

EFFECT OF PRODUCTION METHOD ON COMPOSITION OF CHEESES FROM MERINO SHEEP MILK

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AIM OF INVESTIGATION

- to determine the effect of different production technologies on yield and composition of sheep milk cheeses was compared.

MATERIAL AND METHODS

The following types of cheese were made:

- Scalded semi-hard maturing cheese (SSH) – made from casein using modified technology of Kaschkawal –cheese
- Rennet white non-maturing cheese (RWN)
- Curd cheese (APC) from al milk proteins.

The SSH cheese was made as follows: pasteurized milk was acidified with cheese cultures and rennet was added. Blocks of cheese moulded from cheese mass and pressed for 2-2,5 h, after which cheese mass cut and treated for 1-1,5 min. with hot (75°C) brine. Cheese were moulded again, pressed for 20 h and left in ripening room, for 4-6 weeks. RWN – milk was curdled with rennet, cheese was moulded from curdled cheese mass, pressed for 24 h and salted to obtain ready-to-eat product. APC cheese obtained by the acid-rennet method as a result of long-term (<20 h) curdling into moulds and pressed for several hours. No salt was added of technological process when cheese APC was made.



RESULTS

COMPOSITION OF:					
		MILK	Cheese - SSH	Cheese - RWN	Cheese-ACP
Dry matter	(%)	20,63	53,03 ^A	41,24 ^{Ba}	36,14 ^{Bb}
Ash	(%)	No analized	3,92 ^{Aa}	2,72 ^{Ab}	1,09 ^B
Protein	(%)	6,88	24,86 ^A	16,62 ^B	14,29 ^B
Fat	(%)	8,29	21,12 ^A	17,61 ^B	16,49 ^B
Protein/fat ratio		0,83	1,186 ^{Aa}	0,950 ^b	0,867 ^B
Energetic value	kcal	120	302 ^A	242 ^B	223 ^B
Yield of cheese mass	(%)	-	24,51 ^C	32,86 ^B	43,51 ^A
Retention of dry matter	(%)	-	63,40 ^B	66,21 ^B	77,24 ^A
Retention of milk protein	(%)	-	90,66 ^A	79,33 ^B	90,56 ^A
Retention of milk fat	(%)	-	61,94 ^B	70,43 ^B	88,73 ^A
Time of curdled milk	(min.)	-	45 ^A	40 ^A	1042 ^B
Temperature of curdled milk	°C	-	36,1 ^A	35,7 ^A	26,9 ^B

CONCLUSION

Production method had an effect on cheese yield and composition; yield was highest for SSH, retention of solids and fat was highest for APC; retention of protein was highest for SSH and APC – cheeses.