamin B1, vitamin C, beta carotene, potassium, iron, phosphor, calcium [12][13].

Currently cassava leaf jerky has a monotonous taste so that it is boring for consumers and also the packaging of cassava leaf jerky sold in the market is usually wrapped in clear plastic which is not practical so that when you consume your hands get dirty. In fact, in today's digital era, many people like something different and innovative in terms of variety of flavors and packaging [18].

In response to this situation, DENCUBI (Dendeng yam shoots/cassava leaves) is one solution to increase people's fondness for healthy snacks. Compared to traditional beef jerky, DENCUBI will eliminate the use of MSG (flavoured seasoning) which is replaced by natural flavoring spices and eliminate the use of ordinary transparent plastic that is not practical. DENCUBI has a new innovation, namely the current packaging which is very attractive and different from the usual monotonous souvenir food packaging [19][20]. Besides, DENCUBI has the main raw material, namely young cassava leaves, as well as a variety of flavors, namely; original, balado, bbq, and roasted corn. The advantages of this DENCUBI product are seen in terms of product packaging innovation and various choices of product flavors that are very attractive to consumers [24]. The challenges faced by DENCUBI relate to product packaging because it is difficult to find a place to print innovative packaging wrappers in small batches, and there are already many [28].

UMKM (Micro, Small and Medium Enterprises) which have conventional businesses and already have regular customers. Therefore, we take this opportunity especially for children, teenagers to adults who have a curiosity about new things. This is also a threat to us, namely from among mothers and fathers who are already familiar with ordinary cassava leaf jerky and do not want to change their hearts in the future.

2. LITERATURE REVIEW

2.1 Vision

The vision used in the preparation of this report is as follows: The author will try to serve consumers as well as possible and give what consumers want to the maximum. The author will present a healthy and clean menu according to consumer conditions. The author will create a product that can be enjoyed by all groups and provides social and health benefits.

2.2 Mission

The missions used in the preparation of this report are as follows: The author will apply an attitude of courtesy and hospitality so that consumers who come do not feel shy with the services that

the author provides. The author will try his best and will create a comfortable place and good quality so that many customers come to buy. The author will not set a standard price so that it is in accordance with the conditions of the pockets of consumers and makes the author's product affordable for all consumers.

2.3 Purpose

The objectives to be achieved in preparing this report are as follows: As a form of embodiment of the entrepreneurial spirit and student organization. Growing entrepreneurial spirit for students so that they have the courage to start a business. Train the ability to communicate and collaborate with others so that they are trained to become a leader. Introduce to the public that beef jerky is not only made from meat, but can be made from green plant materials, namely cassava leaves, and also has many benefits.

3. EXPERIMENTAL

3.1 Company Strategy.

The products that I run are cassava leaf jerky, cassava leaf jerky made from natural ingredients and without preservatives. Making cassava leaf jerky is very simple and does not require special skills, but care must be taken in choosing cassava leaves and manufacturing techniques. When using good quality cassava leaf ingredients and also good manufacturing techniques, it will produce delicious and crunchy cassava cassava leaf jerky. Good cassava leaves used in making cassava leaf jerky are leaves that are not too young or 4 pieces down from the shoot, so the results will be better when processed. is:

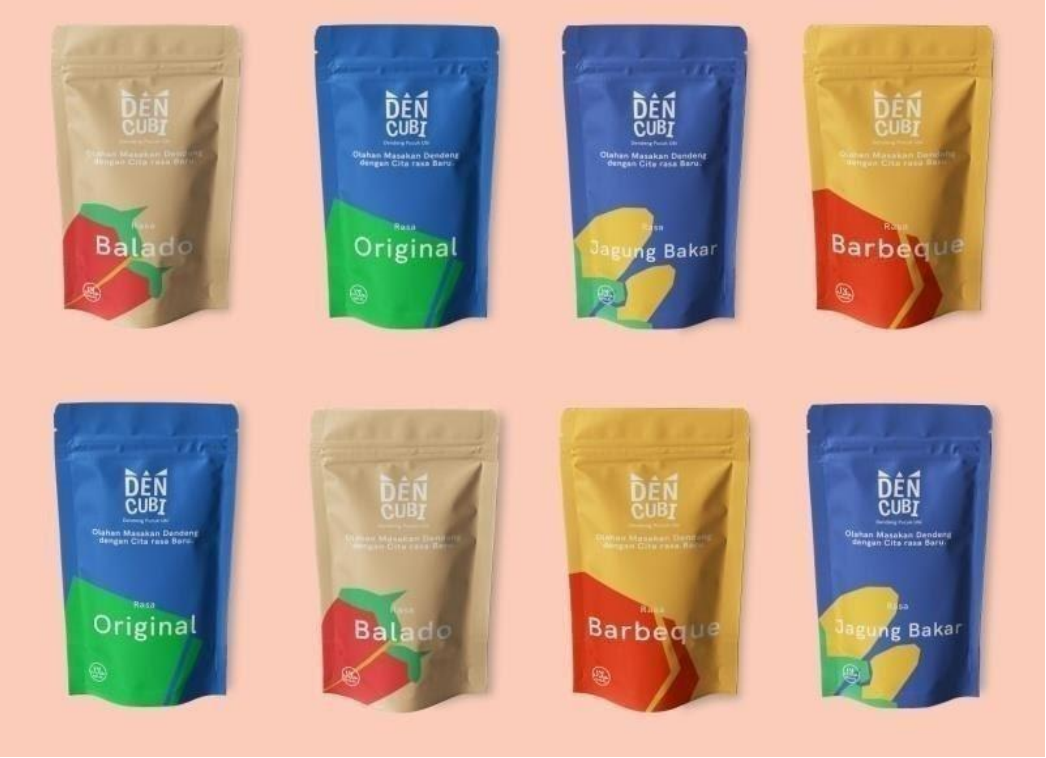
Ingredients needed in making cassava leaf jerky

