It is evident that manufacturers of Tomato Ketchup are impressed with the necessity of adding a preservative, either to the finished article, or to the stock from which this is made.

We have not, as yet, forbidden the use of benzoate of soda in foods, as the evidence of its use in minimum amounts necessary to prevent spoilage is not convincing as to its harmfulness to health.

A careful study of this matter was made by the Referee Board of the United States Department of Agriculture in 1909, and Food Inspection Decision No. 104 (March 3), 1909) declares:—

'It having been determined that benzoate of soda mixed with food is not deleterious or poisonous and is not injurious to health, no objection will be raised under the Foods and Drugs Act to the use in food of benzoate of soda, provided that each container or package of such food is plainly labelled to show the presence and amount of benzoate of soda.'

Several state laws, however, forbid its employment in foods.

The fact that 17 samples of this collection of Ketchup contain no preservative, and are nevertheless found to be in sound condition, would argue that Ketchup may be manufactured and marketed without a preservative; a conclusion which is in accord with a careful study of the matter made by A. W. Bitting, Inspector, Bureau of Chemistry, Washington, in 1907, and published as Bulletin No. 119. Mr. Bitting's conclusions are summed up as follows: 'The experiments . . . . were conducted under factory conditions, and upon a commorcial scale. The results prove that such a Ketchup can be made and delivered to the consumer in perfect condition; the product in question having already stood ten months unopened, without showing the slightest indication of spoilage.' It was also proved that after opening, the article could be kept at a temperature of  $\mathbb{C}^{7^\circ}$  for eight days, without any development of moulds.

Since Ketchup is valued rather as a condiment than as a food, it may be unfair to place too much importance upon the amount of solid matter contained in it. At the same time it is in the contained in it. At the extremely low solids in some of these samples does not constitute.

The contained in it. At the extremely low solids in some of these samples are characterized by a relatively high content in solids.

The samples now reported show solids as below:-

Above 30 per cent in 11 samples.

46	25	66	3	66
44	20	66	11	66
46	15	44	14	66
66	10	66	24	66
Belov	v 10	"	4	66

It will be seen that 60 per cent of these samples contain practically from 15 to 30 per cent of solids

It has been sufficiently proven that a Ketchup made from ripe and fresh tomatoes, shows a good colour without any addition of a dye. Dyes are absent in 42 samples of this collection (62 per cent) and these samples are for the most part of very satisfactory 55864—11.

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