SUMMARY

Bread and bakery products have an important role in human nutrition. Generally, wheat bread is considered to be a good source of energy and irreplaceable nutrients for the human body. This is especially true for the products made from whole grain or high-yield flour types. Bread is considered as a basic food worldwide. It is part of the Mediterranean diet, which has recently been awarded World Heritage status as a model for healthy eating.

Whey permeate (WP), contains essentially lactose and some minerals and minimal fat and protein. Permeate are commonly used in formulation of infant foods, integrators, bakery products, and meat products.

The main objective of this research is to investigate improvement of bread flavor and decrease amount of water (60% - 70% absorption) used in bread making. This improvement and decreasing amount of water used in dough was achieved by studying the following objectives:
1- Addition different percentages from milk permeate to the dough during the process of Balady bread and toast bread.
2- Addition different strains of lactic acid bacteria (AL5- CL8) to the dough.
3- Studying the chemical composition and the microbial count of milk permeate.
4- Effect of storage at cooling, room temperature and 40°C on milk permeate stability.
5- Studies of using either wheat pollard or fine bran on the resulted gluten and cumulative gas during fermentation stage.