

Basic pig husbandry – grower herd

Greg Roesse and Graeme Taylor

Livestock Officers Pigs

Intensive Industries Development, Tamworth.

Introduction

The period from 20 kg liveweight to slaughter can be divided into two stages: a grower phase from 20–50 kg and a finisher stage from 50 kg to slaughter.

Growing stage: 20–50 kg

Management practices during this period are aimed at fast economical growth of pig meat and for this reason feeding is on a generous scale, often ad lib, using self-feeders to achieve quite heavy weights in pigs.

Reducing stress during this period is critical. Overcrowding in particular causes high stress factors, which depress the efficiency of food utilisation, limit growth rate and cause unevenness of growth.

Feeding

Diets fed during this period are termed 'medium density', with 13.8–14.5 megajoules (MJ) of digestible energy per kilogram (DE/kg) and 0.68–0.74 g available lysine/MJ DE.

Pigs differ widely in their response to various diets and general recommendations are inappropriate for any individual set of circumstances. Nutrient requirements vary according to the genetic quality and sex of the pig and the surrounding environment. Computer modelling using Auspig can determine diets and feeding regimens for individual piggeries.

Feeding levels

Most pigs should be able to reach 50 kg liveweight fed ad lib using self-feeders, without the pigs becoming excessively fat at slaughter. Genetically superior stock can be taken to heavier weights. Boars can also be fed at different levels and split-sex feeding attempts to make provision for these differences.



Frequency of feeding

If not on self-feeders the animals can be fed once per day unless problems with disease organisms are common or where the utilisation of certain nutrients, for example free lysine, would be affected and thus more frequent feeding would be advisable. This can be done quite easily where piggeries employ automatic feeding.

Disease

Outbreaks of disease can cause deaths, scouring, weak and stunted pigs and severe checks to growth, resulting in a loss of productivity.

- ***E. coli* or virus infections.** These infections can be a problem in some piggeries, with losses occurring even up to 3–4 months of age. Vaccination programs are effective for *E. coli* but management must still be of a high standard and any feed changes have to be made gradually. The pigs' environment has to be maintained at optimum levels.
- **Erysipelas.** Vaccinations should be carried out at 6 weeks and again at 12 weeks of age. The cost of vaccination will be amply rewarded, even if it prevents the death of only one pig.

- **Worms.** Depending on the disease status of the animals it may be necessary to worm pigs routinely. For effective control it is important to accurately diagnose what particular worms are present in the animals, as the worm species may vary from piggery to piggery. Most worm eggs passed in fresh manure require a period of time for development before they can cause infection. With the use of litter-based housing systems, worm control is important. Consult your veterinarian for advice on a suitable worming program.
- **Tail biting.** This is not uncommon in the early grower phase when pigs have been moved into less than ideal surroundings. Isolate the culprit, treat the affected animals and try to determine as quickly as possible what caused this outbreak of abnormal behaviour.
- **Glassers disease.** This is a bacterial infection most commonly affecting weaner pigs. Until recently it was an uncommon disease; however, its prevalence has increased due to the rise in the number of high-health-status herds, deep-litter housing and the mixing of weaners from different breeder herds at grow-out units. You will need to discuss vaccination programs, medication and management strategies with your veterinary consultant.

Grading

If pigs have not been sorted into groups for size and/or sex prior to or at weaning, they should be graded on entering the grower pens. This allows more accurate feeding by altering the amount and type of ration to be fed to each group.

This practice prevents larger animals squeezing out the smaller pigs at feed time, prevents the larger ones becoming too fat and prevents barrows becoming too fat on a ration which is more suited to gilts or boars.

Grading and penning under these circumstances will produce the maximum number of top grade pigs economically.

Temperature

Attention should be given to the comfort of the pigs at this stage, as temperature will affect growth rates and food conversions.

Temperatures can be under the control of the operator to some extent by:

- increasing or decreasing stocking rate;
- controlling ventilation and temperature by mechanical means;
- use of false roofing across pen divisions to provide warmth;
- using misters or spray cooling to reduce the effects of high summer temperatures.

Finishing stage: 50 kg to market weight

In this less critical phase of growth, problems likely to arise are weaknesses in management, such as overfeeding, or an outbreak of disease.

