

Food poisoning linked to kudoa septempunctata.

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Introduction

In recent years, an emerging concern in the realm of food safety has been the link between food poisoning and *Kudoa septempunctata*, a microscopic parasite found in certain fish species. This parasite, originally believed to be harmless, has now been associated with cases of foodborne illness, prompting heightened attention from health authorities and researchers alike [1, 2].

Kudoa septempunctata is a myxosporean parasite that primarily infects olive flounder (*Paralichthys olivaceus*), a popular fish species consumed in East Asia, particularly in countries like Japan and South Korea. Historically, *Kudoa septempunctata* was thought to cause no harm to humans, as it primarily affected the fish muscle tissues without apparent adverse effects. However, recent investigations have uncovered a potential link between the consumption of contaminated fish and cases of food poisoning [3, 4].

The lifecycle of *Kudoa septempunctata* involves spore release within the fish host's muscle tissues, leading to contamination of the flesh. When infected fish are consumed raw or undercooked, there is a risk of ingesting viable spores, which can subsequently cause infection in humans. This mode of transmission has raised concerns, especially in regions where raw fish dishes, such as sushi and sashimi, are popular [5, 6].

Food poisoning associated with *Kudoa septempunctata* may present with a range of symptoms, including gastrointestinal distress, nausea, vomiting, abdominal pain, and diarrhea. In severe cases, individuals may experience fever and muscle pain. Although the symptoms are generally self-limiting, vulnerable populations, such as the elderly, young children, and immunocompromised individuals, may be at a higher risk of developing complications [7, 8].

Health authorities in affected regions are intensifying surveillance efforts to monitor the prevalence of *Kudoa septempunctata* in fish populations and are implementing regulatory measures to ensure food safety. This includes stricter guidelines for the handling and processing of fish, as well as recommendations for thorough cooking to eliminate potential risks [9, 10].

Conclusion

The emerging association between *Kudoa septempunctata* and food poisoning emphasizes the dynamic nature of food safety challenges. Ongoing research is crucial to further understand

the transmission, impact, and potential mitigation strategies associated with this parasite. Consumers are advised to stay informed about the risks and exercise caution when consuming raw or undercooked fish, particularly in regions where *Kudoa septempunctata* has been identified as a potential food safety concern.

References

1. Hadfield CA. Myxozoan and coccidial diseases. Clin Guide Fish Med. 2021;569-90.
2. Bolin JA, Cummins SF, Mitu SA, et al. First report of *kudoa thunni* and *kudoa musculoliquefaciens* affecting the quality of commercially harvested yellowfin tuna and broadbill swordfish in Eastern Australia. Parasitol Res. 2021;120(7):2493-503.
3. Li YC, Tamemasa S, Zhang JY, et al. Phylogenetic characterisation of seven *Unicapsula* spp. Commer Fish Southern China Japan. Parasitolo. 2020;147(4):448-64.
4. Eiras JC, Barman GD, Chanda S, et al. An update of the species of Myxosporea Cnidaria, Myxozoa described from Indian fish. J Parasi Disea. 2023;47(1):12-36.
5. Hasegawa R, Koizumi I. Parasites either reduce or increase host vulnerability to fishing: a case study of a parasitic copepod and its salmonid host. Sci Nature. 2023;110(2):10.
6. Qi X, Alifu X, Chen J, et al. Descriptive study of foodborne disease using disease monitoring data in Zhejiang Province China, 2016 -2020. BMC Public Health. 2022;22(1):1831.
7. Leong CR, Daud NS, Tong WY, et al. Gelatine film incorporated with *clitoria ternatea* derived anthocyanin microcapsules, an effective food packaging material against foodborne pathogens. Food Technolo Biotechnol. 2021;59:4.
8. Chinh NN, Ngo HD, Van Tuc V, et al. A new myxosporean species, *Henneguya lata* n. sp. Myxozoa: Myxobolidae from the gills of yellowfin seabream *acanthopagrus latus* Perciformes: Sparidae in the gulf of tonkin, vietnam. Parasito Res. 2021;120:877-85.
9. Su H, Zhang Y, He Z, et al. Rapid and specific detection of Chinook salmon bafinivirus CSBV in flatfish using loop mediated isothermal amplification LAMP. Aquacul Internati. 2023:1-3.
10. Wang Z, Ma C. Research on korean translation in the context of epidemic prevention and control. ACM Transacti Asian Low Resou Langu Informa Proces.2023.

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