

# MODIFIED GHEE/CLARIFIED BUTTER COMPOSITION FOR FOOD TECHNOLOGY

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## Product Background

Breeds of cows contribute to increase solid and fats in milk

Feed, veterinary knowledge and animal welfare were analyzed for ghee production

Different stages of prototype are built with different configurations and state.

The best state of ghee are identified for commercialization

Product has been sold to market

## Inventiveness

Adding microbes in terms of yogurt to allow the ghee to be cultured

Undergoes granulation process to get the crystallized fats to increase appetite of people

## Benefits

The production of pure raw material will eventually improve the health status of people

The saturated fat aids weight loss and support other health benefits such as digestion improvement, strengthens on immunity

Bone development, weight balance, eyesight improvement, promotion of healthy pregnancy and protection of arteries

Enhances the taste of dishes

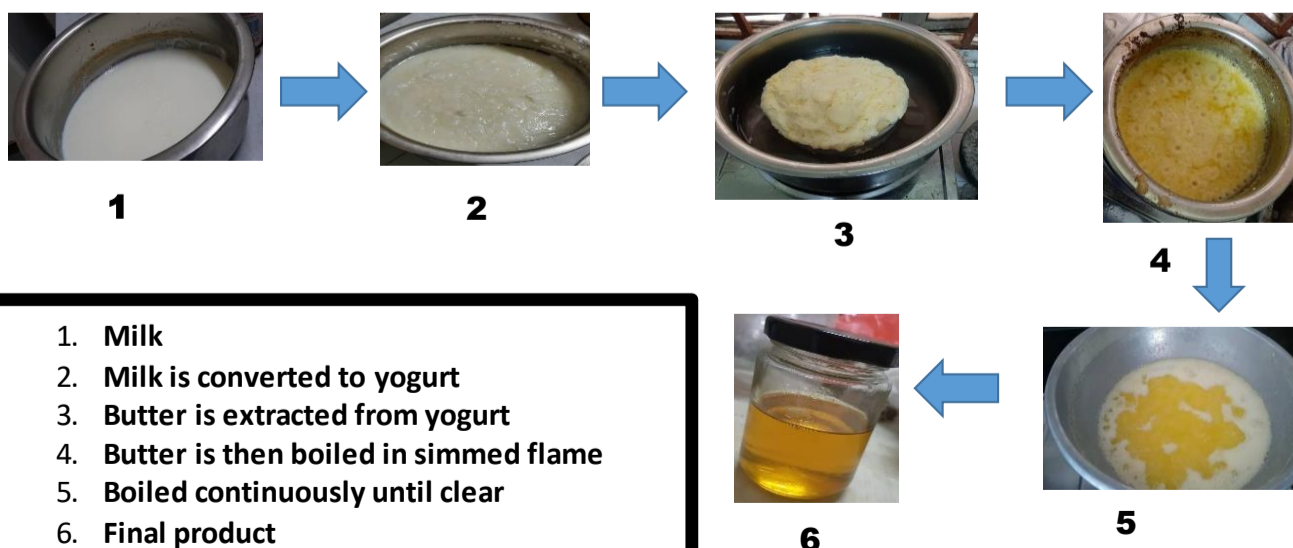
## Product Image



## Process of Making Ghee (Modern)



## Process of Making Ghee (Tradisional)



1. Milk
2. Milk is converted to yogurt
3. Butter is extracted from yogurt
4. Butter is then boiled in simmed flame
5. Boiled continuously until clear
6. Final product

## State of the Art

Ghee previously was a niche market as it was heavily consumed by indians

Today's scenario, multi race have started consuming it because of health consciousness

Many people who are practicing keto diet heavily depend on saturated fats instead of carbohydrates

The market size is actually gradually increasing perpendicular with the population in Malaysia

The market size started from 10% and has been gradually increasing by then

## Marketability & Commercialisation

Dairy production in Malaysia is only 4% self-sufficient and we depend 96% on imports of dairies.

The proportion of the ghee still hold high percentage in imported dairy products.

Almost all commercially produced ghee is imported and distributed in Malaysia.

The ghee is still in niche market. However, it has the potential in international market and reduce import costs of nation.

## Cost Analysis

Rm4/Litre (Requires 25 Litres Of Milk To Do 1 Kg Ghee)

RM 5/Kg That Includes Gas, Yogurt.

## Fully Developed Product

The fully developed product is in granulated solid state which was convenient to the people.

The current product also has improved aroma, and texture.

The milk was sourced from local farmers with high Jersey breed bloodline cows because it has the highest solid and fat (S&F).

In 2 months, a total of approximately 90kgs of ghee has been sold, which proves that the demand of ghee is high and has a potential of commercialization.

A bottle of 10 Oz (283 grams) is being sold at RM 39.90.