

UNIVERSITI TEKNOLOGI MARA

**DEVELOPMENT OF A MOTORIZED
FOOD STIRRER FOR USE OF
COOKING**

MUHAMMAD IRFAN SYAMIL BIN FIRDAUS

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ABSTRACT

Cooking can be a very exhaustive process especially if the stirring aspect in cooking. This could burden old people, disabled people and small businesses that wants to cook their food easily. Therefore, this project can help mitigate those problems and makes cooking a hassle-free process in the stirring sides of the process. This is because, this machine that called motorized food stirrer, uses it motor to stir making it a hands-free process and it can even be automated while people focus on other aspect. The problem statement for this project is that exhaustive process as cookers need to focus on stirring their food carefully and it very tiresome for small businesses that wants to make large batches of food. It also costly for small businesses, they need to hire cookers and assistance to help them make food as they could not focus on one aspect. By designing and fabricating this project, it can help mitigate these problems and helpful for small businesses. This project is design by comparing to other existence product in the market. This could help in shaping the design for this project and have some benchmarking when designing this project. Next, is trying to relate some manufacturing process in the design which is cutting, joining, and finishing. After that, is to find the sustainability for this project by looking at the performance, economy, target production cost, size and weight, appearance, safety, precaution, ergonomics.

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Chapter 1: Introduction

1.1 Background of Study

As the world becomes much busier than usual with many people prioritise working on many hours, the increased use of away-from home meals and convenience food intake may relate to the lack of time and prepare meals from home [1]. Due to the lack of cooking skills and food preparation acts as a barrier to people making home cooked meals [2]. This can have the effect of the increasing consumption of fast food and away from home meals can be associated with lower diet quality and obesity among adults [3]. In Malaysia as an example, a nationwide survey has been conducted in 2019 that reveal a rising trend in obesity, increasing from 15.1% in 2011, 17.7% in 2015 to 19.9% in 2019 [4-5].

This quite worrisome trend would increase if there were no way to stop this problem. Therefore, one of the skills people need to be able to do is cooking. Cooking is a valuable life skill that is often linked with improved diet quality [6-7]. In the UK survey of 2000 residents, learn to cook was the fifth most important life skills to learn in the modern age [8], this shows the public interest in learning cooking skills. Not only that, but food also that prepared from home provides fewer calories per-calorie basis, provides less total in saturated fat, cholesterol and sodium, and more Fiber, calcium and iron compared to food prepared away from home [9].

This project is designed to help people to start and cook from home by making one of the aspects of cooking skills easier which is stir. Even stirring has it own skills and attention into it so that the food that is being prepared are well cooked. With this project, by making the process more convenient and automated, it allows people with medical problems or tired people to enjoy cooking at a much leisure pace and making them less dependent on fast food as home cooked meals are easier and faster to make then before