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**Arabic Summary**

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## 7- Summary

A total of 125 random samples of fried *Tilapia nilotica*, grilled *Tilapia nilotica*, fried *Mugil cephalus*, grilled *Mugil cephalus* (uneviscerated) and fried shrimp were collected from different restaurants at Menoufyia governorate and subjected to bacteriological examination.

The bacteriological examination of fried *Tilapia nilotica* revealed that the mean APC, total thermophilic, Enterobacteriaceae and *Coagulase positive Staphylococcus aureus* were  $1.68 \times 10^4$ ,  $2.4 \times 10^3$ ,  $4.12 \times 10^2$ , and  $1.56 \times 10^2$  respectively. While the mean APC, total thermophilic, Enterobacteriaceae and *Coagulase positive Staphylococcus aureus* were  $6.32 \times 10^4$ ,  $2.10 \times 10^4$ ,  $3.78 \times 10^3$  and  $1.30 \times 10^3$  , respectively for grilled *Tilapia nilotica*.

For fried *Mugil cephalus*, higher counts of APC, total thermophilic, Enterobacteriaceae and staphylococcus aureus were  $2.53 \times 10^4$ ,  $4.70 \times 10^3$ ,  $4.08 \times 10^2$  and  $2.04 \times 10^2$  respectively. While higher counts of APC, total thermophilic, Enterobacteriaceae and staphylococcus aureus were  $3.54 \times 10^5$ ,  $3.62 \times 10^4$ ,  $5.66 \times 10^3$ , and  $1.70 \times 10^3$ , respectively for grilled *Mugil cephalus*

Fried shrimp showed that higher counts of APC, total thermophilic, Enterobacteriaceae and staphylococcus aureus were  $1.70 \times 10^4$ ,  $2.62 \times 10^3$ ,  $5.60 \times 10^2$  and  $3.8 \times 10^2$  , respectively.

The identified isolates of *Enterobacteriaceae* from the examined fried *Tilapia nilotica* were *Enterobacter cloacae*, *Klebsiella aerogenes*, *Proteus rettgeri*, and *Shigella sonnei*. While from grilled *Tilapia nilotica* they were *Enterobacter aerogenes*, *Enterobacter cloacae*, *Proteus rettgeri*, and *Serratia liquefaciens*.

The identified isolates of *Enterobacteriaceae* from the examined fried *Mugil cephalus* were *Enterobacter aerogenes*, *Proteus mirabilis*, *Proteus vulgaris*, and *Serratia liquefaciens*. While from grilled *Mugil cephalus* they were *Citrobacter diversus*, *Enterobacter aerogenes*, *E. coli*, *Proteus mirabilis*, *Proteus vulgaris*, *Serratia liquefaciens*, *Serratia marcescens* and *Shigella sonnei*

*Enterobacter aerogenes*, *Enterobacter cloacae*, *Proteus mirabilis*, *Proteus rettgeri*, *Klebsiella aerogenes* and *Shigella sonnei* could be isolated from fried shrimp.

*Salmonella serovares* could not be isolated from any of the examined fish meals samples.

*Vibrio parahaemolyticus* and *Vibrio alginolyticus* could be isolated from both grilled *Tilapia nilotica* and fried shrimp at percentages of 8%, 4 % and 16 %, 4%, respectively.