

HFMD Fighter Herbal Paper Soap

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Abstract: Health is very important to every person. Especially among children. Children should be given more attention because disease resistance or immunity among children is lower than that of adults. When health is taken care of, all can enjoy life more peacefully. The innovations that we have made can ensure the quality and comfort of life for every person, especially children. In recent times, we have often heard of a wide variety of diseases that children and adults suffer from. Easily infected diseases such as Influenza A, HFMD and Covid-19 are all caused by dangerous viruses. Various diseases are prevalent due to the lack of guidance on the importance of personal hygiene. When all are complacent with personal hygiene, new infectious diseases appear. Adults are good at maintaining personal hygiene but children do not do so due to lack of exposure and most cleaning products are less suitable for children. Need supervision by adults when cleaning products are used. In addition, the cleaning products available in the market are not user-friendly for children in terms of use and storage. This innovation gives new life into ensuring that kindergarten children and level 1 students take care of their personal hygiene from traditional ways that depend entirely on parents and teachers. In addition, the product is also user-friendly as it is easy to carry anywhere that does not pollute the environment. Furthermore, the use of herbal ingredients fully helps to reduce the use of harmful chemicals. Finally, it can prevent infectious diseases such as HFMD.

Keywords: HFMD; Herbal Soap.



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1. INTRODUCTION

Health is very important to every person. Especially among children. Children should be given more attention because disease resistance or immunity among children is lower than that of adults. When health is taken care of, all can enjoy life more peacefully. The innovations that we have made can ensure the quality and comfort of life for every person, especially children.

1.1 Problem Statement

In recent times, we have often heard of a wide variety of diseases that children and adults suffer from. Easily infected diseases such as Influenza A, HFMD and Covid-19 are all caused by dangerous viruses. Various diseases are prevalent due to the lack of guidance on the importance of personal hygiene. When all are complacent with personal hygiene, new infectious diseases appear. Adults are good at maintaining personal hygiene but children do not do so due to lack of exposure and most cleaning products are less suitable for children. Need supervision by adults when cleaning products are used. In addition, the cleaning products available in the market are not user-friendly for children in terms of use and storage.

1.2 Objective

- i. Ensuring this product is user-friendly among children.
- ii. Preventing children from developing infectious diseases especially HFMD

- iii. Ensure that the use of herbs takes precedence over the use of harmful chemicals.
- iv. Assist parents and teachers to train children to maintain personal hygiene in a simple and safe manner

2. METHODOLOGY

2.1 Target Group

- i. Kindergarten children and level 1 pupils
- ii. Parents
- iii. Teacher (kindergarten and level 1)

2.2 The Importance of Innovation Projects

This innovation gives new life into ensuring that kindergarten children and level 1 students take care of their personal hygiene from traditional ways that depend entirely on parents and teachers. In addition, the product is also user-friendly as it is easy to carry anywhere that does not pollute the environment. Furthermore, the use of herbal ingredients fully helps to reduce the use of harmful chemicals. Finally, it can prevent infectious diseases such as HFMD.

2.3 Elements of Innovation

Existing bath soaps or hand washes, most of which contain harmful chemicals. Sometimes it doesn't fit all skin types. Sometimes it can cause irritation, rash and so on. Many bath soaps and hand washes are not easy to store and are not suitable for carrying anywhere. This HFMD Fighter Herbal Paper Soap can be used by everyone without hesitation. This is because; this product is innovative using 90 % extract of herbal plants such as oregano, basil and lemongrass. Furthermore, this soap innovation product is in paper form which it is not easy to spill or difficult to store if it has been used once. Plant extracts such as basil can mainly fight Enterovirus 71 found in HFMD disease

2.4 Method of Preparation

100g of glycerine is melted and supplemented with 100 ml of extract of herbal plants such as oregano, basil and lemongrass (1:1:1 ratio) Then this content is infused with lavender perfume to add fragrance, and a little salt to ensure durability for long periods. Next this content is applied over the water- soluble paper. Let to dry overnight at room temperature. This mixture can produce over 1000 pieces of herbal paper soap.



Figure 1. Materials



Figure 2. Method of Preparation



Figure 3. Method of use

3.0 FINDINGS

3.1 Data and Results

- i. No students with HFMD in kindergarten and grade 1 at SJKT Tun Sambanthan.
- ii. Satisfactory attendance of pupils to school from the beginning of the year.
- iii. Parents and teachers are very happy without the onset of infectious diseases.

3.2 Estimated Cost

Ingredients	Price	Price Per box(20 pieces)
Glycerine	RM10 (per bar)	RM0.50
Oregano leaf	-	
Basil leaf	-	
Lemongrass	-	
Lavender essential oil	RM 10 (per bottle)	RM 0.25
Salt	RM 2 (per packet)	RM0.25
Water soluble paper	RM 1 (per paper)	RM0.25
boxes	RM 0.50	RM0.50
Labels	RM 2.00	RM0.25
		RM2.00

4. DISCUSSION

HFMD Fighter Herbal Paper soap is able to compete with other soaps in the market due to its natural ingredients. This innovative product can be commercialized in the local market. This is because many consumers want natural products rather than those containing chemicals. The number of pieces in one box should be added to optimize their use.

5. CONCLUSION

HFMD Fighter Herbal Paper soap an innovative product received and accepted without hesitation by all parties. With this innovative product prevention against HFMD and others from infectious diseases can be achieved. The Future Plan/Project are; Herbal Paper Detergent, Herbal Paper Dishwasher, and Herbal Tissue Paper.

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