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D5:

Beneris & Qalibra dissemination strategy

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Dissemination plan

Purpose

The **dissemination plan for benefit-risk assessment of food** aims to spread information about methods and tools for making better assessments about benefits and risks that relate to food consumption. Typically, these assessments are performed by or for food authorities or companies in the food sector. However, some assessments may be directed to general consumers to promote a healthy diet. The dissemination should be targeted to both those who make these assessments, and those who read the assessments.

A special focus in this plan is on web-based tools and methods that are applicable in Europe.

The key objective of dissemination is to ensure that the methods and tools developed in research projects will become widely known and used, and that they will be further developed by new research after the original projects have ended.

Background

There are several European projects that are developing methods for benefit-risk assessment of food. Beneris, Qalibra, and Brafo are jointly collaborating in this area. In addition, there are several other projects that are closely related although their focus is not on food but on environmental health in general. These projects include Intarese, Heimtsa, and 2-Fun. These projects are producing useful information and methods that can be used also in the food sector. For example, Intarese is developing a toolbox for making environmental health impact assessments on the Internet. Heimtsa is collecting a background incidence database for essential background information used in assessments.

Tasks in the Dissemination plan

The dissemination about methods and tools developed for benefit-risk assessment divides into several parts that mutually strengthen each other towards the key objective. We will work so that the tools will

- be maintained, updated, and kept available to the users for several years after the original projects,
- be utilised in new projects as the basis for new development,
- be utilised for collecting existing useful information related to benefit-risk assessments and food,
- be utilised in real policy situations in the food sector to produce guidance for decision-making,
- be utilised in real policy situations outside the food sector, thus increasing the critical mass of users and developers,
- be utilised for publishing peer-reviewed scientific articles with a novel principle "publish first, review later."
- gain awareness among the potential users so that they can use the tools in new situations,
- gain awareness among stakeholders so that they can demand the use of the tools in new situations,
- provide better interfaces for the end-users of the modelling software.

Sustained maintenance

There is a threat that methods and tools developed by a research project are not maintained after the end of the project. Clear actions should be taken to prevent this. One way to do this is to find new projects that utilise the methods and tools (see below). Other actions are considered here.

Policy guidance and risk assessment are priorities of THL. Currently, there is a research group of nine people dedicated in maintaining and developing Opasnet. However, only one position is permanent and all others are on temporary project funding. Without any new funding, the functionalities of Opasnet can be maintained until the end of 2012.

There is a need for discussion to identify an ecological niche for each tool, so that each tool has good prospects of surviving in the future with some new funding. If there is no foreseen funding, it should be considered whether some tools should be merged to ensure and the know-how is inherited into the new systems.

Actions and suggestions are needed to ensure that a more sustained funding can be achieved. Roles of different institutes in the maintenance should be discussed. Different tools can be maintained by different institutes, but then cooperation is needed to keep the tools coherent. Systematic and established forms of cooperation in the benefit-risk assessment of foods are still missing.

New projects

Bepraribean, Intarese, Heimtsa, Hiwate, and Brafo are all ongoing projects with European Union funding. They are all related to open assessment in one way or another. The use of open assessment is encouraged in all of these projects. Now that the Opasnet Base is entering the phase of practical use, it offers real utility to the projects and their data management and modelling efforts. Partially, the projects are working on similar topics, and the information produced in one project is useful in another. This is a way to avoid duplication of work and save resources to more important things.

These projects will be informed about the new development, and possible collaboration is developed together with a contact person. The contact person for the projects are Jouni Tuomisto (Bepraribean, Brafo), Mikko Pohjola (Intarese, Heimtsa), and Päivi Meriläinen (Hiwate). New projects and contact persons will be added to the list when they are identified.

Collection of existing information

Most of the resources of Beneris and Qalibra have been used in developing methods and tools for benefit-risk assessment and testing them with case studies. Less emphasis has been in producing new information or collecting existing information outside the projects. Beneris has produced food intake and contaminant information, but otherwise it has not systematically searched for food or other data for Opasnet Base (previously Beneris data repository).

Beneris should put much more effort in collecting existing data into Opasnet Base, and existing methodological information into Opasnet during the last months of the project. The dissemination budget of Beneris has been underspent, and this resource can be redirected to data and information collection. A website with useful information is only useful if it is larger than a critical mass. Users will go to the website only if it contains enough

information, i.e. if the expected balance of the benefit of the information and the cost of finding it is favourable to a user.

The collection of data and information can be effectively decentralised. It is based on a web page about information that is wanted to the website. Anyone can read the list, search for the information, organise it into a proper format and upload it to the website. THL can organise this work and pay for the workers. The only requirements for the payment are that 1) the person registers him/herself to the THL system for payments, 2) the task and the amount of compensation for the work is agreed beforehand with the contact person, 3) and the contact person controls that the agreed work has actually been done.

- See Information collection tasks for Opasnet

Real policy situations in the food sector

EFSA is a potential key user of the methods developed in Qalibra and Beneris. EFSA experts and staff are involved in the Scientific advisory panel of the two projects. During the rest of the projects, a plan should be developed about how to utilise the methods and tools developed in the projects in a small practical case study arising from the needs of EFSA. The case should be performed in the near future, preferably starting before the end of the projects in September 2009. In practice, this should relate to the work and case studies already performed in the projects. This is probably the only way to do the case study without extensive new research and funding for it. The advice of the scientific advisory panel is needed in identifying a relevant and feasible question.

Real policy situations outside the food sector

The open assessment methods developed in Beneris are not dependent on the actual sector in which they are applied. The use of the methods in any sector will spread the word and also help their usage in the food sector. Therefore, the dissemination plan includes actions that promote the methods in other potential sectors. The most important of these is currently climate change, and this is described in more detail.

