

Beyond the feed bag:

Practical Pig Nutrition for
Successful Pig Farming



*How do we turn feed into pig growth —
efficiently and profitably?*



Meet Petrus

 Petrus has 15 pigs

He wants to:

-  Grow healthy pigs
-  Reach market weight
-  Reduce feed costs
-  Avoid wasting feed
-  Make a profit



What would you do
if these were your pigs?



What is your biggest challenge?

- ☐  Feed costs are too high
- ☐  My pigs aren't growing fast enough
- ☐  Too much feed is being wasted
- ☐  Water is a problem
- ☐  My pigs are getting sick
- ☐  I'm not sure if my feed is working





NutriBlend

BETTER NUTRITION • HEALTHIER PIGS • STRONGER FARMS

IF I GAVE YOU N\$5,000 TODAY...

Where would you invest it in your pig farm?

☐

Feed

☐

Piglets / weaners

☐

Medication

☐

Housing

☐

Water

☐

Something else



There is no wrong answer...

But one cost affects almost everything else.



What does a pig actually eat?

? *What does this pig really need from its feed?*



Feed ingredient $\neq$ nutrient

Ingredient		What it provides	
	Maize		Energy Fuels growth and activity.
	Soybean meal		Protein & amino acids Builds and repairs body tissues.
	Limestone		Calcium Builds strong bones and teeth.
	Salt		Sodium & chloride Supports fluid balance and appetite.
	Water		Essential for life & performance Regulates body functions and performance.



Key message:

A pig doesn't need ingredients — it needs nutrients.
The ingredients are simply how we deliver those nutrients
in the **right amounts** and **balance**.



Building a healthy pig is like building a house.



Energy

= power to do the work
Provides the fuel for growth and activity.



Amino acids / protein

= bricks
Builds and repairs body tissues.



Minerals

= cement & building materials
Builds strong bones and supports many body functions.



Vitamins

= tools and helpers
Help the body work properly and stay healthy.



Water

= essential throughout the whole process
Needed for digestion, nutrient transport and temperature control.



More of one nutrient does not automatically mean more growth.
The **right balance** of all nutrients is what builds stronger pigs.



THE RIGHT FEED FOR THE RIGHT PIG

One feed does NOT fit every pig



Piglet



Grower



Finisher



Pregnant sow



Lactating sow



Boar



Key message:

The pig's nutritional requirements change as its production class changes.

Every pig has a different job

	Piglet	Grower	Finisher	Pregnant sow	Lactating sow	Boar
Pig 						
Main objective 	Rapid growth & development 	Efficient muscle growth 	Efficient saleable weight gain 	Maintain herself + grow babies 	Produce milk + maintain condition 	Maintain condition + reproduction 



Key message:

The pig's nutritional requirements changes as its production class changes.



THE COST OF FEEDING THE WRONG DIET

Too much of what a pig doesn't need is wasted. Too little of what it does need limits performance.

1 Feeding a **finisher** like a **piglet**



You pay for nutrients the pig doesn't need.

2 Feeding a **piglet** like a **finisher**



The pig doesn't get enough of what it needs to grow.

WEANER



Supports rapid growth & development.



GROWER



Builds lean muscle efficiently.

FINISHER



Optimises efficient weight gain.



As the pig changes, its nutritional needs change.

So should its feed.



KEY TAKEAWAY:

The right nutrition at the right stage protects both performance and profitability.

How much feed does a pig need at each stage?



BIG QUESTION:

“How much should I feed my pig every day?”



A pig cannot perform properly if it receives too little feed.



The amount changes as the pig grows.



Weaner



Small intake, nutrient-dense feed



Grower



Increasing intake to support growth



Finisher



Higher intake for efficient weight gain

WEANER

Supports early growth and development



GROWER

Builds lean muscle and frame



FINISHER

Optimises efficient weight gain



FEED THE PIG ACCORDING TO ITS STAGE AND REQUIREMENTS.

Don't guess – monitor intake, growth and performance.



HOW MUCH SHOULD YOU FEED?

A practical starting guide — then monitor and adjust.

GROWING PIGS

	 Piglet / early nursery Supports early growth and development.	APPROX. FEED INTAKE PER DAY (practical guide) 0.2 – 0.7 kg per day	
	 Weaner Transition and steady growth.	0.7 – 1.3 kg per day	
	 Grower Builds lean muscle and frame.	1.3 – 2.2 kg per day	
	 Finisher Optimises efficient weight gain.	2.2 – 3.3 kg per day	

Pig grows
→ feed
intake
increases

BREEDING ANIMALS

	 Pregnant sow	1.7 – 2.7 kg per day*
	 Lactating sow	Target average ~ 6.0 kg per day*
	 Boar	2.5 – 3.2 kg per day*
 Breeding animals require individual adjustment. Consider body condition, body weight, production demand, litter size, stage of lactation, health and environment.		



