

**UNIVERSITI TEKNOLOGI MARA**

**DESIGN AND FABRICATION OF VEGETABLE  
CUTTING MACHINE**

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## **ABSTRACT**

Consuming vegetables for our daily routine life are good for our health benefits. Veggies contain a lot of vitamins, and it can boost up our mind. There are variety of veggies that can be eaten without cook it first. But most of it must be cooked first to get the nutritious from it. Kitchen knife was invented to help people easily cut veggies into small pieces so that they can put it in their dishes. The main problems with this tool now it is dangerous to use, lack of time and using too much energy especially for people working as chef. My objective is to invent an automatic vegetable cutting machine that can solve all of these problems and can simplify human life. During this project, I will be making a full research based on the design of the product, material selected and using mechanical engineering concept to make this project successful. After this project finished, I would be expecting this product will solve all of the main problems for the consumer of this product.

## **ACKNOWLEDGEMENT**

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Finally, this dissertation is dedicated to my father and mother for the vision and determination to educate me. This piece of victory is dedicated to both of you. Alhamdulillah.

## LIST OF TABLES

<b>Tables</b>	<b>Title</b>	<b>Page</b>
Table 2.5.1	Summary of Detail Specification of Literature Review	16
Table 3.2.1	Morphological chart	18
Table 3.2.2	Concept Design Generation	19
Table 3.2.3	1 <sup>st</sup> design characteristics	20
Table 3.2.4	Advantages and Disadvantages of 1 <sup>st</sup> Design	21
Table 3.2.5	2 <sup>nd</sup> design characteristics	22
Table 3.2.6	Advantages and Disadvantages of 2 <sup>nd</sup> Design	23
Table 3.2.7	3 <sup>rd</sup> design characteristics	24
Table 3.2.8	Advantages and Disadvantages of 3 <sup>rd</sup> Design	25
Table 3.4.1	Cost Calculation of Fabrication	43-44
Table 3.5.1	Material and Fabrication process	45-46
Table 4.3.1	Advantages and Disadvantages of Prototype	55
Table 4.4.1	The specification of the prototype	56
Table 4.5.1	Prototype maintenance	57

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of Study

Vegetables contain a lot of health benefits to human as it is rich with vitamins and preventing hypertension to the consumer. There are some types of vegetable which can be eaten freshly and there are some veggies that need to be cooked first. Kitchen knife was made to make people cut all types of vegetable easily, but it cost a lot of time and energy especially at the restaurant which serving to the customer. Most top-rated restaurants have a machine to cut the raw material which way faster and easier. Unfortunately, the machine is very big and costly which we can only see it at least top-rated restaurants. I would like to invent a vegetable cutting machine which does not require a lot of space, with affordable price and easy to use.

### 1.2 Problem Statement

One of the problems that I have identified is most of chef at restaurant usually cook in a rush to serve food for their customers. One of the procedures preparing a food is to cut raw material such as vegetable and fruit. Kitchen knife is used to cut these materials, but it still took time and energy for this process. This will make chef depress so that the making of food will not be satisfied by the customers. Other than that, there are a machine that can cut veggies automatically, but it requires a lot of space, and it is costly.

Based on the survey that I had collected via google forms, there are some problems that been identified by the respondents.

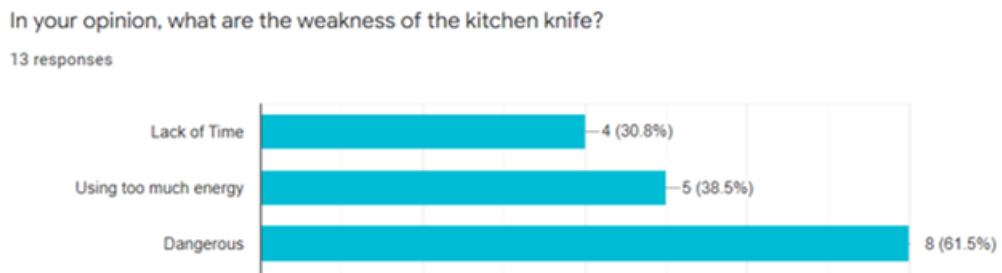


Figure 1.2.1: Google form review