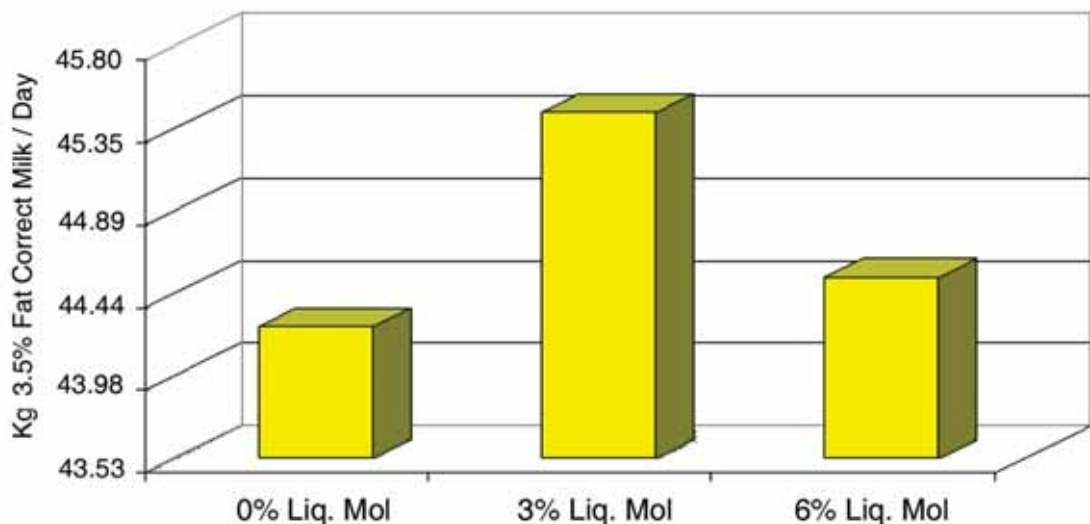




Sugar vs Starch

Sugar and starch are carbohydrate energy sources fed to dairy cattle. The primary and greatest source of energy available to the dairy cow is the supply of Volatile Fatty Acids (VFA) produced during rumen fermentation. A ration providing a balance of carbohydrates from both sugar and starch optimises VFA production. While natural feedstuffs contain a level of sugar, greater reliance on fermented silages of varying types in lactating rations means much of the naturally occurring plant sugar has been utilised in silage fermentation. Liquid molasses provides a high quality, palatable source of sugar that benefits rumen fermentation and therefore, VFA production. This results in improved milk production.

**Milk Production Levels at 0%, 3% and 6%
Liquid Molasses Addition to Ration**



Source: Broderick & Radloff, 2003. JDS 86: Suppl. 1 p 217 (Abstr).

The researchers concluded that adding 2.4 percent sugar* (dry matter basis) to the diet through molasses to basal diets containing 2.6 percent total sugar (dry matter basis) was the optimum for milk production and components.

* Adding 2.4% sugar to a TMR (dry matter basis) provides 0.54 kg supplemental sugar when cows eat 22.7 kg Dry Matter. QLF recommends 0.34 to 0.57 kg supplemental sugar for lactating dairy cows from a QLF Liquid Supplement. This equates to 1 - 2 kg of most QLF liquid supplements.