## Abstract:

Enterococci are an important and diverse group of bacteria that cause disease in humans and animals. These bacteria are present in human and animal gastrointestinal tract, in soil, water and food, which has always been considered as one of the major nutritional problems of people in developing countries, including Iran. The present study was conducted to determine the antibiotic resistance of *Enterococcus faecalis* isolates from foodstuffs supplied in Zabol city. In this study, 77 isolates from research samples were selected by Okati (2017) on the study of contamination of food products such as *Enterococcus faecalis*. Antibiotic resistance of 77 isolates of *enterococcus faecalis* was investigated. All specimens were evaluated and confirmed by standard biochemical tests. The susceptibility of the isolates was measured by the Kirby-Baer method compared to furazolidone, ciprofloxacin, tetracycline, gentamicin, ampicillin, amoxicillin, vancomycin, erythromycin, bacitracin, ticoplanin and linosolide. The interpretation of the results was carried out in accordance with the CLSI guide. In the present study, the most antibiotics tested were cotrimoxazole (5%) and ampicillin (7%) with the lowest resistance, and erythromycin and linozolid with 81%, and tetracycline and furazolidone with 77% had the highest resistance. The findings also showed that the most resistant isolates were antibiotics from the vegetable group (54%). According to the results of antibiogram in this study, due to the maximum sensitivity of enterococcus faecalis to cotrimoxazole and ampicillin, these drugs can be an appropriate antibiotic to prevent the spread of Enterococcus faecalis in the region. In addition, it should be reconsidered in the use of a series of common antibiotics used in the region, such as erythromycin, gentamicin, tetracycline and amoxicillin due to its high resistance. It was also found that the most resistant isolates were antibiotics from the vegetable group due to the possibility of transmission of Enterococcus faecalis through contaminated food and the increasing increase of antibiotic-resistant isolates, identification of contaminated sources in foodstuffs, especially vegetables It is necessary.

Key words: Enterococcus faecalis, antibiotic resistance, food, meat, vegetable, chiken, fruit, Zabol.

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# Antibiotic resistance of *enterococcus faecalis* collected from food samples in the city of Zabol

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