

LABORATORY  
OF THE  
INLAND REVENUE DEPARTMENT

OTTAWA, CANADA.

BULLETIN No. 249

BOTTLED PICKLES.

OTTAWA, February 19, 1913.

WM. HINSWORTH, Esq.,  
Acting Deputy Minister of Inland Revenue.

SIR,—I beg to send you herewith a report upon eighty (80) samples of Bottled Pickles, purchased by the inspectors of this Department in April and May of last year. The last report upon Pickles was published as Bulletin No. 163, in September, 1908.

Pickles are, as a rule, very carefully prepared, and we have no reason to believe that any ground for complaint exists in their regard.

Mouldiness was found in four samples of the present collection. This is not, apparently, due to the use of imperfect fruit or vegetables in their preparation, but rather to the employment of too weak a vinegar; vinegar containing  $2\frac{1}{2}$  p. c. of Acetic Acid, or more, appears to be best suited to use in bottled Pickles, so far as our experience goes.

Fourteen samples give evidence of the employment of Acetic Acid having its origin in a distillation process—in their manufacture. The vinegar in admixture with which the pickles are sold, must meet the standards legalized for vinegar under the Adulteration Act.

Sixteen samples exhibit traces of Alum, but only one sample contains any notable amount. Alum is extensively used for the purpose of keeping the vegetables hard and firm. It has not been established that the minute quantities of Alum necessary for this purpose are, in any degree, harmful to human health. This may be due to the fact that Pickles are consumed in small quantity only, and as a condiment rather than for food purposes.

It is probable that sound vegetables can be kept in a desirable state of firmness by the use of Vinegar only, provided that the Vinegar is sufficiently strong.

I beg to recommend publication of this report as Bulletin No. 249.

I have the honour to be, Sir,

Your obedient servant,

A. MCGILL,  
Chief Analyst.