



Differentiation of broiler markets in the EU *Background and developments*



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YOUR CHOICE, OUR COMMITMENT

Paul van Boekholt
General Assembly avec 2014

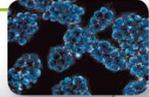




Biopharmacy



Vaccines and human antibodies



Vaccines, bacterial cultures and analysis



Sera, pharmaceutical proteins and specific pathogen free animals



Animal Genetic Selection



Waterfowls & Pigeons



Broilers



Layers



Guinea fowl



Rabbits



Pigs



Shrimps





Differentiation of broiler markets in the EU



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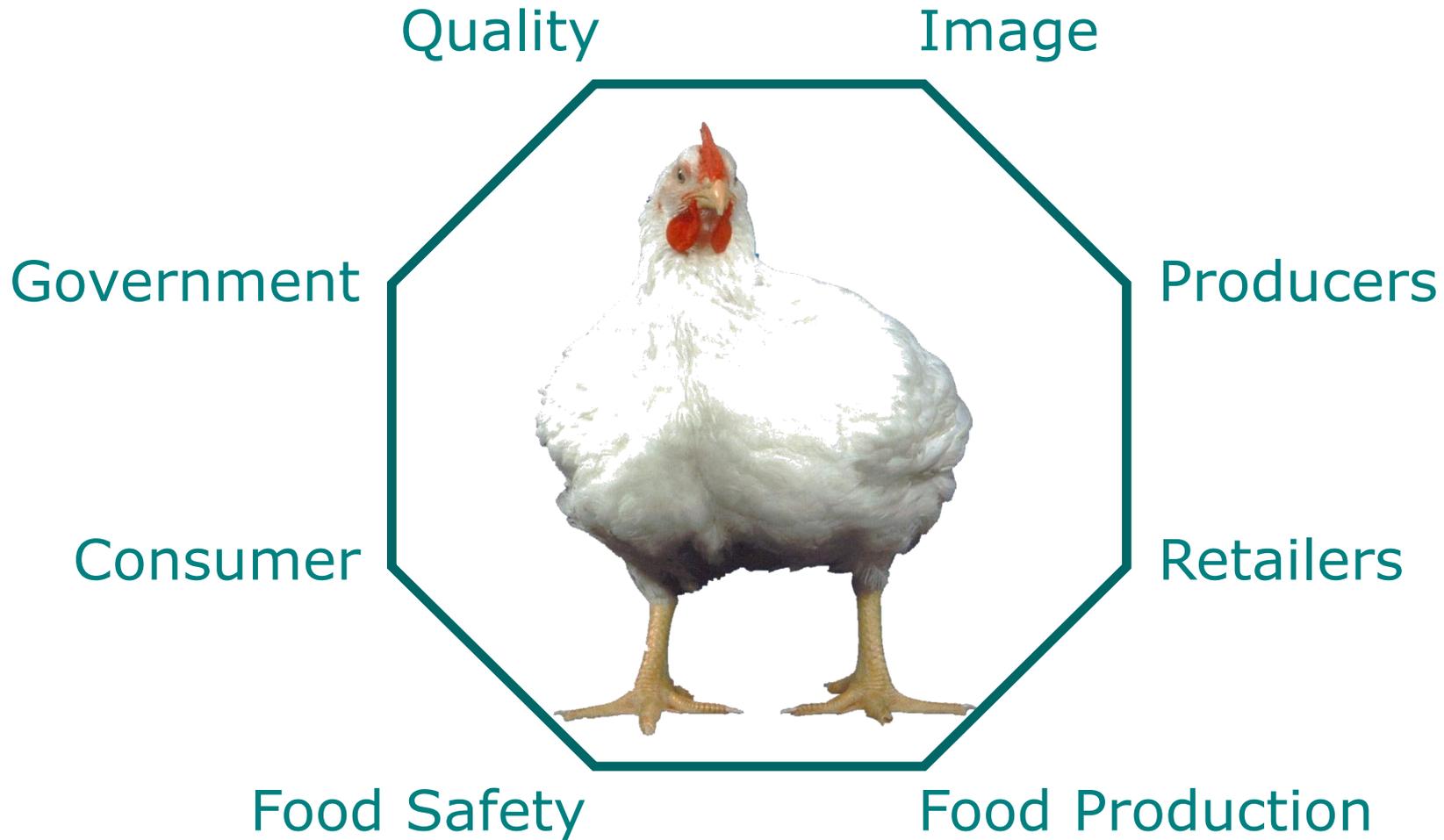
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Why?



A Global Broiler Market...

which develops and differentiates continuously



Why and for Whom are we producing for...?

What market are we in?

- Who are the Producers?
- Who are the Consumers?

Key issues:

- Consumer Demand
- Meeting Expectations



Differentiation needed?

Differentiation in Market Type based on:

- Population
- Demographics
- Income.



Broiler Meat Consumption General Tendencies

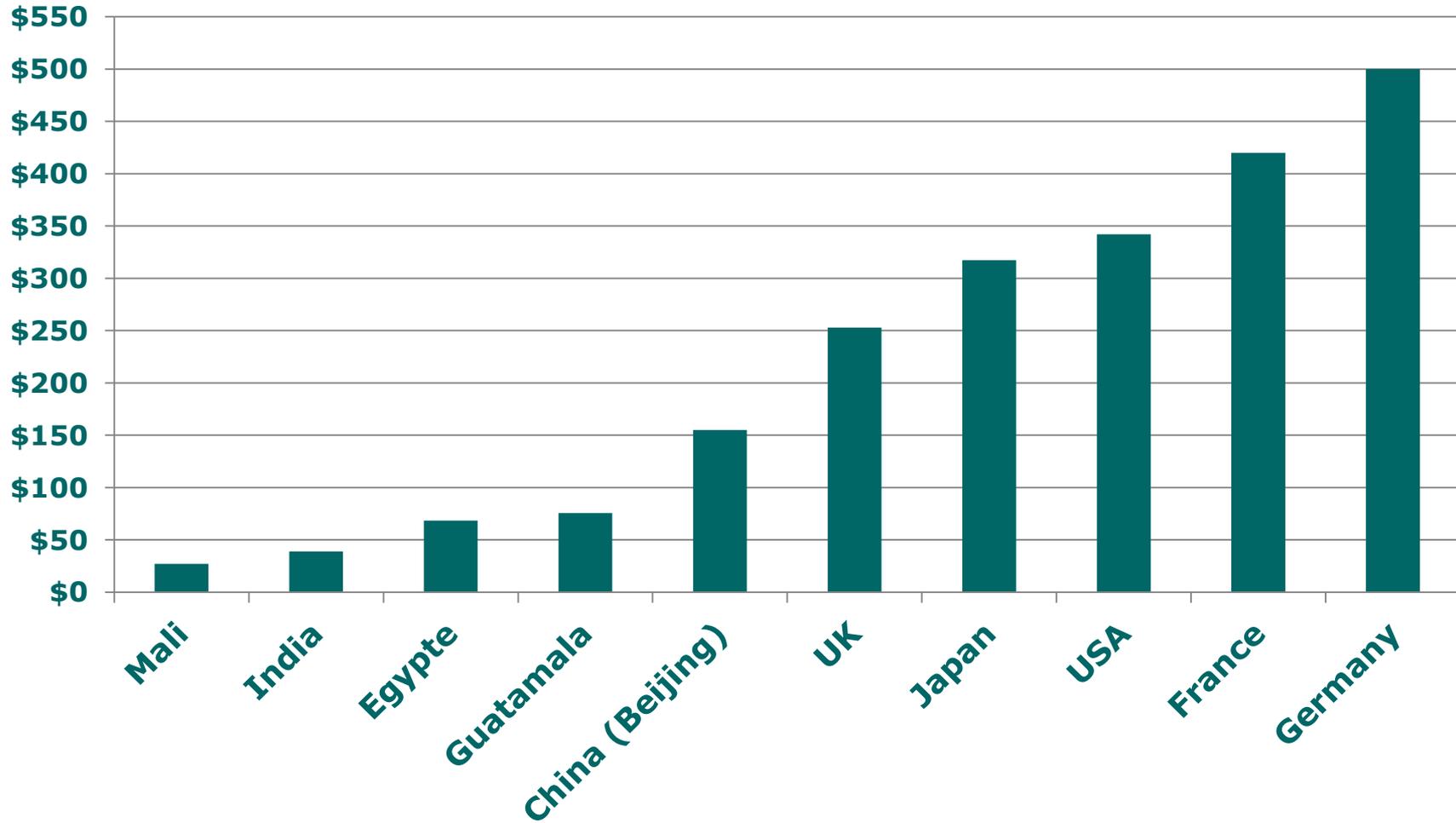
- **Live markets**
- **Whole birds**
- **Cut Up**
- **Further Processed**
- **Value Added**
- **Functional Foods?**

