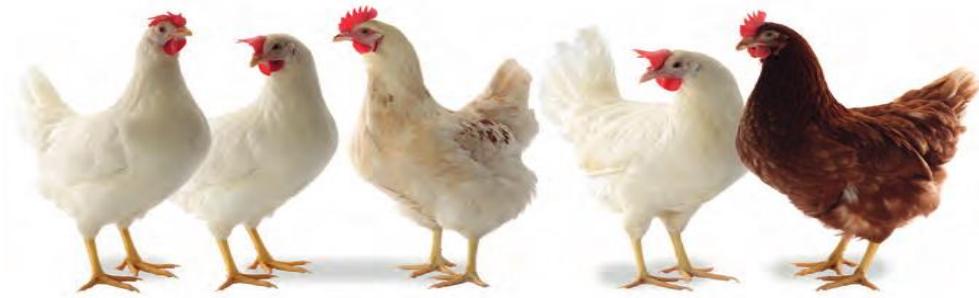




INTERNATIONAL

The key to your profit!



Hybrid feed: low risk and great benefits at the start of production

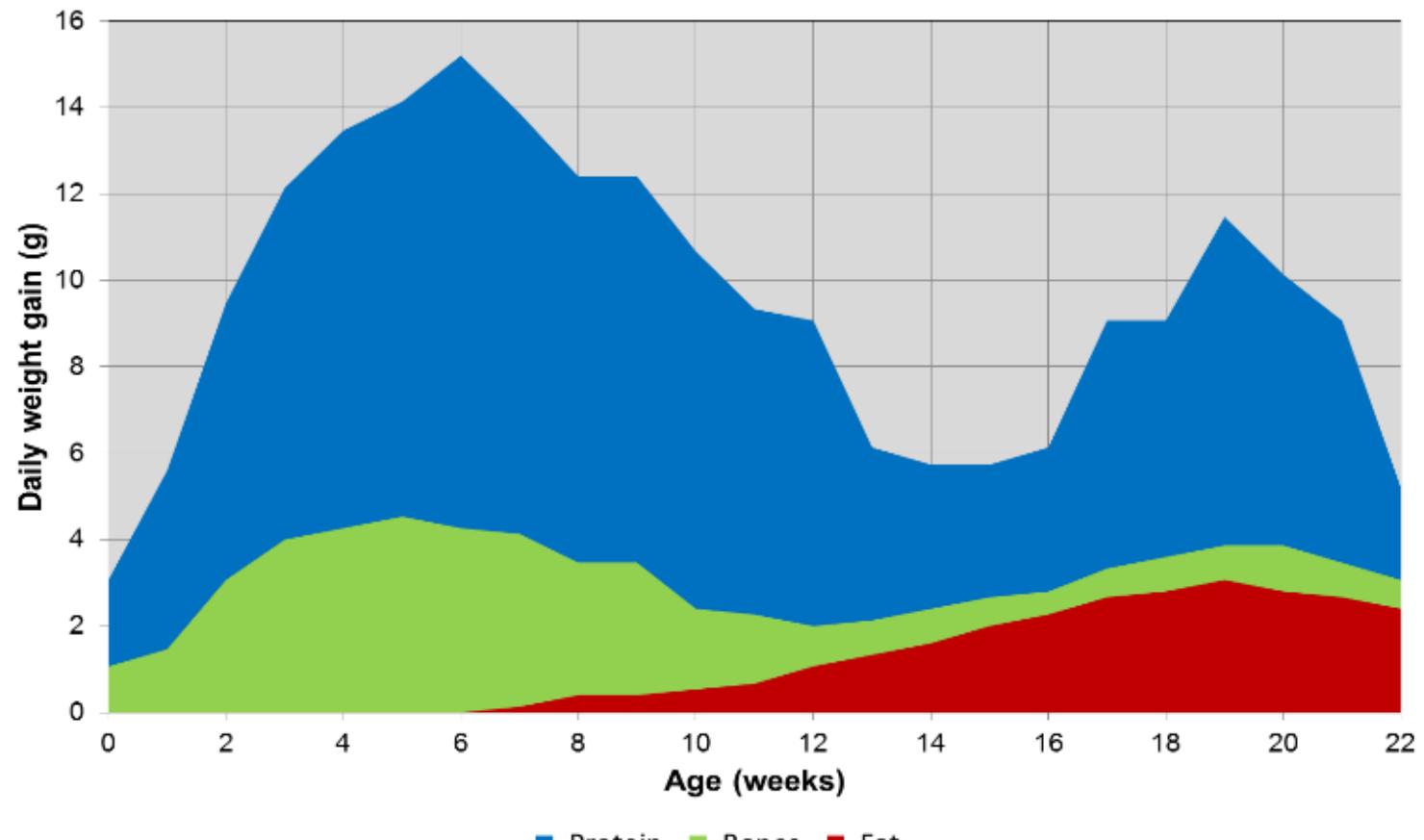
Xabier Arbe, Head of Business Unit

Agenda

