The United State Department of Agriculture (USDA) recently issued proposed regulations making significant changes to the nutrition standards for foods served in schools. This rule adopts many of the recommendations made by the Institute of Medicine (IOM) to improve the healthfulness of school meals. The USDA regulation restricts milk availability to fat-free or 1% white milk, and fat-free flavored milk. The IOM has also recommended that as an ala carte beverage, flavored milk be restricted to <22g total sugars per 8-ounces. Most elementary students choose flavored milk (79%). In preparation, milk processors are lowering calories, fat and added sugars. Milk is an important source of shortfall nutrients (vitamin D, calcium and potassium), thus it is important to know how children accept lower calorie milk. As part of a larger study, 4 schools in the Northeast (NE) and South (S) using lower calorie flavored milk (LCFM) (≤150 calories/8 oz), were selected for a plate waste study in spring 2010. Five control schools from similar districts (4 NE and 1 S) using standard flavored milk (SFM) (>150 calories/8 oz) were enrolled. Flavored milk cartons were collected from 793 students (51% boys) in grades 3-5 (35%, 35%, 30% in grades 3, 4 and 5) and individually weighed to determine consumption (497 SFM and 296 LCFM). Students consumed an average of 5.88oz ±SE 0.12 of SFM (Mdn and Mode=7.55oz) compared to an average of 4.92oz ±SE 0.17 of LCFM (Mdn=6.07oz, Mode=7.54oz). Consumption was highly skewed, thus divided into a binary outcome (0-\(\preceq70z\), >70z). Using linear mixed models, consumption between groups was not significantly different (p=0.09). However, since none of the milks sampled were in full compliance with proposed IOM standards, milk consumption in schools should be further monitored. Funding: National Dairy Council, VT Ag Exp Station.