- **Immature**
- **"Traditional"**
- **Live Cost Oriented**

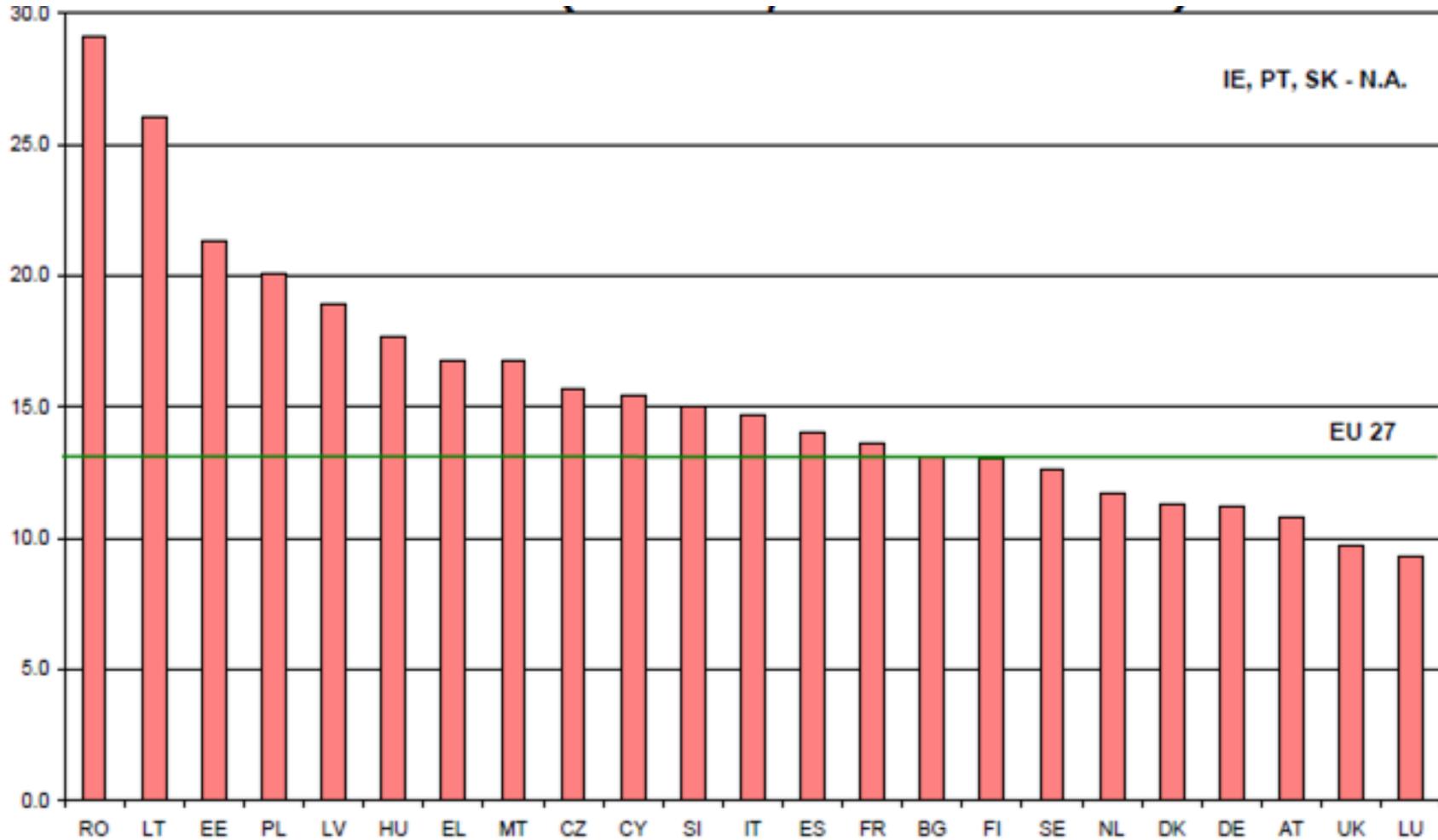
- **Mature**
- **"High Tech"**
- **Market Oriented**



Food expenditure per week (in USD)



Food Expenditure as % of total (2009)



Differentiation based on level of Social Development

**Sustainability / "License to Produce":
Respect for Humans, Animals and Environment**

**Animal
Welfare**

Health

Taste

Ready to Cook / Ready to Eat

Convenience

Food Safety/Traceability

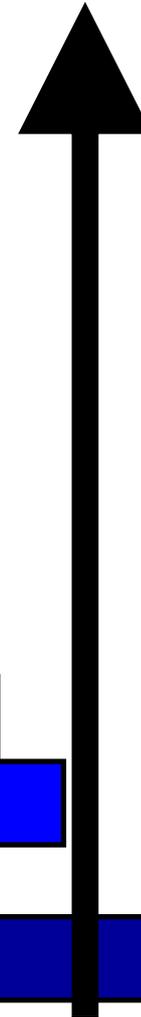
Affordable/Reasonable Price

Availability of Food

**Esteem /
Recognition**

**Social
Safety/
Security**

Physiological



Consumers' Perception & Behaviour

- Most of the Consumers have **no relation to agriculture** anymore
- We have to focus on **teenagers** as the future Consumers
- **Eating meat every day** is less and less a normal habit
- Consumers associate "**Natural**" with Food Safety, Health, Animal Welfare & Environment
 - ➔ Even though this might not always be 100% true, we have to accept this as a reality to deal with
- **Animal Welfare Associations** try to influence consumer behaviour:
 - ➔ Negative: extreme activists, no dialogue (PETA, Wakker Dier, etc.)
 - ➔ Positive: working together with the industry in the development of Welfare Schemes (RSPCA, Dierenbescherming, Tierschutz, ...)
- Consumers often **act differently** to what they say
- **Retailers "translate" consumer demands** to producers



How to meet Consumers' Expectations?