1. Understanding the needs of the birds
2. Actual practices
3. Concept of hybrid feed
4. Practical experience



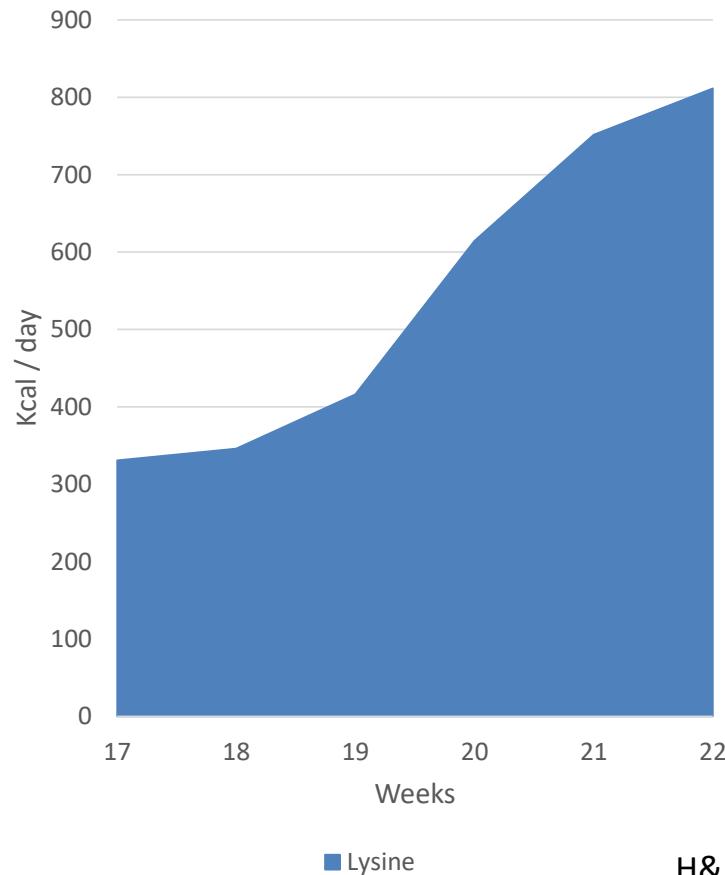
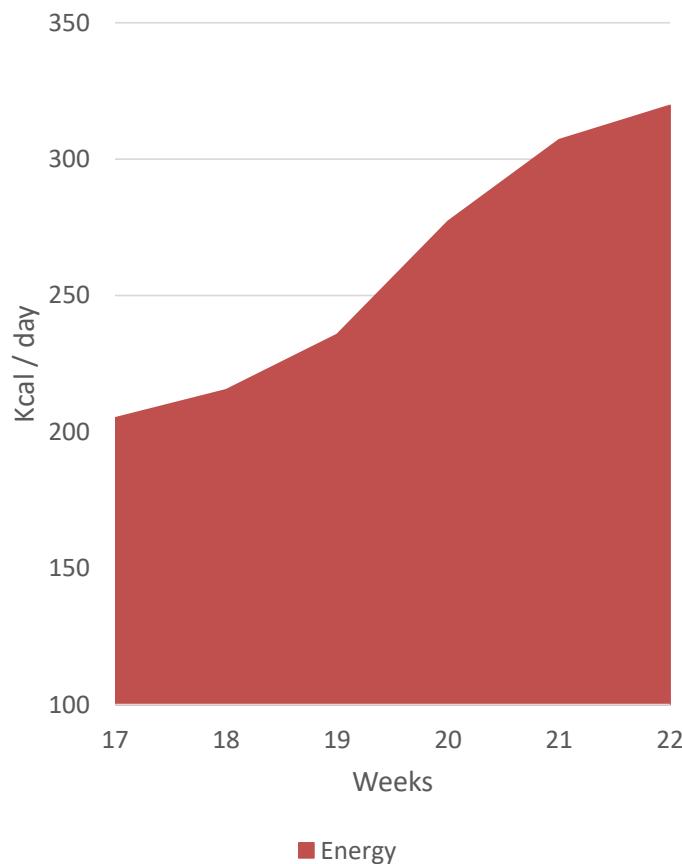
Rearing continues



(Modified from Ysilevitz, 2007)



