TECHNICAL
REPORT
by Groupe Cérès and Nutrition Athéna

LINEAR FEEDER SPACE REQUIRED

Dan Bussières, B.Sc., agr., Jean-Philippe Martineau, M.Sc., agr. & Martine Pelletier-Grenier, B.Sc., agr.
Swine nutrition specialists for Nutrition Athena inc.

Dry feeder		
	Nursery	**Finishing**
Feeder width	-	> 15
Linear inches per head	1	1.88 to 2.0
Wet feeder		
Feeder width	-	> 15
Linear inches per head	1	1.15 à 2.25

TYPES OF NURSERY FEEDERS

In a nursery, there is no advantage on performance to using a wet feeder versus a dry feeder. However, many will say that the beginnings are easier with a dry feeder. A first study on the types of feeders carried out by the CDPQ (2003) showed that piglets did not experience any difference in gain, but that a wet feeder in a nursery reduces feed efficiency by 9 points (Table 1). In this study, it can be argued that this deterioration in performance was caused by an increase in feed wastage due to the piglets playing in the water. Indeed, water wastage was significantly higher on a wet feeder than on a dry feeder with a bowl of water.

Another study was carried out at HyLife in 2013 and the same findings were made; no effect on gain, but a deterioration in feed efficiency (7 points) was observed.

Table 1: Zootechnical performances in nurseries obtained with wet feeders (drinking trough) versus dry feeders

Feeder type	Wet	Dry	Statistically significant difference
Average daily gain (kg)	0.470	0.470	No
Average daily feed intake (kg)	0.708	0.670	Yes
Feed efficiency	1.51	1.42	Yes
Average daily water consumption (liters)	2.39	1.84	Yes

Taken from the article published in Porc Québec April 2003: Trémie-abreuvoir ou trémie sèche en pouponnière?

January 2020

TYPES OF FEEDERS IN FINISHING

A study carried out at HyLife has shown that a Crystal Springs feeder (image 1) provides performance advantages over a Tube feeder (image 2). In this study (T247), an advantage of 86g of gain/day was obtained with the use of the Crystal Springs feeder. The consumption of pigs using the Crystal Springs feeder increased by 10%. Feed efficiency was not affected. It was demonstrated that 22 pigs on a tube feeder limited consumption in finish pigs.

Image 1 : Crystal Springs feeder

Image 2 : Tube feeder

A second trial at HyLife (T253) confirmed that offering more than 1.36 inches per pig does not provide a significant advantage in feed performance (Table 2). The results showed that the average daily gain (ADG) was slightly higher when more than 1.36 linear inches was available for the pigs, but the impact on consumption and feed conversion was almost non-existent.

Table 2: Effect of a 2-place versus a 3-place feeder on finishing performance

	CS 30-inch feeder 2-place	CS 48-inch feeder 3-place
Pig/space	11	7.3
Inches/pig	1.36	2.18
End weight (kg)	133.00	133.90
Carcass weight(kg)	107.82	108.85
ADG (g/day)	956	965
ADFI (kg/day)	2.72	2.76
FE (kg/kg)	2.85	2.86