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Fachtagung Was ist Sache in der Grünen Gentechnik?

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Food safety assessment practices critizised from a comsumers point of view

Praxis der Sicherheitsbewertung von Lebensmitteln aus Sicht der Verbraucher

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(Mitschrift Vortrag)

Ladies and Gentleman, thank you for the invitation to speak. Unfortunately I have to speak in English. I do speak a little German, but it is not good enough to pass over the massage in the way I would like to do it. So I prefer a mutual disadvantage me talking in a strange language and you listening to it. It is a pity we actually had to break down the debate that was just going on. Because from a consumer point of view I think that is a very interesting debate. And I try to come back to it later in my speech.

What I want to do is, I first want to make some general remarks about safety assessment, and how we have experienced safety assessment procedures and concrete safety assessments of genetically engineered food so far. Next I would like to take you with me in a study we have conducted last year on ten safety assessment dossiers. I would also like to make a presentation of some recommendation that were made by the European consumer organisations based on a work shop in which these study on the dossiers was discussed. Then I would like to discuss with you the fact that actually consumers are really concerned with safety of their foods, but I am not just guided by safety concerns but also by other considerations, and I like to have a few of recommendations about the fact that we should keep thinking about consumers.

This is going wrong, I am afraid. See what happens. Okay, something is wrong, I had a slide with some general remarks, and the first general I wanted to make is that from a consumer point of view, it is extremely important that we have safety assessment procedures for food safety and plants. We are dealing with a new technology, a technology with a certain level of uncertainties. If you look into how the assessment have developed during the past few years, it is fairly clear that we will be dealing and still are dealing with several uncertainties. Moreover if you look at the political level, I think it is very important that we have to create trust. We want consumers to be sure that their food is as safe as possible. We do not want consumers to be concerned about what they eat. We do not want this as consumer organisation, and I am convinced that government does not want this, and industry does not want this. Recently, a scientific committee in the

the United States evaluated the assessment procedures, which were carried out by the USDA. According to this committee specific regulations, specific assessment procedures for theses new products and these new technologies are needed, not only because of scientific uncertainty, but also for societal reasons. Actually may be there is not really a difference between 'traditional' or existing foods and foods derived form genetically modified organisms if you look at it from a merely scientifically point of view, however that can be discussed, but of a societal point of view it is important that we really deal this technology in a different way.

I also would like to stress that, from the consumer side, as far as we are informed, and as far as we can judge it, we think that the products that are presently allowed on the marked do not poses specific safety risks to humans. That does not mean that we are comfortable with the assessment procedures and protocols, because we think these can be improved. We are convinced these should be improved as this technology further develops, because at present we are dealing with rather simple applications of this new technology. If we must believe industry we will get future applications which will be more complicated, which will have an effect on the metabolism, of organisms, and which may involve several gene activities. Increased complexity of genetic changes and changes in metabolic pathways may increase the chance that unexpected effects occur. … [Ende Seite A, Band 4, Anfang Seite B, Band 4] … This demands for improved protocols for assessment as far as we are convinced.

For this reason, and for the reason that consumer organisations are considered the first source of information by consumers in Europe, we think as a consumer organisation we have the duty to make a constructive contribution to this improvement food safety assessment procedures.

For this reason we decided to start a project last year. This project was carried out by "Consumentenbond", the consumer association of the Netherlands in cooperation with BEUC, the European Consortium of Consumer Organisations in Brussels. It was financed by SG SANCO of the

European Commission We had a study made of ten dossiers that were filed for food safety assessment in the European Union. It concerned four applications for products derived from genetically engineered rape seed, four products derived from genetically engineered maize, a sweet maize and a tomato product.The genetically modified crops contain genes for herbicide tolerance, insect resistance (BT) and ripening. It concerned both notifications and authorisations, and we had to deal with the information that was publicly available. What we found and what really struck us was the lack of consistency in the use of data on changes in composition. We found differences in approach even within the same type of product in data that were used on macro- and micronutrients, on minerals, on vitamins, on inherent plant toxins, and entire nutrients, sometimes big differences. We also found unclearness or differences in the design of field trials the data were collected from. This is important as the season, the climatee, the geographical condition, the practical conditions -actually where a crop is grown- can influence the composition you get in the end.

Quite often in this dossiers additional questions were raised by the competent authorities of other member states. What we found in the dossiers was a huge unclearness about the way the decision makers, the public authorities in the European Commission are dealing with this additional questions, and how it influences, what impact it has on the decision making. We finally found a huge difference in transparency between member states:For instance in the UK, and to a lesser extend in the Netherlands, the process is quite open, it is easy access to dossiers, at least large part of the dossiers. Especially in Germany it was very hard to get access to the dossiers. The dossiers we found were not specifically meant for food safety evaluation, but mainly for environmental safety evaluation.

On the bases of these findings the group, the food working group of BEUC came up with several recommendations. A workshop of this working group was also attended by representants from several public authorities in the European Commission and scientists. The food working group concluded that it really remains crucial to systematically detect unattended changes in

genetically engineered organisms and to compare them with an appropriate control. In the context of the proposed legislation for GMO food and feed, we think a comprehensive list of criteria should be made, criteria on which the risk assessment for genetically modified food and feed should be based. The food working group also agreed that we need a minimum list of macro- and micronutrients, entire nutrients inherent plant toxins, secondary metabolites and allergens. They must be analysed for each crop species. We also need validated techniques to establish a content of compounds of genetically modified products, especially of plants. We need common methods for statistical analysis of the data, and we think that differences in the composition of genetically modified food crops and its non genetically modified reference, whether they are intended or unintended, should be object to further nutritional, toxicological and immunological evaluation.For detecting these differences in particular with view on unknown substances in plants, we need validated techniques, validated methods based on further development of new techniques like genomics, proteomics, and metabolomics. Expression of indigenous genes may be altered as a result of the inserted promoters and terminators. Therefore, we think the risk assessment should also take into account, and that does not always happen, assessment of the border regions of the uncertain consequences.