Pigs in this stage should require very little supervision but close attention must be paid to their daily feed allowances and nutrient intake, as they can lay down fat rapidly. They can be fed grower rations up to this weight and then switched to a finisher ration with a lower energy level of around 12.5–13.5 MJ DE/kg and available lysine ratios falling from 0.68–0.55 g/MJ DE, depending on the genetics and sex of the animal. Phase feeding can be utilised for large herds, with a number of diets fed over this period which have had energy and amino acid levels adjusted.

If there are difficulties in keeping within market grades you may need to procure superior breeding stock. If some restriction of feed is still required to produce lean carcasses then the following feeding scale can be used as guide.

Scale for restricted feeding

(Ration of 13.2 MJ DE/kg, 0.5 g available lysine/MJ DE)

Pig LW (kg)	Scale (kg/pig/day)			
	A	B	C	D
50	1.85	1.95	2.05	2.10
55	1.90	2.05	2.15	2.25
60	1.95	2.15	2.25	2.40
65	2.00	2.25	2.35	2.55
70	2.05	2.35	2.45	2.70
75	2.10	2.35	2.55	2.85
80	2.10	2.35	2.65	2.95
85	2.10	2.40	2.65	3.10
90	2.10	2.40	2.65	3.10

Aim to keep pigs comfortable and healthy and be on the lookout for any abnormal behaviour such as tail biting or for signs of discomfort.

It is wise to inspect pigs at feeding time or early in the morning to detect animals that have a poor appetite or those who are obviously sick. Prompt action is needed, as losses at this stage are

extremely costly. If possible isolate any sick pigs so that you can treat them more effectively.

Weighing

Manual weighing of pigs is very time consuming but is an invaluable management aid as it will help you to detect poor doers or to check on growth rates. Auto-draft machines are very useful for large groups on deep-litter systems and can result in more effective phase feeding.

If pigs are weighed weekly, a close check can be kept on conversion rates and growth rates. However, disturbances will cause stress, which will affect regular growth patterns. Therefore, little credence can be placed on conversion rates which have been calculated over only a short period. A compromise is to weigh all pigs at two-monthly intervals or to weigh potential sale pigs weekly and all pigs at weaning.

If performance testing is undertaken weigh pigs at 30–35 kg and again at pre-slaughter when the animals are backfat tested. The weight range should at least cover 35 kg or a 10 week period. An alternative is to consider that the birth weight was zero and to weigh pigs only when they approach slaughter weights.

'All-in, all-out'

Opinion differs as to whether slow-growing pigs should be held over until they reach market weight or be sent to market with their pen-mates when the majority of the pen-mates are ready for the market.

Most producers prefer the latter except where animals would be heavily penalised for being outside the weight range required by the processor. In larger units which have large groups of pigs on deep litter, auto-draft machines can be utilised.

Pigs left behind can be a nuisance, taking up valuable pen space. At this age they convert feed less efficiently and they are more likely to be fatter than their pen-mates when they reach the same weight. If you can identify them, they can be:

- pulled out early and sent to an alternative market; or
- drafted off during the latter growth phase and grown out separately; or
- graded out at sale and sent to an alternative market.

While management of grower stock is less demanding than for other classes of stock, a skilled stockperson will be on the lookout for any sign of trouble.

Further information

A wide range of information sources exists for those interested in the pig industry.

Australian Pork Limited (APL) is the national representative non-profit organisation for Australian pig producers. It combines marketing, export development, research, innovation and strategic policy development to help develop a viable and sustainable industry. Resources and contacts are listed on their website:

<http://www.australianpork.com.au/>

or they can be contacted on 1800 789 099.

Specific APL publications with more detailed information are as follows:

- *Weaning to sale kit*
- *Segregated early weaning manual*
- *The good health manual kit*
- *Principles of vaccination*

The Queensland Department of Primary Industries & Fisheries has an extensive range of fact sheets and resources available on their website: <http://www.dpi.qld.gov.au/pigs/>

A number of pig-specific magazines and newspapers exist, including:

- *Australian Pork Newspaper*, (07) 3286 1833
- *Pig Industry News*, (08) 8372 5222
- *Pork Journal*, (02) 9798 3078
- *The Pork Producer*, (07) 4690 9253

Published by NSW Department of Primary Industries

© State of New South Wales 2006

ISSN 1832-6668

Job number 6158

Updates of this Primefact are available at www.dpi.nsw.gov.au/primefacts

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (February 2006). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent adviser.