ECIG: E. coli Inhibitor Garlic

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The Research ECIG (E. coli Inhibitor Garlic) has the goal to inhibit the increase of Escherichia coli bacterium by creating an organic product more effective and less harmful to the environment and humans. Threats of this bacterium includes higher incidence of sickness and death. The researchers visited a Microbiology laboratory to determine which cooking spices have the highest effectivity between ground: cinnamon, pepper, oregano, onion, crushed garlic, clove spice and different combinations of it. The qualified scientists provided the TSA Petri Dish with the bacterium with a temperature of 37 °C for 24 hours, 27 inoculated dishes (made by triplicated) were placed in incubation and made readings of the inhibition area. They chopped the garlic and oregano in a blender, and the clove spice with a mortar to prepare the solutions with different concentrations. They repeated the procedure of incubation and readings with 30 inoculated dishes. The cooking spices with more effectivity were the oregano, garlic, and clove spice. It surpassed the control samples, the commercial bleach and the water. Pepper, cinnamon, onion, and the combinations, don’t present inhibition. In the second part, the 100% garlic solution was the most effective. Its inhibition area was of 35 mm, more than the commercial detergent (difference, 11 mm). While the 100% oregano solution and the combination with the garlic and the clove spice reflected an inhibition no bigger than 25 mm. The established hypothesis was accepted. Furthermore, they can study the solution in contaminated environments to find any effect of this product.

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