

No real surprises in organic nutritional study

A study on the relativity of nutritional content of organic vs. conventional food compiled by UK researchers from the London School of Hygiene and tropical medicine and reported in the Australian today reveals a small slice of information that corroborates many of our understandings on organic food nutrition.

NASAA has examined the claim that there is “no evidence of a difference in nutrient quality between organically and conventionally produced foodstuffs.” It notes the study does acknowledge several factors and is limited to major nutrient groups.

Firstly, there was a large amount of data that was rejected for reasons including methodology but also if it did not fit strict criteria set by the group. Only 55 of over 52,000 studies were used. The study only considered a total of 13 nutrients and omitted reference to complex plant compounds with roles in nutrition.

“The significant claim that extra nitrogen was found in conventional food supports our long held views that nitrate in organic food is lower and that can only be good” said Rod May, NASAA chair “We live in a world awash with Nitrogen compounds and the N cycle has been severally disrupted at a global level by our production and synthesis of Nitrogen. We also understand that on plants without excessive nitrates and other Nitrogen in the tissue, pest attack is reduced,” he said.

The data on which these studies were conducted still remain to be checked, but as the authors acknowledge many factors lead to nutritional status of plants. Variety, soil, climate are just some. Comparisons of macro nutrients and vitamins and the finding of no significant difference are not surprising given the above. In fact, with respect to the heavy metal nutrients such as copper and zinc, we have to ask, do we expect to have more present?

Comparing livestock nutritional levels which are confined to fat and ash are difficult to meaningfully interpret. A plump battery hen compared to a free range hen may indeed see more fat...but is that what we want?

The study, conducted over 50 years of research opens a micro window into a small part of what is indeed a large structure. That is, the quality and the nutrition of the food production web and its harvestable outputs. The product is really only separate from its environment for the last days or hours of its life before consumption. All those weeks and months are what make the food what it is. In a living soil and a biodiverse environment, the plant achieves “natural health” It is not in need of chemical protection and is not in need of synthetic water soluble fertilisers such as urea and can frequently assert itself over its weedy competitors. Consequently, the value and quality of the production environment characterises the quality of the food in this measure and goes well beyond a gross nutrient analysis.

The study clearly omits testing of chemical contaminants, the presence of which in food is a long held reason for concern amongst consumers. Testing of organic food by Ruth McGowan of the DPI several years ago identified virtually zero detectable contamination in fresh organic food in SE Australia...

However, the strong message in the study was for a more rigorous analytical approach in the studies that were conducted in this area. NASA can only support a call for improved science and application of that science to the areas of organic research, which is almost entirely lacking in this country. We look forward to a day when we see the equivalent of the \$100 million recently invested in the US Obama administration, invested in this country.