

Solving a Key Sow Production Challenge – Lactation Feed Intake in the Summer

Suzanne T. Petersen, PhD.
Brand Marketing Manager
Land O'Lakes Purina Feed LLC

Why is lactation intake so important?

- Results from nine experiments revealed that average daily feed intake of lactating sows decreased by 0.21 lb for each 1° F increase in ambient temperature (over the range of 61-90° F)
Black et al. 1993. Livest. Prod. Sci. 35:153
- Daily lactation feed intake was recorded for 20,296 lactating sows on 30 commercial U.S. farms. 10-30% of sows showed a marked dip in feed intake for 2-3 days in the second week of lactation. These dips in feed intake were associated with longer weaning-to-estrus intervals, reduced farrowing rates and smaller subsequent litter size
- For each additional lb increase in average daily feed intake during lactation, an additional 0.05 pigs were born at subsequent farrowing
- Litter weaning wt increased 1 lb/each lb of sows' average daily feed intake (between 8.8 to 15.4 lb; P<.01)
Koketsu et al. 1996. J. Animal Sci. 74:2875

How can lactation intake be improved in hot weather?

Land O'Lakes Purina Feed added an innovative patent pending new product to its already comprehensive and well-balanced sow feed program in June 2008 - A sow intake enhancer named **True Appetizer™ Feed**. This novel product is engineered to increase lactation feed intake, resulting in a significant increase (>10%) in feed consumption during lactation, particularly in hot weather.

Low sow feed intake has a negative influence on reproduction, which is particularly evident during hot weather. Sow feed intake is significantly affected by an increase in temperature, see Figure 1.

Strictly controlled trials performed at LongView Animal Nutrition Center, MO indicated that True Appetizer™ feed is able to significantly increase feed intake, litter weight gain and reduce pre-wean mortality, at a room temperature of approx. 80°F compared to control fed sows housed at the same temperature. See Figure 2 and Table 1. Days to estrus and sow weight change were also numerically improved. See Table 2.

Figure 1 - Average Daily Feed Intake of Lactating Sows Fed in Warm or Normal Environment (28-30 sows/treatment) – LongView Animal Nutrition Center

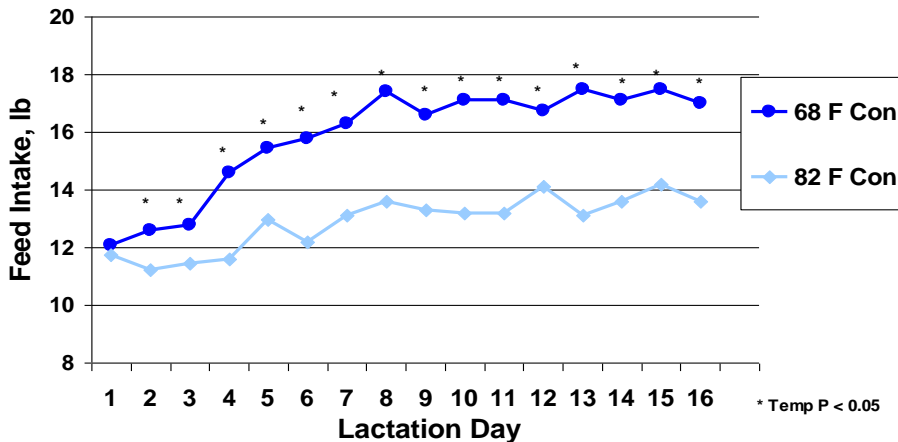


Figure 2 - True Appetizer™ Feed (TA) significantly improves lactation feed intake of sows during hot weather (82°F) (50-51 sows/treatment) – LongView Animal Nutrition Center

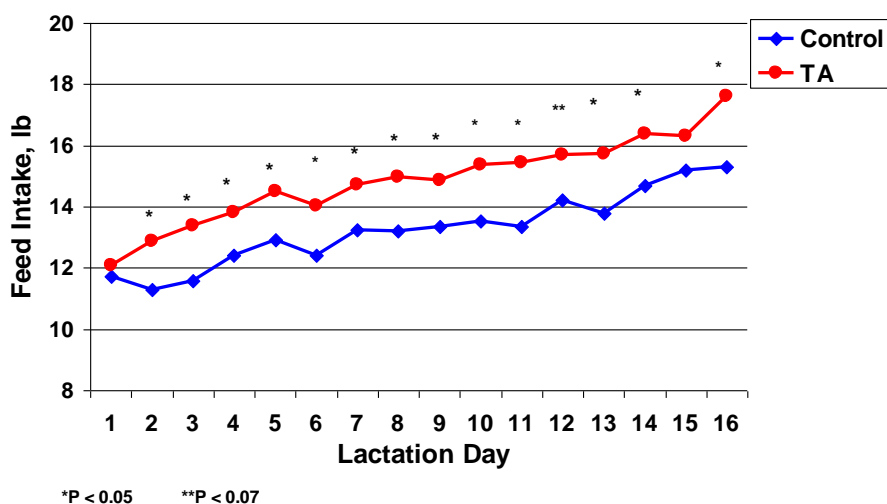


Table 1 – Litter performance improved when sows were fed True Appetizer™ Feed (TA) in a hot environment (82°F) (50-51 sows/treatment) – LongView Animal Nutrition Center

