

From chemistry lab to plate

by Sabine Eiche

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Food – it must have been among the first things for which humans found a word. “Foda,” an ancient inhabitant of the British Isles would have muttered, peering into the pot bubbling on his hearth. Related Anglo-Saxon words are “fedan” and “fodor,” feed and fodder, akin to the German “Futter.” South of the Alps, an ancient Roman, reclining on his triclinium (dining-couch) as he supped, would have spoken of “cibus.” The few English words based on the Latin “cibus” – cibaries, cibarious, cibation – are now rarely used.

Brillat-Savarin (1755-1826), the French philosopher who’s a byword for the superlative in gastronomy, famously said, “Tell me what you eat: I will tell you what you are.” Admittedly he had social distinctions in mind, but I’m convinced that were he around today, he’d overlook whether we ranked as lower, middle or upper class, and declare us all walking chemistry labs.

True, we’re composed of chemicals and the food we eat is composed of chemicals, because all matter is composed of chemicals. But what’s happened in recent history is that chemists have been experimenting in their labs to replicate the substances created by Mother Nature, in order to manipulate foodstuffs – mostly for profit. The result of that manipulation is processed food.

While I bar processed food from my kitchen, it holds the same kind of horrible fascination for me as would a two-headed calf. Hence I couldn’t resist the newly-published book by Melanie Warner, *Pandora’s Lunchbox. How Processed Food Took Over the American Meal.*

Early on, Warner deconstructs a Subway Sweet Onion Chicken Teriyaki sandwich, which is largely “constructed from powders.” Of the sandwich’s 105 ingredients, 55 are powders – the chicken has 13, the teriyaki glaze 12, the fat-free sweet onion sauce 8, and the Italian white bread 22. She names them all.

In the 1950s, the number of food additives allowed by the Food and Drug Administration (FDA) of the United States was around 700. Today it’s some 5,000 – over half are for flavour. And when a company adds something that’s not allowed, all it has to do is stop calling the product food and simply call it a product – as Kraft did a while back with one of its packaged cheeses.

It was only about 100 years ago that the Polish biochemist Casimir Funk identified the substance in food that cured diseases. He called it vitamin, from the Latin “vita,” (life) and amine. Though his experiments were focused on brown rice, he’d taken the first step towards the eventual discovery of the 13 vitamins and around 14 minerals that are our essential nutrients.

At first vitamins were obtained from natural foods. In the 1930s, chemists succeeded in making synthetic vitamins. The process became increasingly sophisticated, deriving vitamins from the unlikeliest sources. For example, the milk (organic included) we buy in stores contains Vitamin D made from grease found in Australian sheep wool, which is shipped for processing to China, where “roughly half of all global vitamin production” is carried out.

This morning in the garden I saw a slug, reclining like a Roman on his triclinium, the last millimetre of an organic seedling sticking out of its mouth. A discerning eater, the slug. I bet it wouldn’t touch processed food.