



# **ELM FARM RESEARCH CENTRE CONFERENCE**

## **DOES ORGANIC FOOD HAVE AN 'EXTRA QUALITY'? New Research, New Perspectives and New Insights**

**A record of the Conference held on  
TUESDAY, 23RD NOVEMBER 2004**

**This Conference was sponsored by Sheepdrove Trust  
in collaboration with**



**FQH (International Network for Food Quality and Health)  
Sustain (the alliance for better food and farming)**



**ELM FARM RESEARCH CENTRE**

*The Organic Research Centre*  
*'For organic principles and best practice'*

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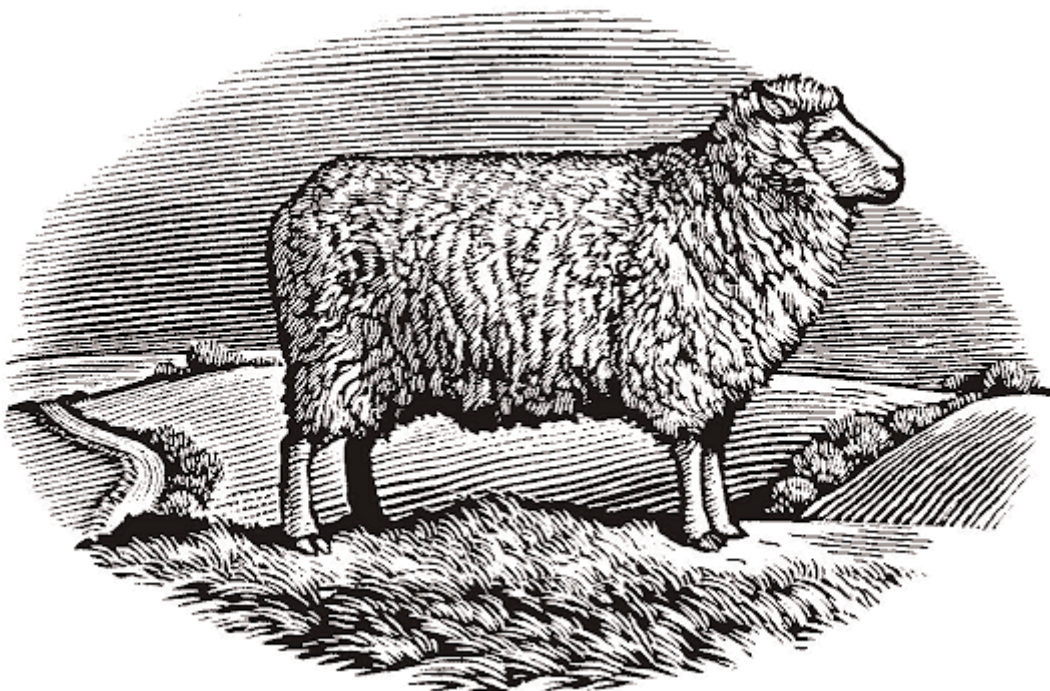
For further information please contact the Director, Elm Farm Research Centre.



## ACKNOWLEDGEMENTS

### A special acknowledgement

**We acknowledge and thank the Sheepdrove Trust for its financial support towards this Conference which allowed the use of the beautiful setting of the Kindersley Centre and its excellent facilities**





# ACKNOWLEDGEMENTS

## Acknowledgements

We would like to thank **all** those who participated in the Conference on 23rd November 2004 - those who gave presentations, those who chaired, those who responded and those who participated in asking questions and the discussions.

We also thank the team that organised the event so effectively.

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"Stressing the importance of differentiating between accepted dogma: "Organic food is better for you" and what is actually "true", i.e. the scientifically proven, Dr Brandt's interesting and balanced paper highlighted the need for a consistent approach and common understanding if claims about organic food are to be accepted.

The science that proves the "extra qualities" of organic food, or equally that demonstrates the detrimental effects of "conventionally-produced" foods, on our health is still developing, as shown by other speakers. But Dr Brandt concluded that organic farming, which has distinct benefits for the environment and food produced, has that "extra quality" that was the Conference's theme.

For consumers, the key benefit of organic produce may simply derive from the fact that positive choices are made in food purchasing that enhance a sense of individual value and well-being".

## Alara Wholefoods

"Projects that give statistically robust nutritional differentiation between organic and non-organic food are very welcome by organic food manufacturers".

## Duchy Home Farm



# TOWARDS WHOLE FOOD QUALITY

*Lawrence Woodward O.B.E. Director EFRC*

Does Organic Food Have An Extra Quality? Is it healthier than conventional food? Can the quality of organic food be linked to both environmental health and human health? These are some of the questions that we hope to address. It is unlikely that they will be answered because they are huge questions that go - not merely to the core justification of organic agriculture - but to the heart of perceptions and concepts of health.

