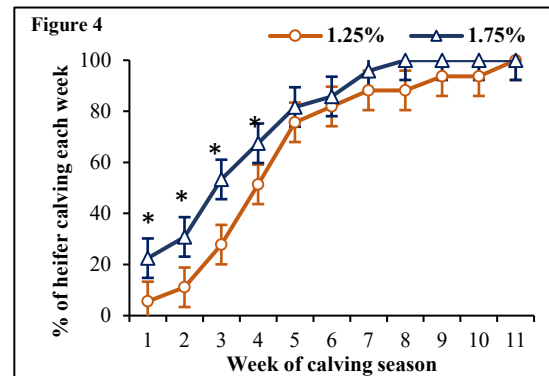


* $P < 0.05$



* $P < 0.05$

After completing this study, we decided to further evaluate the impact of puberty status at the start of the breeding season on subsequent pregnancy rates. So, regardless of treatment, we divided the 2-year data into 2 groups. Group 1 represented the heifers that achieved puberty AFTER the start of the breeding season, whereas group 2 included the heifers that achieved puberty BEFORE the breeding season had started (Table 1). On average, heifers that achieved puberty before the start of the breeding season had 2.25 times greater overall pregnancy rates than heifers that achieved puberty after the breeding season had started. These results reinforce the importance of properly developing heifers to induce puberty attainment before the breeding season begins.

Take Home message = Decreasing the frequency of concentrate supplementation did not impact overall pregnancy rates of beef heifers if a puberty induction protocol was also implemented. Also, increasing the supplementation amount from 1.25% to 1.75% of body weight enhanced the reproductive performance of heifers beyond the extra supplementation cost.

Item	Puberty status at the start of the breeding season		SEM	P
	GROUP 1 = Heifers that achieved puberty <u>AFTER</u> the breeding season started	GROUP 2 = Heifers that achieved puberty <u>BEFORE</u> the breeding season started		
<i>Pregnant heifers, % of total</i>				
Year 1	33.9	78.2	12.2	0.001
Year 2	39.4	85.0	6.1	0.005
Average	36.2	81.6	10.3	<0.0001

References: Endecott et al. 2013. J. Anim. Sci. 91:1329–1335; Moriel et al. 2012. J. Anim. Sci. 90:2371-2380; Moriel et al. 2017. J. Anim. Sci. 95:3523-3531.