Wet distillers grains plus solubles do not alter the relationship between fat content and marbling score in calf-fed steers.


Some research has suggested feeding dried distillers grain plus solubles can have a negative effect on marbling score in beef. One hypothesis is that feeding this byproduct of ethanol production alters the relationship between lipid content and marbling score by reducing the ability to visualize fat present in the ribeye. The objective of this study was to determine the effects of finishing diets with different levels of wet distillers grains plus solubles (DG) on the relationship between fat and marbling in beef cattle. Ninety-four, calf-fed, crossbred steers were randomly distributed to three treatments (0%, 15% and 30% DG – DM basis) for 133 d. Forty-eight h postmortem, marbling score, marbling texture and marbling distribution were assessed by a USDA grader. For the treatments (0%, 15% and 30%) 37.5%, 62.5% and 46.9% of the carcasses of each respective treatment were considered USDA Choice, with mean marbling scores ($P = 0.456$) of Slight93, Small03 and Small04, respectively. For all treatments, there were linear relationships ($P < 0.008$) between marbling score and fat percentage in the ribeye. Slopes were statistically similar at $P = 0.721$. Treatment did not significantly influence marbling texture, marbling distribution or fat content of the ribeye. These results indicate that finishing diets containing up to 30% wet distillers grains plus solubles can be used without affecting the relationship between fat and marbling in beef.

**Key Words:** Distillers Grains, Fat, Marbling