NOTES FROM THE U. S. BUREAU OF CHEMISTRY.*

VOLUME VARIATION OF BOTTLED FOODS.¹

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[ABSTRACT.]

DATA on the capacity of bottles and volume of food in bottles indicate that only a small percentage of the bottles of food filled in accordance with good commercial practice should vary in quantity of contents by more than the calculated maximum variations.

Good commercial practice in bottling foods has been considered to be the attainment of conditions in the bottler's state of business in which he (*a*) includes in his orders for bottles the specifications as to capacity when filled to a specific height, (*b*) tests representative samples of every lot of bottles received, rejecting those appreciably under-capacity, (*c*) fills his bottles to a height determined from the results of his tests, and (*d*) has his labels printed with a definite, correct statement of the quantity of contents and applies them unaltered.

The calculated maximum variations in the volume of bottled foods, as given in the following table, have been computed from the weight variation allowed the blowers by the manufacturers, and by the use of the relation between the weight and volume of bottle glass.

Capacity of bottles. Fl. oz.	Calculated maximum variation in volume	
	Individual bottles. Fl. oz.	Average of representative samples. Fl. oz.
$\frac{1}{2}$	0.10	0.014
1	.10	.014
2	.19	.027
4	.24	.034
6	.24	.034
8	.29	.041
12	.29	.041
16	.39	.056
24	.39	.056
32	.58	.083
64	1.16	.17
128	1.94	.28

* Communicated by the Chief of the Bureau.

¹ U. S. Dept. Agr. Bull. 1009, issued Dec. 16, 1921.