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Approaches to Sow Longevity *solutions*®

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Major concern

- Costly
 - Effect on output
 - Relationship with culling
 - Increasing
 - Demoralizing
 - Welfare concern
- 

Aims of a sow herd

- Like a feed mill
 - Deliver the required amount of pigs
 - Understand over vs under
 - Within specifications
 - Genetics
 - Size
 - Age
 - Disease status
 - Control costs



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Where do sow farms diverge over time?

- Mortality and culling rates
- Production per week
- Quality of progeny
 - Underweight
 - Age
 - Diseased
- Costs
 - Replacement
 - Salvage
 - Rate





Opportunities

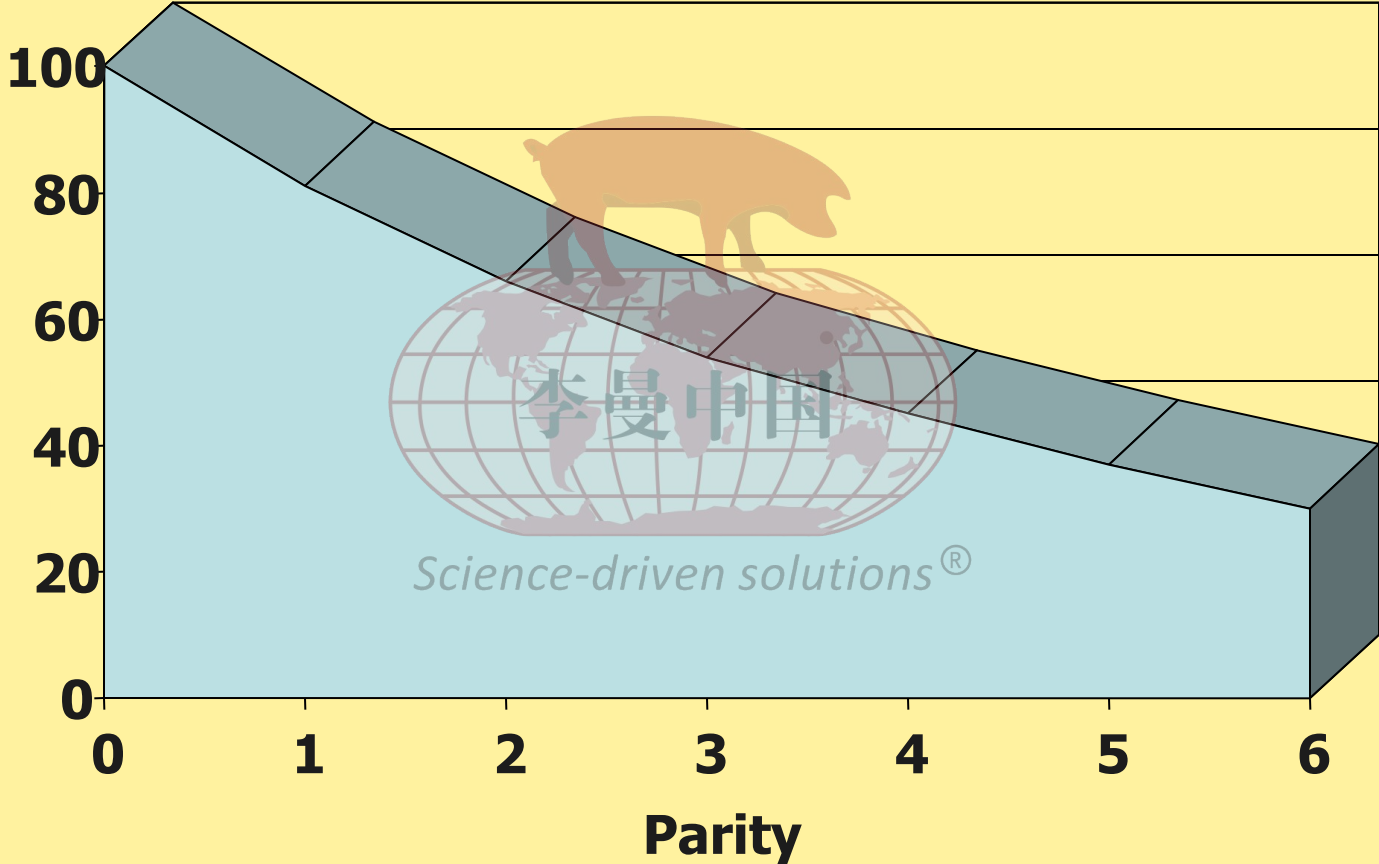
- Increased sow retention
- Stable gilt requirements
- Decreased variation in output
- Lower gilt production costs
- Better welfare
- Ease of production