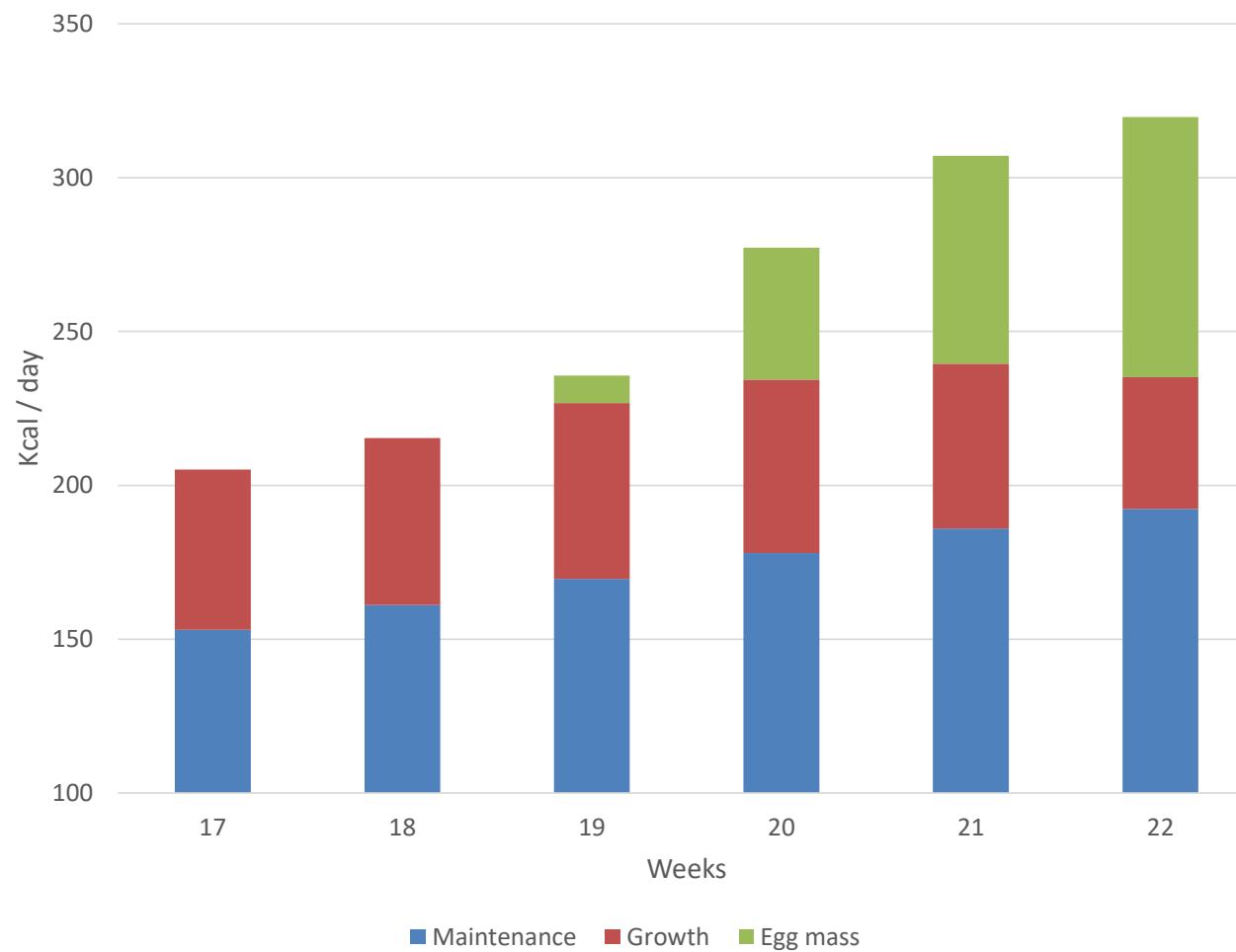
On set period - Needs



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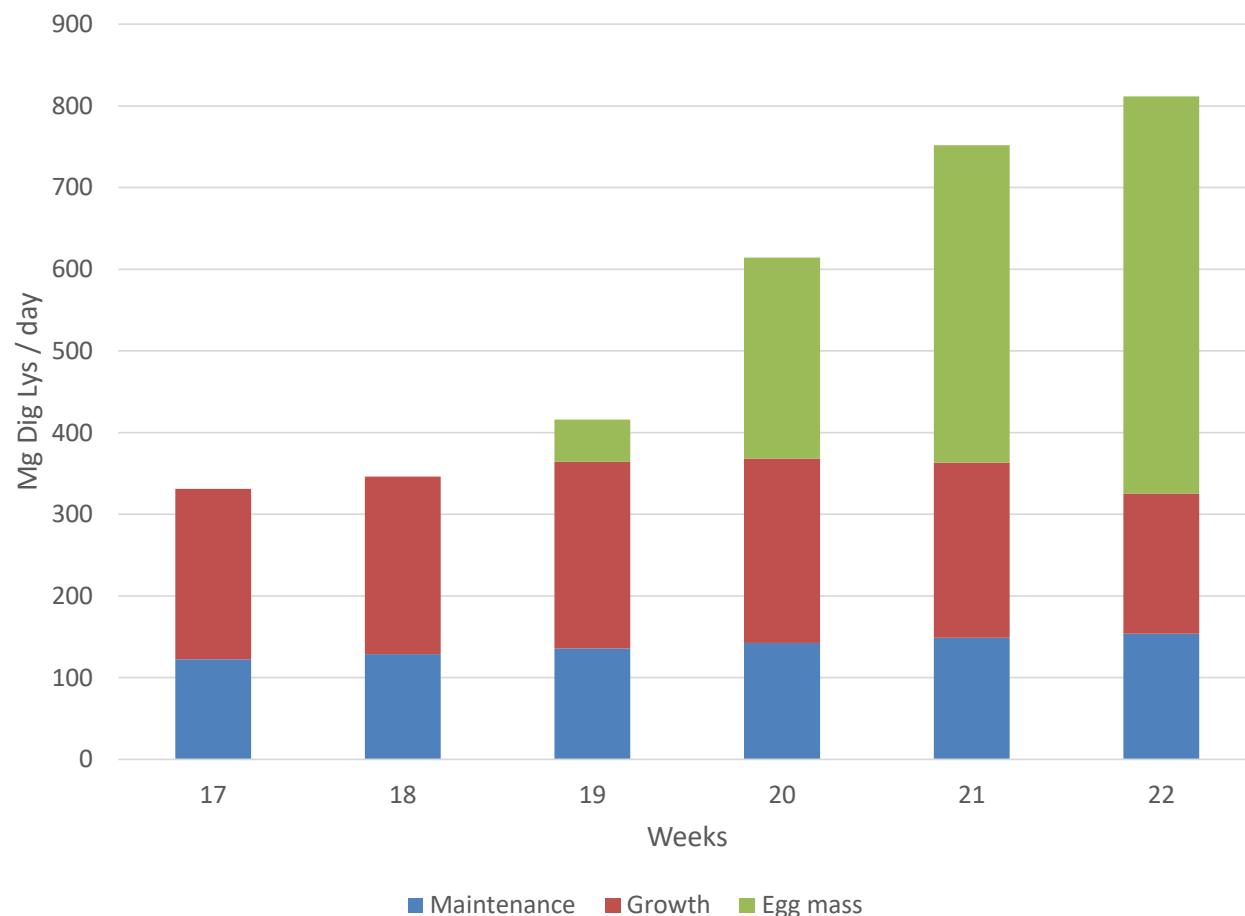
On set period – Energy Needs



