

## **Consumers' acceptance of an online tool for health risk-benefit communication about seafood consumption**

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### **Abstract**

Seafood is widely recognized as an important component of a healthy diet. As we gain more knowledge on contaminants in seafood, concerns are being raised over the risks associated and there is debate on the communication dilemma concerning the nutritional-toxicological conflict. Although health benefits outweigh the health risks for the general population, there is a need for caution when it concerns more vulnerable groups such as pregnant women and children. In order to tailor messages based on consumers' profile and consumption pattern, online interactive tools grant new opportunities, with consumers increasingly using the internet for health and nutrition information.

The interactive FishChoice tool ([www.fishchoice.eu](http://www.fishchoice.eu)) was developed within the ECsafeSEAFOOD FP7 project and aims to inform consumers on the health benefits and health risks linked to their weekly dietary pattern regarding seafood. To assess the acceptance of the FishChoice tool, an online survey was undertaken in five European countries, namely Belgium, Norway, Spain, Portugal and Ireland (n=697; age 25 to 65 years). The used conceptual framework is a modified Technology Acceptance Model based on the adaptation Lin and Lu (2000) introduced for measuring the acceptance of websites.

Although attitudes are generally positive, they differed slightly between countries. The majority of consumers agreed that the tool is useful and easy to use. About two thirds of consumers who assessed the tool agreed they would use the information when choosing seafood species, portion size or frequency of consumption. Consumers with a higher weekly consumption of seafood, also have higher intentions to use the tool. The study also identified a number of pitfalls that limit the acceptance of the tool among consumers and lead to recommendations for further development of similar online risk-benefit communication tools.

Online tailored risk-benefit tools designed by trustworthy institutions can potentially solve the nutritional-toxicological communication dilemma that exists regarding seafood consumption. European consumers prove to have positive attitudes and intentions towards using such a tool. Similar tools can be used in situations where no general recommendations can be made and risk communication has to be targeted. Further research should determine the long term impact of these communication messages on consumers' behavior, especially on vulnerable groups.

### **Keywords**

Seafood consumption; Consumer; Risk-benefit communication; Online tools; Computer tailoring; Internet; Fish consumption; Health risks

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