We need further development and discussion in quite a few areas. I think we need further discussion on the role animal feeding trials can play: Do we really need those animal feeding trials, in what case do we need them, and what do they actually tell us? Systematic screening on unforeseen effects of genetically modified food after market approval is a real necessity. We need well designed post market surveillance systems for genetically modified food.

It is a long desired wish from consumer organisations that genetically modified food products do not contain antibiotic resistance marker genes. The latter is a rather complicated discussion Ifyou look more in detail to antibiotic marker genes you could make a difference between marker genes that code for resistanceagainst antibiotics that still have some value in

human treatment or in animal treatment, and antibiotics that do not. We have to tried to explain that to consumers, but we found it is impossible to explain such distinction. So we concluded: Well, from a scientific point of view it might be useful to make that distinction, but from a societal point of view, and from a communication point of view it is extremely difficult.

We think that for traceability purposes we also need new techniques to make distinction between GMO and non-GMO products. And finally, we think more resources need to be made available for an independent and biases scientific research in the field of GMO risk assessment. The food dossiers should be made public. The example of how the UK authorities deal with GMO applications is a good one. They put the food dossier on the website for a period of thirty days, so everybody can have a look at it and it is accessible to anybody who wants to. We also think public authorities should seek participation by not only consumer organisations but also other stakeholders in the safety evaluation of genetically modified foods.

Now, we know from public surveys that food safety and rsik perception is an important factor in shaping the opinion and the attitude of consumers, but it is not the only one. This slide shows how consumers think about several applications – in red, the usefulness, the need, the benefit, which is in blue, and moreover the acceptability, which is in yellow, are very important factors in shaping this opinion. It would be a mistake to think that, when we had everything covered scientifically and we can say, well these foods are safe, that we have sufficient basis for consumers to accept these products. In addition we need to recognize that, when we discuss genetic engineering and its application, it is not a discussion that stands alone, it is always in comparison with alternatives, other options. Consumers do ask: “Do we really need this, what alternatives do we have? What is so bad about conventional agriculture? Is conventional agriculture already developing in a direction which responds to our needs, or should we choose for organic agriculture. Also, the notion of safety and risk and, of course, of benefit is one that should be put in a comparative context. Something is not just good or bad, but it is always better or worse. So you should compare. Compare in

the context of different production systems. Not just compare, as I often have seen, with the conventional practices. As Monasnot, for example, calims a high percentage of reduction in the use of herbicides can be achieved with genetically engineered crops, when we compare it to conventional practices. Maybe that goes for the US, but agricultureal practices in Europe are very different from those in the US.. I think you can only get a complete and balanced picture if you compare different systems: conventional, modern Integrated Pest Managment and organic systems, systems with and without genetically engineered crops. Moreover, apart from the use of herbicides, any reasonable effect should be taken into account, like effects on the labour of the farmer, effects on biodiversity, on the quality of a product, on price, and so on, whatever you can think of. In my view that also means that we should shift from a research agenda that is mainly technology oriented to a research agenda that is more problem oriented. In recent years, more funds have been made available for organis research.We are happy about this development, but if you compare trhese funds to the amount of public money that has been poured into development of gene technology, than this comparison is not very equal. I also think that the debate should focus on the question where we want to go with food and food production in our society. My experience is that a narrow focus on gene technology often frustrates the debate.

An example of an approach where we try to do that is the AgroGen project in the Netherlands (www.agrogen.nl). This is a project where we try to make a comparison of effects of different cultivation systems with and without GMOs, ranging from conventional to IPM and organic. From a methodological point of view it is a difficult comparison but in the debate, at least, we would like to take into account that you should not limit yourself to comparing potential future applications of a new technology, like gene technology, with existing practices in agriculture but also that you should look into the future as far as the further development of conventional agriculture practices or organic practices goes, because we need developments there, too. The project focuses on sustainable agriculture, because in the evaluation of the debate that has been going on for about 20

years now, our conclusion was sustainable agriculture is actually the key issue. We have chosen for a participationary character of the project. Often, in research projects stakeholders, NGOs are invited to participate at the moment that a research project is already defined. In that case, the research targets are already defined. It is usually only in the end that scientists realise think about inviting stakeholders In AgroGen we have realised stakeholder participation right from the start. What we hope that we will be able to do in this project is make a contribution to the debate, to improve the quality of the debate by clarifying both the scientific and the normative, the emotional or moral basis for stakeholders, the appreciation of effects of various systems be it negative or be it positive. We also think about possibilities of an educational and of a virtual or a real test farm.

Finally, I think this is a well known Dutch consumer, I think it is not very famous in Germany. He always has a lot of adventures, very strange adventures. Every adventure ends with a huge diner. You can tell by his figure that he really likes 'good food'. This consumer has a butler, who wants a change. He thinks, well, it is good for this consumer to consume differently. You have to be really careful with that. I missed the last picture. That is a pity, because that is the picture where this consumer walks away, and we should not risk that. Thank you very much.