



## **GM Food Survey 2007**

**February 2008**

*The results presented in this report relate solely to the individual samples/batches tested and do not necessarily reflect the general status of the products listed.*

# CONTENTS

<b>1.</b>	<b>Summary</b>	<b>3</b>
<b>2.</b>	<b>Legislation Governing GM Food</b>	<b>3</b>
<b>3.</b>	<b>FSAI GM Food Surveys</b>	<b>3</b>
	Figure 1: FSAI GM survey from 2000 - 2007	4
<b>4.</b>	<b>2007 Survey</b>	<b>4</b>
<b>5.</b>	<b>Results</b>	<b>5</b>
	Table 1: Foods Found to Contain Roundup-Ready Soya DNA	5
	Table 2: Foods in Which GM Ingredients Were Not Detected	5
	Cereals	5
	Biscuits, Cakes and Sweets	6
	Snack Foods	6
	Soups	6
	Sauces	6
	Rice	7
	Baby Foods	7
	Other Foods	7
<b>6.</b>	<b>Conclusion</b>	<b>8</b>
<b>7.</b>	<b>Further Information</b>	<b>8</b>

## **1. Summary**

The Food Safety Authority of Ireland (FSAI) routinely surveys the food supply in Ireland to ensure that only EU-authorized and appropriately labelled Genetically Modified (GM) food ingredients are placed on the market. Food ingredients from GM soya bean, maize, oilseed rape, sugar beet and cotton are authorized in the EU. Most of these crops have been genetically altered to tolerate the application of specific herbicides and/or resist attack by certain pests.

The 2007 survey focused on foodstuffs containing ingredients from soya bean and maize as these constitute globally traded commodity crops, with a significant proportion emanating from GM sources. Rice-containing foodstuffs were also targeted as a result of emergency legislation put in place in 2006 due to the presence of unauthorized GM rice from the US.

A total of 97 foodstuffs were sampled and tested in 2007 but GM maize or GM rice were not detected. However, ingredients from GM soya bean were identified in 13 of the 97 products tested (13%), but as they were present at levels below the labelling threshold of 0.9%, GM labelling was not required.

## **2. Legislation Governing GM Food**

The authorization and labelling of GM food within the EU is governed primarily by Articles 5 to 7 and Articles 12 and 13, of the GM Food and Feed Regulation (EC No. 1829/2003).

Specific GM labelling is required where more than 0.9% of a food or ingredient is produced from, or contains a GMO, and this requirement is not dependent on the presence of GM DNA or protein. Where the GM content of a food or ingredient is no more than 0.9%, specific GM labelling is not required provided operators can demonstrate that they have taken steps to avoid the presence of GM ingredients and therefore its presence is adventitious or technically unavoidable. The threshold applies to the ingredients considered individually, or to the whole food where a food comprises a single ingredient.

GM food is also subject to the general food labelling Directive (2000/13/EC, S.I. No. 483 of 2002), a fundamental principle of which is that the information on the label must not mislead the consumer.

