

# Commodity Variation vs. Value Added Consistency

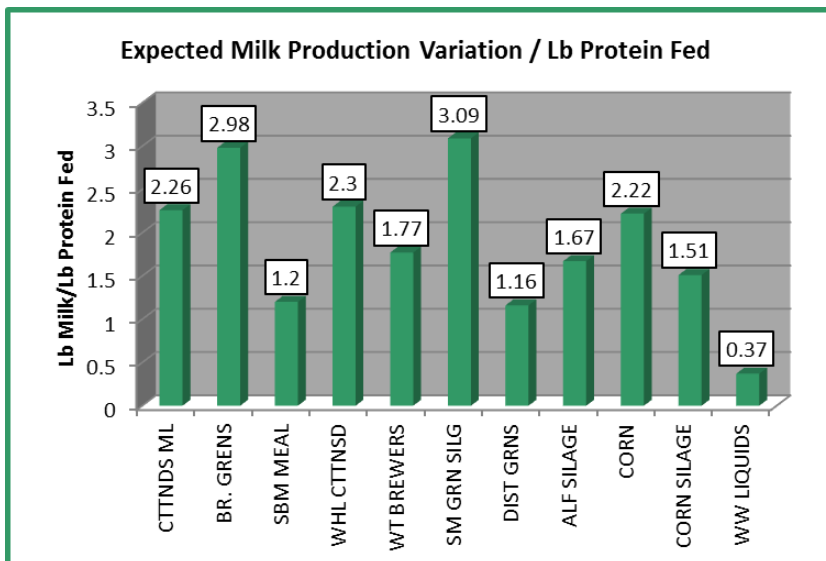


Cattle perform best with a consistent diet. Variation reduces performance or requires over-formulation to meet nutrient requirements. How much variation is normal? This Table shows the average, typical range, and percentage variation found by Dairy One Lab on all assays from 2000 to 2004 (website [www.dairyone.com](http://www.dairyone.com)). The Westway Liquid values are from all assays on Westway 32% protein liquid supplements in 2003-04.

	PROTEIN CONTENT			
	AVE	LOW	HIGH	%VAR
CTTNSD ML	43.2	35.0	51.3	19.0
BR. GRNS	26.4	19.8	33.0	25.1
SBM MEAL	51.1	45.9	56.2	10.1
WHL CTTNSD	24.8	20.0	29.6	19.3
WT BREWERS	30.0	25.5	34.4	14.9
SM GRN SILG	13.2	9.8	16.7	25.9
DIST GRNS	30.7	27.7	33.7	9.8
ALF SILAGE	20.8	17.9	23.7	14.1
CORN	9.4	7.6	11.1	18.7
CORN SILAGE	8.3	7.3	9.4	12.7
WW 32% LIQUID	32.8	31.8	33.8	3.1

The averages are close to commonly used table values for the ingredients. However, actual protein content of a sample can vary greatly as shown in the typical range and percentage variation. What is the practical effect of this variation? The following Chart shows the expected impact of assay variation on milk production for each pound of protein formulated using average values (based on *Nutrient Requirements of Dairy Cattle, 2001*).

Note that predicted milk production varies by more than a pound for each pound of protein formulated (based on average values) for all the commodities. Estimated variance from protein in Westway value added products was less than 1/3 that from the least variable commodity.



This example deals with protein. All nutrients in commodities are variable.

Over 30 other nutrients can be guaranteed in value added products. None are guaranteed in a commodity. Westway assays over 5,000 ingredient samples each year in order to formulate a consistent value added product that meets the guaranteed values and will give dependable results.

**Nutrients that can be guaranteed in Value Added Products: 30+**

**Nutrients that can be guaranteed in Commodities: 0**