Storing Canned Tomatoes Has no Effect on Vitamin A

Gertrude Dieken

Iowa State College

Follow this and additional works at: http://lib.dr.iastate.edu/farmsciencereporter

Part of the Agriculture Commons

Recommended Citation
Dieken, Gertrude (1940) "Storing Canned Tomatoes Has no Effect on Vitamin A," Farm Science Reporter: Vol. 1 : No. 3 , Article 5.
Available at: http://lib.dr.iastate.edu/farmsciencereporter/vol1/iss3/5

This Article is brought to you for free and open access by the Iowa Agricultural and Home Economics Experiment Station Publications at Iowa State University Digital Repository. It has been accepted for inclusion in Farm Science Reporter by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
STORING CANNED TOMATOES HAS NO EFFECT ON VITAMIN A

Mother Nature’s erratic method of one year loading the tomato vines to breaking and, the next, searing the vines to the point of crop failure creates canning problems for the homemaker. Especially because canning has been a sort of year-to-year affair. If there were more tomatoes than the family could eat during the winter months, the neighbors got the rest if they didn’t have too many themselves—or sometimes they even wasted in their lush glory.

Iowa State College nutritionists—Dr. Pearl P. Swanson, Dr. Gladys Stevenson, now at the University of California, and Dr. P. Mabel Nelson—have been investigating the advisability of canning more during years of good production in anticipation of the “lean years” to come in the future.

In the past, usually only enough for one year has been canned, partly because it was believed that canned foods lose some of their nutritive qualities over a period of time.

The Iowa State College nutritionists took for their study the effect of canning and prolonged storage on vitamin A in tomatoes. In order to insure accuracy of results, it was necessary to carry the investigation over a period of 5 years to rule out possible differences in vitamin content in different years. The tomatoes were raised in college gardens, were the same variety (Marglobe) and were canned in the same way.

By GERTRUDE DIEKEN

White rats—166 of them in all—were fed both fresh tomatoes and tomatoes canned for different lengths of time. Careful records were kept on their growth. Rats are used as test animals in the home economics laboratory because they assimilate food in the same manner as the human being.

The tests showed that no loss occurred in the vitamin A content as a result of storage. Storage at room temperature of commercially canned tomatoes for a period as long as 42 months did not change the vitamin A value of the tomatoes.

The experiment assures the homemaker that she can depend for a long time on properly canned tomatoes to furnish vitamin A equivalent to the same value they had immediately after they were canned.

Canned tomatoes apparently contained somewhat more vitamin A than did fresh tomatoes. It is not yet definitely known whether this can be counted on as being generally true. Undoubtedly a short garden-to-kettle process prevented losses of the vitamin in this experiment. Also, heat processing may have made the vitamin more available—tests in their laboratories have indicated that this may be true.

The study shows that tomatoes may contribute an important part of the daily requirement of vitamin A. For instance, it was found that one serving of canned tomatoes contains as much vitamin A as is furnished by 1½ pats of high-grade butter.

Vitamin A, needed for health, growth and vitality, helps build body resistance against the entrance of certain disease-producing organisms.

To clean the inside of your coffee pot, boil a strong soda and water solution in it.