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At the kind Attention to the manager's laboratory

REFERENCE MATERIAL FOR COW MILK

SENT ON 01/07/2008

N.	FAT g/100g	SR*	TOTAL NITROGEN CONTENT g/100g	SR*	LACTOSE g/100g	SR*	CASEIN g/100g	SR*	UREA mg/100 ml
1	3,59	0,039	3,31	0,031	4,94	0,028	2,55	0,027	27,99
2	3,12	0,032	3,62	0,028	4,91	0,030	2,81	0,016	45,49
3	3,02	0,020	3,47	0,019	4,97	0,021	2,70	0,032	41,42
4	2,50	0,023	3,12	0,034	4,96	0,027	2,43	0,035	59,67
5	2,07	0,028	2,91	0,019	5,22	0,027	2,28	0,028	37,58
6	4,77	0,039	3,21	0,030	5,41	0,020	2,54	0,021	30,20
7	4,25	0,038	3,13	0,024	4,86	0,027	2,40	0,019	47,23
8	3,98	0,037	3,33	0,025	4,96	0,026	2,59	0,032	37,36
9	2,82	0,026	2,61	0,039	5,09	0,028	2,01	0,032	51,19
10	3,44	0,037	2,92	0,026	5,06	0,021	2,26	0,034	41,65

- The batch homogeneity was verified evaluating the fat content with infrared instrument according, FIL/IDF 141C:2000. On 180 samples, about the 10 % of the samples produced the between-samples standard deviation is always less than 0,01 g/100g, (ISO/FDIS 13528 STATISTICAL METHODS FOR USE IN PROFICIENCY TESTING BY INTERLABORATORY COMPARISONS).
- The target values for fat, total nitrogen content and lactose were obtained with the statistical elaboration of the specific proficiency test with 25 participants with 38 instruments. Our laboratory executed the reference method: for Fat FIL/IDF 1D:1996, Total nitrogen content ISO 8968-2 IDF 20-2 2001 for lactose differential pH.
- The casein content the reference value was obtain by a proficiency test on 15 laboratories with 21 instruments and our laboratory with reference method ISO 17997-1 IDF 29-1 2004 or ISO 17997-2 IDF 29-2 2004.
- The urea reference material content was obtained with reference method ISO 14637 IDF 195 2004.
- * The standard deviation of reproducibility (SR) was obtained from the proficiency test elaborated according ISO 5725-2. SR can be considered the Uncertainty of each reference material (ISO/TS 21748)
- the mean uncertainty for all 10 samples is: SR (mean) = FAT 0,033 g/100g – TOT.NITROGEN CONTENT 0,028 g/100g – LACTOSE 0,026 g/100g – CASEIN 0,028 g/100g

MACCARESE, 03/07/2008

Il Responsabile del Laboratorio
(Dr.ssa Annunziata Fontana)