- Broiler Meat is still a **commodity product**
 - ➔ *Be Realistic and seek Opportunities!*
 - ➔ *Does the EU have to feed the whole world?*
- Change from “**Production of Agricultural Products**” to “**Production of Consumer Food Products**” based on consumer requirements
- Continued focus on **Cost Price**
 - ➔ *If consumers are educated about the Quality (welfare, health, safety) of the product, they should also be educated about the Cost of it!*



How to meet EU Consumers' Expectations in a global environment?

Focus on:

- **Quality** of the products in all aspects
- **Fresh** meat to compete with cheaper 3rd countries

Differentiation:

- Good conventional products
- Development of "Premium" products mainly driven by:
 - Animal Welfare
 - Health (low use of antibiotics)
 - Food Safety & Traceability
 - Tradition
- Not all schemes to follow the **EU Marketing Terms**
- Some refer to **Origin** of product (country, region, village)
- **Branding** is very important, tell the story!





Differentiation of broiler markets in the EU



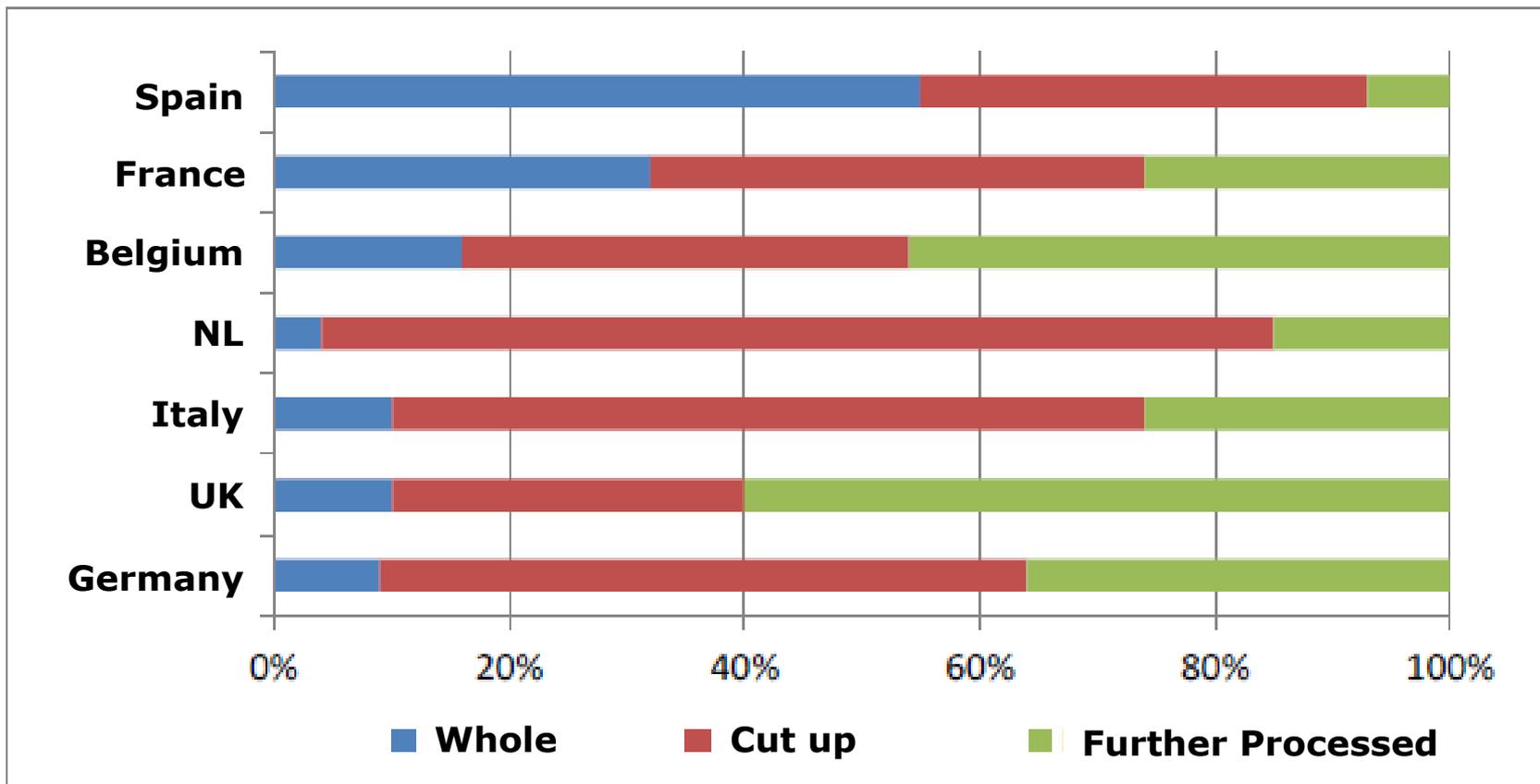
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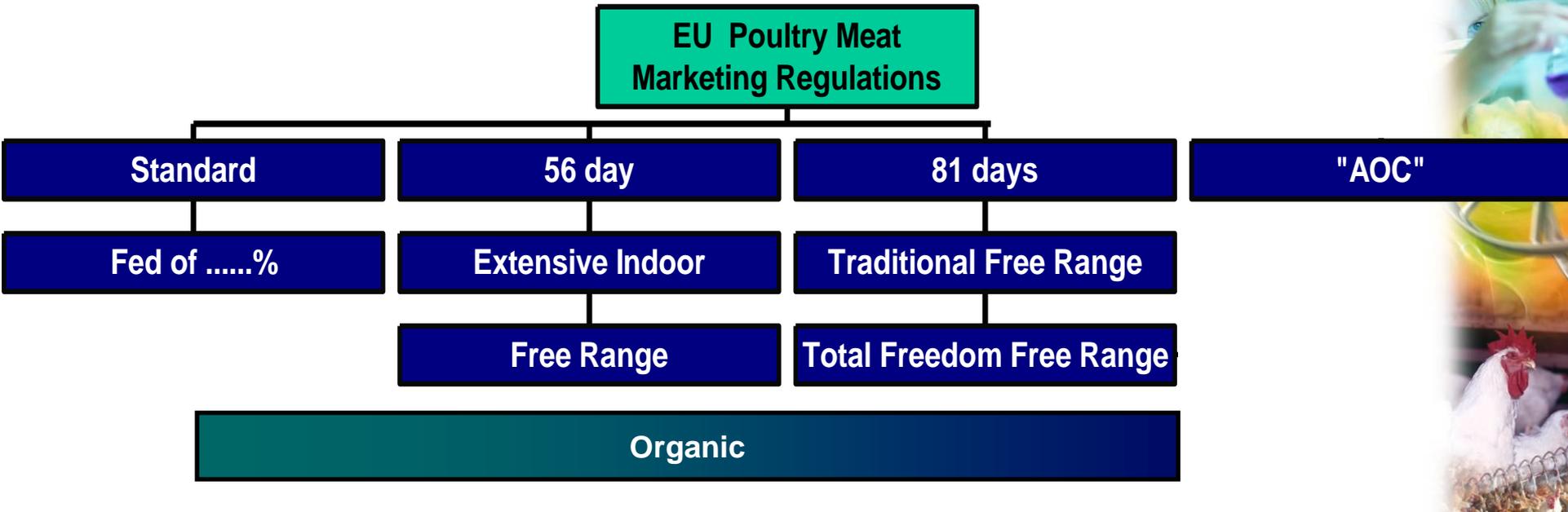
Differentiated markets in the EU



