## **Supplemental Materials to**

Homogeneity density scores of quarter milk in automatic milking systems. *Journal of Dairy Science*. 2021.

C. Hallén Sandgren<sup>1</sup>, D. Anglart<sup>1</sup>, I.C. Klaas<sup>1</sup>, L. Rönnegård<sup>3,4</sup>, and U. Emanuelson<sup>2</sup>

Supplemental materials published by the Swedish University of Agricultural Sciences, Department of Clinical Sciences, 2021

<sup>&</sup>lt;sup>1</sup>DeLaval International AB, PO Box 39, SE-147 21 Tumba, Sweden

<sup>&</sup>lt;sup>2</sup> Swedish University of Agricultural Sciences, Department of Clinical Sciences, PO Box 7054, SE-50 07 Uppsala, Sweden

<sup>&</sup>lt;sup>3</sup>School of Technology and Business Studies, Dalarna University, SE-791 88 Falun, Sweden <sup>4</sup>Swedish University of Agricultural Sciences, Department of Animal Breeding and Genetics, PO Box 7023, SE-750 07 Uppsala, Sweden

<sup>\*</sup>Corresponding author: dorota.anglart@ delaval .com



**Figure S1.** The box with holders in which filters were photographed, together with the whiteboard displaying information about the sample. The entire box was first photographed, as shown; the filters were then photographed in close-up, for use in scoring.

Supplemental Materials: Homogeneity density scores of quarter milk in automatic milking systems. Hallén Sandgren et al. 2021.

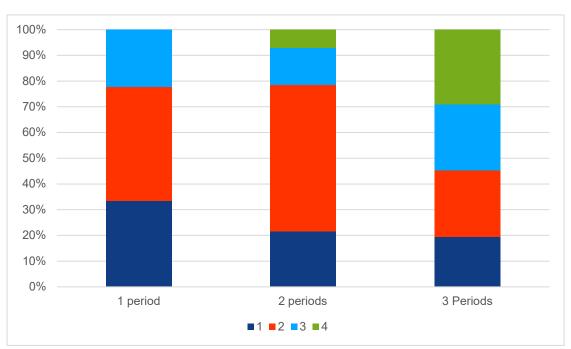


Figure S2. Proportion (%) of cows with 1 to 4 individual quarters with sum scores (QPSS)  $\geq 1$  in cows with 1, 2 or 3 cow period sum scores (CPSS)  $\geq 1$  respectively.

Table S1. Farm information

	Farm						
	A	В	C	D			
Start of data	9 March 2017	15 August 2017	1 February 2018	3 February 2018			
collection periods	22 March 2017	5 September 2017	24 March 2018	26 March 2018			
-	11 April 2017	27 September 2017	4 April 2018	6 April 2018			
Number of automatic milking systems	2	3	2	3			
Number of cows	145	175	113	191			
Lactation 1, 2, and $\geq 3$	43/26/76	61/52/62	31/17/65	57/67/67			
Milk production (kg/cow/year)	12,672	11,619	10,074	10,106			
Somatic cell count (cells/mL)	285 000ª	184 000 <sup>b</sup>	236 000ª	106 000ª			

<sup>&</sup>lt;sup>a</sup>Artihmetic mean from monthly dairy herd improvement sampling; <sup>b</sup>Bulk tank arithmetic mean.

Supplemental Materials: Homogeneity density scores of quarter milk in automatic milking systems. Hallén Sandgren et al. 2021.

**Table S2.** Number of cows, milk inspections, quarters, and distribution of quarter milk scores (QMS) for each farm

Farm							
	A	В	С	D	All		
Individual cows	145	175	113	188	621		
Checked milkings	1194	1519	1095	1590	5398		
Checked quarters	4683	5926	4326	6267	21,202		
Number of QMS (%)							
0	4425 (94.5)	5762 (97.2)	4095 (94.7)	6040 (96.4)	20,322 (95.7)		
1	116 (2.5)	73 (1.2)	87 (2.0)	94 (1.5)	370 (1.8)		
2	87 (1.9)	48 (0.8)	78 (1.8)	88 (1.4)	301 (1.5)		
3	40 (0.9)	27 (0.5)	36 (0.8)	31 (0.5)	134 (0.7)		
4	15 (0.3)	13 (0.2)	28 (0.7)	14 (0.2)	67 (0.4)		
5	0 (0)	3 (0.1)	2 (0.1)	3 (0.1)	8 (0.0)		