

# GM Food Newsletter

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## What will the King of the Rats have for Breakfast ?

In a dark dark night, servants of the King of the Rats, little rats Fatty and Skinny, slipped into a barn where a mountain high of corn was stored.



- Fatty:** Look, Skinny! We have discovered a treasure here!
- Skinny:** Whoa!
- Fatty:** Let's bring the corn home! Move, move...
- Skinny:** Just a moment, Fatty! Look at this wooden board - "The corn has been genetically modified (GM)".
- Fatty:** So?
- Skinny:** They are not good for our health!
- Fatty:** No kidding!
- Skinny:** It's true! The Rat's Daily reported that current studies on safety of GM crops were all in short term. There is no guarantee that GM crops are safe for long-term consumption.
- Fatty:** Really?
- Skinny:** Shall we just leave this GM corn and look for other food?
- Fatty:** But...
- Skinny:** Just go! Let's take our time to find something that's really good!
- Fatty:** OK...

Fatty and Skinny spent the rest of the night wandering around the street to look for something better. Time flew, the two little rats could find nothing but a few pieces of biscuit crumbs. They brought the crumbs to the castle and served them to the King for breakfast.

- King:** Bring me something to eat.
- Fatty:** Here it is, Your Majesty.
- King:** Just a few pieces of biscuit crumbs? Haven't you tried hard to look for something good, Fatty?
- Fatty:** Your Majesty, Skinny and I have already tried our best to find some food for you. However, we could only find some biscuit crumbs and GM corn.
- King:** GM corn? Where is it now? You keep it for yourself!
- Fatty:** No, we didn't, Your Majesty. The GM corn is just not good for your health!
- King:** Why?
- Fatty:** The long-term safety of GM corn hasn't been assessed. It may not be safe for eating.
- King:** Is that true, sage?
- Sage:** Your Majesty, different GM crops include different genes inserted in different ways. It is not possible to make general statements on safety of all GM crops. However, GM crops currently available on the international market should have passed the "pre-market safety assessment" in their country of origin.<sup>1</sup>
- King:** "Pre-market safety assessment"?
- Sage:** Yes, "pre-market safety assessment" is designed for identifying whether a hazard, nutritional or other safety concerns are present in a newly developed GM crop and if present, information on its nature and severity will be gathered and analyzed to ensure it is safe before a GM crop can be commercialised.<sup>2</sup>
- King:** Umm...How this assessment be done?
- Sage:** Usually, a comparison, in terms of composition, nutritional value, toxicology and allergenicity, will be made between the GM crop and its conventional counterpart which is considered safe on the basis of consumption history. If any hazard or safety concerns are identified in the GM crop during the process, further assessment will be carried out.<sup>2,3</sup>
- King:** What if a GM crop has been found not suitable for consumption?
- Sage:** Then this GM crop should not be allowed to be put onto the market.
- King:** How about the long-term safety? GM crop that has passed such assessment is safe for long-term consumption?
- Sage:** All foods contain beneficial nutrients, and in some cases, toxins and allergens that are harmful to some of us with intolerances to them. So even conventional foods cannot be guaranteed absolutely safe for all people under all circumstances. However, since the first approval of GM foods, there has been no report of adverse health effects as a result of consuming such foods by the general population in countries where pre-market safety assessment is in place.<sup>1</sup> Continuous use of risk assessments based on principles developed by international food safety authorities should form the basis for evaluating the safety of GM food<sup>1</sup> and have given assurance that GM food on the market is as safe as its conventional counterparts.<sup>4</sup> Therefore, the potential for long-term effects of GM foods are no different from that of conventional foods<sup>5,6,7</sup> and the possibility of long-term effects being specifically attributable to GM foods will be unlikely.<sup>4</sup>
- King:** O...I see. Fatty and Skinny, why are you still standing here? Go and get me the corn for breakfast!
- Fatty and Skinny:** Yes, Your Majesty.

1 WHO. 20 Questions on Genetically Modified (GM) Foods. Available from: [http://www.who.int/entity/foodsafety/publications/biotech/en/20questions\\_en.pdf](http://www.who.int/entity/foodsafety/publications/biotech/en/20questions_en.pdf)

2 Codex. Principles for the Risk Analysis of Foods Derived from Modern Biotechnology CAC/GL44-2003. Available from: [http://www.codexalimentarius.net/download/standards/10007/CXG\\_044e.pdf](http://www.codexalimentarius.net/download/standards/10007/CXG_044e.pdf)

3 OECD. Safety Evaluation of Foods Derived by Modern Biotechnology – Concepts and Principles. Available from: [http://www.agbios.com/docroot/articles/oecd\\_fsafety\\_1993.pdf](http://www.agbios.com/docroot/articles/oecd_fsafety_1993.pdf)

4 WHO. Report of a Joint FAO/WHO Expert Consultation on Foods Derived from Biotechnology 2000. Available from: <ftp://ftp.fao.org/esn/food/biotechnology.pdf>

5 FSANZ. Frequently Asked Question on Genetically Modified Foods. Available from URL: <http://www.foodstandards.gov.au/foodmatters/gmfoods/frequentlyaskedquest3862.cfm>

6 Health Canada. Frequently Asked Questions – Biotechnology and Genetically Modified Foods. Available from URL: [http://www.hc-sc.gc.ca/fn-an/gmf-agm/fs-if/faq\\_2-eng.php](http://www.hc-sc.gc.ca/fn-an/gmf-agm/fs-if/faq_2-eng.php)

7 Department of Health of South Africa. Questions and Answers on Safety of GM Derived Foods. Available from URL: <http://www.doh.gov.za/departement/foodcontrol/docs/safety.html>

For more information on GM food, please visit our website

[http://www.cfs.gov.hk/english/programme/programme\\_gmf/programme\\_gmf.html](http://www.cfs.gov.hk/english/programme/programme_gmf/programme_gmf.html)