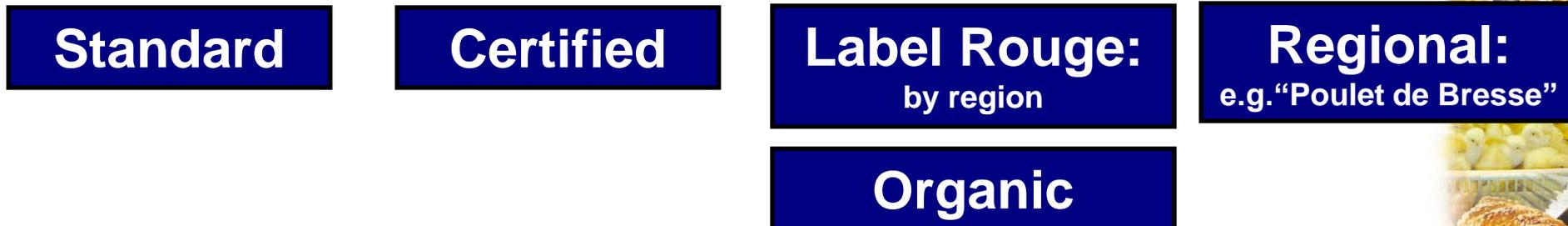
Segmentation of Broiler Meat Consumption at home



Special Marketing Terms EU (Directive 2000/13/EC) & France



France



Comparison of EU Marketing Terms

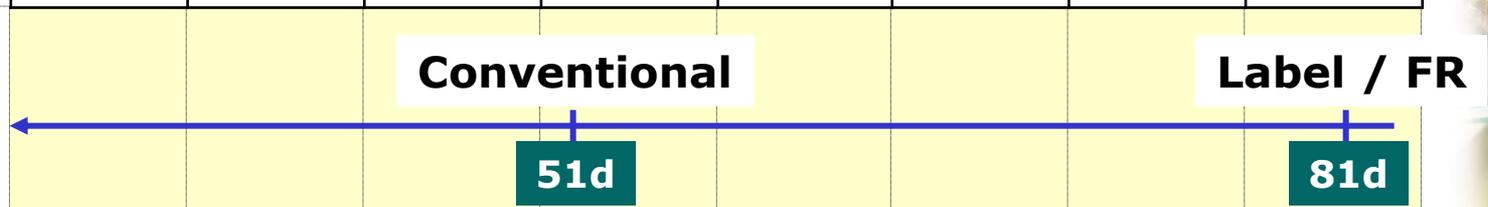
	Conventional	Fed with...%	Extensive Indoor (Barn reared)	Free Range	Traditional Free Range	Total Freedom Free Range
Breed	---	---	---	---	Slow Growing	Slow Growing
Minimum Age	No limit	No limit	56 days	56 days	81 days	81 days
Feed	---	≥ 65% cereals ≥ 50% maize	---	≥ 70% cereals	≥ 70% cereals	≥ 70% cereals
Max. birds/m² Indoor	---	---	15	13	12	12
Max. kg/m² Indoor	42 or less	42 or less	25	27.5	25	25
Popholes	---	---	---	4 m/100 m ² surface	4 m/100 m ² surface	4 m/100 m ² surface
Access to range	---	---	---	≥ 50%	at least from 6 wks	All their life
Ranging area/bird	---	---	---	1 m ²	2 m ²	unlimited
Max house size	---	---	---	---	4,800 broilers	4,800 broilers