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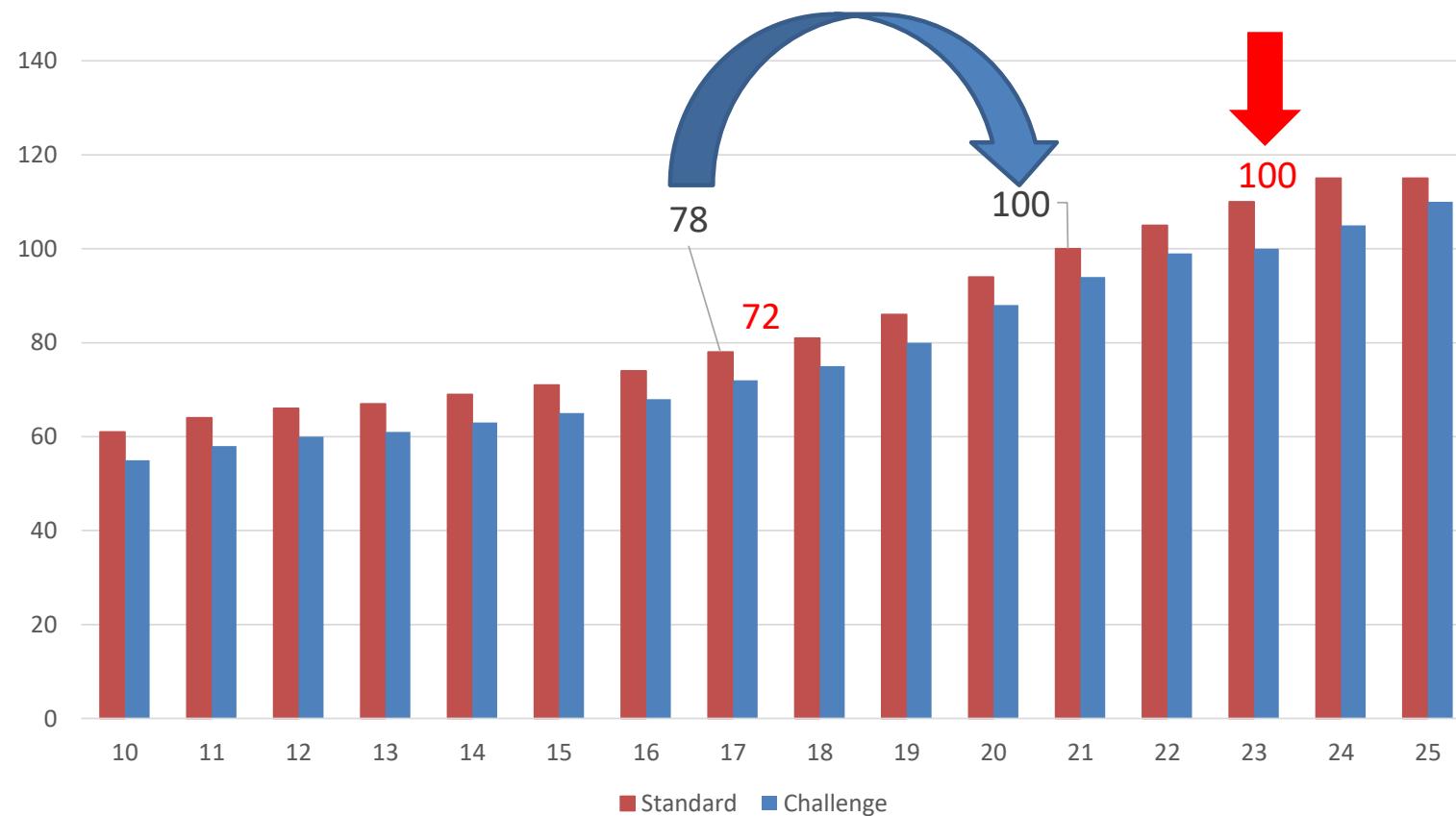
On set period – Lys Needs



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Feed intake evolution



Start of lay

Dietary component	Rearing diet	Pre-lay diet	Super Layer diet
Energy	-	+	+++
Amino acids	-	++	+++
Calcium	-	+	++
Crude fiber	+++	+	-
Expected FI	+++	+	+



Use of pre - lay

- Until a % of lay
 - Egg collection challenge
 - The hen laying one egg needs all the calcium
- Amount of feed per hen
 - Feed intake challenge



Management challenge of pre-lay

- Silo management.
- Delivery control.
- The flock performance variation needs to be considered.



