

ARTICLE – “Avlsnyt”, January, 1999

## **Growth Promoters for Piglets are Unnecessary**

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**Thanks to a new product concept, the possibility has been opened up that better growth can be achieved by avoiding antibiotics completely.**

Earlier this year, the agricultural organizations have entered into an agreement with the government about leaving out the application of antibiotic growth promoters for piglets in such a way that the whole concept of antibiotic growth promoters could be eliminated. They were hoping that it would be possible within a relatively short period of time to compensate for this.

### **Various lines of approach to a future compensation ...**

For the herdsman, there are several approaches to the problem which to some extent supplement each other:

- Intervention in the bacterial flora of the intestine, typically by antibiotics, but in principle the "acid discussion" is merely a substitute for the same.
- Actions to take and risks involved in connection with the choice of stable equipment, splitting up into groups, equalization of litters, etc.
- As it is not possible to reach perfection in selection breeding, it is necessary to give priority to the objectives which offer the biggest possibilities of financial gain. If the economic conditions change substantially, breeding targets that used to have a low priority may be given a higher priority.
- Application of probiotics, by which a process that is already taking place in the intestine is accelerated.

### **The intestine in the suckling pig ...**

When the subject of diarrhoea and growth is brought up, the intestine is where the action is – and when some of the basic facts are being listed, a picture starts to be formed:

- The piglet increases its intestine by 12 metres during the 8 first weeks!
- In the fully-grown pig, the total surface of the intestinal system covers 200 m<sup>2</sup> – the large surface is due to the many villi.
- The villi will be damaged during an attack of diarrhoea. Until quite recently, it has been generally believed as a fact that they will be fully restored after a period of diarrhoea, but according to the most recent knowledge, this is not the case.
- Well-developed villi and their crypts are "the Alpha and Omega" for the nutritional intake in piglets.
- The enzyme system in the suckling piglet is not functioning at all during the first few weeks, so the piglet is unable to make use of even the best premixes, no matter what efforts have been made in developing the formula. So the old wisdom that you do not have to worry if only you can get the piglet to eat as early as possible is not exactly supported by the facts.

### **SYSTEM 1-2-3**

Trials carried out at universities around the world have shown that the product FerPect which, today, is the most popular oral iron supplement in Denmark, has an effect beyond the iron

supplementation. BIOFIBER•DAMINO has developed this further and now is launching the product concept SYSTEM 1–2-3, consisting of a fibre-based oral iron product plus a fibre-based dietetic feed supplement plus an anti-scour remedy on the basis of fibres. This system is revolutionary in that way that it consists of selected, specially treated components of which the piglet can make use in spite of the fact that its enzyme system has not yet started functioning. The production is carried out by way of a recently patented manufacturing process that makes this possible at prices, which are interesting for the piglet breeder.

### **Exact Dosing ...**

SYSTEM 1+2 must be applied at the rate of 225 g per piglet, and no other supplement must be given during the first 17 days of life. The reason why no other supplement must be given is that during the first 17 days, the piglet on the whole is not able to absorb more than 8 g dry feed per day besides the sow's milk. This is why the product that is to be administered must be "enriched baby food", and the improved nutritional value thus added must not be reduced by intake of other feedstuffs within the 8 g. These few grams per piglet – a total of 225 g – cost DKK 5,00 per piglet and at the same time as it renders further iron supplementation superfluous. In this way, the growth of the villi and crypts of the piglet is consolidated at a time that is crucial for the continued power of resistance of the piglet. Already at the time of the weaning, a small increase can be recorded, but the big advantage can be seen in the weaning stable and in the fattening stable – i.e. a long-term effect.

### **Diarrhoea ...**

At SYSTEM, a reduced frequency of weaning diarrhoea can be established which can be explained by the fact that now the piglet is tackling more cases by itself. In case problems with diarrhoea still occur during the first days after weaning, these cases can be solved by way of the third product of the concept: DanPect which must be used 3-5 days as a top dressing on the dry feed or mixed with the wet feed.

It will still be necessary to use antibiotics in the difficult cases, but only to a much lesser extent. This is why the concept offers the big advantage that in herds where the danger of resistance to antibiotics increasingly gives rise to concern; this programme may reduce this risk considerably.