

Table S1. Fourth season sample classification by batch, according to linear discriminant functions with the variables of each method alone

Batches		Fatty acids				Isotopes				Tocopherols			
	N	BE	RE	CA	CE	BE	RE	CA	CE	BE	RE	CA	CE
CE1	15		13	2			3	12			1	11	3
CE2	12				12				12				12
CE3	8				8				8				8
CE4	15				15				15			6	9
CA1	12				12			7	5			2	10
CA2	10		3	1	6			9	1			4	6
CA3	10				10			7	3			3	7
CA4	15			1	14			15				14	1
CA5	15				15			15			13	1	1
RE1	5	4	1				1	4		5			
RE2	16	16				7	5		4	6	10		
RE3	14	5	8	1			7	1	6	1	5	8	
RE4	17	4	9	4			10	4	3	1	16		
BE1	11	11				9	2			8	3		
BE2	15	15				8	5	2		15			
BE3	11	11				3	8			10	1		
BE4	13	5	6	2			11	2		3	10		
BE5	14	14					12	2		7	7		
BE6	7	7				4	2	1		4	3		
BE7	15	14	1			2	9	4		12	3		
BE8	15	14	1			12	3			1	14		
BE9	12	12					12				12		
BE10	10	10					9	1		1	9		
BE11	12	12					12			1	11		

CE: standard feeding with commercial diet. CA: open-air system feeding with commercial feeds besides of the grazing of grass or stubble. RE: free-range with *ad libitum* acorn and pastures plus commercial feed. BE: free-range with *ad libitum* intake of acorn and pastures