

**LABORATORY**  
OF THE  
**INLAND REVENUE DEPARTMENT**  
OTTAWA, CANADA.

BULLETIN No 387

**BEANS**

Ottawa, December 11th 1917.

J. U. VINCENT, Esq., K. C., B. A., L. Ph.,  
Deputy Minister of Inland Revenue,

Sir,

I have the honour to present you with a report upon 318 samples of Beans, as found upon the Canadian retail market in August, September and October of this year.

Beans constitute a highly nutritious food for man, as well as for domestic animals. Konig (Zusammensetzung, etc. Vierte Auflage, Band 1, S. 1484) quotes the following percentage value :

	Water	Protein	Fat	Carbohydrates		Ash
				Starch	Fibre	
1. Phaseolus vulgaris..	18.20	18.44	0.78	45.32	1.29	3.29
2. " lunatus..	10.31	19.56	2.48	46.46	4.93	4.07
3. Soya beans (mean).	14.38	31.43	18.20	15.00	6.48	3.98

It will be noted that the proteid matter of the bean is very high, and this is particularly true of the Soya (Soja) bean, which is also specially rich in fact.

The experiments of Thomas (Lusk, Fundamental Basis of Nutrition, p. 20) show that the protein of beans has a higher nutritive value than that of bread, and nearly twice as high a value as that of Indian Corn.

Using the prices which obtained in New York, in January 1913 it was found that each 1000 calories of energy furnished by dried beans, cost 4 cents, as against what flour, 2½ cents; wheat bread 5½ cents, Milk, 10 cents, mutton 16¼ cents sirloin beef 24 cents.