

PRODUCTION OF PALM-BASED PROCESSED CHEESE

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INTRODUCTION

Processed cheese was invented around 1912-1913 when the Swiss and the Germans made considerable efforts to export cheese to tropical countries.

Processed cheese is made by blending natural cheese (young, mature, or different types) in the presence of water, colouring matter, emulsifying salts and then heating and agitating to produce a homogeneous mixture.

The cost of producing dairy products has risen considerably over the years as a result of supply and demand pressures in the face of population growth. This has given an impetus to the development of a range of dairy product substitutes.

Price, yield, reliability of supply, product diversity, nutritional and health aspects are some of the prominent factors which contribute to the substitution of milk fat vegetable fats (palm-based products).

PRODUCTION OF PROCESSED CHEESE

The basic ingredients used in the production of processed cheese are as follows:

- 1) Matured cheddar cheese
- 2) Cheese base
- 3) Water
- 4) Emulsifying salt
- 5) Palm based oil blend

Matured cheddar is incorporated into the formulation to enhance the flavour and aroma of cheddar. Matured cheddar is cheese which has been aged for more than six months.



Palm based processed cheese.

Steps involved in the production of cheese base are shown in *Figure 1*. Cheese base is used in this formulation to replace the natural cheese.

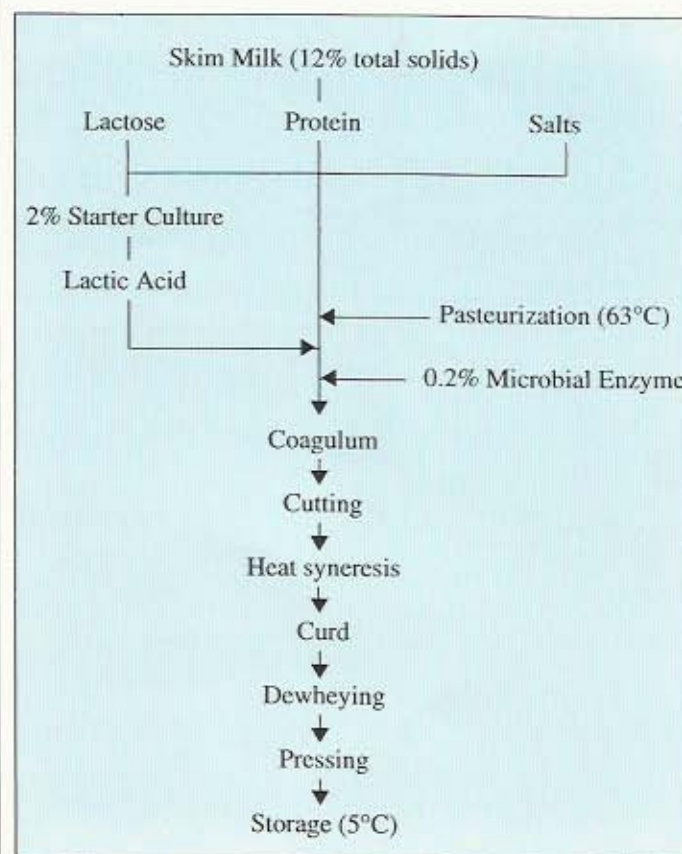


Figure 1. Production of cheese base

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The final moisture content for block processed cheese is about 45%.

Processed cheese is prepared by heating a mixture of comminuted cheese in the presence of emulsifying salts. Processing of cheese using heat and agitation will result in the cheese constituents separating but not melting. The curd will shrink and allow fats and moisture to escape.

Different fractions of palm-based oils, comprising 30% palm oil (PO) and 70% palm kernel olein (PKOo), were blended and used in the formulation.

The flow-chart for the production of processed cheese is shown in *Figure 2*.

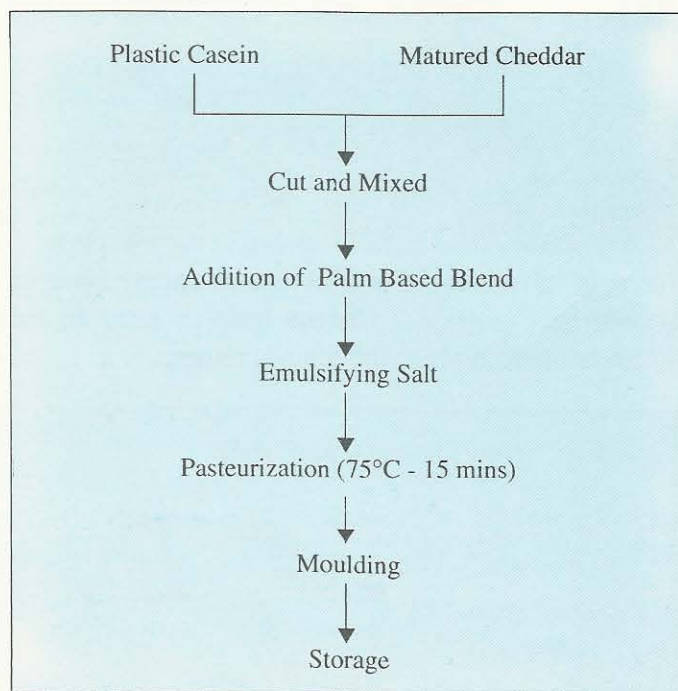


Figure 2. Flow chart for the production of processed cheese.

ADVANTAGES OF USING PALM-BASED BLEND IN PROCESSED CHEESE

The use of palm-based products will improve the nutritional value (no cholesterol, more unsaturated fatty acids) and will have better functionality and preservation qualities.

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