It is claimed that organic agriculture is the only farming system that has as its underpinning philosophy and goal the achievement of positive health in its broadest sense. But what is this claim based on? Has it any justification?

Of course, we know that there are differences in the levels of chemical residues, protein and vitamin levels favouring organic over conventional food but we also know that; a) they do not apply across the board to a wide range of foods; b) modern usage and monitoring of agro- chemicals is increasingly able to produce foods with low or non detectable residue levels; c) the levels that are detected have unknown consequences but we cannot conclusively say that they are always detrimental to health; d) because variety selection and manure use is not controlled in a good deal of organic production some organic food is as problematic as conventional; e) highly processed organic food is likely to be as nutritionally deficient as highly processed conventional foods; f) out of season production, lengthy distribution chains and over packaging of organic produce creates some of the same adverse consequences as those produced by conventional methods.

Furthermore the reported decline in mineral levels in vegetables and the reduction in the proportion of omega 3 levels in meat are modern and adverse trends that seem to be occurring in organic as well as conventional production, albeit in a less pronounced way.

However, none of this negates the claim: at least as things are at the moment. The practice of organic food production may not be as good as the aspiration of the original organic movement requires it to be; the character of the organic sector may sit uneasily with that aspiration; and even though some certified organic food is unworthy of the words - organic and food, nonetheless, organic agriculture still has a recognisable relationship with a philosophy and concept of health.

Even after the passage of more than sixty years it is hard to find a better description of that concept than the one given by Lady Eve Balfour; "the health of soil, plant, animal and man is one and indivisible." She was a disciple of Sir Robert McCarrison, one of the pioneers of human nutrition who, having systematically observed many peoples and many diets, realised that there was a quality in the diets of the healthiest peoples which was absent from the least healthy; "that the food in all these diets is, for the most part, fresh from its source, little altered by preparation, and complete; and that, in the case of foods based on agriculture, the natural cycle is complete. Animal and vegetable waste - soil - plant - food - animal - man; no chemical or substitution stage intervenes."

Others reached similar conclusions and the concept - that health was part of a continuum through soil, plant, animal and man; and that by recycling nutrients through this chain, productivity could be maintained over time and health could be enhanced at all stages - this concept became a foundation stone of the international organic movement.



## TOWARDS WHOLE FOOD QUALITY

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Or possibly a millstone! Because this concept is rooted in another and very problematic one; that of wholeness (the two words wholeness and health share the same origin after all): problematic, because in the words of Dr. Innes Pearce one of the founders of the Pioneer Health Centre and the renowned "Peckham Experiment", "biological wholes,.....unlike their parts, cannot be examined a-part; hence cannot be analysed; nor are they definable in terms of quantification."

Whether in agriculture, food and nutrition or healthcare this problem has dogged the practitioners of what might, somewhat unsatisfactorily, be called "holistic science". There will be arguments against such terminology and it will be pointed out that the relevant distinction is whether the science is good or bad. Which is a fair point, especially as one of the determining factors of whether science is good or bad is the whether the methodologies are appropriate or fit for the purpose they are employed.

And for the most part the methodologies available to those researchers and indeed lay people who are interested in the dynamics of whole biological systems and their relationship to the whole quality of food have been lacking. They have allowed us only a partial look and yielded largely indicative information.

This is of course extremely valuable. We know there is a clear trend that in appropriate crops organic produce contains more desirable components and less undesirable than conventional produce. We also know that in livestock trials, animals fed on organically grown feed generally show greater fertility and longevity than those fed on conventionally produced feed. I am sure that researchers will continue to add to this body of information and that in time some commentators will accept that there are real differences between organic and conventional food that have implications for health.

I hope that we will become smarter in using this information in order to improve organic systems - both on farm and in food processing. Frankly, we have to, if organic production is going to legitimately continue. And it may be that this is as much as can be managed.

But I hope not; because such indicative information does not, for me at least, tell us enough about the nature of health and how to enhance it; nor about the relationship between the health of the living organisms (including humans) that share the same living biological systems; to put it another way, about the essence of living.

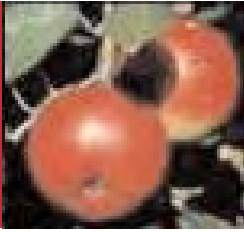
McCarrison spoke about an extra quality in the diet of the healthiest people; Scott Williamson and Pearce wrote about health being a biological process not a state; others have referred to vitality being transferred being living organisms. To learn about these things, if they exist, we must surely develop new insights and methodologies.

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Elm Farm Research Centre (EFRC) is one of the UK's leading research, development and advisory institutes for organic agriculture.

For more than 20 years EFRC has played a central role in the development of policy and standards for organic farming and food within the UK, EU and internationally.

The Centre's alliance of practice and policy – on-farm and desk research and consultancy and advice is unique.



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