



FINISHING

Simple calculations: feed conversion, daily gain and mortality

For producers not using an electronic recording system, there are some simple ways of calculating three key performance indicators.

Feed Conversion Ratio (FCR)

FCR represents the proportion of food that is converted into meat and is the hardest figure to calculate accurately, particularly if you have a continuous flow building with bins feeding into several rooms. However, you can get an estimated figure from using the amount of feed purchased in relation to the number of liveweight (kgs) sold.

Liveweight (kgs) sold can be calculated from the abattoir sheets using the total dead weight (kgs) and the kill out percentage figure.

FCR can be calculated over a set period, eg monthly, quarterly, annually or on a room, house or herd basis.

$\text{FCR} = \frac{\text{Feed intake}}{\text{average daily gain}}$	(make sure feed intake and average daily gain are both in either kg or g)
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Average Daily Gain (ADG)

Weighing all pigs at weaning, entrance into each stage and at slaughter can be time consuming; an alternative option is to weigh a selection of pigs to give an indication of the overall picture.

Select a room, a litter or 10–20 random pigs of various sizes (if possible tag these pigs so you can identify them) and weigh them at different stages. The most common time to do this is when moving to different accommodation, but as a minimum aim to weigh at weaning.

The ADG from weaning to slaughter can be calculated by using the average weaning weights, the average live weights at slaughter (estimated using the dead weights and the kill out percentage figure) and the age in days of the pigs.

Have a look at your abattoir sheets – how many pigs are ‘in the box’? Could it be worth while implementing a weighing strategy at slaughter?

$\text{ADG} = \frac{\text{Finish weight} - \text{start weight}}{\text{Age (days)}}$

Mortality

Mortality is relatively simple to calculate. Count how many pigs you have when they enter a room/building. Keep a record of pigs which: are ill, going into hospital pens, streamed off, sold or die. Use the number of dead pigs to calculate the mortality percentage for each room/building/stage and then work out an overall mortality figure from weaning to slaughter.

Targets: example industry figures

Combined Rearing and Finishing Herds 7–110kg: FCR and ADG figures for the 12 months ending March 2012

	Top 10% of producers	Top third of producers	Average
Feed conversion ratio	2.12	2.28	2.44
Average daily gain (g/day)	574	632	644

For the latest figures go to: www.bpex.org.uk/prices-facts-figures/costings/KPICombined.aspx

Action for Productivity 25: Improving Key Performance Indicators: Rearing herd, provides further guidance on FCR and ADG.

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