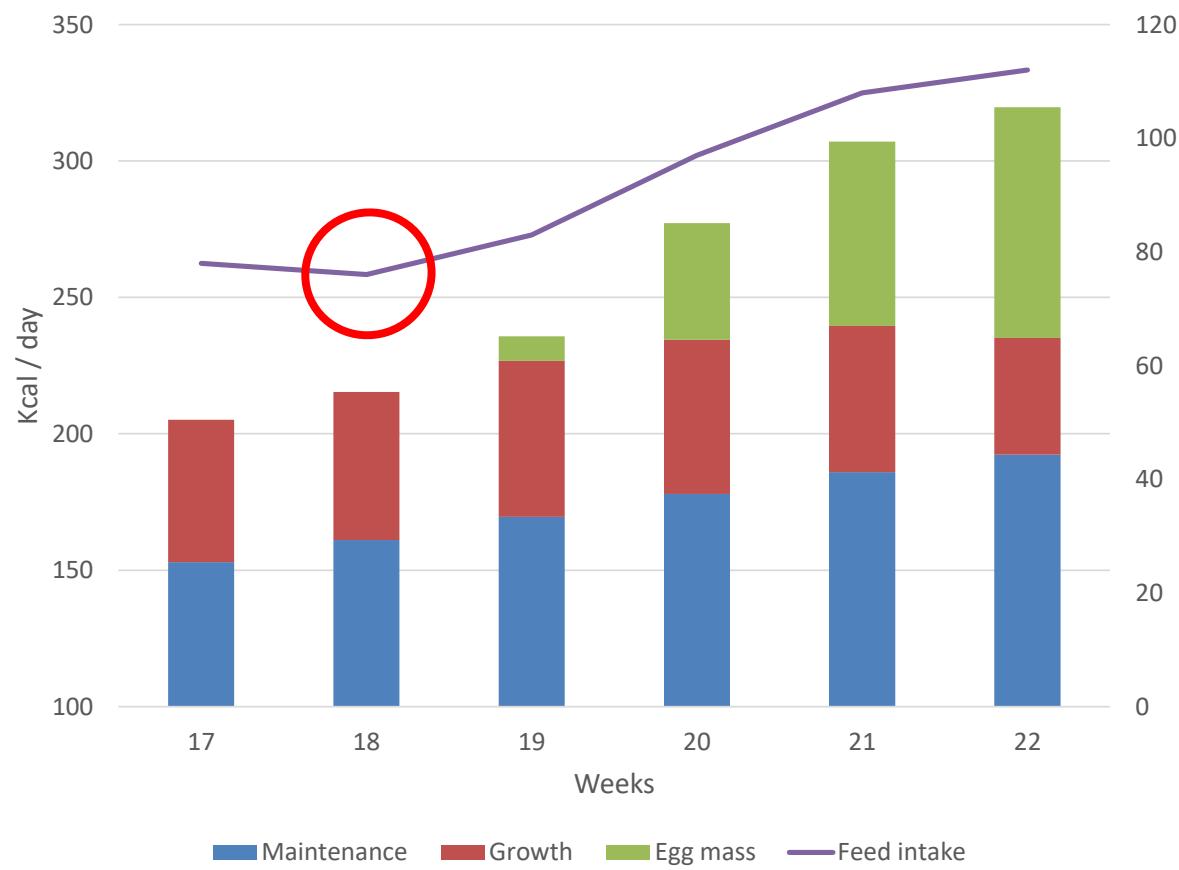
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Super starter layer

- Fear of low feed intake.
- A lot of nutrients.
- Expensive option of the feed program.



Super starter layer – 2850 kcal

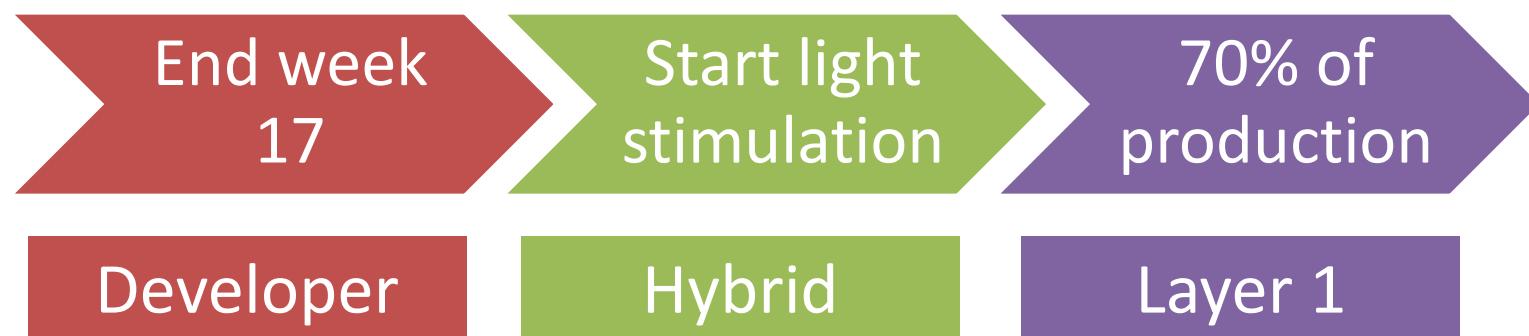


Hybrid feed - Concept

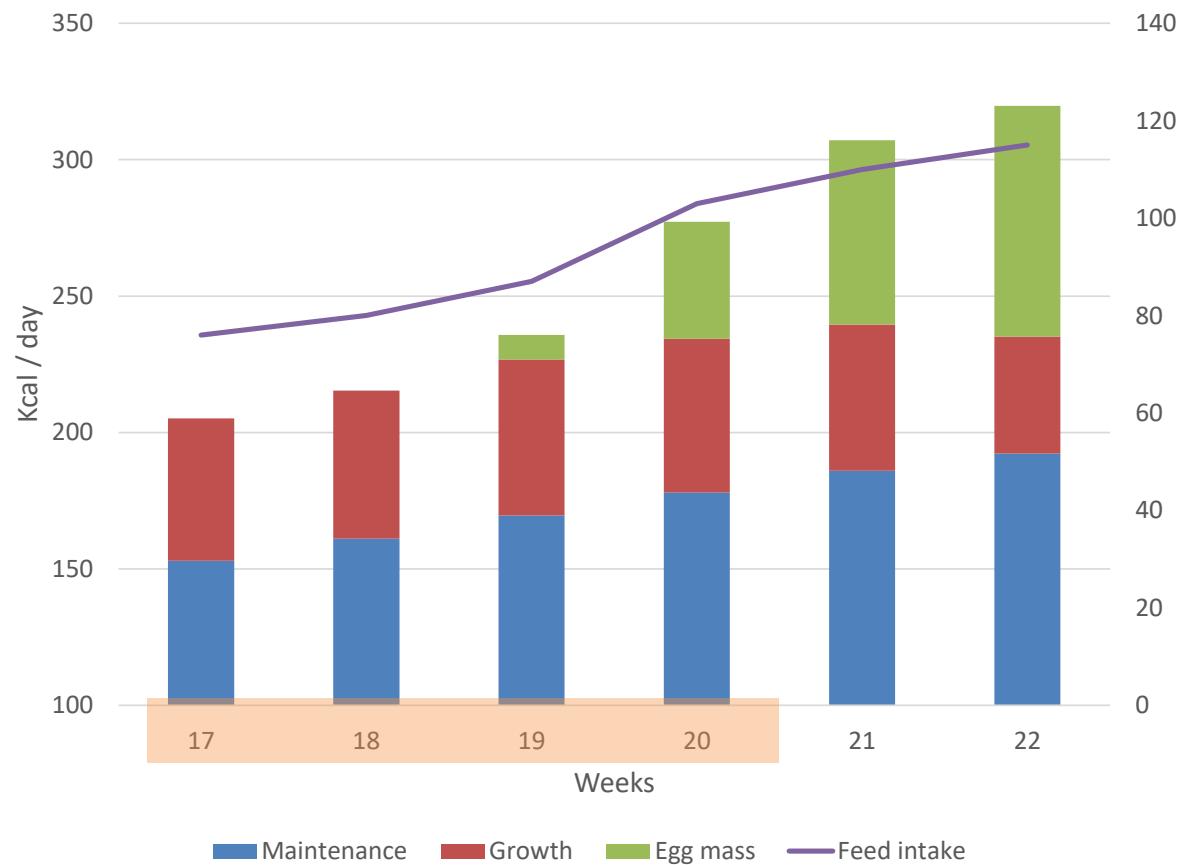
Nutrient			
ME	Kcal / kg	2700	Low energy
Dig Lys	%	0.8	
Dig Met	%	0.4	
Dig M+C	%	0.72	
Dig Thr	%	0.56	
Dig Trp	%	0.176	
Ca	%	3.8	
Av P	%	0.44	
CF	%	4	Keep the feed intake development
Salt	%	0.28	Stimulate feed intake



