

Table B.5 — MPN indexes and confidence limits (95 %) when three test portions of 1 g (ml), three of 0,1 g (ml) and three of 0,01 g (ml) are used

Number of positive results			MPN index <sup>a</sup>	Category <sup>b</sup>	Confidence limits (95 %) <sup>a, c</sup>	
					Lower limit	Upper limit
0	0	0	< 0,30		0,00	0,94
0	0	1	0,30	3	0,01	0,95
0	1	0	0,30	2	0,01	1
0	1	1	0,61	0	0,12	1,7
0	2	0	0,62	3	0,12	1,7
0	3	0	0,94	0	0,35	3,5
1	0	0	0,36	1	0,02	1,7
1	0	1	0,72	2	0,12	1,7
1	0	2	1,1	0	0,4	3,5
1	1	0	0,74	1	0,13	2
1	1	1	1,1	3	0,4	3,5
1	2	0	1,1	2	0,4	3,5
1	2	1	1,5	3	0,5	3,8
1	3	0	1,6	3	0,5	3,8
2	0	0	0,92	1	0,15	3,5
2	0	1	1,4	2	0,4	3,5
2	0	2	2,0	0	0,5	3,8
2	1	0	1,5	1	0,4	3,8
2	1	1	2,0	2	0,5	3,8
2	1	2	2,7	0	0,9	9,4
2	2	0	2,1	1	0,5	4
2	2	1	2,8	3	0,9	9,4
2	2	2	3,5	0	0,9	9,4
2	3	0	2,9	3	0,9	9,4
2	3	1	3,6	0	0,9	9,4
3	0	0	2,3	1	0,5	9,4
3	0	1	3,8	1	0,9	10,4
3	0	2	6,4	3	1,6	18,1
3	1	0	4,3	1	0,9	18,1
3	1	1	7,5	1	1,7	19,9
3	1	2	12	3	3	36
3	1	3	16	0	3	38
3	2	0	9,3	1	1,8	36
3	2	1	15	1	3	38
3	2	2	21	2	3	40
3	2	3	29	3	9	99
3	3	0	24	1	4	99
3	3	1	46	1	9	198
3	3	2	110	1	20	400
3	3	3	> 110			

<sup>a</sup> Source: Reference [27].

<sup>b</sup> See Table B.6.

<sup>c</sup> The confidence limits given in this table are meant only to provide some idea of the influence of statistical variations on results. There will always also be other sources of variation, which may sometimes be even more important.

Table B.6 — Explanation of categories of results

Category <sup>a</sup>	Definition
1	When the number of bacteria in the sample is equal to the MPN found, the result is one of those that have the greatest chance of being obtained. There is at most only a 5 % chance of obtaining a result that is less likely than the least likely one in this category.
2	When the number of bacteria in the sample is equal to the MPN found, the result is one of those that have less chance of being obtained than even the least likely one in category 1, but there is at most only a 1 % chance of obtaining a result that is less likely than the least likely one in this category.
3	When the number of bacteria in the sample is equal to the MPN found, the result is one of those that have less chance of being obtained than even the least likely one in category 2, but there is at most only a 0,1 % chance of obtaining a result that is less likely than the least likely one in this category.
0	When the number of bacteria in the sample is equal to the MPN found, the result is one of those that have less chance of being obtained than even the least likely one in category 3. There is only a 0,1 % chance of obtaining a result in this category, without anything being wrong.

<sup>a</sup> Before starting testing, it should be decided which category will be acceptable, that is, only 1, 1 and 2 or even 1, 2 and 3. When the decision to be taken on the basis of the result is of great importance, only category 1, or at most 1 and 2, results should be accepted. Category 0 results should be considered with great suspicion.

Table B.7 — MPN values per gram of sample and 95 % confidence limits  
(when five test portions of 1 g, five of 0,1 g and five of 0,01 g are used)

Number of tubes giving positive reaction			MPN (per g)	95 % confidence limits	
5 of 1 g	5 of 0,1 g	5 of 0,01 g		Lower	Upper
0	0	0	< 0,2	< 0,1	0,7
0	1	0	0,2	< 0,1	0,7
0	2	0	0,4	< 0,1	1,1
1	0	0	0,2	< 0,1	0,7
1	0	1	0,4	< 0,1	1,1
1	1	0	0,4	< 0,1	1,1
1	1	1	0,6	< 0,1	1,5
2	0	0	0,5	< 0,1	1,3
2	0	1	0,7	0,1	1,7
2	1	0	0,7	0,1	1,7
2	1	1	0,9	0,2	2,1
2	2	0	0,9	0,2	2,1
2	3	0	1,2	0,3	2,8
3	0	0	0,8	0,1	1,9
3	0	1	1,1	0,2	2,5
3	1	0	1,1	0,2	2,5
3	1	1	1,4	0,4	3,4
3	2	0	1,4	0,4	3,4
3	2	1	1,7	0,5	4,6
3	3	0	1,7	0,5	4,6
4	0	0	1,3	0,3	3,1
4	0	1	1,7	0,5	4,6
4	1	0	1,7	0,5	4,6
4	1	1	2,1	0,7	6,3
4	1	2	2,6	0,9	7,8
4	2	0	2,2	0,7	6,7
4	2	1	2,6	0,9	7,8
4	3	0	2,7	0,9	8
4	3	1	3,3	1,1	9,3
4	4	0	3,4	1,2	9,3

Table B.7 (continued)

Number of tubes giving positive reaction			MPN (per g)	95 % confidence limits	
5 of 1 g	5 of 0,1 g	5 of 0,01 g		Lower	Upper
5	0	0	2,3	0,7	7
5	0	1	3,1	1,1	8,9
5	0	2	4,3	1,5	11
5	1	0	3,3	1,1	9,3
5	1	1	4,6	1,6	12
5	1	2	6,3	2,1	15
5	2	0	4,9	1,7	13
5	2	1	7	2,3	17
5	2	2	9,4	2,8	22
5	3	0	7,9	2,5	19
5	3	1	11	3,1	25
5	3	2	14	3,7	34
5	3	3	18	4,4	50
5	4	0	13	3,5	30
5	4	1	17	4,3	49
5	4	2	22	5,7	70
5	4	3	28	9	85
5	4	4	35	12	100
5	5	0	24	6,8	75
5	5	1	35	12	100
5	5	2	54	18	140
5	5	3	92	30	320
5	5	4	160	64	580
5	5	5	> 180	—	—