



ФОНД
НАУЧНИ
ИЗСЛЕДВАНИЯ

МИНИСТЕРСТВО НА ОБРАЗОВАНИЕТО И НАУКАТА

25 години

ВИСШЕ УЧИЛИЩЕ ПО АГРОБИЗНЕС И РАЗВИТИЕ НА РЕГИОНИТЕ
Юбилейна международна научна конференция БЪЛГАРИЯ НА РЕГИОНИТЕ

Перспективи за устойчиво регионално развитие

27-28 октомври 2017 г., Пловдив, България



25 years

UNIVERSITY OF AGRIBUSINESS AND RURAL DEVELOPMENT
Jubilee International Scientific Conference BULGARIA OF REGIONS

Sustainable Regional Development Perspectives

27-28 October 2017, Plovdiv, Bulgaria

<http://regions.uard.bg>

Effect of Mussels Consumption on Human Health

Pınar Yıldırım¹, Ertan Ercan², Gülen Türker³

¹*Canakkale Onsekiz Mart University, Canakkale College of Applied Science,
Fisheries Technology, Canakkale, Turkey*

²*Mugla Sıtkı Koçman University, Faculty of Fisheries, Mugla, Turkey*

³*Canakkale Onsekiz Mart University, Canakkale College of Applied Science, Food
Technology, Canakkale, Turkey*

Abstract: The mussels are filter-feeding organisms and have an open circulatory system. Planktonic organisms are the most important source of nutrients for the mussels. Shellfish poisoning is caused by some toxins released by the planktonic algae fed by the mussel. By filtering, the mussels take the toxin through the planktonic organism and accumulate it in their bodies. Toxins that cause poisoning from mussels in humans, but do not show any toxic effects on the mussels. However, the consumption of these mussels, which carry the toxin, causes poisoning which will be result at death in humans. The poisonings caused by the mussels are generally examined in 5 groups. These groups are called Paralytic shellfish poisoning (PSP), Diarrhetic Shellfish Poisoning (DSP), Neurotoxic Shellfish Poisoning (NSP), Amnesic Shellfish Poisoning, Azaspiracid Shellfish Poisoning.

It is not possible to visually distinguish toxic from non-toxic shellfish. Many countries rely on biotoxin monitoring programs to protect public health and close harvesting, when toxic algal blooms/toxic shellfish are detected. In non-industrialized countries, particularly in rural areas, monitoring for harmful algal blooms does not routinely occur and death due to "red tide toxins" commonly occurs. It is very important to pay attention to the hygiene conditions in the process from hunting to harvesting of mussels obtained by hunting and cultivation and to reach the consumers with the most reliable food.

In this review, it is aimed to bring together research materials on poisoning that occur in bivalve consumption of study material. It also emphasized the characteristics of the bivalve and the importance of human nutrition. At the same time, information was given on the importance of mussel consumption in terms of human health.

Keywords: bivalve, poisoning, toxins.