

# 4-H SWINE NUTRITION

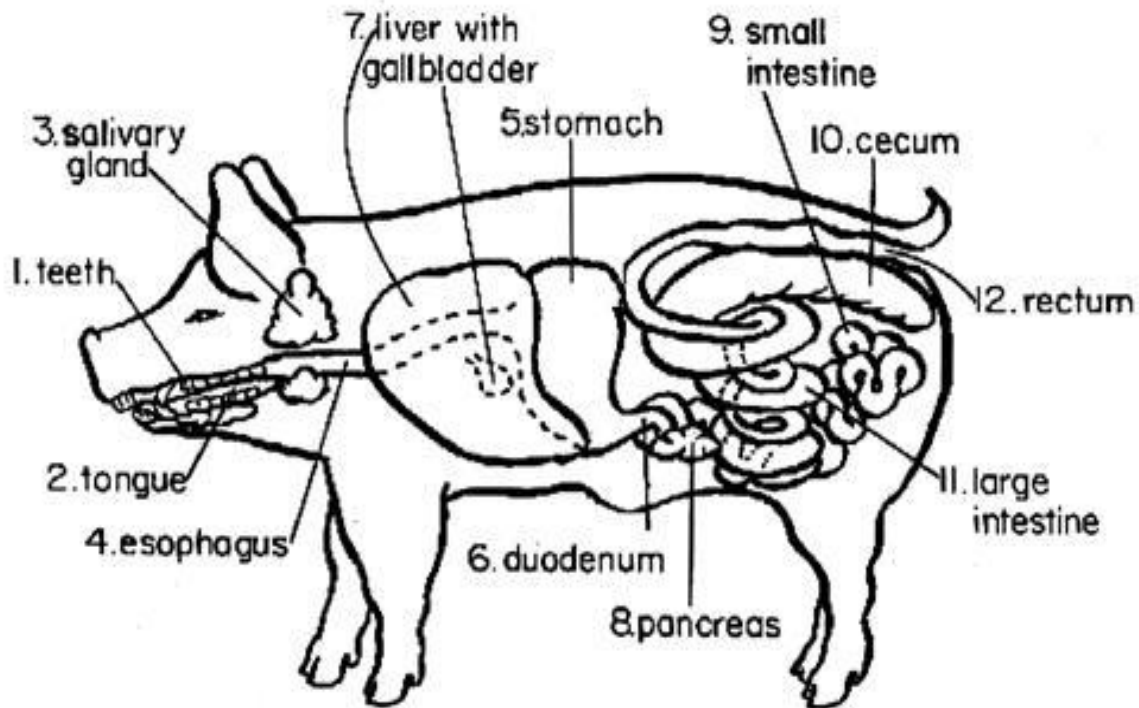
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CHS Nutrition

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# YOUR 4-H PROJECT

- ◉ Breeds
- ◉ Body parts
- ◉ Management
- ◉ Record keeping
- ◉ Showing
- ◉ Budget
- ◉ NUTRITION!!!!

# DIGESTIVE TRACT



**Convert Feed to Meat**  
**3 lbs Feed = 1 lb**

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# SWINE PRODUCTION

## ◎ Phase Feeding

- Starter
- **Grower**
- **Finisher**
- Gestation
- Lactation



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# WHAT TYPES OF NUTRIENTS ARE THERE?

Protein

Carbohydrates

Fats

Vitamins

= Energy

Minerals

WATER

# WHAT ARE THE 5 MAJOR NUTRIENTS?

- ① Water
  - Most important nutrient
- ② Protein
  - Help animal create muscle, milk, enzymes, & more
- ③ Energy
  - Carbohydrates & fats give animals energy
- ④ Minerals
  - Basic foundation for nutrition. Needed for strong bones, heart & nerves to work, and body fluid balance
- ⑤ Vitamins
  - Include vitamin A,C,D,E,K and B vitamins. These are needed for strong bones, vision, growth, & milk production

# TYPES OF NUTRIENTS...

- ⦿ Water - the **MOST IMPORTANT**
- ⦿ Animal's body is **70%** water
- ⦿ Important for nutrient transport, waste removal, and digestion
- ⦿ Supply **CLEAN, FRESH SUPPLY** daily!!!



# DAILY WATER NEEDS FOR LIVESTOCK

- Beef Cattle- 7 TO 17 Gallons
  - Dairy Cattle- 10 TO 29 Gallons
  - Horse- 8 TO 12 Gallons
  - Sheep/Goats- 1 TO 4 Gallons
  - Swine- 3 TO 6 Gallons
- 
- Maintain cool, clean, free choice access to water!



# FEEDING OPTIONS...

- ◎ Complete Feeds
- ◎ Concentrates
  - Require Grain
- ◎ Premixes
  - Require Grains
  - Protein Source

An advertisement for PAYBACK Champion feed. The background is a green gradient. At the top, the word 'PAYBACK' is written in white on a dark brown banner. Below that, the word 'Champion.' is written in a large, bold, white serif font. Underneath, the text 'High-quality performance nutrition for the show ring.' is written in a smaller, white, sans-serif font.