1. 1/2 kg of cassava leaves
2. 2 eggs
3. 3 tablespoons tapioca flour
4. 3 tablespoons of wheat flour
5. 1 teaspoon coriander
6. 6 cloves of garlic
7. 1/2 teaspoon salt
8. 1/2 teaspoon of flavoring
9. Sprinkle seasoning according to taste

The stages in making cassava leaf jerky are as follows:

1. The cassava leaves are first boiled, after being tender, then they are removed and drained.
2. The drained cassava leaves are finely sliced.

3. Combine eggs, coriander, garlic, salt, and seasonings, then mix well.
4. The cassava leaves that have been sliced and the spices that have been mixed earlier, are stirred until smooth.
5. Then add the flour and tapioca flour into the dough until well blended.
6. After that put it in a plastic bag, steam for ± hour. After that lift and drain.
7. Once cool, slice a little bit. Then flatten it like beef jerky using ampia.
8. Then fry the cassava leaf jerky until cooked.
9. Sprinkle with powder evenly, then the cassava leaf jerky snacks are ready to be packed.
10. Make the packaging attractive and airtight.



Picture 1. cassava leaf jerky snacks that are ready to be packaged

3.2 Marketing Strategy

The media used in marketing are as follows: :

a. Online

Facebook (DENCUBI), Instagram (paid promote, give away), Youtube (Content in the form of short videos about the benefits of consuming DENCUBI for health and reviews from consumers), Google business, Buying and selling website (Cooperating with several websites, as well as creating and managing their own website).

b. Offline

Supermarkets around Padang State University, Restaurants around Padang State University, Free delivery for areas around Padang State University, Sales at events at Padang State University.

4. RESULTS AND DISCUSSION

4.1 BUSINESS DESCRIPTION

A. Field of Business : Culinary Business

B. Product Type : DENCUBI (Jersey from sweet potato shoots/cassava leaves)

C. Usability, Advantage, Uniqueness, or Product Innovation:

1. Usability. As a snack and a side dish for staple foods.
2. Excellence. It has many flavors, namely original, balado, bbq,
3. Uniqueness. Consumers can feel the sensation of enjoying beef jerky from processed cassava leaves, which is not much inferior in taste to beef jerky.
4. Product Innovation. In terms of marketing, innovation is in the form of implementing a door to door system, free delivery for the UNP environment, and also utilizing online media as much as possible such as youtube, instagram, google business, and websites.

D. Business Location: UNP Freshwater Campus

E. Time : From morning to evening

F. Business Impact: Creating innovative and creative products from local West Sumatran snacks by following the development of increasingly diverse market demands, replacing unhealthy snacks with healthier and preservative-free ones and fostering entrepreneurial spirit for students.

Impact of business on the environment (economic, social, cultural and natural environment)

1. Economics: DENCUBI is derived from raw material for cassava shoots/young cassava leaves. Therefore, our business group will improve the economy of cassava farmers in Padang. As well as improving the economic level of students who participate in entrepreneurship.
2. Social: Will establish a relationship between the seller and the buyer.

   Increase the sense of love for local food products. In addition, it can create interactions with business partners.

   Culture: People will turn away from modern snacks that use flavorings and are not healthy to local snacks in West Sumatra that are healthy and natural.

   Natural Environment: Will cultivate cassava agricultural land in West Sumatra.

