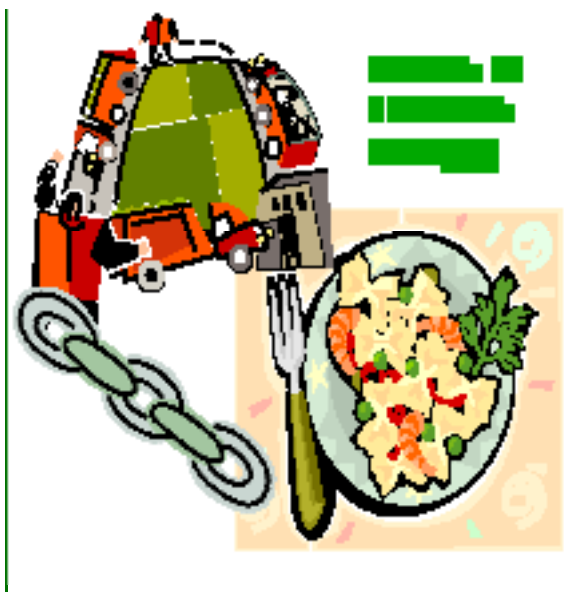


## Greening the Food Chain- Workshops



As a result of consultation with its members in summer 2007, AAB has organized a series of workshops under the title "Greening the food chain". This series recognizes that substantial research effort has been directed at improving efficiency and developing innovative solutions which reduce environmental impact and/or increase sustainability in the food chain. A number of industry and government initiatives are working towards similar goals. This series of meetings therefore seeks to provide opportunities for stakeholders throughout the food chain to:

- Highlight new approaches
- Review the success of initiatives currently in place
- Consider the trade-offs and interactions that take place throughout the food chain.

The first meeting in the series considered the question "**What does green mean?**" and focused on understanding and meeting conflicting aspirations for food. It took place in the Boardroom at the Society of Chemical Industry, Belgrave Square, London on Wednesday 14<sup>th</sup> December 2007. In an introductory exercise we had to think about what characteristics we would consider to be "green" for different food types (from vegetables and meat to bread and ready meals). Then Mary Brennan who is a lecturer in marketing at Newcastle University introduced the consumers' perspective on these issues. She gave us interesting information about the market for ethically and environmentally labeled food and the consumer characteristics associated with purchase of foods with different types of labels such as free-range or fair trade. Using case studies she showed how retailers and manufacturers were seeking to integrate "green" messages but also reminded us that for consumers, perception rather than the facts is what matters, even when they are trying to make ethical decisions. Professor Paul Davies of the Royal Agricultural College then spoke; he has considerable experience of crop production systems and crop science, and has developed a particular understanding of agricultural development. He highlighted the importance of integrity in the food chain and highlighted the steps that had been taken by some farmers to develop assurance schemes to deliver

food quality and higher level environmental and ethical credence. He also highlighted using case studies some of the concerns that are expressed about green claims; this is a complex area and improving a products carbon footprint might impact on other aspects of the product supply chain in unexpected ways. After lunch attendees worked in groups to map where work on "green" qualities of food and food chains is being carried out. The discussions highlighted the complexity and interacting nature of the flows within the food system. One group particularly focussed on identifying the steps in place to measure and manage food quality such as assurance schemes, LEAF, fair trade, high animal welfare systems and application of carbon footprinting and life cycle analysis within the food chain as a whole. The other group highlighted the environmental impacts (arising at local to global scales) of decisions made within the food system and suggested that very few of these can be clearly linked directly to products at present. In the final discussions, attendees concluded that while a single set of green criteria could not be applied to all foods, nonetheless a set of common principles could be identified probably under the banner of "sustainable food systems". Conflicts arise as there are a lot of expectations and all cannot be achieved at the same time or for all products. Food systems are a complex area of study where applied biology interacts strongly with social and economic aspects which all need to be studied in an integrated way.

The second meeting in the series considered the question "**Does Life Cycle Analysis make sense for food?**" and considered this tool and a number of other approaches to measuring "green" for foods. It took place in the lecture theatre and garden room of the Society of Chemical Industry, Belgrave Square, London on Wednesday 6<sup>th</sup> February 2008. The day was filled with a series of inspiring and challenging presentations as well as some workshop discussions which took place with marker in hand. The platform speakers agreed that Life Cycle Analysis could be applied to the study of food, though to date most of the work carried out had been focused on the farm system rather than integration throughout the food chain. Nonetheless problems remain with lack of and variability in the data which underpins the development of robust general estimates e.g. for typical fertilizer use or N<sub>2</sub>O emissions. The need for transparency in methodology and for presentation of sensitivity analysis in relation to the main assumptions as a way of indicating precision in the final estimates was also highlighted. Groups worked to identify the strengths and weakness of LCA approaches for food; whether we could achieve a standard approach and what points should be the focus of an audit of LCA systems. The meeting was interested to hear about several other approaches to describing environmental impact for foods which had been applied through the food chain. The development of standard methods for the product carbon footprinting, which applies across all sectors, not just food, was welcomed.

Presentations, posters and the summary of discussions from these workshops will be produced together in a volume of the *Aspects of Applied Biology* series, which should be available in June 2008. Also watch out for more meetings in this series to come in the next year, and possible developments towards the establishment of a specialist group focusing on food systems within AAB.

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