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**Champion.**

High-quality performance nutrition for the show ring.



# WHY A COMPLETE FEED OVER OTHER FEEDS?

- ⦿ Don't need to add anything!
- ⦿ Energy dense with grains and fats to get optimal performance
- ⦿ Added lysine (most limiting amino acid that is needed for muscle growth and development) Requirement: 1% Lysine
- ⦿ F:G 3:1 vs. 3 ½ -4:1 F:G, which means it takes less feed to get the results you are trying to achieve
- ⦿ Grain products- Lighter, skinner; some tend to be fatter with less muscle; stand out in the show ring!!!

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# MEDICATIONS- CTC?

- ◎ Why does my feed contain CTC?
  - Improved feed efficiency and it reduces scours; we also see less respiratory issues in the hogs
- ◎ Is there a withdrawal period?
  - NO! There is NOT a withdrawal period; it says right on the tag!
- ◎ What is Bio-Mos and why is that in my feed?
  - All natural additive....“Sticky Sugar” that helps animals if they are exposed to salmonella or e-coli

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# HOW DO I KNOW WHAT TO FEED TO REACH MY GOAL BEFORE FAIR?

<b>Payback Feeds Swine Feeding Sheet</b>				
<b>Hog Wt.</b>	<b>Days on Feed</b>	<b># of Feed</b>		
50	1	12	3.00	
75	13	24	3.75	
100	25	36	4.50	
125	37	48	5.00	
150	49	60	5.75	
175	61	72	6.25	
200	73	84	6.50	
225	85	96	6.75	
250	97	108	7.00	

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# HOW DO I FIGURE ADG?

$$\text{ADG} = \frac{\text{FINISH WEIGHT} - \text{CURRENT WEIGHT}}{\text{DAYS UNTIL SHOW}}$$

# WHERE TO START WITH ADG

## Projections

Desired weight at the fair	_____
Starting Weight	_____
Pounds needed of gain	_____
Days to fair	_____
ADG	_____

# ADG EXAMPLE

## ⦿ Market Hog

- 280# target wt- 70# current wt= 210# gain
- 90 days to the fair
- $210\# / 90 \text{ days} = 2.3\#$  of gain per day

# FEEDING FOR THE SHOW



- Grains- whole, ground and rolled-  
Corn, Oats, Barley
- Protein-SBM, canola, DDG
- Fat- Vegetable oil, DDG, Rice Bran



# SWINE FEEDING OPTION

- ◉ Self Feeders- check them out daily to make sure the feed is flowing through them
- ◉ Hand feeding- feed pans



# WHAT TOOLS WILL YOU NEED TO HAVE?

- ① Feed
- ① Scales
- ① Feed sheets
- ① Feed bunks/ buckets
- ① Weigh tapes
- ① Shelter
- ① Water source
- ① Patience and attention

# SWINE MANAGEMENT

## ◎ Feed

- Give pigs free choice of feed
- Feed intake can be limited to control gain

## ◎ Water

- Fresh and Cool

## ■ Housing

- Provide Plenty of Shade

## ■ Vaccination

- Worm Pigs that are Living in Dirt Pens



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# PEDV

- ⦿ Virus (causes diarrhea), very contagious and will be harder on younger pigs worse than older pigs
- ⦿ Keep pens clean and dry
- ⦿ Bio Security- be clean
  - Clean boots, hands, anything that has manure on it

# ANIMALS WILL GO OFF OF FEED

- ⦿ **Animals tend to go off feed if:**
  - No water is available to drink or the water is frozen, too hot or dirty
  - They are sick
  - They are stressed
- ⦿ **Animals may not reach a desired level of performance:**
  - Stress such as washing, or training at the heat/cold of the day
  - Less than optimum genetics
  - The animal needs to be de-wormed
  - No preventative health program has been implemented



# FOR THE BEST SUCCESS...

- ① Choose an animal that is at the proper weight and age for the targeted date of the show.
- ① Provide clean, cool water at all times.
- ① Feed at least 2X a day on a **regular schedule**. Feed by weight and not volume! If self-feeding, never let the feeder run empty and keep it clean of bad feed and foreign material.

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# FOR THE BEST SUCCESS...

- ① Work with animals during the comfortable time of day for the animal.
- ① Provide adequate shade and wind protection for animals and if needed keep them dry/wet depending on conditions.
- ① Provide a health program along with a deworming program.

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# FEEDING FOR THE PURPLE RIBBON

- ◉ Keep your feed consistent
- ◉ Management
- ◉ Outline your goals and objectives when starting your project so you know what you want to achieve





# GOOD LUCK



- Work hard
- Enjoy your project
- Having fun doing your work, it is not work
- Try to do better than you did last year
- Thank your parents and your leaders for the opportunity to be in 4H!

# THANK YOU

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