FEED INTAKE WILL VARY with diet energy density, health, environment, water availability and management.

Use these ranges as a starting guide.
Weigh pigs regularly and monitor feed intake, growth and body condition.



Measure
feed intake



Monitor growth
& body condition



Adjust
accordingly

**START WITH
THE RIGHT RANGE —
THEN ADJUST.**

DON'T UNDERFEED — THE GROWING PIG —



MEET MAX

Adequately fed. Thriving.



VS.



MEET BUSTER

Underfed. Falling behind.



- ✓ Steady, fast growth
- ✓ Reaches market weight sooner
- ✓ Better feed efficiency
- ✓ Higher sale weight
- ✓ Higher profit

- ✗ Slower growth
- ✗ Takes longer to reach market weight
- ✗ Lower profit potential

THE HIDDEN COST OF UNDERFEEDING



Slower growth



More days before market



More days paying for housing & labour



Lower sale weight or delayed sale



Poorer overall efficiency



Less profit potential



BIG MESSAGE:

Feeding less may save money today —
but cost you more at market.



IS MY PIG GETTING ENOUGH?

7 practical checks every farmer should make.

1 BODY CONDITION



 Is the pig too thin?

2 GROWTH



 Is it gaining weight as expected?

3 FEED INTAKE



 How much is actually being eaten?

4 COMPETITION



 Are smaller pigs getting their share?

5 FEED AVAILABILITY



 Is feed available when needed?

6 WATER



 Can every pig access clean, fresh water?

7 HEALTH



 Could health problems be limiting growth?



THE TROUGH
Shows what you offered.



THE SCALE
Shows what the pig achieved.

Measure both.
Don't guess.



**DON'T JUST MEASURE THE FEED.
MEASURE THE PIG.**



CHECK
REGULARLY.



ADJUST
EARLY.



LET'S DO THE MATHS

Simple maths. Real impact on your pocket.



FEED USED
(grower phase)
X kg



GROWER RATION COST
R8 000/ton



SLAUGHTER PRICE
R40/kg
(liveweight)



OPTION 1: FEED PROPERLY 2.0 kg/day



Grower ration cost
R8 000/ton



ADG (Average Daily Gain)
850 g/day



DAYS UNTIL MARKET
60 days

VS



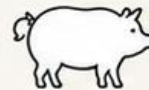
OPTION 2: UNDERFEED 1.5 kg/day



Grower ration cost
R8 000/ton



ADG (Average Daily Gain)
640 g/day



DAYS UNTIL MARKET
60 days



DON'T LOOK ONLY AT FEED USED.
LOOK AT WHAT IT TOOK TO PRODUCE THE PIG.



TURNING FEED INTO GROWTH

How much feed does it take to produce 1 kg of weight gain?

FCR – FEED CONVERSION RATIO



$$\text{FCR} = \frac{\text{FEED CONSUMED}}{\text{WEIGHT GAINED}}$$

FCR tells us:

How many kilograms of feed it takes to produce 1 kg of weight gain.

EXAMPLE:



2.5 kg
FEED



1 kg
WEIGHT GAIN



WHAT IS THE FCR?

$$\text{FCR} = 2.5$$



**LOWER FCR =
BETTER FEED
EFFICIENCY**

A lower FCR means you get more growth from less feed.



**DON'T JUST MEASURE FEED USED.
MEASURE WHAT THE FEED PRODUCED.**

- ✓ Measure feed intake
- ✓ Measure weight gain
- ✓ Know your FCR



MORE FEED $\neq$ MORE GROWTH

Feeding beyond a pig's needs does not automatically improve FCR.



If I give my pig more feed, will it automatically grow faster?



NOT NECESSARILY.

THE GOAL



RIGHT AMOUNT
OF FEED

+



BALANCED
NUTRITION

+



HEALTHY
PIGS

+



GOOD
MANAGEMENT



EFFICIENT GROWTH

MORE FEED



- ✗ Wasted feed
- ✗ Higher feed cost
- ✗ May not improve growth

THE RIGHT AMOUNT OF FEED



- ✓ Feed used efficiently
- ✓ Supports good growth
- ✓ Better FCR

VS.



