



DANISH MEAT  
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## Produktkatalog - okse

PISTOL



### LANGRYG

Langryg og kille udgør tilkammen en pistol. Langrygsen er afskåret kyllen i et vandret snit, således at tykkelse, trekantning, udvortes, mættede samt hofbenet sidder på langrygsen.

### KILLE

Kyllen er skåret tyk, trekantet og vandret snit.

# Updated Nutrient Data On Danish Beef and Veal

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# Background



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- EU Regulation No 1169/2011 requires declaration on nutrient content of all centrally packed meat products with added ingredients, that is e.g. :
  - Marinated, cured meat and meat with spices.
  - In case of voluntary labelling from 13 December 2014
  - Mandatory labelling from 13 December 2016
- Required declaration on
  - *Total fat*
  - *Saturated fat*
  - *Carbohydrates*
  - *Sugars*
  - *Protein*
  - *Salt*
  - *Energy*
- The Danish Food Composition database is outdated!
  - Based on 30 year old data
  - Does not reflect present animal production, commercial cuts or trimming methods
  - Does not reflect present fat content in retail cuts.



**Objective:** To document up-to-date nutrient data on total and saturated fat as well as protein and salt content in Danish beef and veal cuts sold in Danish marketplaces of today.

# Materials and Method

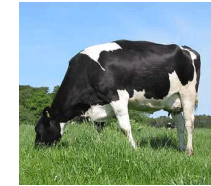


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- **Sampling principles:**
- Average animals
  - Breed (Holstein Friesian)
- Average classification criterias
  - Carcass weight
  - Age
  - EUROP Conformation
  - EUROP Fat class
  - Colour

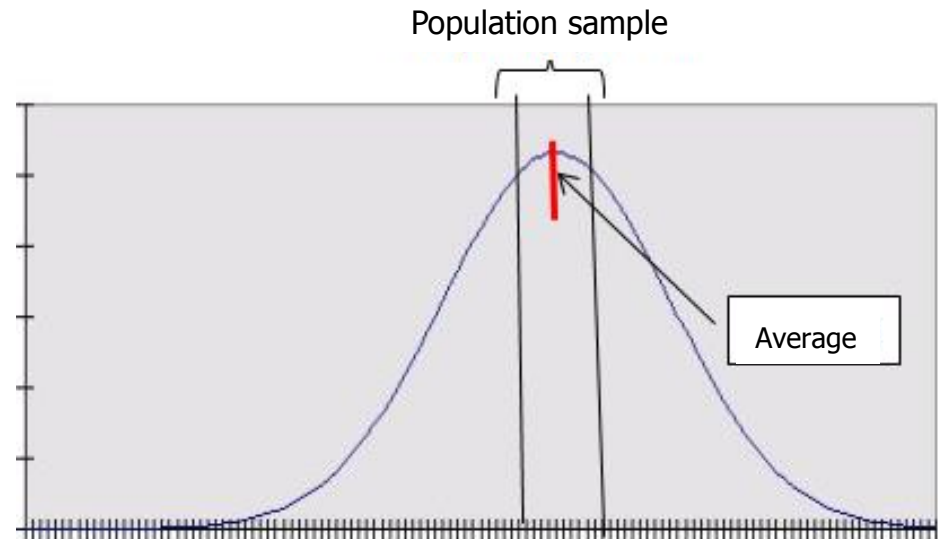


8 veal  
< 12 months



8 beef  
> 12 months

**= Representative sample**

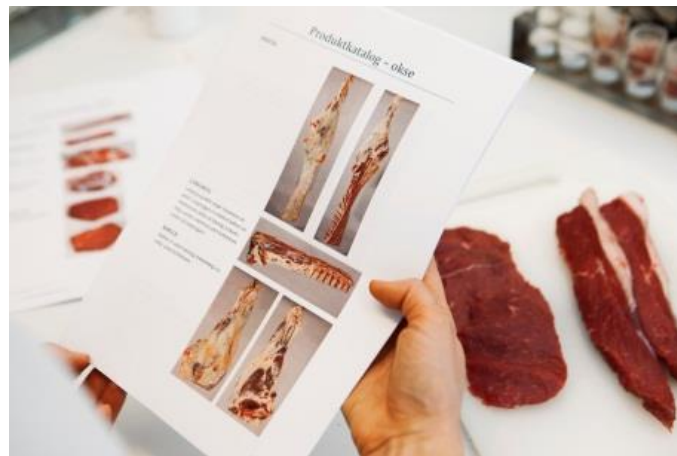
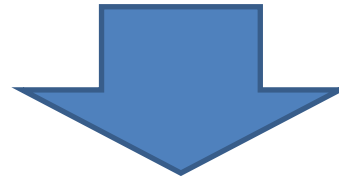


