



Integrating consumers' perception in communication strategies for Risk-Benefit Assessment outcomes in food and nutrition. Case study: red meat vs novel protein sources, under the NovRBA project

Main author: Ermolaos Ververis (European Food Safety Authority (EFSA); National and Kapodistrian university of Athens (NKUA))

Co-authors: Emilia Boehm, Dan Borzekowski, Mark Lohmann Gaby-Fleur Böl, Naska Androniki

INTRODUCTION

The application of Risk-Benefit Assessment (RBA) models in the public health nutrition sector is a relatively new tool, rapidly gaining ground in the formulation of nutrition policies and actions. The separate assessment of risks and benefits usually provides a distinct direction regarding the communication of each conclusion. The dual nature of RBA though, i.e. that it assesses both risks and benefits under the same framework, introduces challenges in the communication of the respective outcomes, which lie somewhere between the two ends. A robust and clear communication strategy, which will initially attract the public's attention and subsequently gain its trust, should consider elements pertinent to consumer choice and acceptance regarding the assessed dietary choices. Such issues were addressed in the EFSA-funded NovRBA project (Novel foods as red meat replacers – an insight using Risk-Benefit Assessment methods), in which the substitution of novel protein sources for red meat is investigated by applying RBA methodologies. The substitution scenarios comprise patties containing beef or cricket powder.

METHODOLOGY

The public's perception regarding possible risks and benefits linked to the consumption of red meat and edible insects were mapped using data identified through a literature search. Information such as state of knowledge, consumers' acceptance, and sociodemographic characteristics was collected.

RESULTS

Factors shaping consumers' acceptance of edible insects are divided into psychological, those related to the product per se and those related to social trust and norms. Main psychological factors are food neophobia, feelings of disgust and fear, and cultural and social influences. Trust in information sources and knowledge about possible health

benefits are factors related to the other two macro-categories. Perception towards edible insects was reported to be improved through education, and the production of foodstuffs in which insects are not in a visible form. The selected studies showcased that perception highly depends on sociodemographic characteristics such as gender, ethnicity and educational level.

Several studies reported that red meat is considered healthy and nutritious by consumers. Risk perception regarding red meat consumption was mentioned to be influenced by exposure to information, as well as being affected by sociodemographic characteristics. The products' type and price were reported as important variables affecting the public's safety perception. Changes in consumers' behaviour towards red meat consumption may be driven by medical advice and societal influence.

DISCUSSION

Considering the project's possible outcomes (promote red meat, promote insects, or a neutral outcome), the information gathered may be used in different ways. If insects are to be promoted over red meat, any triggers of disgust and associations with live animals should be avoided, while still being transparent regarding the ingredients in the food. Public access to information on relative risks and benefits should be enhanced through science-based social events, as well as through competent public entities. If red meat is to be promoted over edible insects, establishing informational engagement of the public with trusted sources can be beneficial. Given that red meat is a staple food, emotional and psychological factors have less effect on public perception. Neutral information on long-term health risks and benefits should be communicated by well-established public or private entities. By integrating into an RBA communication strategy elements pertinent to consumer choice and perception towards the under-assessment of foodstuffs, it will be possible to develop and deliver targeted messages, tailored to the scenarios under assessment.

(Disclaimer yet to be inserted as per EFSA G&P rules)