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Evaluation of antibiotic resistance and beta lactamase properties *Staphylococcus aureus* isolated from food

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Our research has been executed for antibiotic resistance of *Staphylococcus aureus* isolated from food. 80 samples of raw milk and from some local markets 100 samples of cheese, 100 samples of chicken meat were collected. Antibiotic resistances and beta-lactamase activities of *S. aureus* stains were determined by comparing them between each other. In our research totally 280 food samples were examined. The strains of which were isolated from 80 different raw milk samples were found resistant to 70% penicillin, 1.3% oxacillin, 6.3% erythromycin, 7.5% clindamycin and 1.3% trimetoprim/sulfamethoxasol. The strains of *S. aureus* which were isolated from 100 different cheese samples were found resistant to 67% penicillin, 2% oxacillin, 7% erythromycin, 8% clindamycin, 2% gentamycin and 2% trimetoprim/sulfamethoxasol. The strains of *S. aureus* which were isolated from 100 different chicken meat samples were found resistant to 82% penicillin, 3% oxacillin, 8% erythromycin, 9% clindamycin and 2% gentamycin. If we evaluate all food samples together, were observed that, the strains of *S. aureus* were found resistant to 73.2% penicillin, 2.1% oxacillin, 7.1% erythromycin, 8.2% clindamycin, 1.4% gentamycin and 1.1% trimetoprim/sulfamethoxasol. From beta-lactamase ratios point of view, in 280 food samples 134 (76.4%) of them were found positive. The current situation of antibiotic resistance and the possible precautions were discussed out of precautions for minimizing possible risks of *S. aureus*.

Biography

Rasih Felek has completed his MD from Hacettepe University School of Medicine and Postdoctoral studies from Ataturk University School of Medicine. He has published more than 14 papers in reputed journals.

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