

**Table S1.** Prevalences and distribution of categorical herd-level variables for digital dermatitis, ulcers and white line disease in 420 Swiss dairy farms participating in the Swiss claw health programme in 2022 offered to univariable analyses.

	Digital Dermatitis		Ulcer		White Line Disease	
	% (n)	P-value	% (n)	P-value	% (n)	P-value
Prevalence at herd-level in % (N)	49.8 (209)		51.9 (218)		74.3 (312)	
Variable						
Herd trimmings per year		<0.001		0.025		0.395
<i>n</i> = 1 ( <i>N</i> = 247)	42.5 (105)		46.6 (115)		74.1 (183)	
<i>n</i> = 2 ( <i>N</i> = 166)	59.6 (99)		59.0 (98)		75.3 (125)	
<i>n</i> = 3 ( <i>N</i> = 7)	71.4 (5)		71.4 (5)		57.1 (4)	
Housing		<0.001		0.359		<0.001
<i>Tie stall</i> ( <i>N</i> = 194)	32.0 (62)		46.4 (90)		59.3 (115)	
<i>Free stall</i> ( <i>N</i> = 226)	65.0 (147)		56.6 (128)		87.2 (197)	
Mountain pasturing		<0.001		0.134		0.016
<i>Yes</i> ( <i>N</i> = 221)	39.8 (88)		48.4 (107)		69.7 (154)	
<i>No</i> ( <i>N</i> = 199)	60.8 (121)		55.8 (111)		79.4 (158)	
Predominant breed		<0.001		0.016		0.647
<i>Holstein Friesian</i> ( <i>N</i> = 125)	77.6 (97)		59.2 (74)		75.2 (94)	
<i>Other</i> ( <i>N</i> = 295)	38.0 (112)		48.8 (144)		73.9 (218)	
Mean 305-d milk yield (kg)		<0.001		0.011		0.436
≤7000 ( <i>N</i> = 134)	32.8 (44)		47.0 (63)		72.4 (97)	
7001-9000 ( <i>N</i> = 218)	51.4 (112)		51.8 (113)		73.9 (161)	
>9000 ( <i>N</i> = 68)	78.0 (53)		61.8 (42)		79.4 (54)	
Intercalving period (d)		0.006		<0.001		0.561
≤390 ( <i>N</i> = 145)	36.0 (63)		37.7 (66)		73.1 (128)	
391-419 ( <i>N</i> = 175)	61.3 (73)		56.3 (67)		75.6 (90)	
≥420 ( <i>N</i> = 100)	57.5 (73)		66.9 (85)		74.8(95)	
Lactation length (d)		0.004		<0.001		0.587
≤339 ( <i>N</i> = 175)	36.0 (63)		37.7 (66)		73.1 (128)	
340-360 ( <i>N</i> = 118)	61.3 (73)		56.3 (67)		75.6 (90)	
≥361 ( <i>N</i> = 127)	57.5 (73)		66.9 (85)		74.8(95)	

**Table S2.** Prevalences and distribution of categorical cow-level variables for digital dermatitis, ulcers and white line disease in 13,735 dairy cows from 420 Swiss dairy farms participating in the Swiss claw health programme in 2022 offered to univariable analyses.

	Digital Dermatitis		Ulcer		White Line Disease	
	% (n)	P-value	% (n)	P-value	% (n)	P-value
Prevalence at cow-level in % (N)	11.7 (1,612)		3.7 (512)		10.8 (1,477)	
Variable						
Housing		<0.001		0.040		<0.001
<i>Tie stall</i> (N = 4,228)	4.0 (170)		4.3 (180)		6.6 (278)	
<i>Free stall</i> (N = 9,507)	15.2 (1,442)		3.5 (332)		12.6 (1,199)	
Predominant breed		<0.001		0.305		<0.001
<i>Holstein Friesian</i> (N = 6,072)	18.3 (1,112)		4.1 (251)		9.4 (573)	
<i>Other</i> (N = 7,663)	6.5 (500)		3.4 (261)		11.8 (904)	
Trimming season <sup>1</sup>		0.008		0.008		<0.001
<i>Housing period</i> (N = 9,022)	11.0 (970)		2.8 (200)		8.5 (596)	
<i>Grazing period</i> (N = 4,713)	13.0 (642)		4.7 (312)		13.2 (881)	
Milk yield (kg)						
≤20 (N = 3,393)	8.9 (301)	0.195	3.2 (109)	0.011	10.3 (351)	0.080
21-30 (N = 5,996)	10.9 (655)	0.139	3.7 (220)	0.141	10.4 (622)	0.054
≥31 (N = 4,346)	15.1 (656)		4.2 (183)		11.6 (504)	
Parity		0.011		<0.001		<0.001
<i>n</i> = 1 (N = 3,347)	10.1 (337)		1.2 (40)		5.8 (194)	
<i>n</i> = 2-3 (N = 5,614)	13.9 (780)		2.5 (141)		8.3 (468)	
<i>n</i> ≥ 4 (N = 4,774)	10.3 (495)		6.9 (331)		17.1 (815)	
Intercalving period (d)						
≤365 (N = 4,388)	10.7 (470)	0.049	3.4 (150)	<0.001	10.8 (474)	<0.001
366-414 (N = 4,945)	12.2 (603)	0.177	4.3 (213)	0.027	12.3 (608)	0.073
≥415 (N = 4,402)	13.6 (599)		5.8 (257)		13.8 (609)	
Lactation length (d)						
≤339 (N = 4,140)	9.9 (409)	0.039	3.7 (151)	0.221	10.6 (438)	0.038
340-360 (N = 5,731)	11.4 (657)	0.767	3.3 (189)	0.031	10.2 (584)	0.026
≥361 (N = 3,864)	14.0 (541)		4.5 (172)		11.7 (453)	

<sup>1</sup>Grazing period: For DD = May 16 to Nov 15; For U and WL = Jul 01 to Dec 31.  
Housing period: For DD = Nov 16 to May 15; For U and WL = Jan 01 to Jun 30.