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Improving the Quality of Freedia Herbal Products SME Hippocrates Medika Palembang with the Application of Capsulation Technology

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ABSTRACT

Spices have been widely developed for herbal products because people believe that the product is safe without any side effects that are harmful to the health of the body. Herbal products are made from natural ingredients of plants or plants without a mixture of chemicals. One of the herbal product businesses in Palembang is SME Hippocrates Medika. SME Hippocrates Medika was established in 2019 as a communal partnership. Freedia is the mainstay product of this SME, which is downstream from the innovative products of Rachmat Hidayat and the team. Freedia is an herb that is processed as a brewed drink to overcome diabetes mellitus disorder. In an effort to improve the quality of Freedia products, efforts are made to carry out a capsulation process for the extract so that the discomfort of freedia extract can be minimized to the maximum. The application of capsulation technology greatly helps improve the quality of freedia herbal products. Where consumers feel very comfortable in the consumption of freedia herbs because there is no need to bother boiling herbs, and do not need to feel bitter when consuming herbs.

1. Introduction

Spices have existed in Indonesia since ancient times. These spices became an attraction and allure for Europeans to come and colonize Indonesia. Spices consisting of various types of plants are used to add flavor to food and drinks.¹ But besides that, it is also believed to be used to maintain health, prevent and treat disease, and as a beauty ingredient.¹⁻⁴ At this time, many spices have been developed for herbal products because people believe that these products are safe without any side effects that are harmful to the health of the body.⁵⁻⁷ Herbal products are made from natural plant or plant ingredients without a mixture of chemicals.⁸ Herbal products can be in the form of food, beverages, medicines, or cosmetics.

One of the herbal product businesses in Palembang is SME Hippocrates Medika. SME Hippocrates Medika

was founded in 2019 as a limited partnership. Freedia is the flagship product of this SME, which is the downstream product of Rachmat Hidayat and his team's innovations. Freedia is an herb that is processed as a brewed drink to treat diabetes mellitus. Herbal freedia is still produced as a brewed drink from spice extracts. This brewed drink is indeed very refreshing for the body, but the unpleasant taste sensation on the tongue causes consumers to be less comfortable drinking the brew. Of course, efforts and technology are needed to overcome these problems.

In an effort to improve the quality of freedia's products, efforts were made to carry out a capsulation process for the extract so that the discomfort from the freedia extract can be minimized to the maximum. In addition, the capsulation process makes the dosage of the extract more precise because the extract is

ensured to enter the digestive system and is ensured to enter the body.⁹⁻¹¹ This will be more effective than the brewed extract, where the brewed extract sometimes leaves a lot in the drinking container, so the dose is not effective.

2. Methods

The implementation of this community service activity is carried out by methods of observation, interviews, planning, training, implementation, and

monitoring, as shown in the flowchart in Figure 1. The first process begins with observation, where at this stage, observations are made regarding the obstacles and problems faced by SME Hippocrates Medika. The data collected is consumer testimonials of freedia herbs, especially in terms of taste and practicality of freedia herbs. Furthermore, a direct interview process was carried out with SME Hippocrates Medika to find out the partner's opinion about the preparation of freedia herbs.



Figure 1. Process of implementing activities.

The next stage is to design a technology to perform capsules from freedia extract. Capsulation technology includes the formulation of freedia extract preparations, namely the composition of the vehicle and extract, followed by selecting the right type of capsule according to the dosage of freedia. After the planning process was carried out, it was followed by training for SME Hippocrates Medika employees to train and provide direction related to capsule technology. The next stage is the freedia herbal production process with standardized capsule

packaging. The capsules are expected to give the impression of being more hygienic, practical, precise in dosage, and convenient for consumption. After the implementation process, the monitoring stage is carried out, as well as providing criticism, input, and suggestions to improve and improve the quality of the capsulation technology.

3. Results and Discussion

Capsule filler is a tool used in the freedia extract capsulation process. The extract and vehicle, with a

ratio of 1:10, were put into capsules with the help of filler capsules. After the extraction process and the extract is obtained, mixing is carried out between the extract and vehiculum, where 1 part of the extract is

mixed with the fine powder of simplicia freedia Mesh 100. Then a mixture of such extracts and vehiculum is introduced into the capsules with the help of filler capsules.

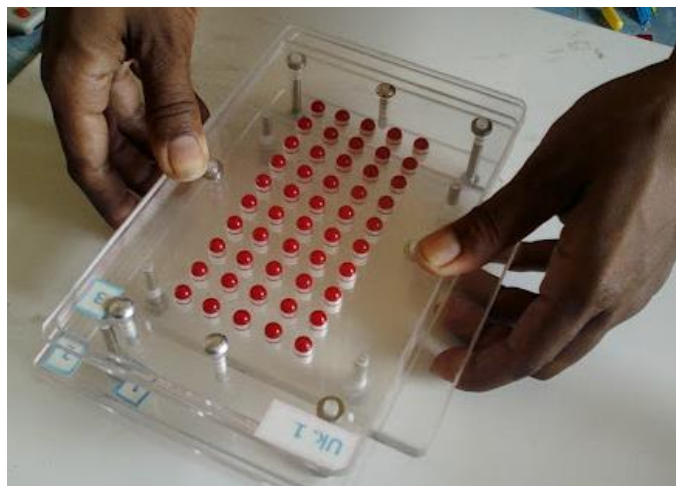


Figure 2. Capsules filler.

After the application of capsulation technology, there were several changes in the quality of the Freedia product. The quality change that is most felt is that consumers feel very comfortable consuming freedia herbs because they don't have to bother boiling herbs, and they don't have to feel bitter when they want to consume freedia herbs. Of course, this is a very significant change felt by consumers. In addition, consumers feel an improvement in the quality of freedia herbs by taking capsules, where freedia herbs become more hygienic and more guaranteed quality, efficacy, and dosage. From the employee's perspective, it was felt that it was enough to add to the process and hassle of freedia herbal production, where initially only the extraction was carried out and then it was only packaged, but with this capsule, the production took a little longer so that the employees became more tired. Solutions using automatic capsulation technology may be very helpful in overcoming employee complaints and optimizing freedia herbal production.

4. Conclusion

The application of capsulation technology is very helpful in improving the quality of freedia herbal

products. Where consumers feel very comfortable consuming freedia herbs because they don't have to bother boiling herbs and don't need to feel bitter when they want to consume freedia herbs.

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