



1. Introduction

This paper presents a method to improve piglet feed intake. Theoretically, piglets should grow faster than today's piglet growth. The lower piglet growth causes the following three big losses: (1) economic loss due to slow growth; (2) lower piglet weight at weaning; the lower the weight gain at the growing-finishing stage, the greater the number of days to market; (3) higher mortality rate during the piglet stage. Consequently, improving piglet feed intake is a very important issue.

2. Birth weight

Heavier birth weight piglets always have higher vigorous milk suckling. The result of this higher milk intake can cause higher weight gain. The higher weight causes piglets to not get enough nutrition from milk for their maintenance and growth. Consequently, they must eat more creep feed. Once they eat more creep feed, they will become used to feed after immediately weaning. Producing piglets with heavier birth weight is the essential point. If we provide sows with more feed or a higher energy diet during the last 2-3 weeks, the sows can produce about 1.4-1.5 kg additional weight in new born piglets. There are three points we have to notice. Firstly, we should not provide too much feed for gilts. Secondly, it is important not to provide higher feed for sows for more than 3 weeks before farrowing. Thirdly, if we provide a higher energy diet, which is produced by adding a higher percent of fat or oil, we should add Vit E in the diet.

3. Spray dried plasma protein (SDPP)

Adding 5% of SDPP in the piglet diet can stimulate the piglet to eat more feed. However, the result can last about 2 weeks. This may be due to lower

isoleucine content in the SDPP.

I suggest it might be added in the creep diet and provided to weaning piglets for another 2 weeks.

4. Tryptophane

Our experimental results showed that adding enough tryptophane to the piglet diet can improve feed intake. This result may be due to tryptophane transferring to melatonin and melatonin plays an important role in feed intake.

5. Amino acid balance feed

Amino acid unbalance feed usually causes lower feed intake.

6. Sucrose

Our experimental results showed that adding sucrose in the piglet diet can improve piglet feed intake. However the minimum added percentage should be 10%. This is a very high percentage. The sugar cost is quite high. Glucose cannot replace sucrose due to its lower sweet taste.

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7. Acidified feed

Slightly acid feed causes higher saliva secretion. Higher saliva secretion usually can induce piglets to eat more.

8. Vit B complex

Some members of the Vit B complex can induce higher feed intake in pigs. If we can add a proper amount of Vit B complex, it could improve pig feed intake.

9. Fresh feed

Piglets are very sensitive to bad smelling feed. They usually refuse to eat feed left in the trough for a few hours. This is the reason why we it is better to feed piglets 3-4 times during the day.

10. Conclusion

There are many methods to improve feed intake. However, the previous discussed methods are quite important.

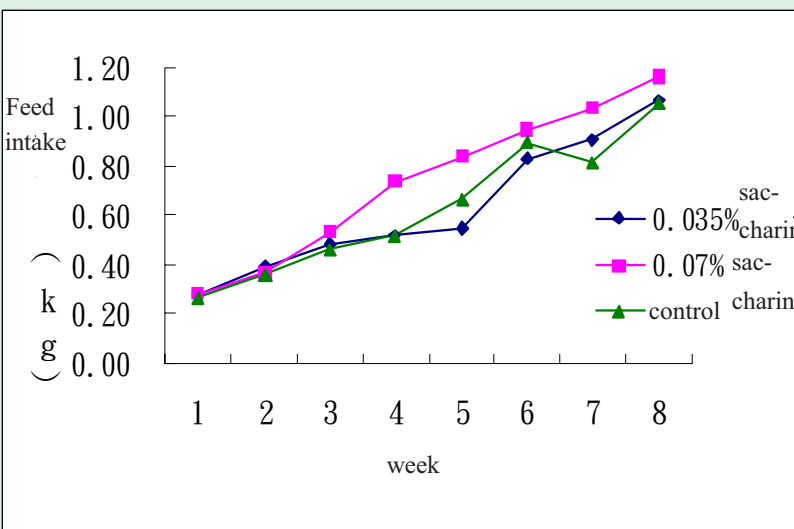


Figure.1 : Saccharin feed supplementation effect on the feed intake of weaning piglets.

Table 1 Effect of different proteins or higher tryptophane feed supplementation on piglet performance of piglets

W e e k	c o n t r o l	0 . 2 2 % t r y p t o p h a n e	S D P P	m i l k p u r e p o w d e r	S i g .	S E M	(Unit: g)
F e e d i n t a k e							
1 ~ 4	3 3 3	3 4 6	3 2 6	3 1 3	N S	1 5 . 7	
5 ~ 8	8 0 9 ^b	8 7 7 ^b	9 5 4 ^a	7 8 8 ^b	*	3 5 . 8	
1 ~ 8	5 7 1	6 1 2	6 4 0	5 5 0	N S	2 4 . 5	
W e i g h t g a i n							
1 ~ 4	1 8 5	1 9 5	1 8 3	1 6 4	N S	1 4 . 6	
5 ~ 8	4 4 8 ^b	4 9 1 ^{a b}	5 1 6 ^a	4 4 0 ^b	*	1 7 . 3	
1 ~ 8	3 1 7	3 4 3	3 4 9	3 0 2	N S	1 3 . 5	
F e e d e f f i c i e n c y							
1 ~ 4	2 . 0 2	1 . 9 3	1 . 8 6	2 . 0 7	N S	0 . 2 3	
5 ~ 8	1 . 8 1	1 . 7 8	1 . 8 4	1 . 7 9	N S	0 . 7 0	
1 ~ 8	1 . 9 2	1 . 8 6	1 . 8 5	1 . 9 3	N S	0 . 1 1	

Notes :

1. a,b significant differences within the same row while not bearing the same superscripts ($P < 0.05$).2. NS: $P > 0.05$; *: $P < 0.05$.