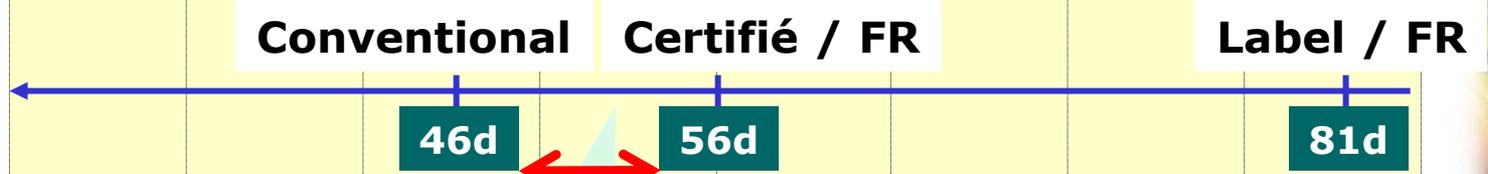
Evolution of ADG allows for innovation

28 35 42 49 56 63 70 77 84

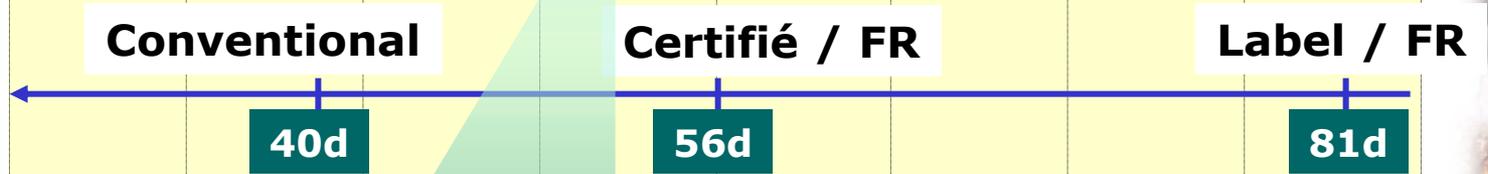
1980



1992



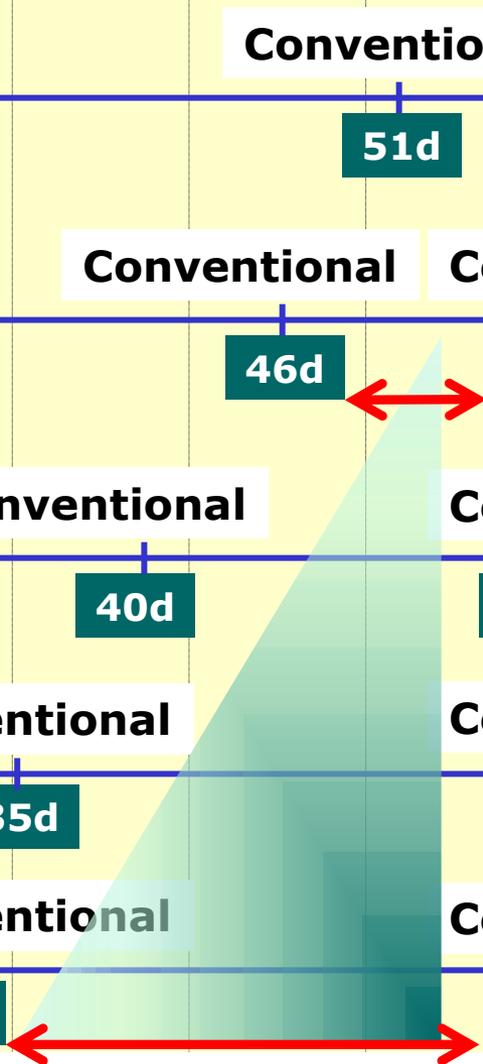
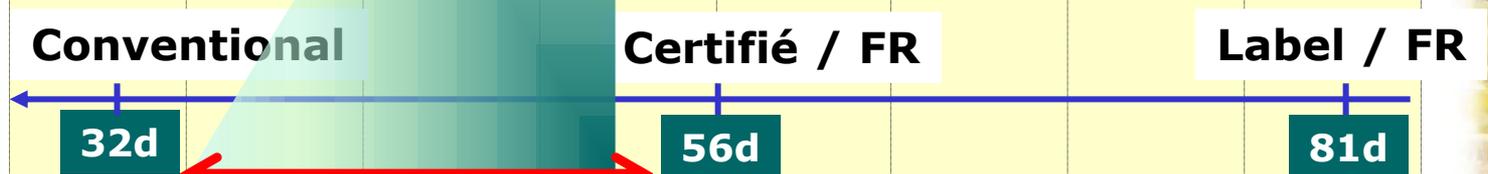
2004



2014



2020



Differentiated markets in the EU

In short

- According to an EFSA report (2010) about 7% of all Broiler Parent Stock in the **EU** are for the production of a “slow growing” broiler
- **France** has historically been the basis of this kind of Parent Stock, mainly based on “*tradition*” and “*cuisine*”:
 - About 35% of the total PS population is a PS for slow(er) growing broilers (Label Rouge, Certifié, premium, export)
- **Southern & Eastern Europe** have been using slow growing PS for the “*traditional*” and often “*seasonal*” backyard markets:
 - Spain, Italy, Greece, Eastern Europe
- **North Europe** is showing a development of new products or production systems, mainly driven by “*animal welfare*”:
 - UK, NL, Germany, Austria
- **More recent developments** seen because of an increase focus on *human health* (Food Safety, AMR) & *animal welfare*



EU: Backyard

- This traditional market is not based on any official certification
- Products sold directly to consumers (on local markets)
- Local poultry farmers grow broilers in natural settings
- Sometimes also used for dual purpose (females for eggs, males for meat production)



EU: "OAC" (Controlled Origin)

- This market is very limited
- One very good example is the "Poulet de Bresse" from France, using a special breed (blue feet) and specified production area (Bresse)



EU: Organic

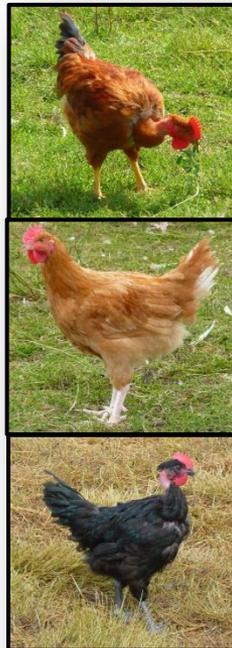
- This market falls under a separate EU regulation, but rules differ a lot between countries or certifications
- It is a relative small market
- No real growth
- Production in France: 7 000 T/year



France: Label Rouge



- Started in 1961
- 1965: Other products can have « Label Rouge » certification
- 1967: Synalaf (French Federation for Poultry Labeling)
- 2011: There are 200 different « Label Rouge » poultry products in France
- Production in France: 150 000T per year



France: Certifié



- CQC is a French certification
- The first « certified » broiler was introduced by Duc in 1991
- Production in France: 75 000 T per year



EU: Free Range



- 81-day FR is similar to Label Rouge in France
- Mainly used in the UK (56-day and 81-day)
- Total Freedom Free Range is hardly seen



UK: RSPCA Freedom Food (Indoor)



- Introduced by the RSPCA in the UK
- In 1996, creation of the RSCPA welfare standards
- Specifications:
 - the welfare of a breed is assessed according to the RSPCA Broiler Welfare Assessment Protocol. The Hubbard JA757 is the benchmark used in these trials
 - Can be used for Indoor, Free Range & Organic
 - Indoor with enriched environment

RSCPA: Freedom Food Indoor	
Breed	Slow growing
Max. Stocking density	< 15 birds / m²
Max. density	30 kg/m²
Max. Farm size	No limit
Max. barn size	No limit
Max. pen size	30,000
Min. Age	No limit
Light	20 lux min & natural light



Germany: Tierschutzlabel 2-step ("Stufe") concept



- Developed in 2011 by the German Animal Welfare Association "Tierschutzbund" for broilers and pigs
- 2-Step concept: "Basic" (1 star) and "Premium" (2 star)

		
Breed	Slow growing ≤ 45 g/d ADG	Slow growing ≤ 45 g/d ADG
Max. stocking density	15 birds/m²	10 birds/m²
Max. density	25 kg/m²	21 kg/m²
Max. Farm size	2x30,000	16,000
Max. barn size	30,000	16,000
Max. pen size	30,000	4,800
Min. Age	No limit	56 days
Light	Daylight is advised 8h dark in 1 period	Daylight is advised 8h dark in 1 period
Ranging area	Wintergarten (min.20% + 3m wide)	Wintergarten + Free Range (≥1/3 of life; 4 m²/bird)
Additional Material	1 bale of straw/2,000 Min. 15 m perches/1,000 Pecking stones	1 bale of straw/2,000 Min. 15 m perches/1,000 Pecking stones

NL: Dierenbescherming "Beter Leven" concept



- Introduced in 2007 by the Dutch Animal Welfare Association "Dierenbescherming" for different products (calves, pigs, meat cattle, rabbits, poultry)
- 3-star concept:



56-day indoor + wintergarden



56-day Free Range



Organic



NL: Dierenbescherming “Beter Leven” 1-star concept



- Based on the EU regulation for **Extensive Indoor** & some additional requirements.
- The **wintergarden** is the most typical additional requirement of this concept



NL: Dierenbescherming "Beter Leven" 1-star concept





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More recent developments

Netherlands



Increased pressure on retailers



- During the last 2-3 years an extreme animal welfare group called “Wakker Dier” (Awoken Animal) has increased the pressure on Dutch retailers asking consumers to stop buying broiler meat:
 - using a very strong media campaign
 - focusing on chicken meat
 - against individual supermarkets and food producers
 - against the production of standard chickens called “Plofkip” (exploding chicken)
 - to move to at least the 1-star chicken
- The campaign won a media award
- “Plofkip” was chosen as the most popular word in 2012



First campaign: "Best kept retailer's secret"



Organic chicken
930 gram

**Exploding chicken
("Plofkip")**
2.350 gram



95% of all broilers are a "Plofkip"
Such animals can hardly walk



Mijn burger bij McDonald's?



AH-KLANTEN OPGELET

Deze verpakking bevat plofkip.



“ONBEGRIJPELIJK dat supermarkten als Albert Heijn en Jumbo nog steeds PLOFKIP verkopen.”



