

## Impact of the “Anisakis C.Re.N.A.” APP

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### ABSTRACTS

Anisakiasis is a zoonotical disease provoked by the nematodes belonged to the Anisakidae family. The trend of Anisakiasis cases increases continuously, therefore a constant awareness of this topic is essential for the consumers' protection. An application for smartphones was carried out by the National Centre for Anisakiasis for this purpose. This work aimed at evaluate the impact of “Anisakis CReNA” app for consumers by the implementation of a survey. The results obtained revealed that the app developed has reached the goal established giving easy to understand and easy to consult information for the protection of consumers regarding the risks related to these parasites.

### KEY WORDS

*Anisakis*; National Reference Centre; health.

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The application “Anisakis C.Re.N.A.” was developed by the National Reference Centre for Anisakiasis (C.Re.N.A.) of Istituto Zooprofilattico Sperimentale della Sicilia, with the aim to divulging information about the health risk related to Anisakis parasites in fish products. There are several recommendations on the consumption and correct preparation of fish-based recipes and detailed information on their related diseases such as Anisakiasis with related photos and videos. It is possible to download it freely for the Android and iOS platforms.

Today, there are a lot of applications which give a valuable contribution to ensure food safety giving the widespread use of smartphones or tablet. The app is proved to be very smart and easy because of its subdivision in topic icons. The homepage is divided as follow: informations about CReNA, *Anisakis*, Anisakiasis, normative and cooking recipes.

The digital devices that are use daily are the best

tools for communication purpose concerning lifestyle areas, comprising cookery. For these reasons, the app contain delicious fish-based recipes with all the recommendations for consumers to ensure the maintenance of food safety. The work aimed to evaluate the impact of “Anisakis CReNA” app for consumers by the implementation of a survey.

A total of three hundred persons were contacted in supermarkets, fish street vendors and hotel management Schools of Sicily and primed to download and evaluate the app. Of these, 150 downloaded the app and evaluate it with a good feedback. A Monte Carlo test was conducted in order to have a clear estimation of the satisfaction grade subdivided by person category.

The test was carried out by R 2.1.4 software. The users that downloaded the *Anisakis* app were doctors, housewives and food sector operators. 80% of housewives showed a valuable interest on the *Anisakis*

topic, asking more information about the good practices of cooking fish products; the remaining 20% alerted themselves declaring to avoid the consumption of food products. Of these, over 90% were females between 50 and 60 years old. All the doctors gave a 100% positive feedback of the app highlighting the need to emphasize the information of the app to the consumers. 90% of the food sectors operators showed high interest to the information included in

the app; the remaining 10% declared that the information of the app could be dangerous for the fish products sectors because are too alarmist and able to deviate the consumers. 94% of the users declared the app very useful, smart and easy. Finally, the results obtained revealed that the app developed has reached the goal established giving easy to understand and easy to consult information for the protection of consumers regarding the risks related to these parasites.