How to use the Hybrid

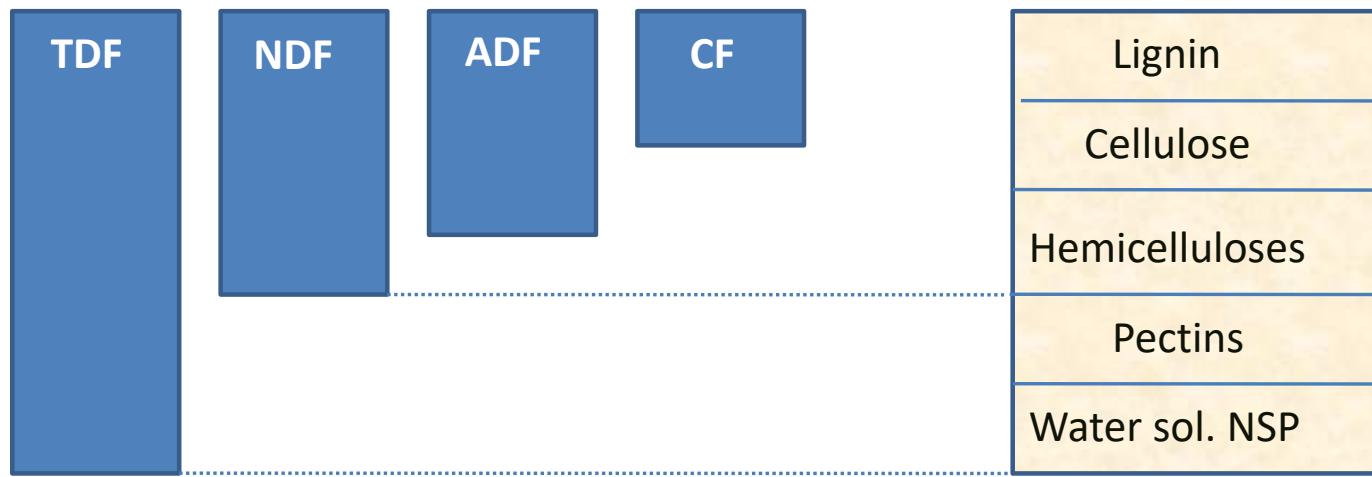


Expected feed intake for Hybrid



What is the fiber

- Total Dietary Fiber (TDF)
 - Neutro Detergent Fiber (NDF)
 - Acid Detergent Fiber (ADF)
 - Crude fiber (CF)
 - Acid Detergent Lignine (ADL)



Sources of fiber

Raw material	Crude Fiber (%)	Inclusion rate (%)
Barley	4.7	40
Barley sprouts	12.9	5-8
Copra meal	12.6	5-10
DDGS	7.8	5-20
Lupins	14.8	5-10
Oat hulls	30.1	2-4
Palm kernel meal	12.6	2-8
Rice bran	7.7	5-15
Sunflower meal	25.6	5-15