Ask yourself:

Is the extra feed producing extra growth?



DON'T FEED FOR A FULL TROUGH. FEED FOR RESULTS.
The right nutrition, in the right amount, with good management.



TURNING FEED INTO PIG

LET'S TALK ABOUT MONEY

JOHANNES

Omaruru Region, Namibia



Johannes focuses on
saving money
in his pig business.



FEED EATEN
3 kg/day



WEIGHT GAINED
0.5 kg/day

CALCULATION

3
kg/day

÷

0.5
kg/day

=

6

FCR = 6.0

FCR = Feed consumed ÷ Weight gained



TURNING FEED INTO PIG

LET'S TALK ABOUT MONEY

MARLENE

Oshakati Region, Namibia



Marlene focuses on
maximizing growth
in her pig business.



FEED EATEN
3 kg/day



WEIGHT GAINED
0.75 kg/day

CALCULATION

3
kg/day

÷

0.75
kg/day

=

4

FCR = 4.0

FCR = Feed consumed ÷ Weight gained

JUDGING BY THE NUMBERS...

Which FCR is better – Marlene or Johannes?



FCR BECOMES MONEY

Same Goal: 50 kg Weight Gain

MARLENE

Oshakati Region, Namibia



Marlene focuses on
maximizing growth
in her pig business.

FEED PRICE
N\$9 / kg

FCR
4.0



Feed needed for
50 kg gain

200 kg

=

200 kg
x
N\$9

=

TOTAL FEED COST
N\$1,800

(50 kg gain x FCR 4.0 = 200 kg feed)



Same goal
50 kg
weight gain



FCR
(Feed Conversion
Ratio)



Feed needed
to reach the
goal



Total feed
cost

JOHANNES

Omaruru Region, Namibia



Johannes focuses on
saving money
in his pig business.

FEED PRICE
N\$8 / kg

FCR
6.0



Feed needed for
50 kg gain

300 kg

=

300 kg
x
N\$8

=

TOTAL FEED COST
N\$2,400

(50 kg gain x FCR 6.0 = 300 kg feed)



BETTER FCR. LOWER FEED COST.
MORE PROFIT.

MARLENE SAVES
N\$1,275
(N\$2,400 – N\$1,800)

Marlene spends N\$1,275 less
in feed to achieve the same
50 kg weight gain.



Lower FCR means your pigs grow more on less feed – and that puts more money in your pocket!

THE CHEAPEST FEED?

Helena

Oshakati Region



FEED PRICE

N\$7/kg



FCR

(FEED CONVERSION RATIO)

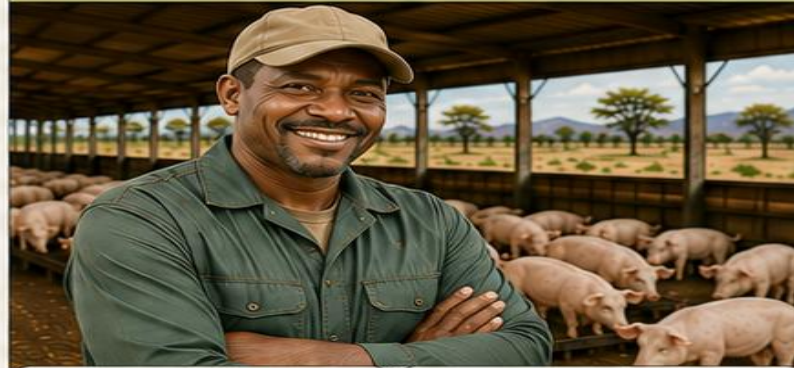
5.0



Uses cheaper feed,
but pigs need more
feed to grow.

Paulus

Otjiwarongo Region



FEED PRICE

N\$8/kg



FCR

(FEED CONVERSION RATIO)

3.8



Good balance – pigs grow
more efficiently, so feed
goes further.

Ben

Kavango East Region



FEED PRICE

N\$6/kg



FCR

(FEED CONVERSION RATIO)

6.0



Cheapest feed,
but pigs need a lot
more to grow.



DON'T ONLY ASK:

***"HOW MUCH IS
THE FEED?"***



ASK:

***"HOW MUCH DOES IT
COST ME TO PRODUCE
1 KG OF MEAT?"***



Lower FCR = Less feed to grow = Lower cost per kg of meat = More Profit

WHAT IF THINGS GO WRONG?

“My pigs aren’t growing!”

*“My pigs are eating,
but they aren’t growing
like I expected.”*



THINK LIKE A DETECTIVE

Find the clues. Solve the problem. Improve growth.