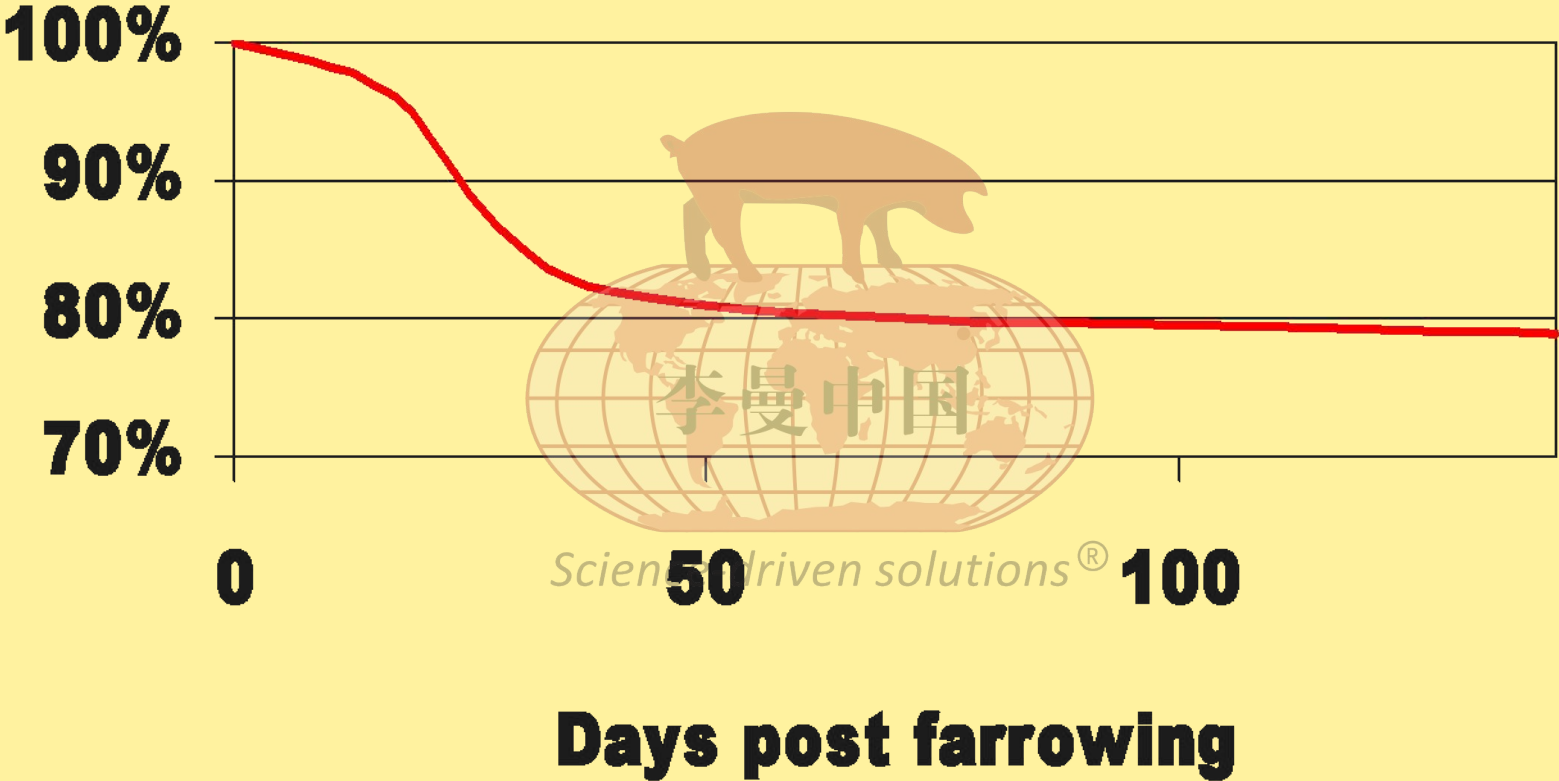
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Sow Attrition