Plofkipp Albert Heijn



Plofkipp Jumbo

De plofkipp heeft vaak ziektes die met antibiotica worden bestreden

Marno Wolters, dierenarts:

Ik ben nu bijna veertig jaar dierenarts, en maak me al vele jaren zorgen over de leefomstandigheden van de dieren in de pluimvee-industrie. Met name de plofkipp is een schrijnend voorbeeld van dieren die in hun welzijn worden aangetast om tot hoge productie te komen. Toch is deze plofkipp nog altijd het meest gehouden dier in Nederland.

Zo'n plofkipp leeft met tienduizenden andere kuikens in een grote hal, met een leefruimte die per dier niet groter is dan één A4'tje. Hier staan ze hun leven lang, terwijl de ondergrond door hun ontlasting steeds verder vervuult. Ze kunnen niet naar buiten en de kans op infecties is hoog. In deze ongezonde leefomgeving moet het kuiken ook nog extreem snel groeien. Het slachtgewicht van 2,2 kilo wordt bereikt in slechts zes weken: bijna 4 keer zo snel als 60 jaar geleden.

Door deze snelle groei en de slechte leefomstandigheden, lijden de dieren vaak aan pijnlijke aandoeningen en ziektes. De groei van poten, skelet, hart en longen blijven achter bij de groei van de borstspier (de filet). Een groot deel van deze kippen heeft ontstekingen aan de poten of borst. Vele kunnen niet meer normaal lopen en een deel is zelfs ernstig kreupel. Jaarlijks halen miljoenen plofkippjes de slachtleefijd van 6 weken niet.

Bij veel gezondheidsproblemen worden antibiotica ingezet. Uit recent onderzoek van Wageningen Universiteit en Research over de periode 2011 en 2012, blijkt dat plofkippjes gemiddeld 26 dagdoseringen antibiotica per dier per jaar krijgen. Die antibiotica zijn veel minder nodig als de kip langzamer groeit onder betere leefomstandigheden. Voor de kippen die gehouden worden volgens het 1 ster Beter Leven kenmerk van de Dierenbescherming, zien de cijfers in dit onderzoek er dan ook heel anders uit. Zij groeien langzamer en krijgen maar liefst 85% minder antibiotica toegedend.

Als dierenarts moet ik constateren dat we met elkaar een vorm van dierhouderij hebben gecreëerd, die veel te eenzijdig gericht is op de productie van goedkope kippenvlees. Dit systeem wordt nu mede met antibiotica overeind gehouden. Maar antibiotica zijn bedoeld als medicijn, om mensen en dieren beter te maken. Niet om de gevolgen van een verkeerd systeem te maskeren.

De goedkope plofkipp wordt zo massaal gehouden om aan de eisen van de supermarkten te voldoen. Want kipfilet is vaak in de aanbieding, soms voor een prijs per kilo die lager is dan voor druiven of luxe kattenvoer. Voor een slachtrijpe plofkipp, ontvangt de boer maar €1,90: de prijs van een kopje koffie op een terras. Voor dit bedrag moet hij het dier haar hele leven voeden en huisvesten. Er zijn wel alternatieven, maar die kosten ook wat meer. Dat vinden supermarkten niet aantrekkelijk; zij zetten hun leveranciers juist vaak onder druk om nog goedkoper te produceren.

Albert Heijn en Jumbo zijn grote verkopers van plofkipp. Een mooie stik op de verpakking wekt de indruk van kwaliteit waarbij de kip een goed leven heeft gehad. Of er wordt een sticker op geplakt, met 'laagste prijs'. Zo lang supermarkten de schappen vol blijven leggen met goedkope plofkipp en blijven stutten met prijzen, houden zij dit systeem in stand.

Als dierenarts vind ik het onbegrijpelijk dat supermarkten als Albert Heijn en Jumbo deze plofkipp nog steeds verkopen. Ik doe hierbij een oproep om zo snel mogelijk te stoppen met de verkoop van plofkipp en om te schakelen naar kip met een ster van het Beter Leven kenmerk. Dan krijgt het meest gehouden dier van Nederland eindelijk echt een beter leven.

Meer weten? wakkerdier.nl



Video 31-07-2013



Meer weten
wakkerdie





Differentiation of broiler markets in the EU



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Netherlands
Chicken of Tomorrow



NL: Chicken of Tomorrow

Stakeholders:

- All retailers organised in an association called "CBL"
- Dutch Poultry Board
- Processing plants
- Dutch Farmers associations (NOP & NVP)



Agreement for:

- **all fresh broiler meat** sold in the **supermarkets** latest by 2020
→ Who reacts first?
- Focus on People, Profit, Planet
- Use of slower growing breed with max 50 g/d ADG
- No requirements to adjust current broiler houses
- Slightly lower density & enriched environment in the broiler house



Comparison of standards: conventional, Chicken of Tomorrow, 1-star

	Conventional (average)	Chicken of Tomorrow	56d + Wintergarden 
Breed	Fast Growing	Slower Growing	Slow Growing
ADG (g/d)	Actual (60-65 g/d)	Max. 50 g/d	About 42 g/d
Killing Age (d)	No limit	No limit	Min. 56 days
Age in practice (d)	35-42	45-47	56
Max. Density (kg/m2)	42	38	25
# broilers/m2 in practice	21	19	12
Extra material	No	Bales of straw + grain	Bales of straw + grain
Use of windows	No	No	Yes
Day/night-rythm	Min. 6h dark (of which 4h in 1 period)	Min. 6h dark	* Natural daylight (min. 20 lux); * Min. 8h dark in 1 period
Access to range	No	No	Wintergarden
Use of antibiotics in practice	Average 17.6 animal day doses per year (in 2013)	Max. 17.0 animal day doses per year	Average 3.9 animal day doses per year (2012)
Stunning method	Electrical + 2-phase CO ₂ method	Electrical + 2-phase CO ₂ method	2-phase CO ₂ method





Differentiation of broiler markets in the EU



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***Genetics to be adapted
to the differentiated markets***