FEED

- What feed?
- Correct production stage?
- How much?
- Good quality?
- Properly stored?



PIG

- Age?
- Weight?
- Health?
- Parasites?



WATER

- Always available?
- Clean?
- Enough flow?
- Working drinkers?



ENVIRONMENT

- Heat?
- Ventilation?
- Space?
- Competition?



MANAGEMENT

- Feed wastage?
- Mixing different pig classes?
- Feeding routine?



Good growth is no accident – it's the result of **checking the right things!**



WHAT WOULD YOU DO?



SCENARIO 1

*"Feed is expensive...
so should I give my
pigs less?"*

WHAT DO YOU THINK?



GOOD IDEA



Raise your hand!



BAD IDEA



Raise your hand!



LESS FEED CAN LEAD TO:



Slower growth



More days
to market



Higher overall
cost



**SAVING FEED TODAY
DOES NOT ALWAYS
MEAN SAVING MONEY
OVERALL.**



Make smart decisions today for
better growth, lower cost and **higher profit** tomorrow!



SCENARIO 2

“My pigs are eating well but aren’t growing.”

WHAT WOULD YOU CHECK?

A



FEED QUANTITY

B



FEED QUALITY / FORMULATION

C



WATER

D



HEALTH / PARASITES

E



HEAT / STRESS

F



ALL OF THE ABOVE



A. FEED QUANTITY



B. FEED QUALITY / FORMULATION



C. WATER



D. HEALTH / PARASITES



E. HEAT / STRESS



F. ALL OF THE ABOVE



KEY MESSAGE: | Poor growth is **not always** a “feed quantity” problem.



WHAT IS THE MOST IMPORTANT NUTRIENT FOR A PIG?



WATER

Pigs can survive longer without feed than without water!

MAKE SURE WATER IS:



AVAILABLE

Always available.



CLEAN

Clean and fresh.



FAST FLOW

Pigs need enough flow.



WORKING DRINKERS

Drinkers must work properly.



HEAT

Hot pigs drink more water.



NO COMPETITION

Every pig must have access.

HOW MUCH WATER DO PIGS NEED?		
PRODUCTION CLASS		TYPICAL WATER INTAKE (LITRES PER DAY)
	Piglet / young nursery pig	1 – 3 L
	Weaner	3 – 5 L
	Grower	5 – 8 L
	Finisher	8 – 12 L
	Pregnant sow / Boar	15 – 20 L
	Lactating sow	20 – 30+ L



These are practical guidelines – not fixed limits.
Hot weather → pigs may need more water!



Water is used for:

- ✓ Drinking
- ✓ Digesting feed
- ✓ Regulating body temperature
- ✓ Removing waste

A lactating sow can drink as much as
a bath full!



NO WATER

=



LESS FEED EATEN

=



LESS GROWTH

=



LESS PROFIT

Good water
leads to better
GROWTH & PROFIT!



DON'T FEED THE GROUND

*“If you drop 1 kg of feed every day,
how much have you lost in one year?”*



$$1 \text{ kg} \times 365 \text{ days} = \mathbf{365 \text{ kg}}$$

feed lost in one year

Wasted feed
is wasted
money!



WHAT IF YOU HAVE 20 PIGS?



20 pigs

$$365 \text{ kg} \times 20 =$$

7,300 kg

feed lost in one year



THINK ABOUT IT...
How much money is
7.3 TONNES
of feed worth?



THE KEY:



Fill feeders
correctly
Only what pigs
can eat.



Keep feeders
and floors clean
Reduce waste.



Good management
saves feed and money
Better profit!



EVERY KILO COUNTS. · EVERY DAY. · EVERY PIG.



WHERE DOES FEED DISAPPEAR?

1 OVERFILLED FEEDERS



Too much feed in the feeder gets pushed out.

2 PIGS THROWING FEED



Pigs push feed out when eating or playing.

3 RAIN



Rain spoils feed and washes nutrients away.

4 WET FEED



Wet feed spoils faster and pigs eat less.

5 RODENTS



Rodents eat feed and contaminate it.

6 CONTAMINATION



Mould, insects and dirt ruin feed quality.

7 POOR STORAGE



Poor storage leads to spoilage, leaks and contamination.

8 FEED ON THE GROUND



Feed on the ground is wasted, trampled and dirty.



**THE FEED YOUR PIG DOESN'T EAT
STILL COSTS YOU MONEY**



Small losses every day
become **BIG** losses
by the end of the year.