In December 2009, the politicians of the world will gather to Copenhagen to decide about future actions to tackle climate change. There is an opportunity to make assessments about some of the open issues before the Copenhagen meeting, thus offering guidance for the actual decision-making. There is an ongoing assessment about climate change mitigation policies on city-level (the case city is Helsinki) in Opasnet. Health impacts of fine particles from heat production and traffic are estimated together with climate change effects and direct costs.

The policy process of climate change mitigation has a very high profile. Any good development related to policy-making in this area may also bring awareness to the methods used to achieve the development. Therefore, the case study related to climate change should also be used to promote the methods. The first task here is, of course, to make a good assessment that actually is of interest to the policy-makers. The researchers of Beneris are closely involved in the Helsinki case study.

Peer-reviewed scientific articles

With benefit-risk assessment of food, there is a constant need of new published peer-reviewed information. A critical problem typically is that although the information exists, it

has not yet been published in a peer-reviewed journal or series. The process of peer review is often lengthy, typically several months. In addition, the authors aim to publish in good journals, and there is a high risk of rejection so that the submitting process starts over again in another journal.

In physics, where the speed of scientific innovation is high, researchers cannot afford the delay in publishing, because someone else may publish the same innovation. Therefore, physicists typically publish their manuscripts without any peer review in a website called Arxiv.org. A manuscript may subsequently be criticised and edited, until the author thinks it is ready for publication in an "official" scientific journal. Although this approach has been applied in physics for more than 15 years, it is still a novel idea in other scientific disciplines.

This system speeds up the publishing process, gives the new information available to the users earlier, and is more fair in the competition about the first publisher of an innovation.

A similar system is needed in the food sector. The current idea is to launch Opasnet Journal, which would have the same principle as Arxiv: **publish first, review later.** Opasnet offers a natural workspace for writing manuscripts of this kind, and the peer-reviewed and accepted manuscripts can also be published as articles in Opasnet.

As the work needed to found a new scientific peer-review journal is large, this objective is probably going to take a long time to materialise. In the meantime, we explore the possibility to launch a report series, Opasnet Reports, which can publish also non-peer-reviewed material. However, it makes it possible to publish assessments and other material in Opasnet so that it is given a permanent reference, an archived electronic version that is permanently available, and also a printed version that is stored in libraries.

Awareness among users

The potential users of the methods developed include EFSA, national food authorities such as Evira in Finland, and food industry. The awareness among these users is promoted by personal contacts (e.g. some Beneris staff is now working in Evira, thus bringing information directly to the user organisations). However, also a systematic campaign to raise awareness is needed. A newsletter is produced, briefly describing the methodological results of Qalibra and Beneris, and providing links to the websites where these methods and tools can actually be utilised and where more detailed information can be found. This newsletter is spread to national and international food authorities and to organisations representing food industry in Europe. The newsletter is sent in fall 2009, before the end of the two projects.

Awareness among stakeholders: Continuous contacts to new people who are interested in the topic or open assessments.

Open assessment is a method that only works if there is a critical mass of people actively involved. It can be used in the traditional way with only a small group of experts involved, but then it does not produce any added value compared with the traditional methods. New people should be continuously recruited to use open assessment and Opasnet. Signals from people interested in food safety or promoting openness can frequently be found from the societal discussion from television, newspapers, and magazines. Therefore, one part of the dissemination plan is to keep eye on this discussion, and make contacts to people who might be interested in food safety or open assessment.

The experience so far has shown that many people who are used to the traditional assessment methods are not interested in using openness as the key property in assessments. Therefore, the group of people who are likely to promote open assessments is partially different than the group currently involved in assessments. We cannot restrict the recruitment to the current risk assessors.

There is a need to identify and find these new people. Because this group does not exist yet as a group, it is a challenging task to identify the potential new users. Often people have a strong opinion about the openness of information, as has been seen with the discussion on the electronic (free) distribution of music. Some people emphasize the benefits of openness, while others are concerned about the intellectual property rights of the person who originally produced the information (or music, which is also information), while still others are concerned about the profit from the investments to music marketing. A recent example of this is the trial of the founders of the PirateBay, a music distribution system, and the subsequent increase in popularity of Piratpartiet in Sweden. Users who find open assessments as a good idea are more likely to be found among Piratpartiet than among their opponents.

As a part of the dissemination plan, we will make contacts to people who show interest in open distribution of information, and inform them about our open assessment project. If their agenda is related to food risks and benefits, or otherwise a topic with potential synergism, possibilities for practical collaboration are sought for.

Improved user interface of modelling software

There is a need to facilitate the use of software that are suitable for modelling benefit-risk assessments. Uninet is a key software for disseminating the details of a benefit-risk assessment. However, Uninet deals with BBNs (or dependency diagrams) that are often very complex. Therefore, the dissemination of the results are inherently difficult. We have noticed that the user-friendliness of Uninet must be improved from specific points to make it suitable for its dissemination task. Therefore, the June 2009 meeting of Beneris decided to allocate resources for two tasks on Uninet. First, to improve readability of the output by a) adding a report generator, b) adding possibility of exporting conditional samples, and c) by graphical improvements of the output window. Second, to facilitate the compatibility with other software the user is using, we will extend the import/export model feature to data-mined models.

There is also a need to facilitate the dissemination of Analytica models. This will be done mainly by utilising and enhancing the use of Analytica Web Publisher (AWP). AWP is a server-based version of Analytica, which can be used and models can be run simply with a web browser.