G. Business Risk and Management : Business risk and management is borne by the team itself.

H. Business Development

Members of the Entrepreneurship Student Program B of the DENCUBI 2021 business consist of 4 people from the majors in hospitality management, English, electronic engineering, and chemistry. Each of us has different expertise in the field of entrepreneurship from managers, accounting, production, and logistics and design.

Our initial stage is to draw up a master plan. We conduct capital analysis, marketing strategy, target market, and analyze the number of competitors. Then, before starting for production, we carry out several activities, namely:

1. Market survey of the prices of materials to be used as the composition of DENCUBI products. Starting from basic ingredients such as cassava leaves to complementary ingredients such as onions and spices.
2. Market survey of the prices of the tools to be purchased or rented during the DENCUBI production process. Such as ampia, gas stoves, presses to small and large basins as containers for the DENCUBI Production process.
3. Survey a suitable place to print packaging according to the price and design desires that have been planned. After conducting a survey and finding a suitable place according to the price and desire, then we shop for the materials and tools needed to start production.

4.2 MARKETING DEVELOPMENT

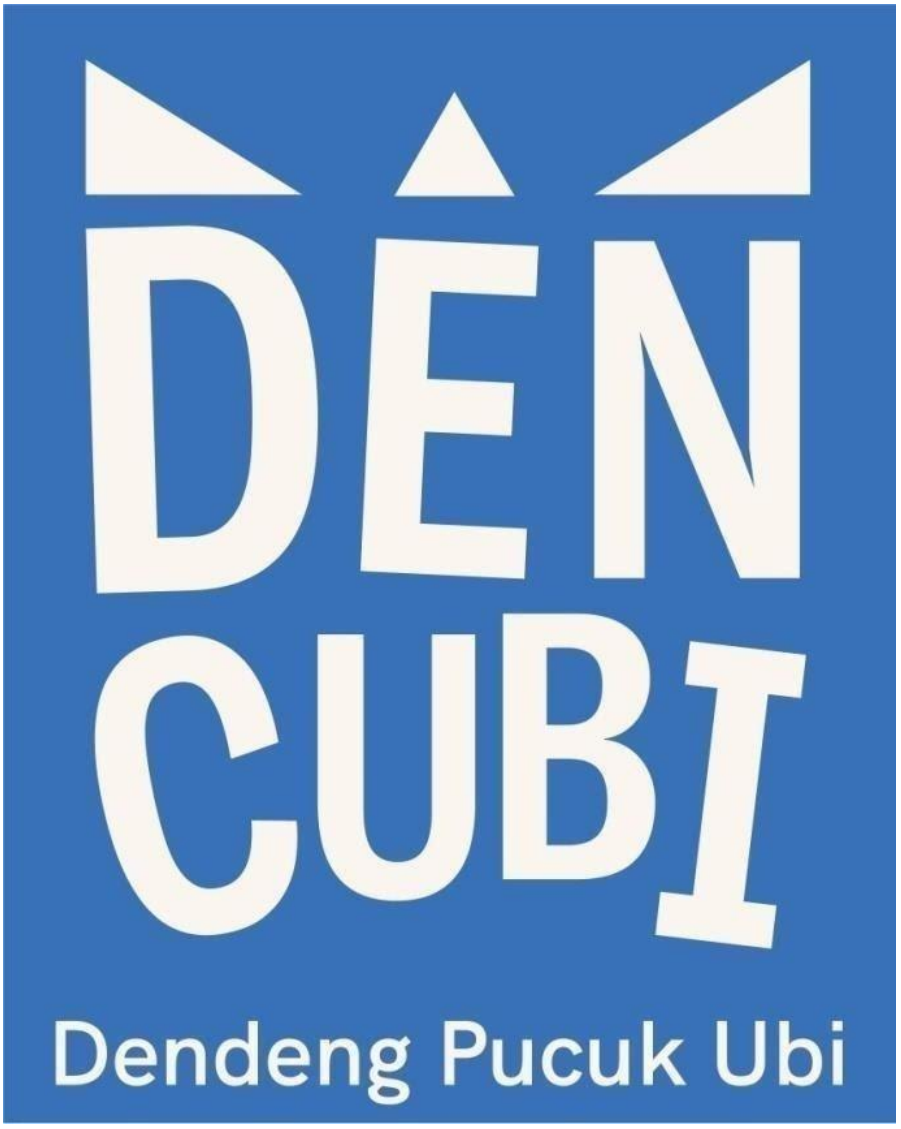
Every UNP student generally likes to snack, especially during breaks and while waiting for the next lecture. The existence of DENCUBI at an affordable price assures us that DENCUBI can compete in the market and will not lose out to existing modern snacks. Our target consumers are UNP students and lecturers at UNP.

