

**NEW VISION CO-OP
"PIG'S EAR"**

"IMPROVEST"

Improvest is the new FDA approved veterinary prescription product from Pfizer that is an effective alternative to physical castration to manage the offensive odors resulting from cooking pork from male pigs. Improvest is a protein compound that works like an immunization to temporarily prevent the offensive odors. To utilize Improvest requires feeding the boars separately from the gilts.

Improvest Definition:

IS	IS NOT
A protein compound	A hormone
An immunological product	Chemical castration
Temporarily in effect	Genetically modified
Using the pig's own immune system	A growth promotant
Given by subcutaneous injection	Added to feed

Improvest performance results:

- 6 – 10% improvement in feed efficiency (Boars vs. Barrows)
- 4 ¼% improvement in average daily gain
- 2 ¼% increase in carcass yield
- 1.6% decrease in mortality
- 0.5 – 1.5% increase in carcass leanness over barrows, but similar to gilts.

Improvest administration protocol:

- Improvest needs to be purchased through your veterinarian. The veterinarian is responsible for informing and training swine producers of its proper use.
- Improvest is injected subcutaneously into the neck of the pig.
- Example timing of administration for a 270 lb market weight hog:
 - 1) 1st injection of 2 ml at approximately 80 to 110 lb (no earlier than 9 weeks of age)
 - 2) 2nd injection of 2 ml at 4 to 6 weeks after 1st injection or approximately 160 to 180 lb.
 - 3) Check for any misses at 2 weeks after 2nd injection. If a miss, inject 2 ml.
 - 4) Can start marketing at 3 weeks after 2nd injection, but before 10 weeks after the 2nd injection. The preferred marketing time is approximately 6 to 7 weeks after 2nd injection. The reason for the 6 – 7 week length of time is the belly composition and pounds of the improvest pigs are then similar in composition and pounds of a barrow belly.

Improvest diet adjustments:

- Boars have a higher lysine requirement than gilts. Most mixed sex diets being fed are based on gilt lysine requirements. Therefore, the suggested increase in lysine is:

Body Weight Range	Increase in Lysine Compared to Gilts
50 lb to 110 lb	+ 5%
110 lb to 2 nd injection (approximately 160 to 180 lb)	+ 8%

- After the 2nd injection the dietary lysine is reduced, compared to gilts, to the suggested requirement for barrows. This phase represents approximately 40% of total feed requirement.

Body Weight Range	Decrease in Lysine Compared to Gilts
2 nd injection (approx. 180 lb to 270 lb)	- 6%

- Post 2nd injection feed intake increases approximately 18%, average daily gain approximately 13%, and back fat increases approximately 17%.

Improvest economics:

- Estimated cost for 2 injections = \$4.00 to \$4.50
- Estimated labor for 2 injections = \$0.50
- Extra estimated feed cost to approximately 180 lb = \$0.70
- 9% improved feed efficiency from 50 to 270 lb
55 lb of feed x \$0.145/lb of feed = [\$8.00]
- Estimated increase in survivability of 1 ½% = [\$0.60]
- Losses due to castration + leanness, - dressing percent = [+]

Improvest Injection Protocol and Labor:

Swine producers have 2 choices:

- Veterinarian Contract Service Provider
 - Veterinarian trains and oversees grower's personnel doing injections and checks for misses.
 - or, veterinarian does entire program
- Pfizer crews
 - In certain areas there will be 3-men crews available to do the injections and checking for misses.

Improvest Compatibility:

- Improvest and Paylean are compatible and additive.

Improvest Acceptance by Packers:

- Currently only a few smaller packers have approved the use of Improvest in the U.S.
- Major packers are evaluating Improvest usage.

For additional information on the Co-op Swine Nutrition Program contact your local Co-op feed department or the swine nutritionist.

Worthington	Neil Cuperus.	1-800-657-3200
Swine Nutritionist	John Goihi	1-800-322-0437