

Dr. Maria Alemany, Department du Nutricio I Bromatologia, Facultat de Biologia, Universitat de Barcelona, who was the researcher for the damning Trocho Study, wrote that he was deeply insulted by Garst's propaganda.

Remember that Dr. Alemany's study proved the formaldehyde converted from the free methyl alcohol embalms living tissue and damages DNA. As we know when you damage DNA you can destroy humanity. So concerned for the public was Dr. Alemany that after his study he reported it to the authorities.

Dr. Alemany said: "First, Garst suggests that perhaps aspartame just affects people with a metabolic deficit. If that were the case (I doubt it, deficits may just enhance the effect of aspartame), why then has it not been studied?"

In the case of cyclamate, the ban on its use is based on the deleterious effects on only a fraction of the population."

Second. Dr. Garst accepts that aspartame yields formaldehyde ... then, why not give formaldehyde to the people to help them synthesize methyl groups?

Did I understand rightly (after his speaking of the double helix, which has very little to do here unless for the binding of formaldehyde to DNA strands to induce mutation) that Dr. Garst suggests that aspartame may be beneficial because its derived formaldehyde may supply one-carbon units for methylation through the folate pathway? If that were the case, why not get the FDA approval for aspartame as a drug/vitamin substitute? This is an outright fallacy.

Third. Please, not again the tale of the methyl-esters of pectins! It has been proved to nausea that most of the methyl-alcohol esters of uronic acids remain esterified through intestinal passage, and that when freed in the large intestine by the action of the microbial flora is majorly and keenly used by these microbes for their own metabolic benefit.

The remaining methyl alcohol leaving the intestine is largely detoxified by the liver (this is a physiological mechanism well known and proved effective for millennia). Aspartame, however, is not fully hydrolyzed in the intestine, being absorbed in part intact. After the intestine-portalvein-liver trap is passed, the body protection against methanol wanes, and the resulting tiny liberation of methanol in tissues yields little amounts of formaldehyde that cause serious damage, precisely because it behaves very differently from the natural product methanol.

Even in cases of wood-alcohol (methanol) intoxication, the liver helps to stem the overflow of toxins.

Methanol inhalation or injection is much more dangerous, because it goes directly into the bloodstream and tissues, jumping the liver barrier.

This is explained in elementary physiology and biochemistry courses, so it is unbelievable that this is maintained as a "serious" scientific position by somebody that got a PhD, unless this is not a discourse of science but of economic profit.

Theories are nice, but have to be proved true.

The one Dr. Garst expresses here is that maintained by pro-aspartame fellows for decades.

This is how they explained the incorporation of aspartame label into protein and DNA in the earliest experiments on aspartame using tracers that were published by us (none were again published by this group thereafter).

This theory fits very well with the story of a harmless aspartame, but it has been proven untrue.

We did it, and this is why our study was so damaging.

If the theory recycled by Dr. Garst were true, then the carbon of the methyl alcohol of aspartame would enter the one-carbon path mediated by tetrahydrofolate, via formaldehyde or via formate.

These one-carbon units may be processed (depending on demand) to methyl groups, such as those found in carnitine, thymine and methionine (the only amino acid that can get back methyl groups in mammals), thus explaining the presence of label in protein (methionine) or DNA (thymine).

We gave labeled aspartame to rats, and got their DNA and protein from a number of tissues, and found large proportions of label.

So far no differences with the Aspartame-lovers theory.

However, we hydrolyzed the protein and DNA and looked for label in thymine in DNA and methionine in protein.

We found none.

Instead, the label was in unknown spots in the chromatograms, which plainly indicates that the incorporation of label into DNA and protein was NOT through the incorporation of methyl groups, i.e. the one-carbon folate pathway. Other ways of label incorporation should explain the attachment of the label.

The most logical explanation (justified by innumerable studies that show that formaldehyde attaches to protein and other molecules) was that aspartame-derived formaldehyde was chemically bound

to protein and DNA, inactivating (embalming, in fact) proteins and altering DNA structure causing mutations.

The experimental studies show that the theory is faulty.
No counter-experiments were published showing our possible "errors", nor has the theory of folate pathway incorporation been proved experimentally (it is fairly easy to demonstrate, it only needs to be true, however).

This is why I felt insulted.
It is an insult to the intelligence of anybody with even a thin varnish of scientific knowledge to discard proven facts and stick to self-fulfilling harebrained theories.

If what the aspartame lovers say about the fate of aspartame carbon is true, why nobody has proved it experimentally?

It is easy to carry out and much less expensive than hiring lawyers to defend bad science with top dollar legal expertise.

I used as heading the famous initial words of the second Catilinary by Cicero, which I remember from my early high-school Latin. Since probably most Americans were lucky enough not to study Latin when 10-11 years old, I provide an approximate translation: "Up to when do you, Catilina, will abuse our patience?". Substitute Catilina for the present aspartame producers and probably it fits very well the picture.
Good luck on the banning of this menace to our collective health."

Best regards,

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