# Representative commercial cutting standard applied for DK products

69 retail cuts  
7 by-products  
ground beef



69 retail cuts  
9 by-products

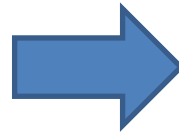


## Nutrient data on:

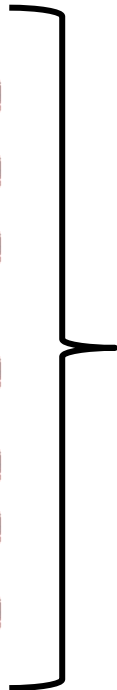
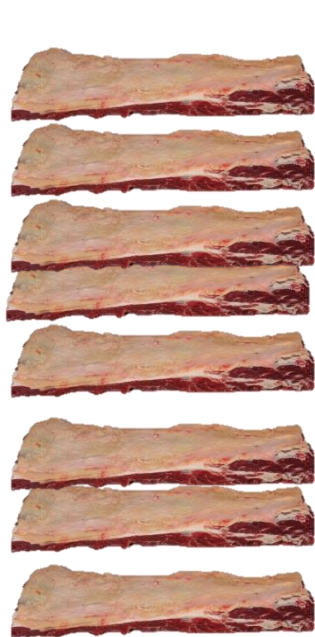
- Total fat
- Saturated fat
- Protein
- Carbohydrates
- Salt
- Energy

