

COMPARISON OF ENUMERATION OF *E.coli*
ON CHROMagar®E.COLI AND MPN METHODS

VALIDATION OF ACCURACY

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Certified to comply with the requirements of Israel Standards SI2025
International Standard ISO/IEC Guide 25 Certification N° 9378

STUDY A

| N° | PRODUCTS TESTED | Number of <i>E.coli</i> per 1gr from 20 g treated in stomacher pour plate technique 44.5°C | |
|-------------------------------|-----------------------|--------------------------------------------------------------------------------------------------|---------------------|
| | | CHROMagar® E.coli | MPN - Method |
| <u>CHEESE</u> | | | |
| 1 | Goat Cheese | 4.0×10^5 | $> 1.6 \times 10^4$ |
| 2 | Salted Cheese | 1.3×10^4 | 1.6×10^4 |
| 3 | Salted Goat Cheese | 5.0×10^2 | 9.2×10^2 |
| 4 | Soft fat (25%) Cheese | 9.6×10^2 | 2.8×10^2 |
| 5 | Grasse Brie | 9.5×10^3 | 1.6×10^3 |
| 6 | Goat Cheese (soft) | 7.5×10^2 | 1.7×10^2 |
| 7 | Camembert Cheese | 2.8×10^2 | 2.2×10^2 |
| <u>SALADS</u> | | | |
| 8 | Fresh Vegetables | < 10 | 0 |
| 9 | Eggplant & Mayonnaise | < 10 | 0 |
| 10 | Potato & Eggs | 5.0×10^1 | 3.3×10^1 |
| 11 | Fresh Vegetables | < 10 | 2 |
| 12 | Corn & Red Pepper | < 10 | 4 |
| 13 | Greek Salad | 1.2×10^1 | 2.7×10^1 |
| 14 | Techina Salad | < 10 | 0 |
| 15 | Cucumber Salad | < 10 | 0 |
| 16 | Carrots & Annanas | < 10 | 0 |
| 17 | Turkish Salad | < 10 | 0 |
| 18 | Mushrooms & Peas | < 10 | 0 |
| 19 | Carrot Slices | < 10 | 0 |
| 20 | Humous | < 10 | 0 |
| <u>VARIOUS FROZEN PRODUCT</u> | | | |
| 21 | Stuffed Meat = "Kube" | 8.0×10^1 | 4.9×10^1 |
| 22 | Maroccan Cigars | < 10 | 4 |
| 23 | Canelloni & Mushrooms | < 10 | 0 |

STUDIES B and C :

| N° | PRODUCTS TESTED | Number of <i>E.coli</i> per 1gr from 20 g treated in stomacher pour plate technique 44.5°C | |
|----|----------------------|--------------------------------------------------------------------------------------------------|-------------------|
| | | CHROMagar® <i>E.coli</i> | MPN - Method |
| 1 | Onion Salad | < 10 | 0 |
| 2 | Carrot & Fruit Salad | 3.5×10^2 | 5.4×10^2 |
| 3 | Olives | < 10 | 0 |
| 4 | Coleslaw | < 10 | 0 |
| 5 | Tuna Salad | < 10 | 0 |
| 6 | Potato salad | < 10 | 0 |
| 7 | Parsley | 6.0×10^1 | 4.9×10^1 |
| 8 | Mayonnaise Salad | < 10 | 0 |
| 9 | Humous Salad | 7.5×10^1 | 1.1×10^1 |
| 10 | Cream Cheese & Dill | < 10 | 0 |
| 11 | Turkish Salad | < 10 | 0 |
| 12 | Cream Cheese & Onion | < 10 | 0 |
| 13 | Avocado & Prasley | < 10 | 0 |
| 14 | Vegetable Salad | 4.5×10^1 | 1.1×10^1 |
| 15 | Hamburger (Frozen) | 2.0×10^1 | 1.1×10^1 |
| 16 | Kabbab (Frozen) | 3.0×10^1 | 3.3×10^1 |
| 17 | Spice | < 10 | 0 |
| 18 | Spice | < 10 | 0 |

| N° | PRODUCTS TESTED | CHROMagar® <i>E.coli</i> | MPN - Method |
|----|--------------------------------------------|--------------------------|-------------------|
| 1 | Vegetable Salad | < 10 | 0 |
| 2 | Carrot Salad & Mayonnaise | < 10 | 0 |
| 3 | Mushroom, Lettuce, Bean & Sprout Salad | < 10 | 0 |
| 4 | Carrot & Pineapple Salad | < 10 | 0 |
| 5 | Fresh Lettuce | 2.5×10^2 | 1.4×10^2 |
| 6 | Techina | 4.0×10^1 | 1.6×10^1 |
| 9 | Vegetable Salad | < 10 | 0 |
| 10 | Potato Salad & Mayonnaise | < 10 | 0 |
| 11 | Parsley & Salad | < 10 | 0 |
| 12 | Potato Salad, Mayonnaise & Peas, Carrot | 1.0×10^2 | 1.3×10^2 |
| 13 | Chickpea Salad | < 10 | 0 |
| 14 | Ricotta Ravioli | < 10 | 0 |
| 15 | Parsley | < 10 | 0 |
| 16 | Fresh Alfa alfa | 2.0×10^3 | 2.6×10^1 |
| 17 | Fresh Bean Sprout | 6.0×10^3 | 9.2×10^2 |
| 18 | Black Pepper | < 10 | 0 |

CONCLUSION

In comparison of the enumeration of *E.coli*, carried out on CHROMagar® *E.coli* and by the conventional MPN method, it can be concluded, that the counts obtained on CHROMagar® *E.coli* are in reliable correlation with the MPN method. This conclusion is based on limited number of samples described above.