

Superbugs slosh round in fish sold in Anand city

Found: E. Coli Resistant To Antibiotics

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Ahmedabad: The Sabarmati, laden with Ahmedabad's sewage, winds its way to the Gulf of Khambhat, but on its journey it touches a number of towns and villages. Anand, which has a bustling fish market, gets much of its fish from the gulf. A recent study by the department of veterinary public health and epidemiology at the College of Veterinary Science and Animal Husbandry in Anand found that fish in the town's market also contained antibiotic resistant E. coli bacteria.

The researchers, H B Begadiya, J B Nayak, M N Brahmabhatt, J H Chaudhary and K S Solanki, collected 200 fish samples which included the skin, gills, muscles, intestine as well as swabs from butchers' hands and knives at the Anand city market.

The researchers found E. coli in various concentrations in 43 fish samples. The

DANGER ON THE PLATE



AT THE BUTCHER SHOP

- ▶ E. coli in 43 (22.5%) fish samples
- ▶ Highest prevalence of E. coli in water samples (52%)
- ▶ From fish parts, E. coli found in intestines (40%), gills (24%), log swab (24%), skin (16%), muscle (8%). Also found in butcher's hand swab (8%) and knife swab (4%)

Fish samples collected	Fish samples found with E. coli
200	43

ANTIBIOTIC SENSITIVE:
Chloramphenicol (95.34% of E. coli) and gentamicin (93.02%)

ANTIBIOTIC RESISTANCE:
Ampicillin (67.44%) and streptomycin (32.35%)

E. coli bacteria in

these samples were tested for resistance to 10 antibiotics such as ampicillin, amikacin, ciprofloxacin, chloramphenicol, gentamicin, enrofloxacin, ofloxacin, oxytetracycline, trimethoprim

and streptomycin.

The results showed that most E. coli isolates showed a high degree of sensitivity to chloramphenicol, up to 95.34%, and gentamicin (93.02%). While a high frequency of resistance were observed to ampicillin



Most freshwater fish samples (22.5%) from Anand city were found to be contaminated with E. coli, researchers claimed

(67.44%) and streptomycin (32.35%).

"Multidrug resistant pathogenic E. coli in the fish market may represent a risk to the consumers," the researchers claim. Most freshwater fish samples (22.5%) from Anand city were found to be contaminated with E. coli.

IIT-Gandhinagar professor Manish Kumar, of the earth sciences discipline, reiterates that stringent government policies to regulate sale and use of antibiotics, better infection control in hospitals, and new standards in sewage treatment are a must. "I urge the public and medical practitioners to exercise restraint towards the use of antibiotics. At the same time, the government should have checks on its sale. We cannot expect treatment plants, for drinking or waste water, to remove every harmful substance."

Title: Superbugs slosh round in fish sold in Anand city (Quoted Prof Manish Kumar (ES)

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Link: <https://timesofindia.indiatimes.com/city/ahmedabad/superbugs-slosh-round-in-fish-sold-in-anand-city/articleshow/66888490.cms>

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