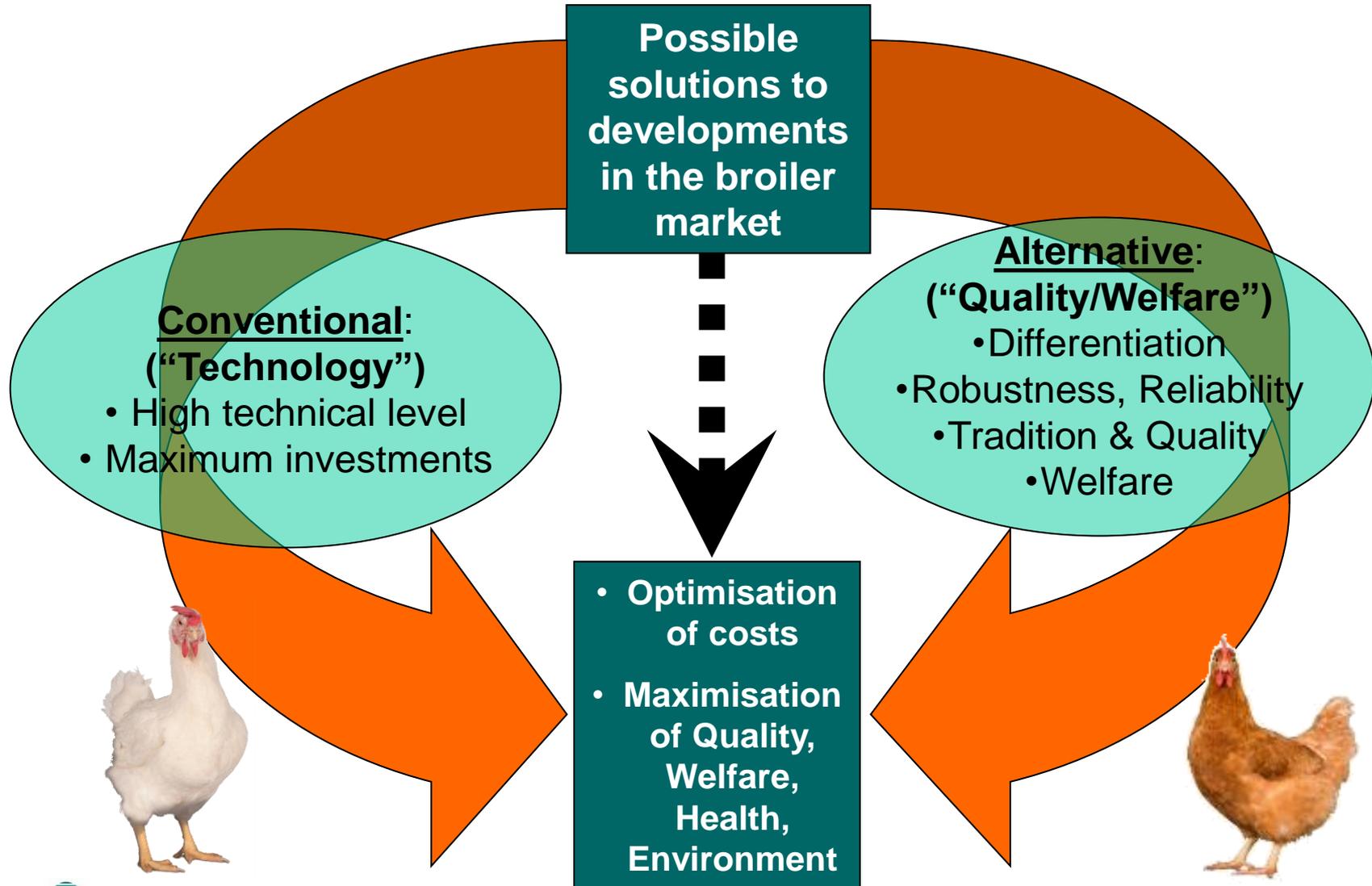
Genetics to be adapted to the differentiated markets

- The existing and newly developed “premium” products are covering a wide range of:
 - age at slaughter
 - growth rate levels
 - housing systems
 - husbandry practices
 - environment
 - etc.
- It is impossible to use the same (fast growing) genetics for these alternative markets with differentiated growth without any negative effects
- Unlike many other inputs (feed, housing, climate, health control, etc.) genetics cannot be “twisted” halfway through and needs to fit the requirements from the beginning!
- This needs a different approach and a different mindset!



A Global Broiler Market...

which develops and differentiates continuously



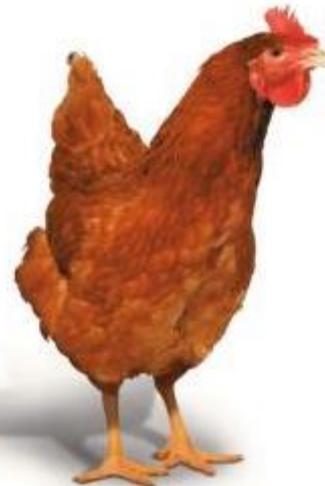
Genetics to be adapted to the differentiated markets

● 2 categories of PS Females:

- Mini



- Standard



Genetics to be adapted to the differentiated markets

3 categories of PS Males:

- Slow Growth (= Label Rouge PS Males)



- Intermediate Growth



- Conventional Growth



Influence of the different parameters on Quality and Image of Broilers

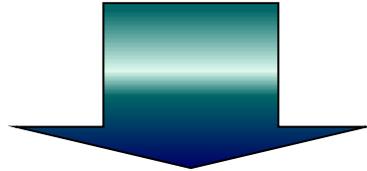
Parameter	Quality	Image	Remarks
Genetics	+++	+++	Adapted genetics through differentiated growth
Feed	+	++	% Cereals, GMO, antibiotics, animal by-products, local sources
Age	+++	++	Never enough for the consumer: when they talk, not when they buy...
Housing	+	++	Density, additional material used, natural light, winter garden
Range area	+	+++	More important for the image than for taste or welfare Risk of diseases
Processing	++	+	Product Quality, presentation, broken bones
Consumer Information	+	+++	Product information, education
Tracability	+	+++	Security
Branding/Marketing	+	+++	Tell a positive story, there is something to say!



Slow(er) Growing Broilers

Better Quality through Differentiated Growth

- Better heart-lung ratio vs. liveweight
- Better bone mineralisation
- Better development of the immune system



- ✓ Very robust and resistant against external stress factors (temperature, feed and disease challenges)
- ✓ Good liveability and good solid bone structure and legs
- ✓ Good welfare for the animals and for the farmers
 - No need to restrict the breeder females and the broilers
 - Ease of management
- ✓ Good uniformity within a flock and between flocks
- ✓ Hardly any need to use antibiotics
- ✓ Good processing characteristics



