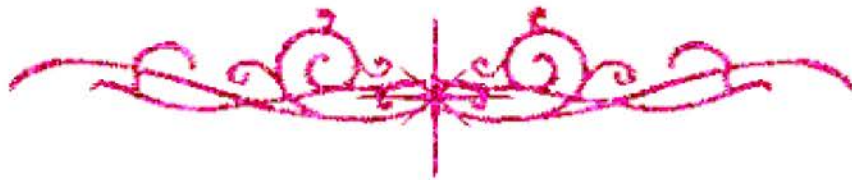


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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم
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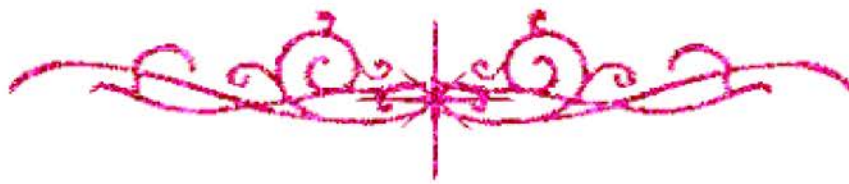


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**STUDIES ON THE PREPARATION
OF SOME PICKLES
UNDER HOME CONDITIONS**

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B.Sc., (Nutrition and food Sci.)
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INTRODUCTION

INTRODUCTION

Industrial fermentations are known to human beings thousands years ago. Relying on excavations , the primitive man was able to make wines by fermenting the locally available fruits . This industry which depends mainly on the alcoholic . Acetic and lactic fermentations is nowadays developed and became a strong and well established . By aid of microbial fermentation many important substances are produced as the organic acids , vitamins , amino acids, enzymes and proteins . Also numerous food are produced by aid of the fermentation such as wines , pickles and many sauces (Farrag , 1955 and El-Bassiouny , 1994) . Moreover yeasts are used for leavened bread, and lactic acid bacteria for improving the flavour and texture of sausages; the latter products might acquire a pleasant flavour , when coated by the mycelia of special kinds of moldes .

Pickling is one of the preservation methods applied to vegetables and fruits . Preservation is achieved by the combined effect of salt and organic acids formed through the activity of lactic acid bacteria . The growth and activity of such bacteria is enhanced by the presence of proper concentration of salt leading to inhibition of some undesirable spoilage microorganisms . At the beginning of pickling , the added salt causes the diffusion of juices from the raw vegetables or fruits . These juices contain minerals, nitrogen and sugars needed for the activity of normal flora , mainly the lactic acid bacteria which produce organic acids , leading to desirable changes in taste, aroma and texture .

Besides the preserving effect , pickling is used to alter some inedible substances as the raw olive , turnip and bitter orange, turning them into edible foodstuffs . Pickles are also tasty and delicious foods which stimulate the appetite . Because pickles can be prepared easily and did not

require for big investment or expensive equipment , pickling became a home industry in both rural and urban areas where it is practiced to increase the family income . It is worthy mentioning that pickling was well known by antient Egyptians . Moreover , pickling is an export food articale , where Greece , Spain , Bulgaria and many other countries gain fabulous amounts of hard currency through exporting pickles in glass jars , tins and plastic containers .

Although pickles , for the most , are consumed for appealing the oppetite , they are not free of nutritional value. For example according to FA0 (1982) pickled carrot and green pepper contained 355 - 356 Mc gm of beta carotene equivalent ; pickled lemon and pickled green pepper had 19 and 15 mg of vit . C respectively and pickled beet showed 10.3 % fat . Moreover , sauerkraut was claimed to have some therapeutic effects . Over and above , pickles are widely used in tropical and subtropical areas to compensate the marked loss of sodium with sweat .

Although pickling is practiced in Egypt at hom hundreds of years ago to be consumed by family members and as a home industry to increase the family incone , good quality pickled green pepper , cucumber , lemon , cauliflower,cabbage,carrots , onion , bitter orange and turrup were produced , but good quality pickled olives are rarely obtained as a home made food article . This might be ascribed to that proper steps of processing are possibly missed and not followed . For instance , at homes the lye - treatment is not practiced ; also most familias do not know how to judge the completeness of this process . Moreover , protection of pickles surface by an edible oil will prevent the growth of yeasts which cause the deterioration of pickles . The housewife do this after opening tomato paste cans , but not for pickles . Also , desalting of pickled green olive before packing with new salt solution and vinegar might improve the quality of the final preduct (El -Bassiouny, 1994) . These might be suggested as