# Sample preparation approach

## Sample preparation



## Analyses



E.g. 8 x Striploin



Pooled sample

### Chemical analyses

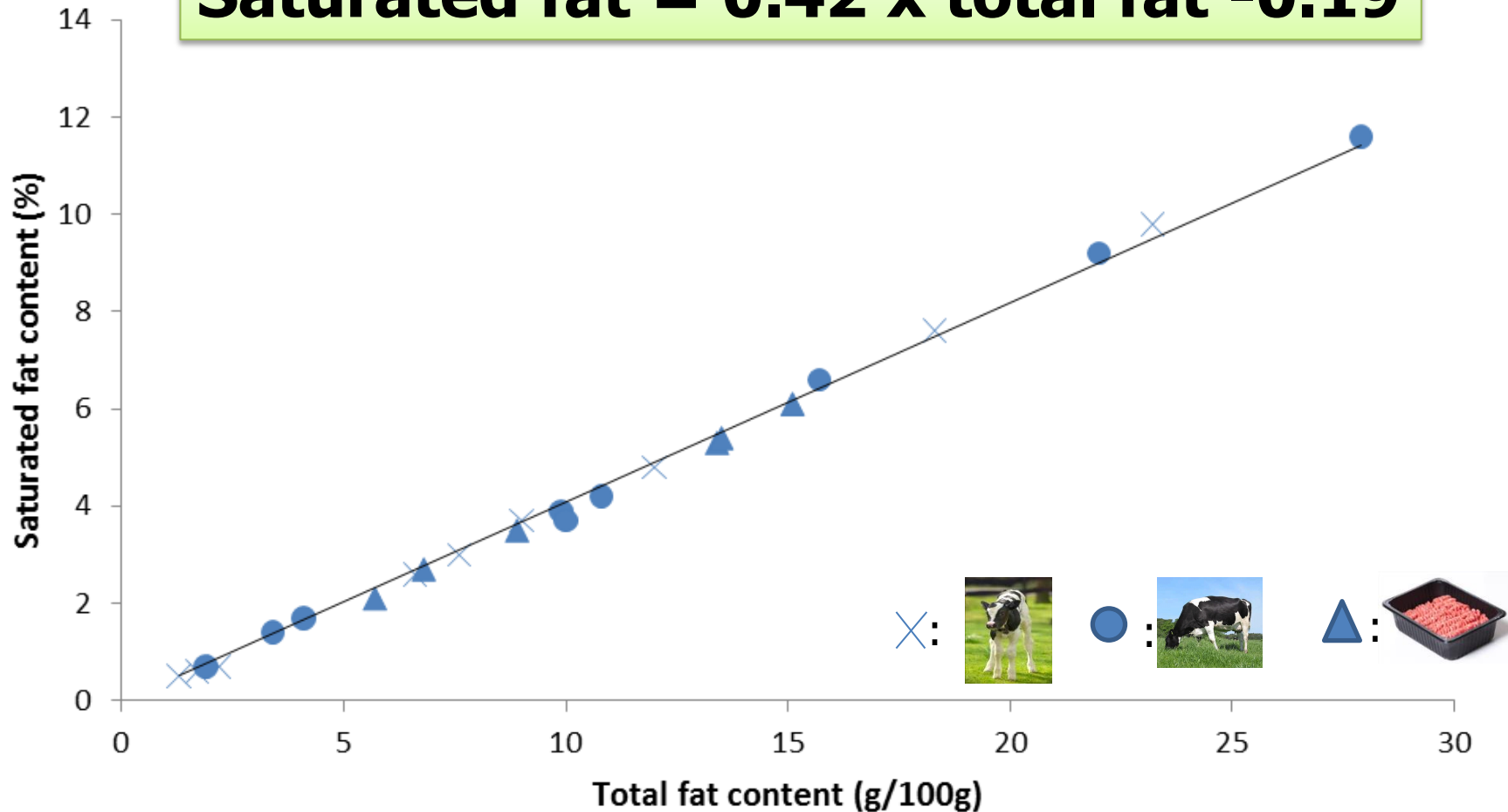
- Total fat
- Protein

### Estimations

- Energy
- ### Database
- Salt

# Linear relationship between total and saturated fat for beef and veal

$$\text{Saturated fat} = 0.42 \times \text{total fat} - 0.19$$





# Results from new nutrient data

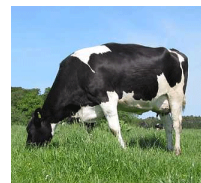


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Item	VEAL			BEEF			Item	VEAL			BEEF		
	Total fat	Sat. fat	Protein	Total fat	Sat. fat	Protein		Total fat	Sat. fat	Protein	Total fat	Sat. fat	Protein
Hindquarters	9.0	3.4	20.3	12.4	4.8	21.2	Culotte	9.0	3.4	19.7	10.8	4.2	19.1
Full loin	9.1	3.4	18.9	12.4	4.8	20.0	Silverside	4.4	1.7	21.8	5.9	2.2	21.0
Leg	8.5	3.2	20.3	12.0	4.7	21.2	Silverside wo/fat	3.0	1.1	21.8	4.0	1.5	21.1
Round w/ shank	8.4	3.2	20.3	11.7	4.6	21.2	Silverside PAD	1.6	0.6	21.8	2.8	1.1	21.0
Long loin	10.7	4.2	20.1	14.3	5.6	21.2	Muscle	2.7	1.0	22	4.2	1.6	21.8
Full rib w/bones	11.0	4.3	20.1	15.5	6.1	21.2	Forequarters w/flank	11.4	4.5	19.4	16.1	6.3	20.2
Full rib, boneless	10.2	4.0	20.5	13.6	5.3	19.8	Forequarters wo/flank	10.0	3.9	19.6	14.7	5.7	20.5
Short loin w/bones	11.5	4.5	20.1	13.5	5.3	22.7	Shoulder w/shin	8.7	3.3	20	12.6	4.9	21.3
Short loin, boneless	9.1	3.4	20.4	10.2	4.0	20.5	Shoulder wo/shin	9.1	3.4	19.7	13.0	5.1	20.6
T-bone	9.8	3.7	20.3	11.7	4.6	22.1	Shoulder clod	6.3	2.4	20.6	8.3	3.1	20.4
Full rib w/bones, 5 bones	10.8	4.2	20.3	15.4	6.0	21.8	Shoulder clod (trimmed)	6.4	2.4	20.6	8.6	3.1	20.4
Full rib wo/bones, 5 bones	9.3	3.5	20.9	13.4	5.2	20.1	Shoulder clod (extra trimmed)	2.9	1.0	21.3	3.9	1.5	21.5
Entrecote w/bones	11.2	4.4	19.7	15.7	6.1	20.4	Feather blade	6.0	2.3	20.6	8.1	3.0	20.4
Entrecote w/cap	11.3	4.4	19.6	15.4	6.0	18.4	Feather blade PAD	3.0	1.1	20.4	4.4	1.7	20.5
Entrecote wo/cap	7.7	2.9	20.6	10.8	4.2	19.7	Blade roll	2.7	1.0	19.8	3.7	1.4	20.0