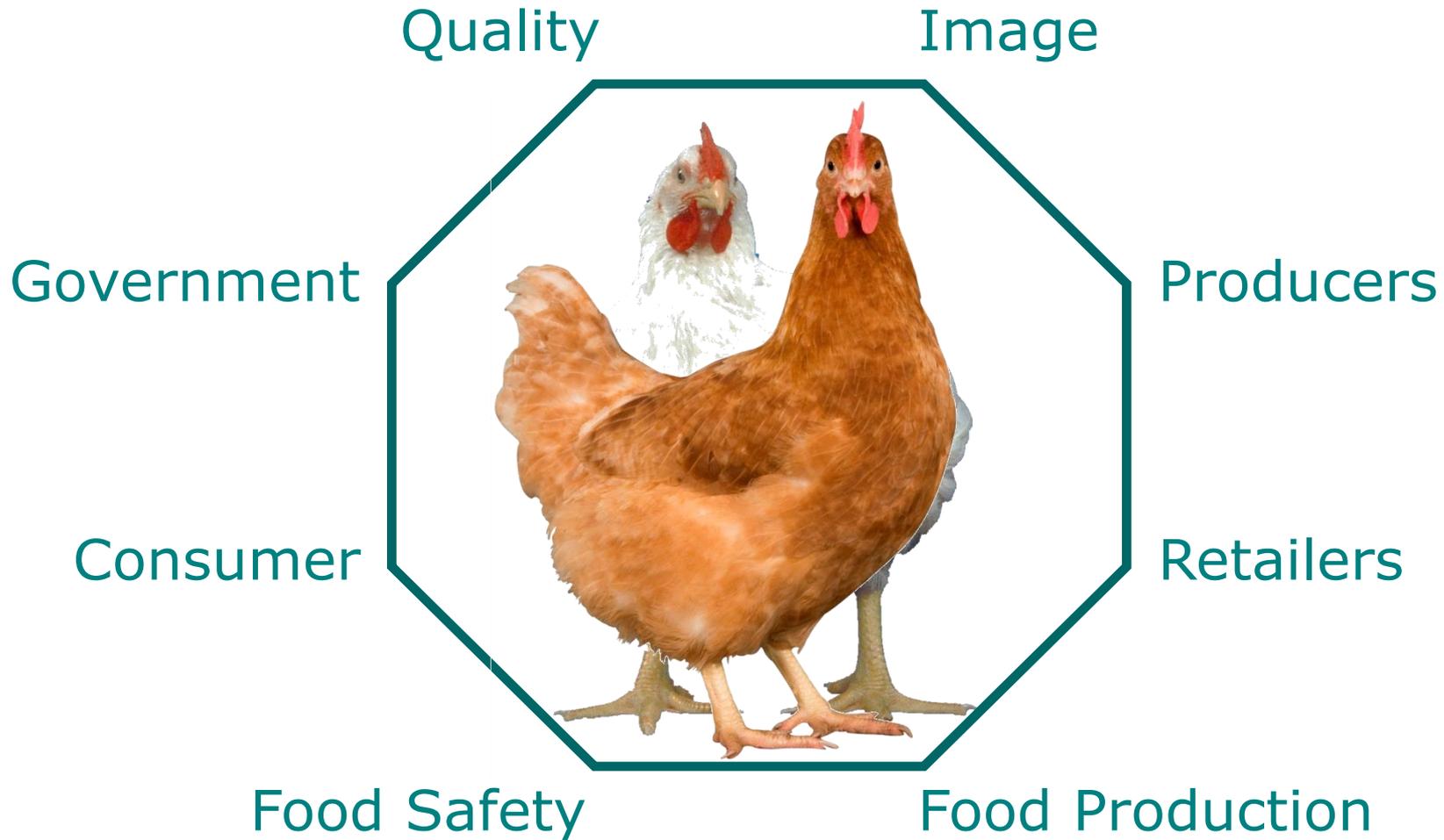
Taste

Eating Quality and Flavour

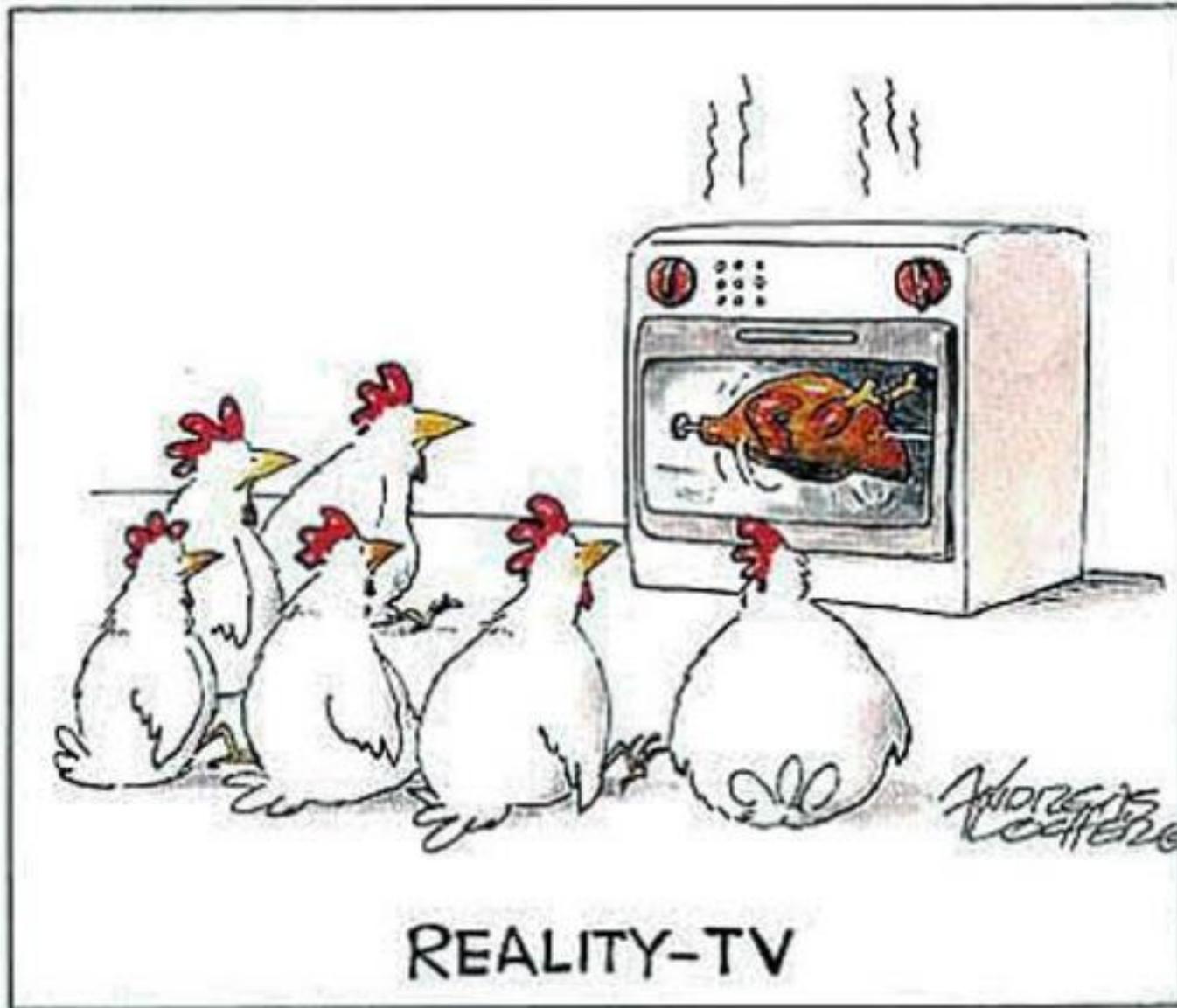
Taste in chickens is mainly influenced to the length of the growing period and the feed/raw materials used; maize has a strong contribution to good taste



A Global Poultry Market... which develops and differentiates continuously



To be continued...





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General Assembly avec 2014



Are Slow(er) Growing Broilers Sustainable?

- Sustainability models often include three major components:

- Environment
- Social
- Economics

These are intrinsically linked and are critical when evaluating agricultural production systems, particularly with farm animal welfare

- Undoubtedly there is a very positive effect on the **Social element**. But there is a negative impact on **environment** and **economics** using slower growing broilers in combination with extensive housing systems

- However:

- on **Parent Stock** level there is a positive effect (less feed per chick produced)
- On **Broiler** level it depends on the actual breed used, but the negative impact is partly compensated by the better liveability, lower condemnation rate and little/no use of antibiotics

- There is probably much more to gain by:

- using more **local raw materials** (less transport)
- **using the whole carcass/all parts** for local consumers in the EU → develop new products for it and educate consumers. The technology is available...
- reducing **food wastage**... (23% edible food is thrown away in the EU)



Hubbard JA57 PS females mated with conventional PS males



Hubbard JA57 PS females Alfa-alfa feeding station



Hubbard JA87 PS females mated with conventional PS males

