



NUTRITION

Feed efficiency: On-farm checks

Although actual feed prices are largely beyond your control, there are a number of routine checks that you can complete on your unit to assess efficiency. It is likely that you will be doing a number of these already, but take the time to specifically look around your unit and double check that this is actually the case, as 5 - 20% of feed is often wasted on a typical farrow to finish unit!

Feeding space

Is there adequate feeder/hopper space for the number and size of pigs in the pen, take time to look, are pigs crowding around the feed hopper or trough? See overleaf for guidance.

Feed flow rates

Are all the hoppers working correctly? Adjust the feeder flow rates to maintain intake but reduce wastage. Depending on the hopper, flow rates may need to be adjusted as the pigs grow. Check each hopper to ensure that the feeding system works.

Feed quality

The presence of dust, "fines" or lumps of clogged feed will reduce feed intake. Check if the hopper or auger mechanism is damaging/crushing the feed or affecting the pellet size, increasing wastage. Try using a Bygholm sieve to check particle size, ask BPEX for more information.

Feed storage

Inspect bins and check feed for signs of mould and mites. If found, identify the source, eg clogged feed in the hopper or poor storage (ie damp and humid). If mould is present discard the affected feed and take remedial actions immediately.

Spillage

How much feed is being wasted from falling down between the slats or being spilt onto the floor around the trough and spoiled? This is expensive wastage. Identify why it is happening; is the hopper design incorrect for the size of pig, is overstocking causing uneven feeding, do feeder flow rates require adjustment or do the feed hoppers or feed system require repair?

Feed orders

Review your storage capacity and when placing feed orders discuss optimal load sizes with your feed supplier.

Vermin & birds

Is there evidence of rodents and/or birds on your unit? Look again at rodent and bird control. When was the last time the bait was changed, is it time to change it? Not only are vermin a health risk, but they can also lead to expensive feed waste.

Temperature

Monitor the daily min/max temperatures within buildings. High temperatures reduce the appetite and therefore growth rate of pigs. Cold temperatures cause pigs to use energy to maintain body heat, rather than using it to grow. See overleaf for recommended temperatures.

Water

Check water availability and flow rates. Water intake drives feed intake and therefore affects growth rate and FCR. See overleaf for recommended flow rates and water requirements.

- Are there sufficient functioning drinkers, providing a ready source of clean water, ie at least one nipple drinker per 10 pigs?
- Check flow rates, you just need a measuring jug/cylinder and a watch. Adequate flow rates are as essential as the number of drinkers.
- Are drinkers at the correct height for stage of pigs and are they correctly positioned to allow ready access?

Fighting

Is there evidence of ear biting or fresh shoulder scars in the group from fighting at or around the feeder? This is an indication that there may not be enough feeding space or that hopper placement/access is inadequate and requires improvement.

Hygiene

Check that the feeders are clean and that there is no caked feed or fouling in the feeder trough area. This should be cleaned out on a daily basis, to reduce wastage and to encourage intake.

Long term planning

It is clearly to the advantage of the pig producer to minimise the variation in future feed costs. This is essentially done by “locking in” prices. Although future prices may be locked in at higher than current prices, this should be more than outweighed by the knowledge of what your future feed costs are going to be. This knowledge is essential to successful business planning.

To help producers tackle these problems, BPEX and the National Pig Association (NPA) have joined forces to hold a series of risk management workshops during December to highlight what tools are available to help protect businesses from these volatile prices, their potential benefits and their limitations. For details see: <http://www.bpex.org.uk/articles/300906>

Recommended feeding space

Weight of pig (kg)	Trough/hopper length/pig	
	Restrict feed (mm)	Ad lib feed (mm)
5	100	75
10	130	33
15	150	38
35	200	50
60	240	60
90	280	70
120	300	75

Recommended building temperatures

Category of pig	Temperature °C	Temperature °F
Sows	15-20	59-68
Suckling pigs in creeps	25-30	77-84
Weaned pigs (3-4 weeks)	27-32	81-90
Later weaned pigs (5 weeks +)	22-27	71-80
Finishing pigs (porkers)	15-21	59-70
Finishing pigs (baconers)	13-18	55-64

Recommended water requirements and minimum flow rates

Weight of pig (kg)	Daily requirement (litres)	Min. flow rate through nipple drinker (l/min)
Newly weaned	1.0-1.5	0.3
<20	1.5-2.0	0.5-1.0
20-40	2.0-5.0	1.0-1.5
40-100	5.0-6.0	1.0-1.5
Sows/gilts (pre-service)	5.0-8.0	2.0
Lactating sows/gilts	15-30	2.0
Boars	5.0-8.0	2.0

Source: Code of Recommendations for the Welfare of Livestock – Pigs (Defra)

While the Agriculture and Horticulture Development Board, operating through its BPEX division, seeks to ensure that the information contained within this document is accurate at the time of printing, no warranty is given in respect thereof and, to the maximum extent permitted by law the Agriculture and Horticulture Development Board accepts no liability for loss, damage or injury howsoever caused (including that caused by negligence) or suffered directly or indirectly in relation to information and opinions contained in or omitted from this document.

© 2010 Agriculture and Horticulture Development Board (AHDB). All rights reserved.