	Control	TA	SEM	P value
No. of sows	50	51		
Parity	3.02	3.18		
Lact. Length, d	19.3	19.4	0.204	
Pigs after transfer	12.34	12.61	0.132	
Pigs at WN ^b	10.14 ^f	10.73 ^g	0.20	0.04
Pre-WN Mort, %^b	18.3^f	13.6^g	1.65	0.05
LT WT after Tran, lb	38.4	39.4	0.72	
LT WT at WN, lb^{cd}	148^h	156ⁱ	3.23	0.11
LT WT gain, lb^{cd}	109.5^h	116.8ⁱ	3.23	0.11
Pig WT after Tran, lb	3.16	3.14	0.06	
Pig WT at WN, lb ^{ce}	14.58	14.65	0.18	

^bNumber of pigs after transfer was used as covariance

^cLactation length was used as covariance

^dLT wt after transfer was used as covariance

^ePig wt after transfer was used as covariance

^fMeans in the same row with different superscript differ (P < 0.5)

^hMeans in the same row with different superscript differ (P = 0.11)

Table 2 – Sow performance improved when sows were fed True Appetizer™ Feed (TA) in a hot environment (82°F) (50-51 sows/treatment) – LongView Animal Nutrition Center

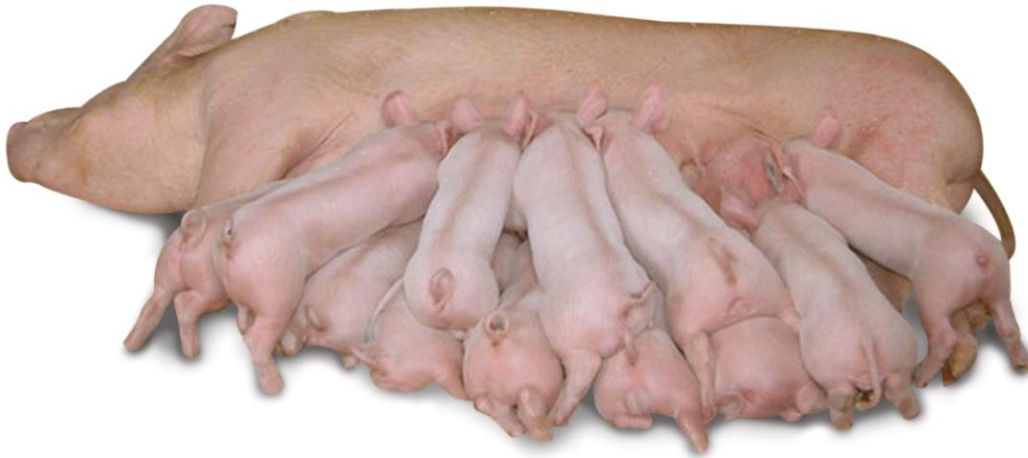
	Control	TA	SEM	P value
No. of sows, lb	50	51		
Parity	3.02	3.18		
Sow wt at farrow, lb	553	564	11.45	
Sow wt at wn, lb ^{bc}	550	551	3.81	
Sow wt change, lb ^{bc}	-9.65	-8.68	3.81	
ADFI d 109-farrow	4.94	4.87	0.11	
ADFI Lactation, lb	13.34^d	14.67^e	0.36	0.01
Total FI Lactation	258 ^d	285 ^e	7.80	0.01
Days to estrus	5.03	4.77	0.198	

^bLactation length was used as covariance

^cSow wt at farrowing was used as covariance

^dMeans in the same row with different superscript differ (P < 0.05)

True Appetizer™ feed



- A new proprietary combination of ingredients engineered to be highly palatable resulting in significant sow feed intake, particularly in hot weather
- Available in 50lb bags
- Mix in lactation diets at a rate of 50 lb True Appetizer™/ton of complete feed if average daily lactation feed intake is 12 lbs/hd/day).
- Begin feeding True Appetizer™ Feed to pregnant sows/gilts when they are moved to crates several days prior to expected farrowing date. Feed True Appetizer™ Feed throughout lactation until pigs are weaned.
- Product Code # 1256510 (L22G)

We recommend True Appetizer™ Feed for your sows to ensure optimal performance this summer.

For further information on True Appetizer™ Feed, please see your local feed sales representative at a Land O'Lakes Feed Co-op or Purina Mills Dealer. Visit us on-line at www.LOLFeed.com, www.PurinaMills.com,

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