FEED QUALITY & STORAGE

FEED DETECTIVE 🔍



1. CLEAN, DRY FEED



2. MOULDY GRAIN



3. WET FEED



4. POORLY STORED FEED

WHAT COULD HAPPEN IF FEED IS POORLY STORED?



SPOILAGE

Feed can spoil, leading to waste and losses.



MOULD

Mould grows in damp feed and can make pigs sick.



MYCOTOXIN RISK

Mould can produce mycotoxins that harm pigs and reduce performance.



REDUCED INTAKE

Pigs may eat less if feed smells, tastes or looks bad.



NUTRIENT LOSSES

Vitamins and other nutrients are lost, reducing feed value.



CONTAMINATION

Feed can be contaminated with bacteria, pests or foreign matter.



GOOD FEED TODAY = HEALTHY PIGS TOMORROW



THE BIG CASE STUDY



Meet Petrus again



Petrus has **15** pigs.

He tells you:

“My pigs are eating plenty of feed, but they are growing slowly. Feed costs are high and some pigs have diarrhoea.”



WHAT QUESTIONS WOULD YOU ASK PETRUS?

THINK LIKE A DETECTIVE

Find the clues. Solve the problem. Improve growth.



FEED

- What feed?
- Correct production stage?
- How much?
- Good quality?
- Properly stored?



PIG

- Age?
- Weight?
- Health?
- Parasites?



WATER

- Always available?
- Clean?
- Enough flow?
- Working drinkers?



ENVIRONMENT

- Heat?
- Ventilation?
- Space?
- Competition?



MANAGEMENT

- Feed wastage?
- Mixing different pig classes?
- Feeding routine?



Good growth is no accident – it's the result of **checking the right things!**



PETRUS MAKES A CHANGE

Petrus decides to:

- ✓ Feed pigs according to production stage
- ✓ Improve feed storage
- ✓ Reduce feed wastage
- ✓ Check water availability
- ✓ Monitor pig weights
- ✓ Record feed used
- ✓ Calculate FCR

FEED PIGS ACCORDING TO PRODUCTION STAGE

WEANER



GROWER



FINISHER



IMPROVE FEED STORAGE



REDUCE FEED WASTAGE



CHECK WATER AVAILABILITY



MONITOR PIG WEIGHTS



RECORD FEED USED



Date	Pigs	Feed (kg)
1/5	15	50
8/5	52	52
15/5	15	49
22/5	15	51



CALCULATE FCR



FCR CALCULATION	
Feed used (kg)	600
Weight gain (kg)	300
$FCR = 600 \div 300$	
$= 2.0$	



SOME OF THE MOST VALUABLE IMPROVEMENTS MAY ACTUALLY
BE **MANAGEMENT CHANGES** RATHER THAN BUYING MORE EXPENSIVE FEED.



EVERY FARMER SHOULD KNOW:



