Over several decades there has been a continual evaluation of the age at which piglets are weaned and the length of the sows’ lactation.

Prior to the modern pig industry developments in the late 1960’s, traditional 8 week weaning applied. This dropped to 5 weeks and was further reduced with the advent of flat decks (to 3 weeks) and cages (down to 9-10 days).

As the costs of energy and diets escalated the 1970’s & 80’s, the weaning of very small/young pigs became difficult. In addition, with very early weaning it was recognised that a penalty is paid by weaning below 21 days in terms of subsequent sow fertility and litter size.

From the mid 1980’s, the perceived wisdom and practical application in the UK was for weaning in the region of 25 days average. Of course this means that with once weekly weaning, there is a range of ages from 21-28 days and also that on many farms the recorded weaning age is actually the sow lactation length. The use of late foster sows - retained to help excess or small piglets means that actual average weaning ages can be 2 days less than the sow’s lactation length. In more recent times with the advent of hyperprolific sows which require the farm to operate programmes that see 15% of pigs late fostered (ie a sow rears a second litter of excess piglets) this discrepancy between weaning age and lactation length has grown further.

It is interesting to note that through the 1990’s, the booming US pig industry drifted towards earlier weaning (typically 16 days) - a practice abandoned in the UK before legislation banned the routine weaning of pigs below 21 days. This was a result of economic pressures with farrowing place costs outweighing cheap energy costs to heat flat decks and the continued use of blood plasma in weaning diets to provide easily digestible animal protein. Plasma is not used in the UK and is specifically proscribed under Red Tractor quality assurance standards. There was also a lack of consumer pressure in the US to avoid early weaning.

In the last 15 years or so, the UK has seen a drift back up in weaning age initially as producers struggled to cope with the ravages of PMWS and the belief that older pigs resist this disease better than younger pigs.

Furthermore, the advantages of improving weaning weight on the subsequent growth of pigs- most easily achieved by raising weaning age - have been applied in an era of raised feed costs.

Within the UK herd, a small niche population of organic production weans at a much later stage - typically 6-8 weeks of age but such production approaches are only viable where considerable price premiums are available rendering calls from lobby groups to ban "early weaning" somewhat futile.

As always, the age at which to wean and, hence, the lactation length of the sow will be a compromise of a number of considerations:-

1) Producing a pig of suitable size to cope with the weaning accommodation.
2) Avoiding the "immunity gap" between 3 and 4 weeks.
3) Maximising sow fertility.
4) Maximising litters per sow per year. ie improve farrowing index
5) Maximising pigs produced per sow per year
6) Lactation ability of the sow.

A number of "rules of thumb" can be applied, and whilst they are averages, can be broadly applied.

1) An extra 1kg on piglet weaning weight is worth a reduction in days to slaughter of 9-10 days saving 14kg of feed saving up to £3 per pig in feed.
2) Sows weaned at 28 days rather than 21 days on average produce 1 pig per litter more in the subsequent lactation. This will yield an extra 1 pig per sow per year born, even allowing for the additional non productive days.
3) Modern day sows selected for fertility but inevitably bred as lean animals reach peak milk production in the 3rd week of lactation (compared to the 5th week in the old traditional sows) and quality and quantity of milk drops off after 28 days.
4) "Burn out" of lean sows is achieved earlier and the longer the lactation, the more rapid this will be, shortening the productive life of the sow.
5) Milk production is initially affected by feed and water intake and limits imposed will both reduce milk yield and lead to excessive loss of condition.

6) Creep feeding is an art and to achieve significant and satisfactory intakes requires a lot of attention.

Clearly, where staff are under pressure of working time, the management of the sucking piglet and suckling sow come under pressure and this will tend to be exacerbated by longer lactation.

**The Role of PMWS**

During the early devastating outbreaks, there was a view that extending weaning age to 5 weeks helped in the control of PMWS. Experience showed however that it was not a simple matter.

PMWS in some ways became a model for disease management of many enzootic diseases. A critical point for weaning with respect to the subsequent development of PMWS seemed to be 22-25 days minimum. Moreover, the age old technique of stealing younger, well grown pigs to wean in exchange for poorer older pigs plays a role in developing disease - the younger pigs being more vulnerable, the older rolled back pigs appearing to exacerbate the cycle of disease.

**So, when to wean?**

Under the Welfare of Farmed Animals (England) Regulations 2007 and equivalent regulations covering devolved administrations, weaning routinely below 28 days is not permitted in the UK. Piglets however may be weaned up to 7 days earlier provided they are weaned into a cleansed and disinfected pen separate from housing where other sows are kept. This means that other than in special circumstances where the health and welfare of the sow or piglets would be compromised, there is an absolute embargo on weaning piglets below 21 days of age. Conversely, retention of sows in a farrowing crate for more than 28 days after weaning - as a routine - is considered by many to compromise the sow’s welfare. The gradual development and adoption of free farrowing systems where there is either no crate or the crate is openable/removable may offset these objections. This rather limits the options of the indoor producer weaning once per week. Options available particularly to avoid this "below 25 day trap" are limited to splitting weaning with the week, although this may compromise the management of nursery accommodation. The application of batch farrowings - if rigorously applied - may be an option, although in practice many herds that operate such a system have such a wide range of farrowing dates within batches that weaning once every few weeks leads to even greater range of weaning ages and lactation lengths. In many cases of 3 week batch production weaning age range can vary between 16 & 35 days of age which is not only illegal but totally counterproductive. Such systems can be regarded as batch weaning rather than the desired batch farrowing.

In general, where sows are retained as foster mothers for extended lactation, it is best to avoid using gilts and do not use the same sow in consecutive lactation. Cull sows may be appropriate, although these are often very large and hence with large teats that may not suit small piglets or may be poor milkers - hence the reason for culling!

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**Boehringer Ingelheim**

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