

## Is Gm Food<sup>1)</sup> Safe To Eat?

Traditional plant breeding involves crossing varieties of the same species in ways they could cross naturally. For example, disease-resistant<sup>2)</sup> varieties of wheat have been crossed with high-yield wheat to combine these properties. This type of natural gene exchange is safe and fairly predictable<sup>3)</sup>.

Genetic engineering (GE) involves exchanging genes between unrelated species that cannot naturally exchange genes with each other. GE can involve the exchange of genes between vastly different species — e. g. putting scorpion<sup>4)</sup> toxin<sup>5)</sup> genes into maize<sup>6)</sup> or fish antifreeze<sup>7)</sup> genes into tomatoes. It is possible that a scorpion toxin gene, even when it is in maize DNA, will still get the organism to produce scorpion toxin — but what other effects may it have in this alien environment? We are already seeing this problem — adding human growth hormone genes to pigs certainly makes them grow — but it also gives them arthritis and makes them cross-eyed, which was entirely unpredictable.

It will be obvious, for example, that the gene for human intelligence will not have the same effect if inserted into cabbage DNA as it had in human DNA — but what side-effect would it have? In other words, is GM food safe to eat? The answer is that nobody knows because long-term tests have not been carried out.

Companies wanting a GM product approved in the UK or USA are required to provide regulatory bodies with results of their own safety tests. Monsanto's soya beans were apparently fed to fish for 10 weeks before being approved. There was no requirement for independent testing, for long-term testing, for testing on humans or testing for specific dangers to children or allergic<sup>8)</sup> people.

The current position of the UK Government is that “There is no evidence of long-term dangers from GM foods.” In the US, the American Food and Drug Administration is currently being prosecuted<sup>9)</sup> for covering up research that suggested possible risks from GM foods.

## 食品转基因食品安全吗？

传统的植物培育方法，是依照植物自然杂交的方式，进行相同物种的人工杂交。比如，抗病小麦同高产小麦杂交，形成了一种具有双重特性的新的小麦品种。这种自然的基因交换既安全，又具有相当的可预见性。

基因工程是在彼此毫无关系的物种之间，相互交换在自然条件下无法交换的基因。它可在有巨大差异的物种之间进行基因交换。比如，将蝎子毒素基因注入玉米，或者将鱼防冻基因注入西红柿。即使在玉米DNA中，蝎子毒素基因依然可能获得有机组织产生蝎子毒素。但是在这种异质的环境中，这种基因产品会有什么其他作用吗？我们实际上已经发现这个问题：将人类生长荷尔蒙基因植入猪的体内，一定会使猪的生长加速，但是同时也使猪患上了关节炎和内斜视，而这一切是完全无法预测的。

打个比方，人类的智力基因显而易见在人体DNA内和注入卷心菜DNA后的作用是不同的。但将它植入卷心菜中会产生什么样的副作用呢？换句话说，食用转基因食品安全吗？没有人知道答案，因为人们尚未进行长期的测试。

## 学英语，练听力，上听力课堂！

在英国或者美国，一个公司如果希望其转基因产品获得批准，它必须向管理机构提供本公司转基因产品安全测试的结果。Monsanto的大豆在获得批准之前，曾用了10周时间进行喂鱼试验。目前，尚无要求对转基因产品进行独立测试、长期测试、人体测试，或者就其对儿童及过敏者所造成的特定危险进行测试。

英国政府目前的态度是：“尚无证据表明食用转基因食品存在长期性的危险。”在美国，人们正在起诉美国食品药品监督管理局掩盖转基因食品安全性的研究结果，这些研究结果表明，食用转基因食品可能导致危险。

### NOTE 注释：

GM food 转基因食品

disease-resistant [di'zi:z ri'zistənt] adj. 抗病的

predictable [pri'diktəb(ə)l] adj. 可预见的

scorpion ['skɔ:piən] n. [动]蝎子

toxin ['tɒksin] n. [生化][生]毒素，毒素

maize [meiz] n. 玉米

antifreeze [ænti'fri:z] n. <美>[化]防冻剂

allergic [ə'lɜ:dʒik] adj. [医]过敏的，患过敏症的

prosecute ['prɒsɪkjʊ:t] vt. 起诉