# TECHNICAL SECTION

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## **Radiation Processing Affects Nutritional Values of Milk**

• Radiations from fission products could be valuable for sterilization of foods. Kung,

Gaden, and King find that cobalt 60 radiations induce losses in nutritive quality in milk
products and change enzymes and vitamins. • Turk presents analyses of materials
adsorbed by activated carbon used for purifying air in fruit storage. Seasonal changes
are shown and hypotheses are drawn concerning the function of the activated carbon.

# Better Bread and Wine by Scientific Fermentation

• Fermentation is important in the food industry not only for making potables. Progress and problems were surveyed in a symposium organized by the Fermentation Subdivision of the Division of Agricultural and Food Chemistry at the 123rd meeting of the ACS in Los Angeles recently. Two papers from that group are presented in this issue, with more to follow. Scientific principles are being applied with good effect in the American wine industry. Berg tells what is being done in grape selection, raw material processing, fermentation, and related techniques in the constant progress toward better quality.

• Among advances in technology of fermentation related to baking reported by Pence, increased knowledge of the action of amylases and proteinases has stimulated the use of fungal enzymes and has led to better adaptation of a wide selection of flours to particular shop conditions.

#### Fertilizer Processes Are Made to Fit Conditions

• The shortage of sulfuric acid in the recent past caused great trouble in the superphosphate industry. McKnight, Anderson, Striplin, and Hignett tell how production costs can be lowered and sulfuric can be partially replaced by nitric acid. • Fertilizer does increase yields; a group from Utah Agricultural Experiment Station report on the increase in alfalfa hay produced by phosphate fertilizers. Trace elements had an effect, but didn't increase the yield under the conditions studied.

## Nutritional Qualities Can Be Affected by Storage

• Stored eggs have a smaller content of folic acid than fresh eggs, we are told, by Evans,

Davidson, Bauer, and Butts, who say that fresh eggs not only look better, but have a higher nutritional value. • The nutrient composition of corn from the 1946 and 1947 crops was surveyed by the Committee on Feed Composition of the National Research Council; Schneider, Lucas, and Beeson comment on soil and climatic influences.

#### Herbicides Kill Brush, Stop Weeds, and Strip Leaves

The Herbicide Symposium, begun in the previous issue, continues. Beatty emphasizes the need for research on the effect of phenoxy compounds in his review on brush control.
Wolf describes outstanding results already found with relatively new pre-emergence herbicides.
Rapid development of the use of preharvest defoliants is reported by Stahler who also considers the present status of techniques and uses.