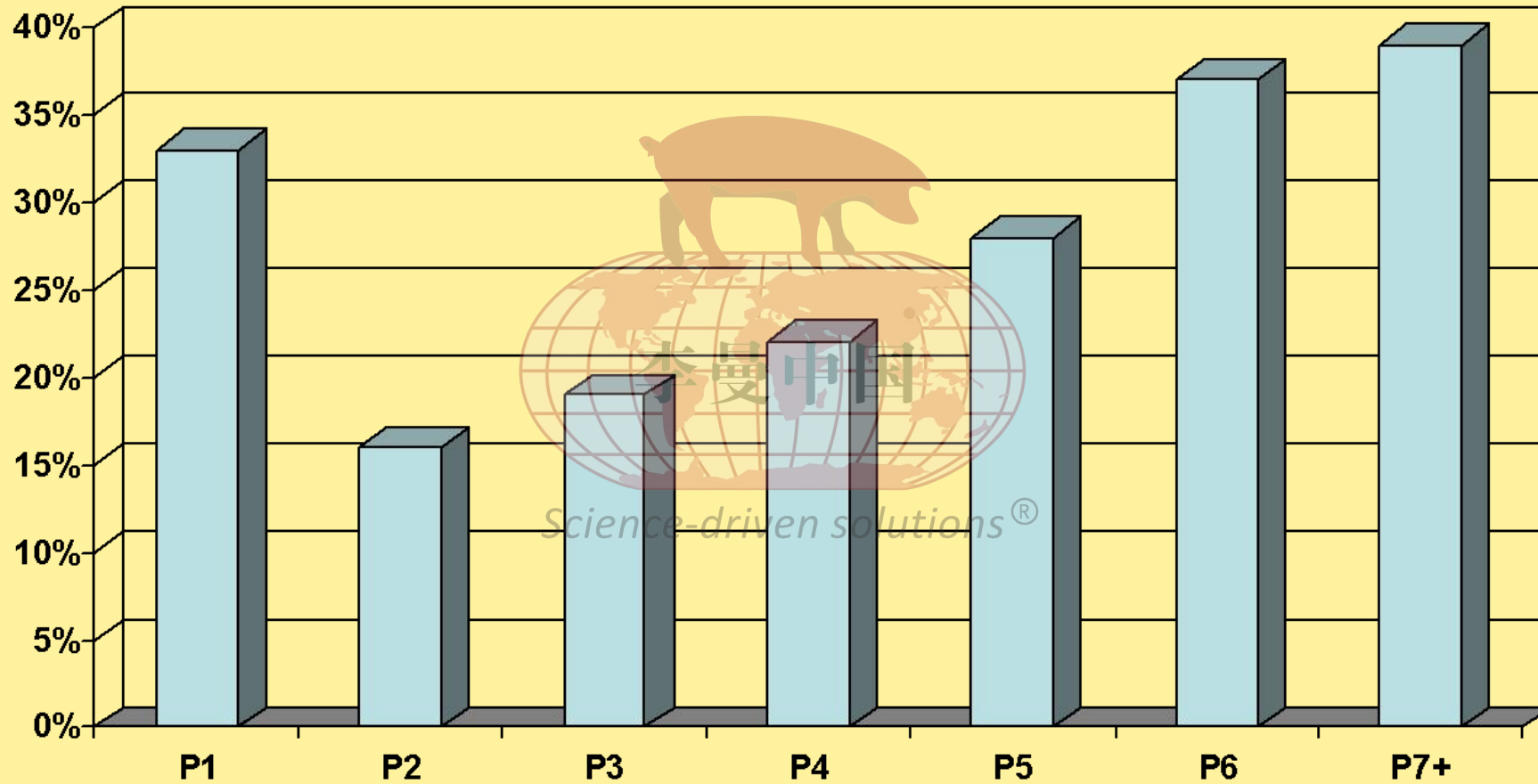


Pattern of retention





Proportion of piglets 1.9 lbs or less by parity





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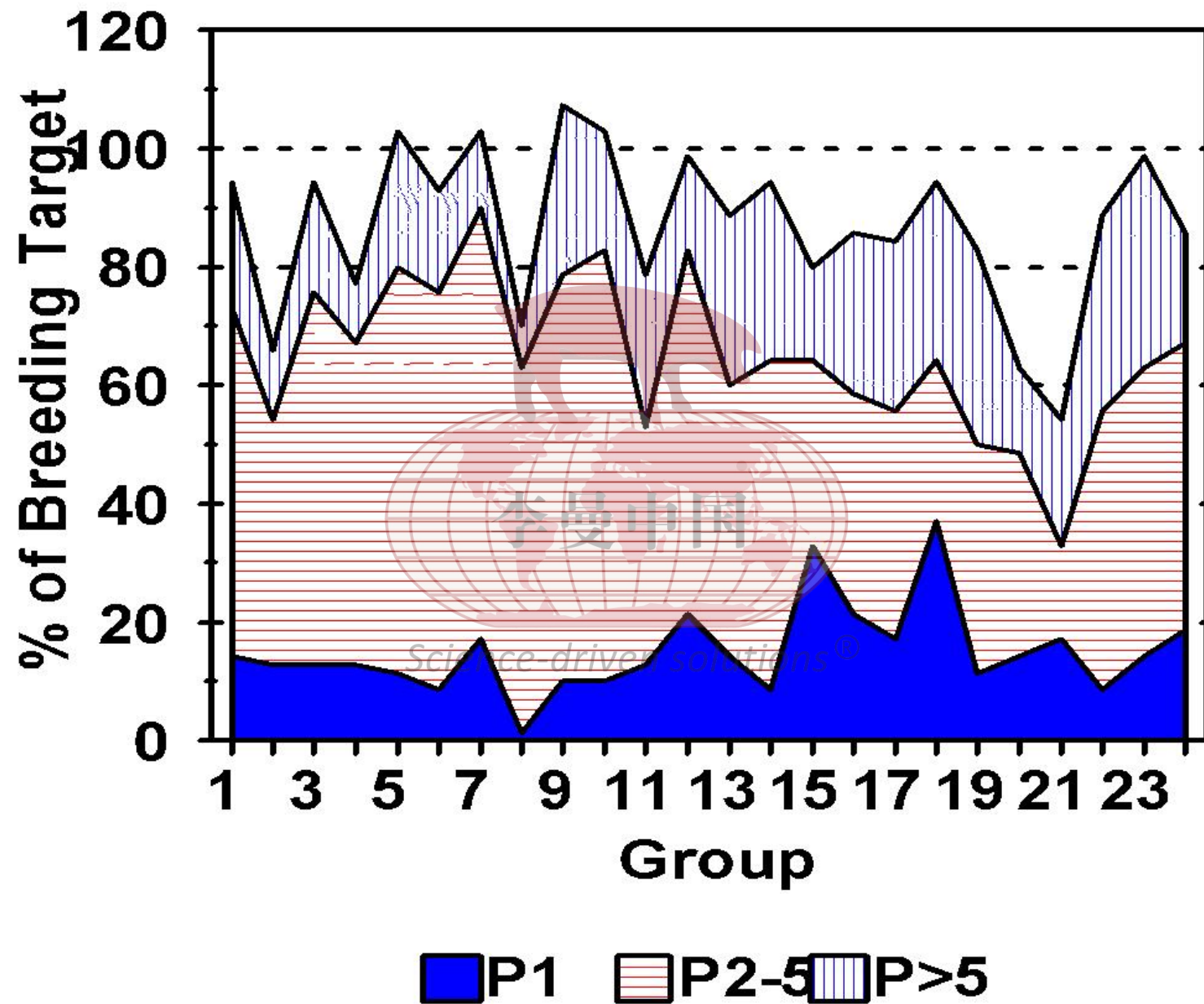
Aim of a sow herd

Fill the barns, week after week, with the same number of high quality weaned pigs

Metrics:

- weeks under target
- proportion of weaned pigs outside quality specifications
- utilization of capacity:
pigs/sow space/year







Would you bet on this horse?



