INTRODUCTION

The novel concept of Maubois et al. (1969) that certain cheese varieties with extremely high yields can be attained directly from concentrated milk retentates or from precheese obtained by ultrafiltration has proven successful. Increased cheese yield and saving in energy, milk-clotting enzymes, manufacturing time, and whey disposal have evoked an interest in the use of milk pretreated by ultrafiltration for cheese making. Success attained in manufacturing cheese from whole milk retentate or skim milk retentate to which cream is added has depended upon the degree of retentate concentration and the type of cheese being made. Unripened soft cheeses and,to a limited extent, Camembert recently have been made commercially with acceptable body and flavour characteristics (Maubois and Mocquot,1975). Similar retentate to manufacture hard type cheeses has not been successful in producing cheese with body and flavour characteristics comparable to product prepared in the traditional manner. Process cheese bases have been prepared experimentally, and interest is being expressed in ultrafiltration (UF) treatment of milk on the farm. All of these approaches are potentially attractive because of possible increased cheese yields and for reduction of transportation and processing costs.

Countering these advantages is the need for research on attaining acceptable cheese quality.

The Blue-veined cheese is a semi-hard mould ripened cheese in which Penicillium roqueforti produces blue or bluish green veins during ripening stages, which may be due to the action of numerous enzymes of Penicillium roqueforti involved in the metabolism of proteins and lipids (Kinsella and Hwang, 1976).

It is made for centuries, from sheeps' milk in France as it is known as " Roquefort cheese ", while it is made from cows' milk in the United States of America and in several European countries as it is known as Blue veined cheese. Blue cheese is manufactured in Egypt at Misr Milk and Food Company, Mansoura Factory, from a mixture of cows' and buffaloes' milk.

The use of imported milk ingredients in dairy products is growing fastly in the last few years, and this policy will continue at least for sometime in Egypt due to the Limited National milk supply.

Therefore, this study was planned to evaluate the manufacture of Blue-veined cheese from ultrafiltrated reconstituted skim milk and butter oil with stress on the composition, the changes during ripening and the quality comparing with that made by traditional process.