1. How much feed did my pigs eat?



2. How much weight did they gain?



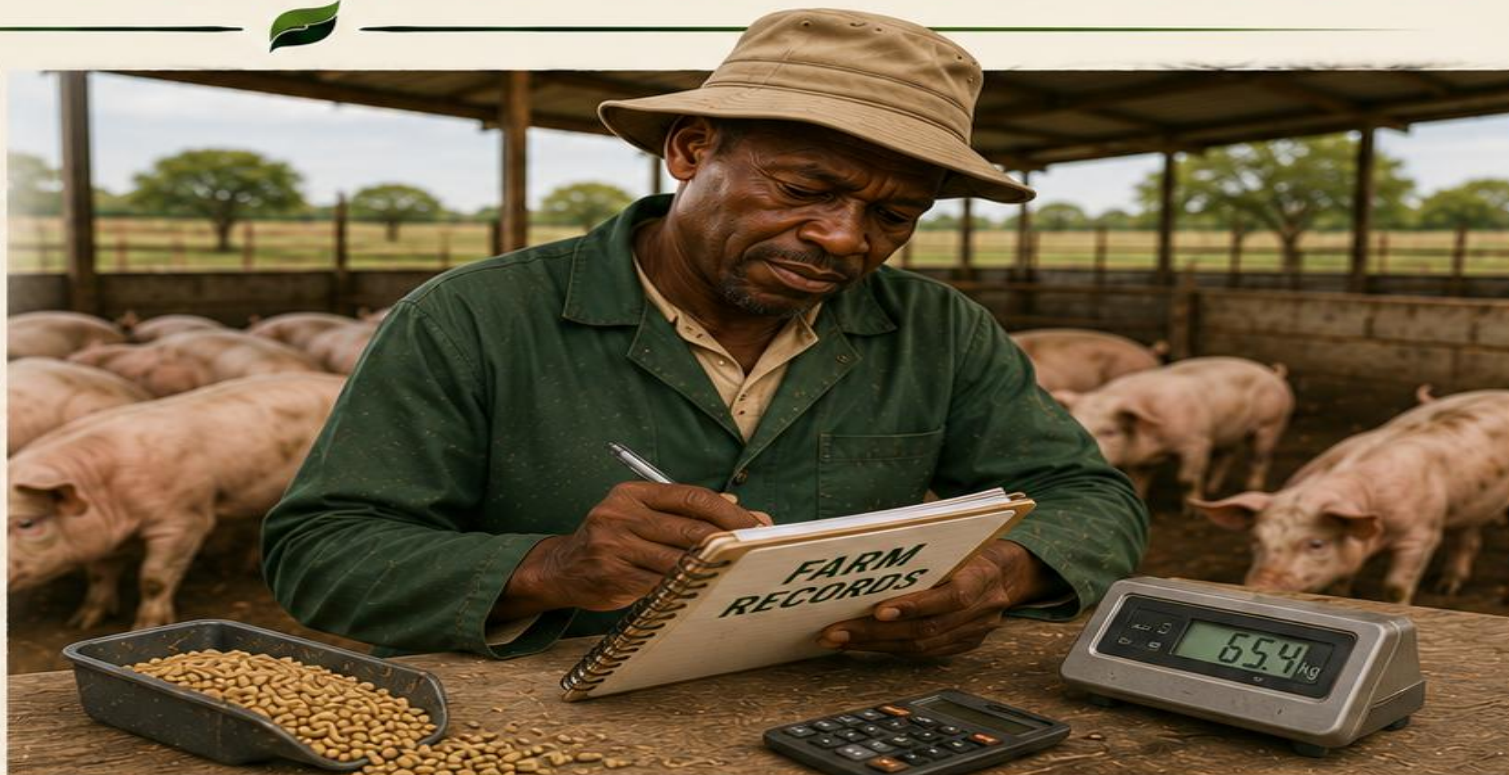
3. How long did it take?



4. What did the feed cost?



5. What did it cost to produce 1 kg of pig?



FEED USED



WEIGHT GAIN



TIME TAKEN



FEED COST



COST PER KG

IF YOU DON'T MEASURE IT,
YOU ARE GUESSING.



THE 5 GOLDEN RULES





FEED THE PIG FOR ITS STAGE

Different pigs have different needs.



PIGLET

GROWER

FINISHER

SOW





GIVE A BALANCED DIET

 **ENERGY** +  **PROTEIN** +  **MINERALS** +  **VITAMINS**







GIVE ENOUGH – BUT DON'T WASTE

MORE FEED ≠ MORE GROWTH



RIGHT AMOUNT = BEST GROWTH



WASTED FEED = WASTED MONEY





NEVER FORGET WATER

Good water = good performance.





-  CLEAN
-  AVAILABLE
-  ENOUGH FLOW





MEASURE YOUR RESULTS

Measure it.
Don't guess it.



FEED EATEN

+



WEIGHT GAINED

=

KNOW YOUR FCR

Feed Conversion Ratio





GOOD NUTRITION



GOOD MANAGEMENT



HEALTHIER PIGS



BETTER PROFITS



Feed the right pig. Feed it well. Measure the results.

THE QUESTION THAT MATTERS?

IF YOU DON'T **MEASURE**
FEED EATEN AND WEIGHT GAINED...
HOW DO YOU KNOW
IF YOUR PIGS ARE PROFITABLE?



1. FEED EATEN
How much
did they eat?



2. WEIGHT GAINED
How much
did they grow?



3. FCR
How efficient
was the feed?



4. PROFIT
What did it
make you?



MEASURE TODAY. MANAGE BETTER. MAKE MORE **PROFIT.**



TAKE-HOME MESSAGE



THINK LIKE A FARMER.



NOT JUST:

*“What is the **cheapest** feed?”*



BUT:

*“What feed gives me the **best return**?”*



FEED THE
RIGHT PIG.



GIVE THE
RIGHT
NUTRIENTS.



PROVIDE
GOOD
WATER.



REDUCE
WASTE.



MEASURE
GROWTH.



KNOW
YOUR **FCR.**

GOOD NUTRITION + GOOD MANAGEMENT = **BETTER RETURNS**

