

Exhibit 50

Calculating Component Values for Butterfat, True Protein and Milk from the Modified Van Slyke Cheese Yield Formula

Adjustment to True Protein:

$$\# \text{ True Protein / Cwt.} = \text{Crude Protein / Cwt.} - 0.19$$

Percent True Protein at Average Crude Protein Test (approximately 3.2%)

$$\begin{aligned} \# \text{ True Protein / Cwt.} &= 3.20 - 0.19 \\ &= 3.01 \end{aligned}$$

$$\text{True Protein as \% of Crude Protein} = 3.01 / 3.20$$

$$\text{True Protein as \% of Crude Protein} = \mathbf{94.06\%}$$

Estimating Casein Percentage in True Protein

$$\text{Casein Concentration in Crude Protein} = 78\%$$

$$\begin{aligned} \text{Casein Concentration in Crude Protein} &= \frac{78\% \text{ Casein}}{1 \text{ Unit Crude Protein}} \quad \times \quad \frac{1 \text{ Unit Crude Protein}}{94.06\% \text{ True Protein}} \\ &= \frac{0.78 \text{ Casein}}{0.9406 \text{ True Protein}} \end{aligned}$$

$$\text{Casein Concentration in Crude Protein} = \mathbf{82.93\%}$$

Determining Component Values while Assigning Casein loss to Cwt. Milk:

$$\text{Cheddar Yield} = \frac{(\text{Cheese Fat \#/Cwt.} \times 0.90 + \text{True Protein \#/Cwt.} \times 0.8293 - 0.1) \times 1.09}{0.62}$$

$$\text{Cheddar Yield} = \frac{(\text{Cheese Fat Pounds} \times 0.90) \times 1.09}{0.62} + \frac{(\text{True Protein Pounds} \times 0.8293 - 0.1) \times 1.09}{0.62} + \frac{(-0.1) \times 1.09}{0.62}$$

$$\text{Cheddar Yield} = (\text{Cheese Fat \#} \times 0.90) \times 1.758065 + (\text{True Protein Pounds} \times 0.8293) \times 1.758065 + (-0.1) \times 1.758065$$

$$\text{Cheddar Yield} = (\text{Cheese Fat Pounds} \times 1.582259) + (\text{True Protein Pounds} \times 1.457963) + (-0.175807 \times \text{Cwt. Milk})$$

Value of Milk and Components for Van Slyke Formula, when Casein Loss assumed as constant per Cwt. Milk			
Butterfat Factor for Cheese Yield:	1.582259	Rounded:	1.5823
TRUE Protein Factor for Cheese Yield:	1.457963	Rounded:	1.4580
Constant per Cwt. Milk (Casein Loss)	-0.175807	Rounded:	-0.1758

Determine the Cheese Yield per pound Milk True Protein:

- Step 1: Remove the Milkfat Portion of the Equation: $CY \text{ from } 3.0\# \text{ Protein} = \frac{[82.93\% \times 3.0\# \text{ Protein} - 0.1] \times 1.09}{0.62}$
- Step 2: Solve for Protein @ Selected Protein Percentage $CY \text{ from } 3.0\# \text{ Protein} = [82.93\% \times 3.0 - 0.1] \times 1.09 / 0.62$
 $CY \text{ from } 3.0\# \text{ Protein} = 4.198082 \text{ lbs. cheese}$
- Step 3: Divide by the Selected Protein Percentage: $CY \text{ from } 1.0\# \text{ Protein} = 4.198082 / 3.0$
 $CY \text{ from } 1.0\# \text{ Protein} = 1.399361$

Value of Milk and Components for Van Slyke Formula, when Casein Loss assumed as constant per Unit Protein			
Butterfat Factor for Cheese Yield:	1.582259	Rounded:	1.5823
TRUE Protein Factor for Cheese Yield:	1.399361	Rounded:	1.3994
Casein Loss per Cwt:	0.000000	Rounded:	0.0000

Source: National All-Jersey Inc. 6486 East Main Street, Reynoldsburg, OH 43068 614-861-3636