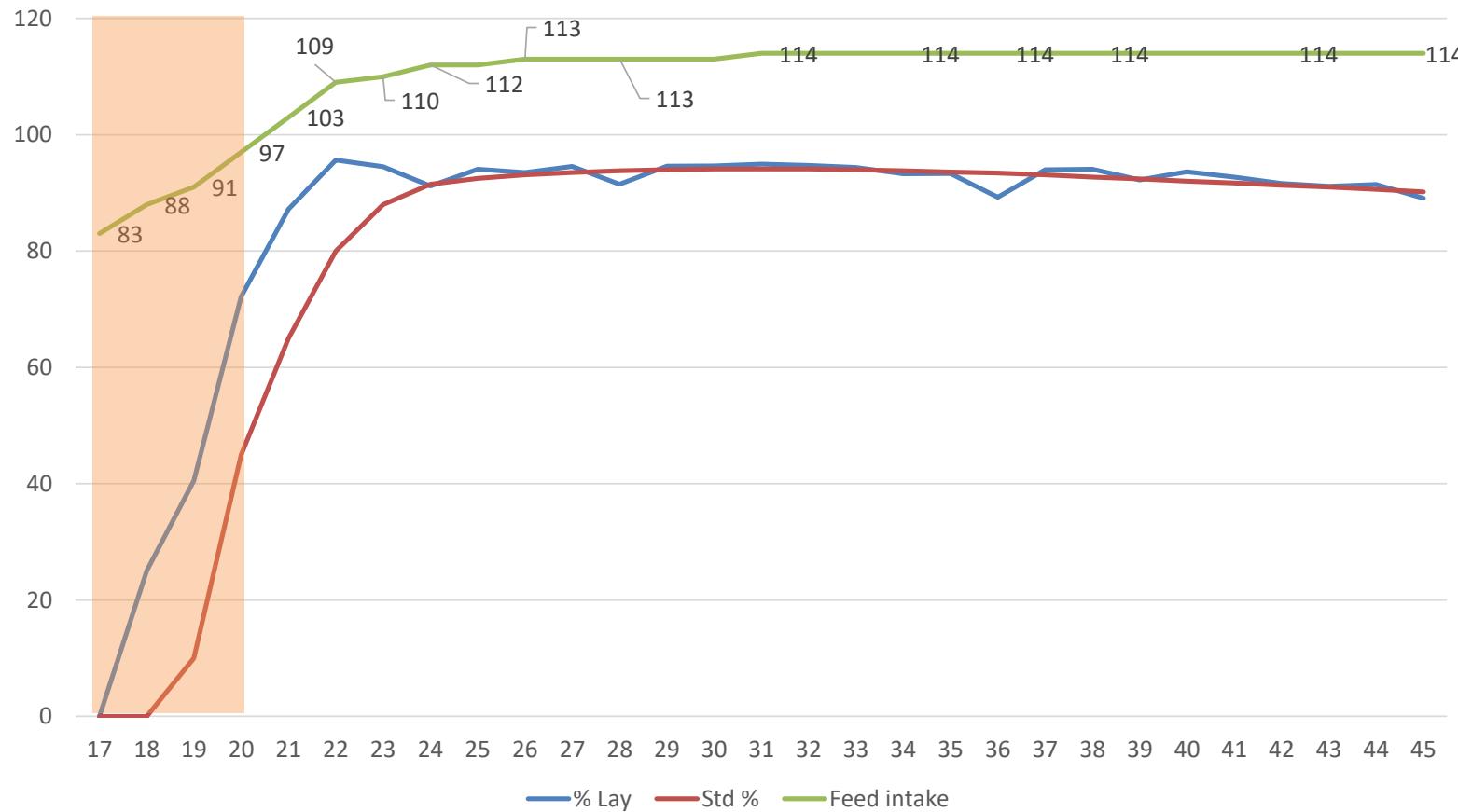


Salt and feed intake

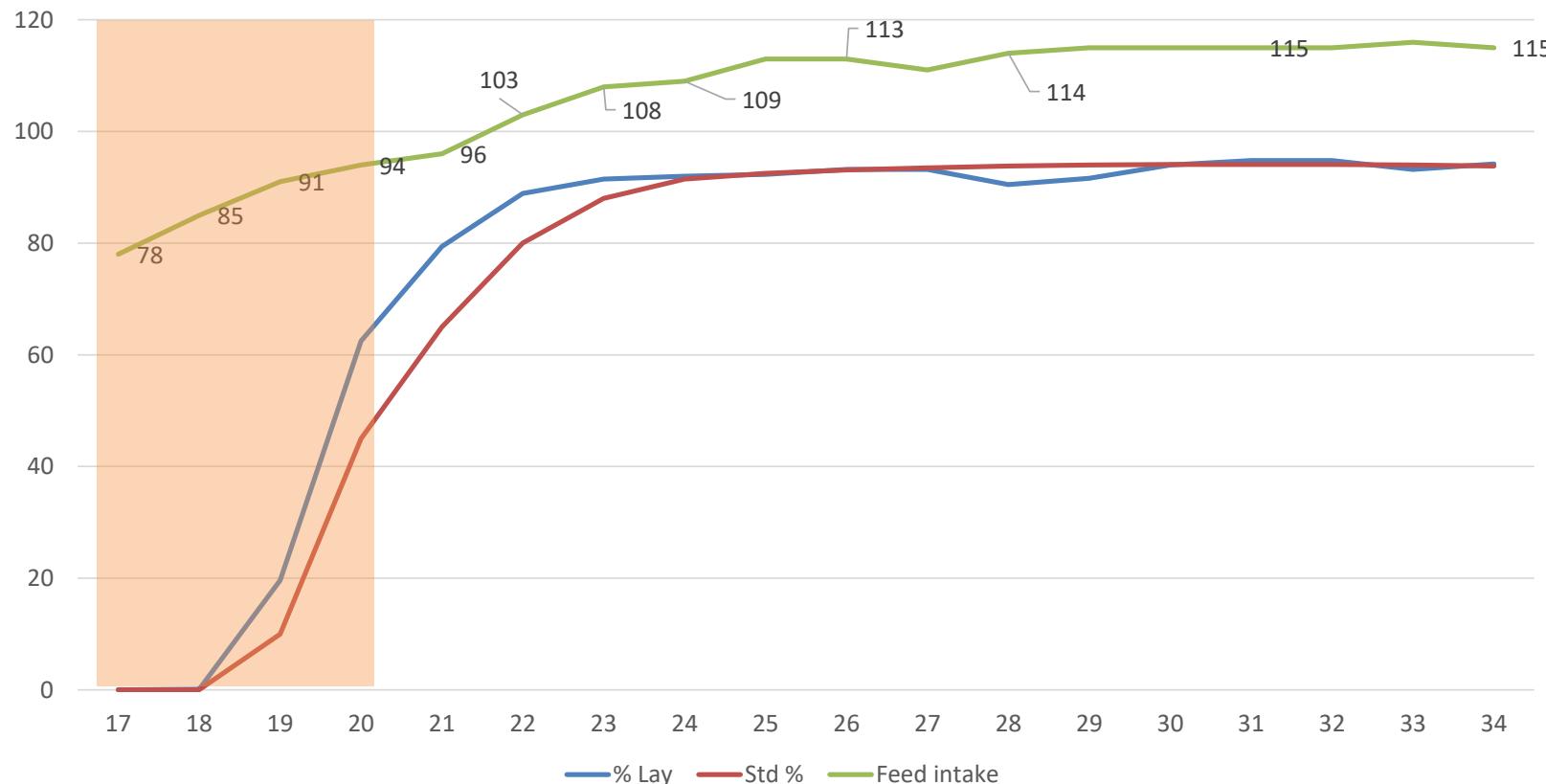
- “*Low dietary salt significantly reduced body weight and feed intake among layers*”, - Poultry Science 1977
- Increasing levels of salt show a feed intake and body weight increase in broiler research.
- Sodium bicarbonate need to wait.