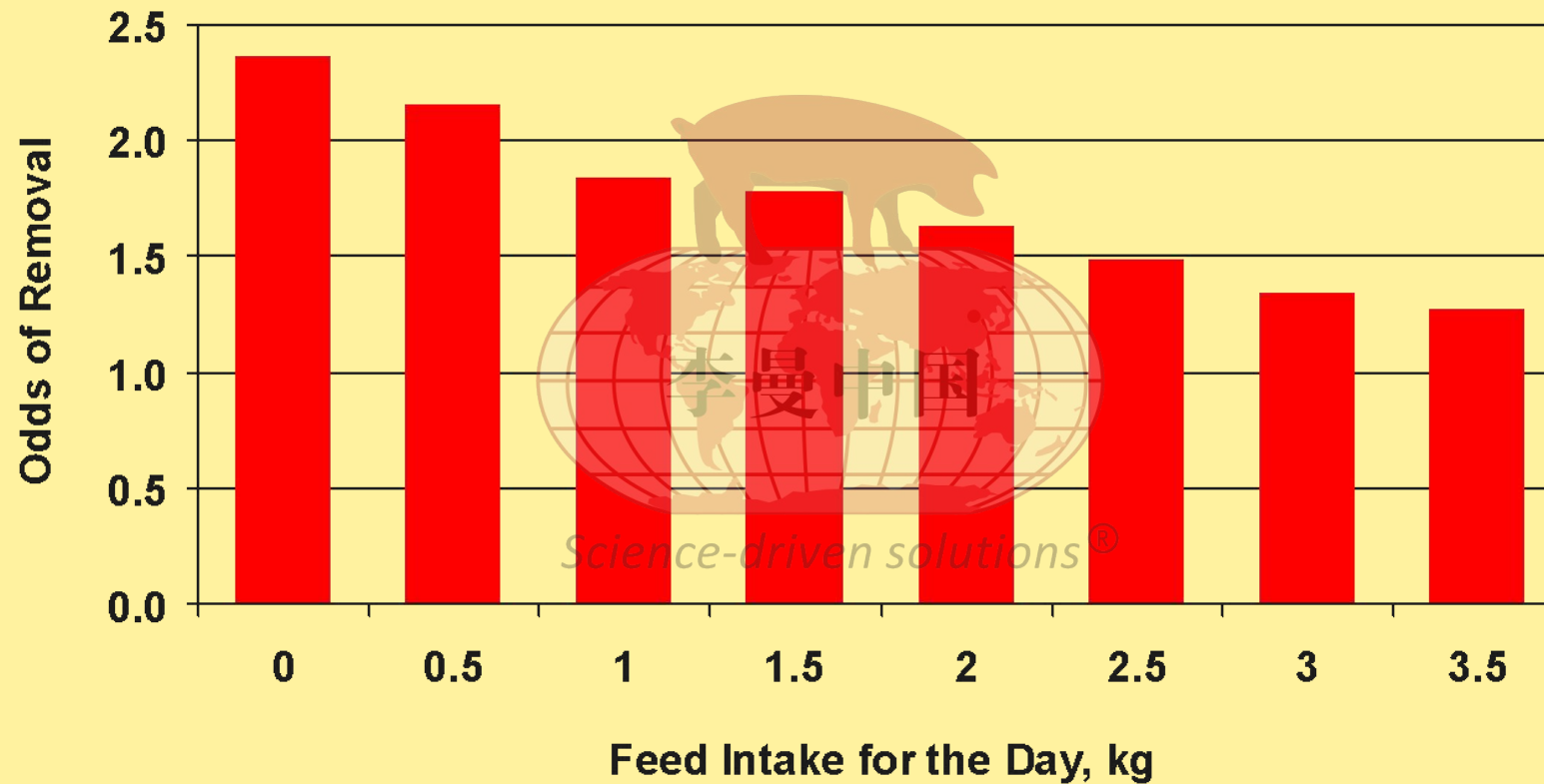




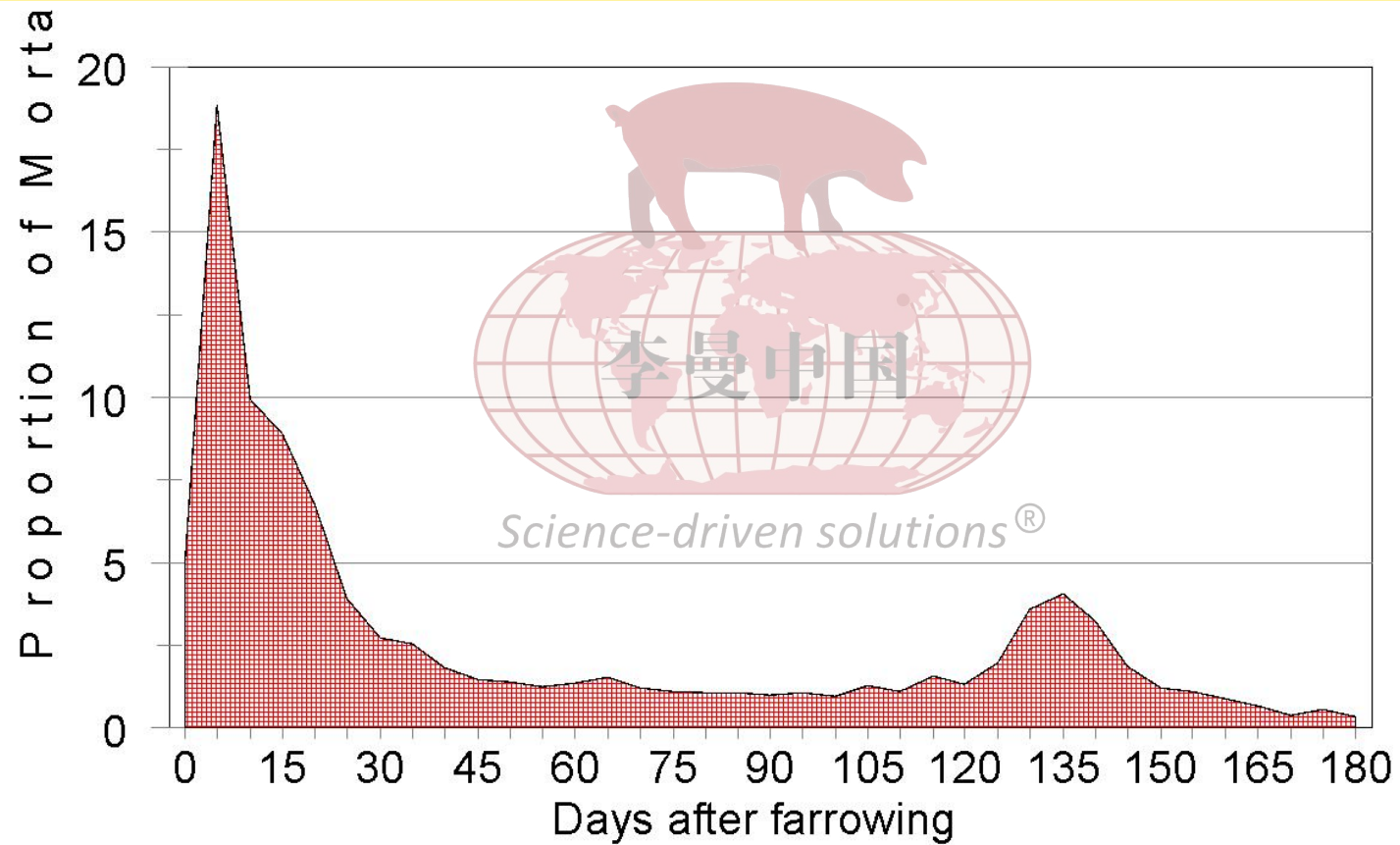
Do they get up and eat?



