## UNIVERSITI TEKNOLOGI MARA

# DEVELOPMENT OF AN AUTOMATED FRENCH FRIES CUTTER MACHINE

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#### **ABSTRACT**

The activity of eating French fries is ubiquitous these days where it can be found a lot in fast food industries as their side dishes. But French fries actually come from potato that has been cut into small pieces. This project is presenting an automatic French fries cutter that can be used to turn from solid potato to French fries by cutting through them. By using and producing the automatic version of the cutter, this can overcome some of the problems that have always been faced by household members when they are cutting potatoes such are, time-consuming activity where people have to spend their time to cut a potato into small pieces. By using this product, it can be done in no time with the least energy and forces needed to cut it into small pieces. Next, this product can help gives the users a consistent and similar shape of French fries due to its fixed shape of blade and a constant force applied when cutting the potatoes. Other than that, this product can reduce the risks of injuries when cutting the potato to turn them into small pieces. For instance, the elders or people with physical disability want to eat and have French fries, they can have it with the least risks of getting their hand or fingers cut. This machine can be operated automatically without the need of human hands. Users just need to put the potatoes inside the safety channel where it should bring the potato inside the cutting path and the potatoes can be cut safely.

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# CHAPTER ONE INTRODUCTION

#### 1.1 Background of Study

French fries are a food that most people eat. It has been discovered by Frederic Krieger, the musician from Bavaria where he learned how to make French fries in Paris and bring it back to Belgium then he sold it by the name of "Paris-styled fried potatoes" [1]. French fries are potatoes that is being cut into pieces, and it comes with various types of shape and styles because it depends on the blades that is being used to cut also the skills from the cutter. What makes this as a delicious and a needed stuffs is because they have been seasoned into varies types of seasoning thus giving the fries such an amazing taste.

To provide various types of french fries, it depends on the type of cuts and blade. Different types of blades will result to different types of cutting results for example if a straight blade is used then it produces a straight French fry and but if a wavy blade is used then it produces a crinkled type of French fries. Moving into the tandem of the world's technology, we can see that lots of people made some remarkable advancements. Not forgetting also with the cutters of the French fries which has been through multiple upgrades and changes due to lots of factors such are efficiency, safeties, and costs.

These days the French fry's cutter has been developed into lots of types to improve the functionality and efficiency depending on the type of usage. One of the reasons why the cutters of the French fry were developing until today are because of the continuous demand in culinary industry because the chefs, and restaurants continuously seeks for ways to improve their French fry's taste and presentation. Thus, we as the engineers and the problem solver will have to modify the cutter until it meets the requirements in the industry. Other than that, some of the households are using a French fries cutter to make their life easier. The problems come when the demand to get the French fry is high so the producer of that fast food will have to do multiple works by just cutting potatoes into small pieces.