# Genetically Modified Crops – Food for Thought…

## Introduction

Genetically modified or manipulated (GM) foods are those that have had their genetic makeup manipulated. Usually this is to create more resistant or more desirable traits within a crop, such as improved pest resistance or more bountiful harvests.

In brief, this process may involve the isolation of a particular gene within a strand of DNA. That gene, or the required portion, is then removed. The sequence of proteins within that gene can then be manipulated and reintroduced into a different DNA strand.

The completion of the sequencing of the genomes of most agriculturally important plants and animals has obviously impacted considerably on the possibilities of genetic research.

Even with the obvious amazing benefits that genetic engineering (GE) can provide, scientists and activists around the world are arguing that it needs to be approached with extreme caution. There is much concern about the release of genetically engineered plants and animals into the natural environment, and the consumption of these GM foods by humans – do they present potential dangers? It is, as yet, still very much unknown.

There is, however, an impending need to provide large quantities of cost-effective and nutritious foods for developing nations. Many of these nations require crops that are much more resilient to the many pressures that the local environment currently presents, such as high rainfall causing rotting, soil of low fertility, pests etc.

Tomatoes, rice and corn are examples of plants that are already being genetically modified. Not all GM foods, however, are currently approved for sale.