Striploin	9.3	3.5	20.9	12.3	4.8	20.5	Shin w/bones	7.3	2.7	21	10.9	4.3	23.9
Full rib, boneless wo/fat	1.9	0.7	21.9	3.7	1.4	21.4	Shin meat	4.7	1.8	21.9	6.3	2.4	22.0
Full rib, boneless wo/fat & short loin	1.9	0.7	22.1	3.6	1.4	21.5	Backrib w/bones & neck	7.7	2.9	20	11.3	4.4	21.1
Full rib, boneless wo/fat & cervical ligament	4.3	1.6	21.3	6.7	2.5	20.7	Backrib long	6.1	2.3	19.4	9.0	3.4	19.1
Tenderloin w/fat & strap muscle	7.5	2.8	20.2	9.5	3.6	19.3	Backrib, short	6.0	2.3	19.9	9.9	3.7	18.9
Tenderloin wo/fat w/strap muscle	3.6	1.4	21	6.0	2.3	19.9	Briskets w/bones	15.6	6.1	18.6	21.1	8.2	19.7
Tenderloin wo/fat & strap muscle	2.7	1.0	20.8	4.8	1.8	19.9	Briskets	15.1	5.9	18.5	20.1	7.9	17.4
Chateaubriand	2.5	0.9	21.1	5.0	1.9	19.9	Thin flank	8.1	3.0	19.6	10.7	4.2	19.0
Topside	4.5	1.7	21.2	5.3	2.0	21.0	Thin flank 22 x 40	7.6	2.9	19.7	10.0	3.8	19.4
Topside wo/cap	2.1	0.8	21.9	2.9	1.1	21.6	Thin flank, middle	17.1	6.7	18.3	21.5	8.4	17.4
Topside PAD	11.3	0.5	22	3.3	0.9	21.7	Flank w/bones	15.3	6.0	19	19.8	7.7	19.5
Full rump w/cap	5.9	2.2	20.7	7.1	2.7	20.3	Flank steak	4.5	1.7	20.9	6.7	2.5	20.0
Rump wo/fat w/cap	3.7	1.4	21.1	5.4	2.0	20.5	Flank steak PAD	2.7	1.0	21.1	5.0	1.9	20.2
Rump w/fat wo/cap	5.1	1.9	21	5.8	2.2	20.5	Bavette	6.1	2.3	19.8	8.4	3.2	19.2
Rump	2.4	0.9	21.5	3.5	1.3	20.9	Bavette PAD	2.9	1.1	20.2	6.1	2.3	19.4
Rump PAD	1.9	0.7	21.5	2.9	1.1	21.0	Tail	12.2	4.8	19.8	17.0	6.6	22.8
Eye of round	4.0	1.5	21.3	5.1	1.9	20.9	Heart	8.6	3.2	16.9	8.6	3.2	17.1
Eye of round PAD	1.3	0.5	21.6	1.9	0.7	21.3	Liver	2.9	1.1	19.1	3.3	1.2	19.2
Ossu Buco	9.4	3.5	20.2	14.3	5.6	20.9	Tongue	13.1	5.1	17.0	16.8	6.6	16.5
Knuckle	4.1	1.5	20.1	5.1	1.9	20.2	Kidney	3.2	1.2	15.7			
Knuckle (German cut)	2.8	1.1	20.6	3.6	1.4	20.7	Diaphragm w/membrane	17.5	6.8	19.7			
Knuckle PAD	1.6	0.6	20.7	2.3	0.9	20.8	Thymus gland	6.4	2.4	17			
Cuvette	8.7	3.3	20.4	11.1	4.3	19.6	Thick Skirt	6.2	2.3	19			
Cuvette, triangle shaped	8.0	3.0	20.6	10.5	4.1	19.8	Head meat	8.8	3.3	21			