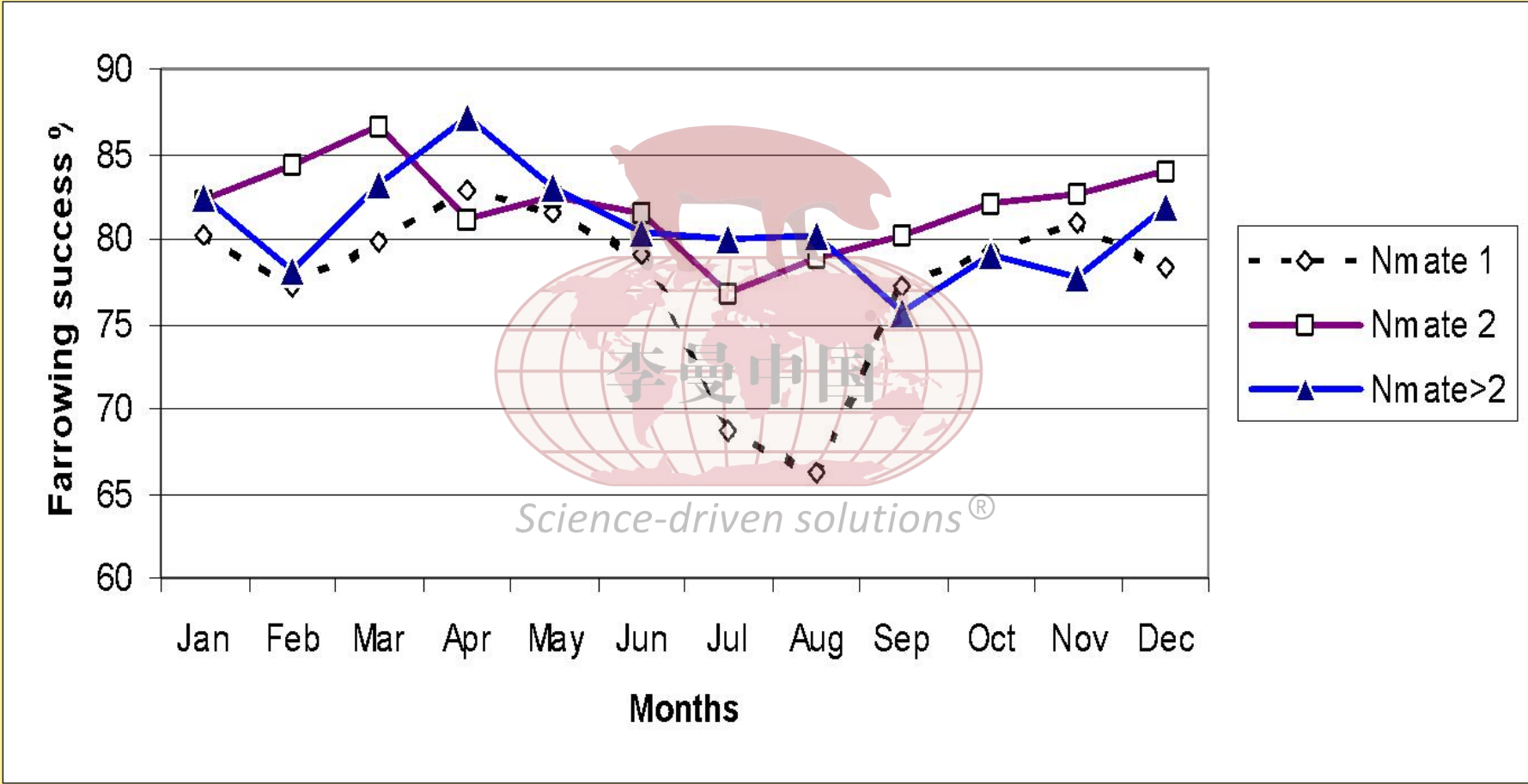
ODDS OF REMOVAL vs LFI



Risk mortality post farrowing

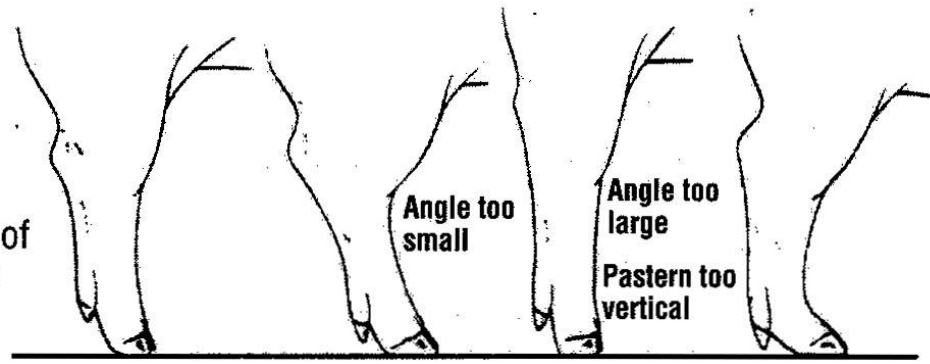


Seasonal stressors





Side view of rear leg



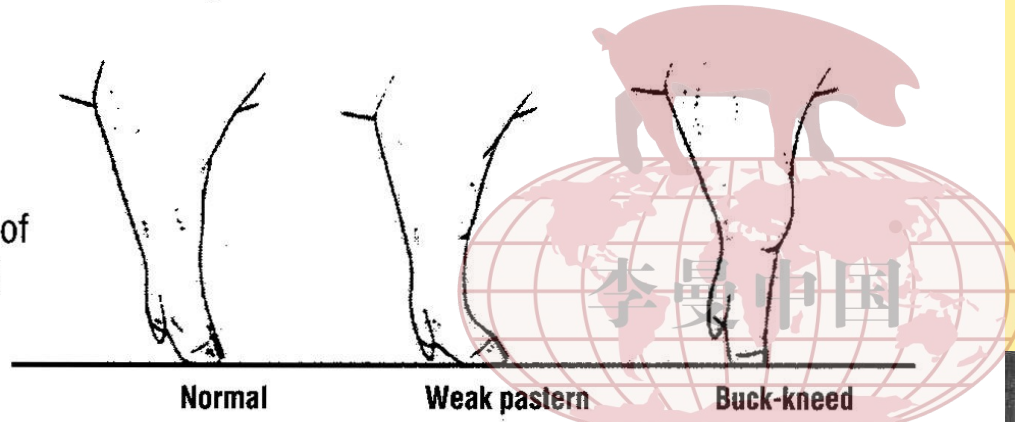
Normal

Sickle-hocked

Post-legged

Weak pastern

Side view of front leg

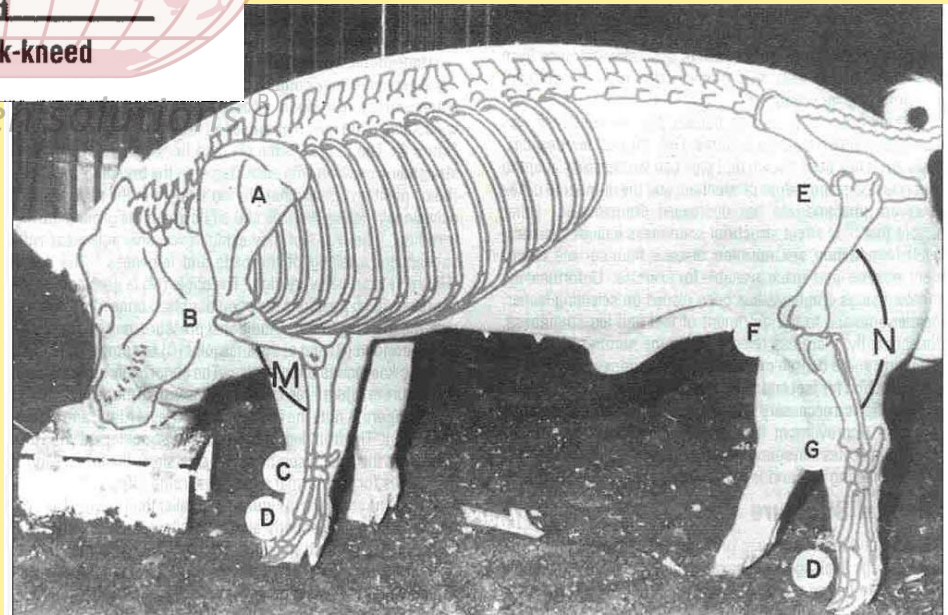


Normal

Weak pastern

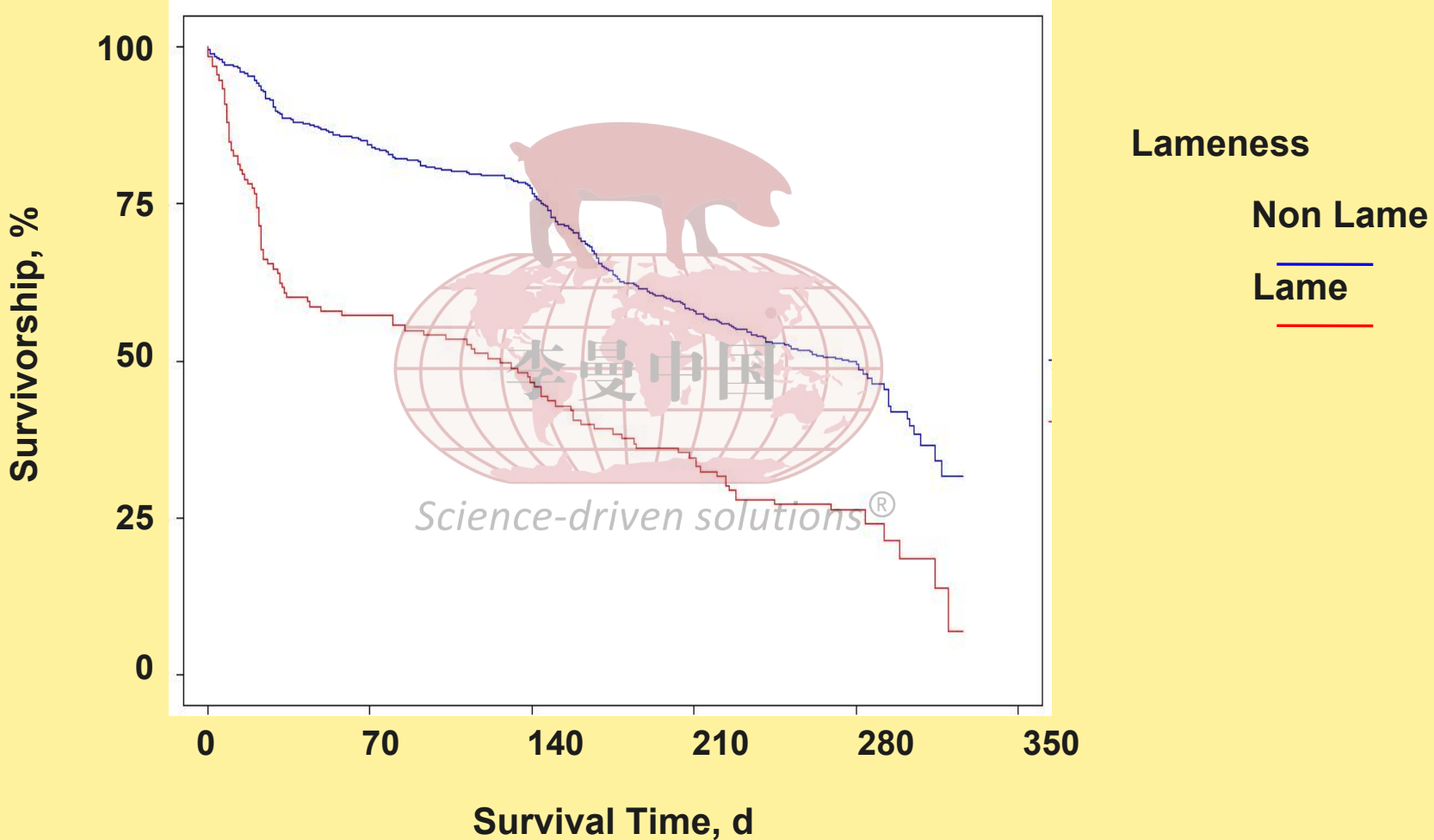
Buck-kneed

Science-drive






Kaplan-Meier PL Survivorship Function






Financial costs of poor sows

- Higher turnover costs
 - Lower productivity
 - Lower salvage revenue
 - Lower output quality
 - Replacement lag
 - Increased care costs
 - Increased pre-weaning mortality
- 



What is the problem?

- End-point quality control
 - Should be preventable traits
 - Predictability rarely tested, retrospective studies flawed
 - Wide variation across industry
 - Variation of application within farms over time
- 



What else can we do?

- Robust sows
 - Genotype, rearing, care
- Good care and maintenance of sows
 - Feeding, housing, environment, treatment
- Consistent production pressures and management
 - Farrowing rate, gilt supply, parity profile



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