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### **The Fall Slump**

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A “Fall slump” in milk production is a common occurrence on many dairy farms. It is characterized by some or all of the following: a moderate to large decrease in milk production, inability to reach high peak milk productions, a decrease in intake, loose manure, and cycling intakes. Fall slumps are most apparent when cows are switched abruptly from old corn silage to freshly cut corn forage or silage that has only fermented for a few weeks. One factor that might explain the slump relates to the fact that the starch in corn crops is relatively low in digestibility when harvested at or above 32-35% DM. With advancing time in the silo, starch digestion improves because proteolytic mechanisms degrade the prolamin-starch matrix in the corn kernel. Thus, when cows are switched from being fed last year’s corn silage in the Fall (which has been in the silo for almost 12 months) and switched to freshly chopped forage or silage only fermenting for a few months, rumen digestible starch declines, thus the drop in milk production. The Fall slump may also occur because fresh forages contains high levels of fermentable sugars that can put the rumen into sub acute acidosis. The condition occurs most with corn silage because it is usually the highest proportion of forage fed in the diet. This occurs frequently on small farms that have only one silo for corn silage. Not accounting for differences in the dry matter and nutrient content of the new silage when changing silos may also be responsible for drops in milk production.

Several approaches can be taken to minimize the incidences of a Fall slump. First, for those dairyman that have adequate forage inventory and silos, plan to allow new corn silage to ensile for at least 4 months before feeding. Next, when switching from one silo to another, try to make the change gradually over a minimum of a 10 to 14 day period. This is obviously very difficult to do if you only have one silo. For this reason, a case could be made to encourage farmers with only one main silo for corn silage to also put up a small bag (or drive over pile) of corn silage that could be mixed with new silage and fed out during the Fall. Last but not least, new forages should be tested for dry matter and nutrient content and diet formulations should be adjusted accordingly.

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