

Toxic 'cocktail additives' in children's foods

Lizzie Vann and Peter Melchett handing in the report at the Department of Health

The Soil Association today presented the results of a three-year study, on the effects of combining four common food additives, to the offices of Rt. Hon Patricia Hewitt MP, the Secretary of State for Health. The research suggests that specific combinations can have a neurotoxic effect. [1]

The researchers at the University of Liverpool examined the toxic effects on nerve cells by using a combination of the following four common food additives:

E133 Brilliant Blue with E621 monosodium glutamate (MSG) and

E104 Quinoline Yellow with E951 L-aspartyl-L-phenylalanine methyl ester. [2]

The mixtures of the additives had a much more potent effect on nerve cells than each additive on its own. The effect on cells was up to four times greater when Brilliant Blue and MSG were combined, and up to seven times greater when Quinoline Yellow and Aspartame were combined.

The study shows that when the nerve cells were exposed to MSG and Brilliant Blue or Aspartame and Quinoline Yellow the additives stopped the nerve cells from normal growth and interfered with proper signalling systems.

The experiments were done in laboratory conditions and the additives were combined in concentrations that theoretically reflect the compound that enters the bloodstream after a typical children's snack and drink.

This marks the start of a campaign from the Soil Association and Organix Brands who are calling for the additives in question to be removed from food. The Soil Association has identified 30 foods currently marketed to children, which include the four additives studied. We are today writing to the manufacturers as well as the Food Standards Agency with a call for an immediate response to this report.

Lizzie Vann, MBE, founder of Organix Brands [3], said,

"Many parents of sensitive children know that food additives are a problem. In processed foods like sweets and snacks they are typically present in combinations. Many parenting and campaigning groups have been calling for stricter regulation and more caution to be taken with additives. At last, the scientific support for their suspicions is beginning to appear."

Peter Melchett, Soil Association, policy director said,

"Organix Brands and the Soil Association have identified 30 foods marketed to children, which use the four additives studied. We have written to the manufacturers, as well as to the Food Standards Agency calling for urgent action on these findings. This marks the start of a joint campaign from the Soil Association and Organix Brands, who are calling for the additives in question to be removed from all foods."

Notes To Editors

1. The independent research was conducted under supervision of Professor Vyvyan Howard by the Developmental Toxicopathology Unit, Department of Human Anatomy & Cell Biology and Department of Pharmacology & Therapeutics, University of Liverpool, Sherrington Buildings, Liverpool L69 3GE, UK.

The research has been published in Volume 90, Number 1, Toxicological Sciences Magazine, March 2006, article entitled "Synergistic interactions between commonly used food additives in a developmental neurotoxicity test" contributed by Karen Lau, W. Graham McLean, Dominic P. Williams and C. Vyvyan Howard.

The full report can be read at: www.organix.com/additives.pdf

2. **Brilliant Blue** - can be found in a selection of sweets, some processed peas, various soft drinks and some confectionery, desserts and ices.

Quinoline Yellow - is found in some smoked haddock, some confectionery and selected pickles.

MSG - which is banned in foods for young children, can be found in some pasta with sauce products, a large number of crisps, processed cheese and prepared meals.

Aspartame - can be found in some diet drinks, a selection of sweets, desserts and medicines.

3. The research has been supported by Organix Brands, manufacturers of a range of organic foods for children. Organix contribute 10% of all net profit before tax to fund research into the link between food and children's health. The four additives used in the University of Liverpool study are included in the Dirty Dozen list of food additives Organix would like to see banned from use in foods for children.