77 % of veal retail cuts



52 % of beef retail cuts

< 10 g fat per 100 g

***"To limit fat intake from meat products by choosing meat with maximum 10 % fat"***



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# Conclusion

- ❑ Updated nutrient data on Danish veal and beef
- ❑ Danish veal and beef offer numerous products with less than 10 % fat
- ❑ A clear linear relationship between the total and saturated fat content



**Updated nutrient data qualifies the debate on nutrient value for beef and veal!**





# Future perspectives

## - Nutritional claims

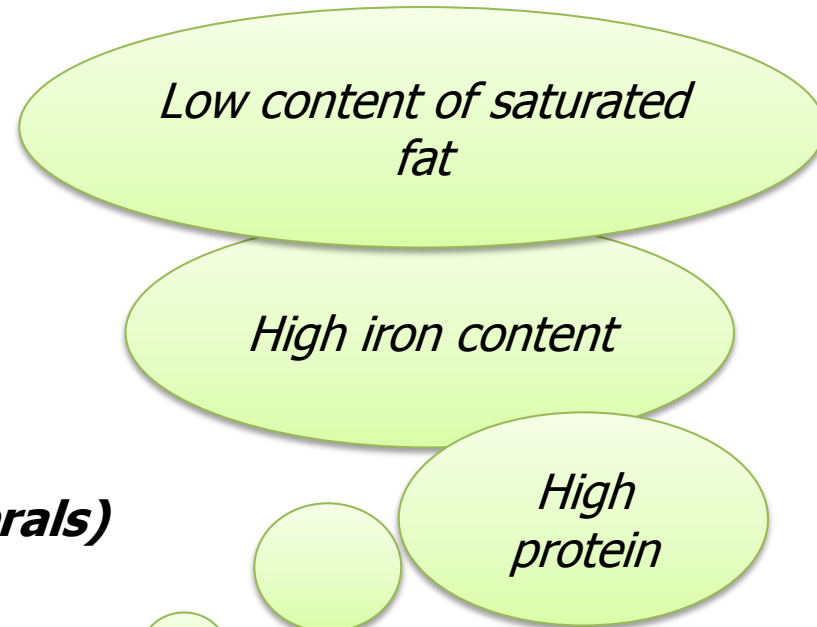


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Regulation No 1924/2006 determines requirements for nutritional claims

**7** out of **30** nutrition claims may be applied to Danish beef and veal retail cuts:

- ***Low fat***
- ***Low saturated fat***
- ***High protein***
- ***Source of protein***
- ***High (vitamin) and/or (mineral/s)***
- ***Source of (vitamin/s) and/or (minerals)***
- ***Naturally/Natural***



# Health claims



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Regulation No. 432/2012 determines requirements for health claims

**140** out of **222** health claims may be applied to Danish beef and veal retail cuts:

- Meat
- Saturated fatty acids
- Protein
- Niacin
- Vitamin B6
- Pantothenin acid
- Vitamin B12
- Potassium
- Phosphorus
- Iron
- Zinc
- Vitamin A
- Vitamin D
- Vitamin K
- Vitamin C
- Thiamine
- Riboflavin
- Biotin
- Folate
- Copper
- Manganese

*Reducing consumption of **saturated fat** contributes to the maintenance of normal blood cholesterol levels.*

***Protein** contributes to the maintenance of muscle mass*



# How can data be applied for general use?

- Documentation for forthcoming labelling requirements
- Documentation for nutrition and health claims
- Benefit various user groups
  - Consumers
  - Health professionals
  - Catering, restaurants, chefs
  - Organisations, NGO's and health authorities



# Thank you!

- [EHBR@DTI.dk](mailto:EHBR@DTI.dk)

Further information and publications:

- <http://www.dti.dk/projects/nutrient-data-for-danish-veal-and-beef/33888>