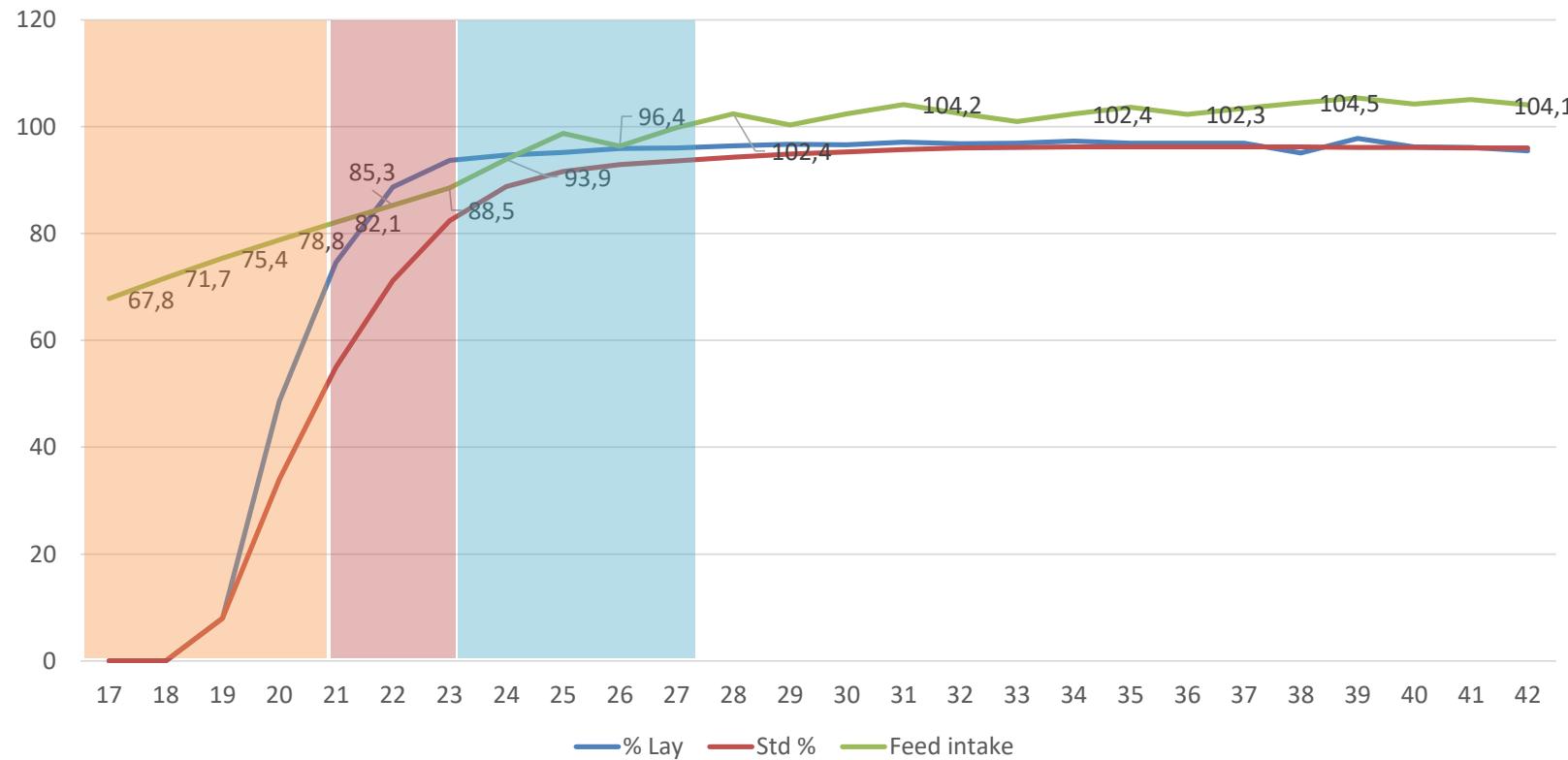
Brown in cage



Brown in cage free



White in cage



*feed intake approx.



Take away messages

1. Receive the bird with developer feed
2. Hybrid is a combination of your developer and your layer feed.
3. Hybrid should be in the silo by the time you start light stimulation.
4. Use the Hybrid until production is 70%.



Summary

- The period of 16-22 weeks is a rearing period
- At the start of production birds are lacking feed intake, we need to apply management and nutrition strategy.
- **Hybrid feed is a new approach with low risk and great benefits.**



Thank you for your attention!

