

# The effect of carcass weight on carcass performance and proportion of tissues in main meaty cuts of hybrid pigs



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## Objective

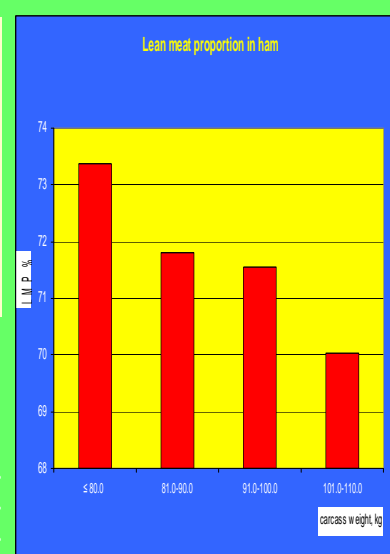
The aim of present study was to determine the effect of carcass weight on carcass parts and proportion of meat, fat and skin, bones of hybrid pigs (Landrace x HAPN).

## Material and method

- pigs (n = 241) were killed at four different carcass weights in experimental abbatoir
- day after slaughter, the dissection of right half carcass and detailed dissection of four main meaty cuts (method of Walstra and Merkus, 1995) were done

## Conclusion

- increasing carcass weight resulted in increasing weight of loin, shoulder, ham, belly and tenderloin but decreasing lean meat %
- tendency of meat proportion was decreasing with increasing carcass weight in all meaty cuts except for tenderloin
- tendency of fat and skin proportion was increasing in all meaty cuts except for tenderloin
- carcass weight of 80.0 kg is recommended as an optimal for pig carcass grading by SEUROP system



Trait		≤ 80.0 kg	81.0 – 90.0 kg	91.0 – 100.0 kg	101.0 – 110.0 kg
Shoulder	meat, %	69.96	69.63	69.12	68.91
	fat + skin, %	19.46	20.28	20.99	21.34
	bones, %	10.48	10.05	9.88	9.76
Loin	meat, %	56.82	54.38	54.74	53.50
	fat + skin, %	27.00 <sup>a</sup>	30.56 <sup>b</sup>	30.86 <sup>c</sup>	31.90
	bones, %	16.08 <sup>a</sup>	15.08	14.49 <sup>b</sup>	15.15
Ham	meat, %	73.37 <sup>a</sup>	71.80	71.55	70.03 <sup>b</sup>
	fat + skin, %	18.81	20.29	20.19	21.17
	bones, %	7.82 <sup>a</sup>	7.94 <sup>a</sup>	8.25	8.80 <sup>b</sup>
Belly	meat, %	50.70	49.07	50.46	48.92
	fat + skin, %	40.31	41.29	40.14	42.38
	bones, %	9.00	9.64	9.05	8.70
Tenderloin	meat, %	84.64 <sup>a</sup>	85.15 <sup>a</sup>	87.63	90.55 <sup>b</sup>
	fat, %	15.36 <sup>a</sup>	14.85 <sup>a</sup>	12.37	9.45 <sup>b</sup>

Trait	≤ 80.0 kg	81.0 – 90.0 kg	91.0 – 100.0 kg	101.0 – 110.0 kg
Carcass weight, kg	75.33	84.50	94.63	104.71
Half carcass, kg	37.75	42.12	46.91	51.36
Backfat thickness, mm	24.05 <sup>a</sup>	26.49 <sup>b</sup>	28.95 <sup>c</sup>	31.90 <sup>c</sup>
Shoulder, kg	4.90 <sup>a</sup>	5.55 <sup>b</sup>	6.23 <sup>c</sup>	6.85 <sup>d</sup>
Loin, kg	5.97 <sup>a</sup>	6.84 <sup>b</sup>	7.57 <sup>c</sup>	8.39 <sup>d</sup>
Ham, kg	9.19 <sup>a</sup>	10.25 <sup>b</sup>	11.68 <sup>c</sup>	12.74 <sup>d</sup>
Belly, kg	4.30 <sup>a</sup>	4.76 <sup>b</sup>	5.22 <sup>c</sup>	5.80 <sup>d</sup>
Tenderloin, kg	0.60 <sup>a</sup>	0.66 <sup>b</sup>	0.70 <sup>b</sup>	0.71 <sup>b</sup>
Lean meat, %	57.86	56.52	56.78	55.74

a, b, c, d P<0.05 min.



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