The competition faced is modern snacks which are more chosen by teenagers than local snacks. So we want to provide a new innovation, namely beef jerky oucuk ubi or cassava leaves which are healthy, natural and nutritious to be a local go national snack, because as we know that beef jerky known to Indonesians is generally made from meat, so this time we will make beef jerky which is different from the main ingredient, namely cassava leaves from West Sumatra. The difference we want to point out is that we have a unique packaging and various flavors. In the business of cassava leaf jerky, in addition to using cassava leaves as the main ingredient, other tools and materials are also needed in the manufacturing process. So in addition to the initial capital of cassava leaves, other production costs are also needed. The following is the cost required in the process of making cassava leaf jerky with the assumption that 2 kg of cassava leaves are used per production.

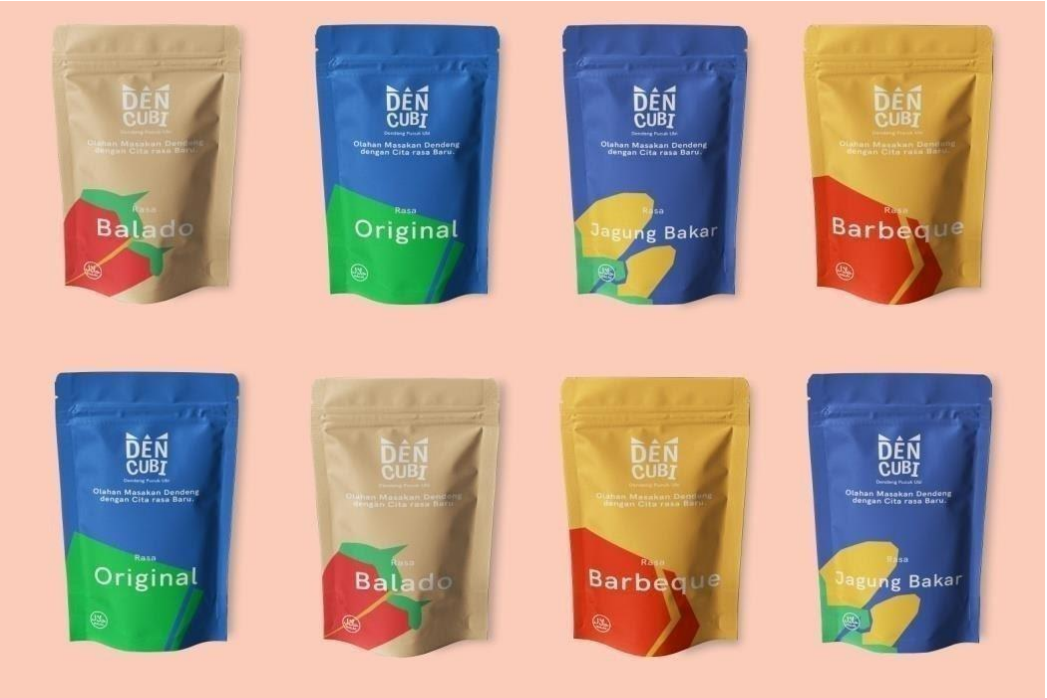
It is assumed that in a single production process of 2 kg of cassava leaves, an average of 50 packs of cassava leaf jerky are produced with a product price of IDR 10,000/pack. The profit from the production can be used for the development of capital for the purchase of further materials, after

being able to meet the necessities of life there is still money left that can be used for the development of the next cassava jerky snack business.

Can determine the financial targets that must be achieved by DENCUBI. Can determine spending priorities to be more productive and efficient. Make a plan of income and expenditure as well as other activities other activities for a certain period. Follow-up on financial planning by making data on income and expenses. Using DENCUBI funds to maximize existing funds for operational activities. Collect funds and store funds for cash safely. Evaluating and improving the finances and financial system of the business.



Picture 2. Logo



Picture 3. Design/packaging

5. CONCLUSION

The need for food that is varied and also has high nutritional value has increased. One of the potential food commodities that should be considered to meet this need is cassava leaves. Cassava leaves can be processed into cassava leaf jerky which is an innovative dish that uses cassava leaves as a substitute for meat. Cassava leaf jerky can not only be used as a side dish to replace the original jerky. But it can also be used as a snack food that can be consumed in any circumstances. The development of cassava leaf jerky snacks with various flavors, namely, balado, barbeque, and grilled corn can compete with other food industries.

In making a business, the most important goal is to make a profit. By processing cassava leaves into cassava leaf jerky with a variety of flavors, you will get a greater profit than selling cassava leaves directly without processing. In making this business, more capital is needed. large, but the profits obtained are also greater, and from these profits, besides being able to be used to meet the needs of life, it can also be used for further business capital. So with this cassava leaf jerky business, the income of food industry players will increase.

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