



Perspective

Physiological state, requirements and feed ingredients of feeding pigs

Hongguang Huang*

Department of Medical Genetics, Cairo University, Cairo, Egypt.

Accepted 15 December, 2021

DESCRIPTION

Feeding pigs

There is no such thing as a “standard” diet for pigs, it is critical to consider their nutritional needs when feeding them. The nutritional requirements are frequently simplified and expressed as an energy and protein requirement. The protein requirement is more precisely stated as a lysine requirement. Lysine is a crucial amino acid that shows the quality of protein in terms of the pig’s nutritional requirements.

The pig’s requirements: The nutritional requirements of pigs for optimal and healthy growth alter over time and are impacted by a variety of factors, including:

Age and body weight: A weaner/young pig requires a higher-protein, higher-energy diet than a finisher or adult pig.

Genetic potential of your pigs: Fast-growing breeds (such as the Large White, Landrace, and Duroc) require more protein in their diet than slower-growing types (e.g. Berkshire, Hampshire).

Housing environment: For example, pigs in a cold or hot environment (outdoors during the winter or summer) may expend more energy just to stay warm or cool, necessitating higher energy levels in the diet to maintain growth.

Physiological state of the pig: A pregnant sow’s energy and nutritional needs will differ from those of a sow feeding piglets or a young pig growing quickly.

Stock feeders offer a variety of produced complete feeds that are intended to fulfill the needs of different species of pigs. Feed firms, stock feed manufacturers, and private consultants can help you create manufactured diets that are tailored to your (and your pig’s) specific requirements. Feed costs account for 60-75 percent of overall operating costs in commercial pig production. As a result, failing to match the content of pig diets to their real needs has an impact on the pig’s health and well-being, as well as its growth and performance (in terms of reproduction and meat production) and the expense of keeping

the pigs.

Feed ingredients: Pigs are monogastric (single stomach) animals with inadequate fibre digestion (only 50% efficiency depending on kind of fiber and age of pigs). As a result, they are not adapted to consuming pasture alone and require supplemental nutrition. Pigs should be fed a complete (made) diet or a home mixed diet that has been specially developed to match their needs. Cereal grains are a fantastic source of nutrition for pigs, but they work best if they’ve been cracked, rolled, or soaked.

Wheat, barley, and lupins are the most common grains used in Western Australian pig production, but other grains like as peas, canola meal, and triticale are also utilized. Because the crude protein level of grains varies greatly depending on the season and source, caution should be exercised when selecting low-cost, low-quality components (e.g. weather damaged cereals).

Pigs are omnivores, which means they eat a wide variety of foods. If you’re making your own feed, a variety of other items should be added in small amounts to provide a well-balanced diet (e.g. meat meal, fishmeal, soybean meal, blood meal, tallow, minerals, vitamins, salt, and limestone).

Fresh fruit and vegetables can be added to pig diets, but you must ensure that the feed is not swill. Swill feeding is against the law. Learn more about swill.

Water: Fresh water should be readily available and accessible to all pigs at all times (including piglets). Cool water (maximum 18°C-20°C) should be available. If the supply lines are black poly pipe outside in the sun, they should be buried or insulated; otherwise, the water will be hot and undrinkable when it is most required.

If nipple drinkers are used make sure the water pressure coming through the drinkers is appropriate for the pigs’ age group to ensure adequate water intake. As a general rule, piglets and weaners should drink 0.5 litres per minute, growing pigs and dry sows should drink 1.0 litres per minute, and nursing sows should drink 2.0 litres per minute.

