

# Nutritional composition of Danish Beef

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## Objectives

To document up-to-date nutrient data on protein, total and saturated fat in Danish Veal and Beef products for EU nutritional labelling.

## Materials and Methods

In 2014/2016, EU requires nutrition labelling (Reg. 1169/2011) of the following nutrients on packed food products:

- Energy
- Fat
- Saturated fat
- Carbohydrates
- Sugars
- Protein
- Salt

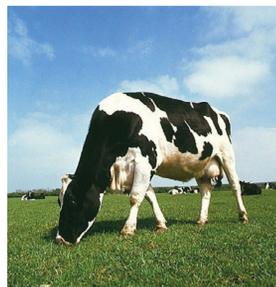


- 8 Veal and 8 Beef Holstein Friesian carcasses were selected (table 1)
- Commercial deboning and trimming was performed into 78 Veal and 76 Beef products
- A full product catalogue with product pictures is given on [www.teknologisk.dk/31186](http://www.teknologisk.dk/31186)
- The 8 samples for each product were pooled into one sample
- Chemical analyses included total fat and protein
- Saturated fat analysis was performed on selected Veal and Beef products in order to establish a relationship to total fat

Table 1. Characteristics of selected average Danish Veal and Beef Carcasses (mean values).

		Weight	Age	Conformation <sup>1</sup>	Fat class
	n	kg	month		
<b>Calf<sup>2</sup></b>					
Z	8	211.3	9	3.8	2.3
<b>Beef<sup>3</sup></b>					
A	2	266.5	12	4.6	2.6
E	2	247.8	30.5	1.8	2.3
D	4	293.4	63.3	2.1	2.5

<sup>1</sup>EUROP. <sup>2</sup>Age >8 to ≤ 12 months. <sup>3</sup>A: Young bull, E: Heifer, D: Cow



## Results

The saturated fat content for the 78 Veal and 76 Beef products was calculated from the total fat content: saturated fat = 0.42 x total fat - 0.19 (figure 1).

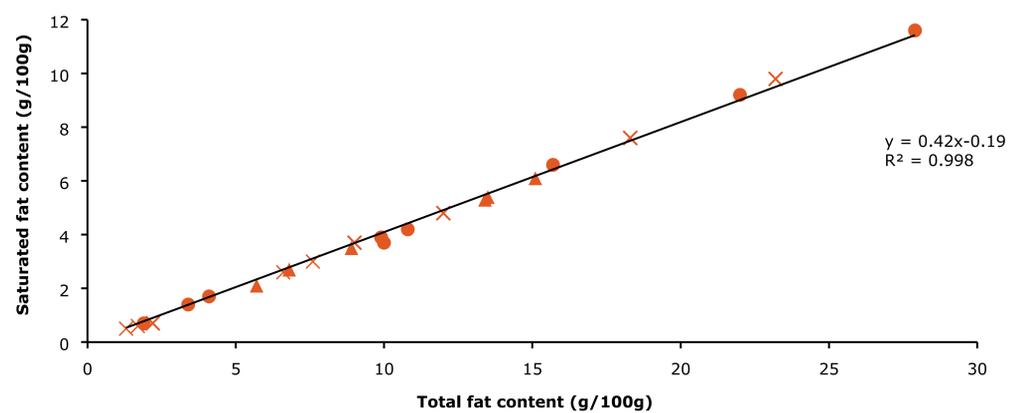


Figure 1. A clear linear relationship was established between total and saturated fat content in selected Veal cuts (x), Beef cuts (•) and ground beef (▲).

Table 2. Extracted nutrient data for 6 average Danish veal and beef product (g/100 g).

Item	VEAL			BEEF		
	Total fat	Sat. fat	Protein	Total fat	Sat. fat	Protein
Entrecote w/bones	11.2	4.5	19.7	15.7	6.4	20.4
Tenderloin with fat & strap muscle	7.5	3.0	20.2	9.5	3.8	19.3
Tenderloin without fat & strap muscle	2.7	0.9	20.8	4.8	1.8	19.9
Topside	4.5	1.7	21.2	5.3	2.0	21.0
Flank steak	4.5	1.7	20.9	6.7	2.6	20.0
Liver	2.9	1.0	19.1	3.3	1.2	19.2

## Conclusion

New nutrient data on Danish Veal and Beef offers numerous products with <10% fat