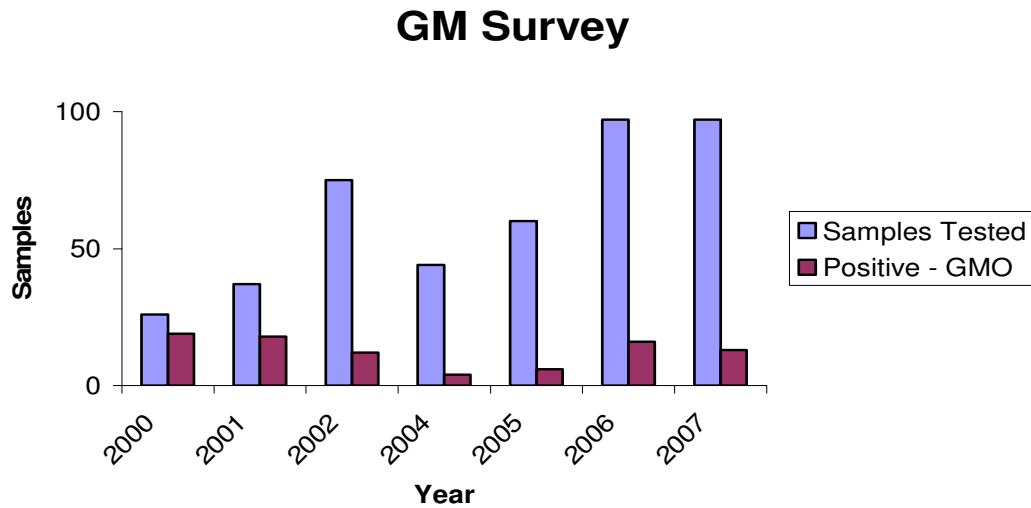
## **3. FSAI GM Food Surveys**

The FSAI is the Competent Authority in Ireland responsible for enforcing EU and national GM food legislation. As part of this function, the FSAI monitors the Irish market to ensure that only EU-authorized GM foods are on the market and that they are labelled appropriately (Figure 1). Of the 436 foods tested between 2000 and 2007, 88 (20%) were found to contain low levels of GM ingredients. With the exception of unauthorized GM rice (LLRICE601) identified in products from the USA in 2006, all of the GM ingredients

identified in the FSAI surveys were authorised for use within the EU and present in the foods at levels below the labelling threshold.

Previous surveys had highlighted potentially misleading labelling where products found containing GM ingredients at below the GM labelling threshold carried GM free claims.

**Figure 1: FSAI GM survey from 2000 - 2007**



#### **4. 2007 Survey**

In October and November 2007, 97 food products containing rice, soya or maize ingredients were randomly purchased by the FSAI at a range of retail outlets including supermarkets and health food shops in Dublin. Samples were submitted to a commercial laboratory for analysis to detect any GM ingredients, and where possible to identify and quantify them.

The testing methodology employed is based on the Polymerase Chain Reaction (PCR) which is designed to detect target and amplify specific DNA sequences. The testing method can detect the presence of as few as 10 copies of the target DNA sequences present in a sample, which is typically well below 0.01% GM DNA in a sample. Quantification results are expressed as a percentage of GM DNA relative to regular plant DNA in the sample.

## 5. Results

Out of the 97 samples analysed, 13 (13%) were found to contain low levels of Roundup Ready GM Soya which is authorised within the EU through Commission Decision 96/281/EC pursuant to Directive 90/220/EEC. None of the GM ingredients constituted greater than 0.9% of the total ingredient and therefore GM labelling was not required. The relevant food business operators were contacted in order to demonstrate that the low level presence of Roundup Ready soya was adventitious or technically unavoidable as stipulated in Article 12.3 of Regulation EC No. 1829/2003. GM maize and GM rice were not detected in any of the samples tested.

**Table 1: Foods found to contain Roundup-Ready Soya DNA**

Product	BB date	Batch	GM result
Realeat <i>Vege Burger Mix</i>	31/08/2008	L7228/2/3	0.6 %
Tesco <i>Soya mince</i>	30/06/2008	L7271A8652	0.4%
Pot Noodle <i>Beef &amp; tomato flavour</i>	31/05/2008	L7220N3796	0.3%
Realeat <i>Vege Burger Mix</i>	31/05/2008	L7145/1/5	0.3 %
Direct Foods <i>Sosmix with Country Herbs</i>	28/02/2009	L7240/2/2	0.2%
Blue Dragon <i>Tofu</i>	05/04/2008	A12	0.2%
Cow & Gate <i>InfaSoy</i>	05/07/2009	41 205088 014153	0.2%
The Health Store <i>Soya Flour</i>	21/09/2008	7271 314393	0.1%
Granose <i>Cashew Roast Mix</i>	31/03/2008	L7145/1/6	<0.1%
Direct Foods <i>Sosmix</i>	31/08/2008	L7234/2/1	<0.1 %
Aldi <i>Snack noodle</i>	31/12/2008	L7274/4/2	Trace
Glutano <i>Digestive Maize Biscuits</i>	11/06/2008	11.06.2008 A	Trace
Marks & Spencer <i>Battenberg Cake</i>	13/11/2007		Trace

**Table 2: Foods in which GM ingredients were not Detected**

Cereals	Best Before
Vogel's – Soya and linseed ultra bran	05/06/2008
Kellogg's – Multigrain cornflakes	06/08/2008
Nestle – Nesquik chocolate flavour cereal	06/08/2008

<b>Biscuits, Cakes and Sweets</b>	<b>Best Before</b>
Jacobs - Smoothie bars	23/02/2008
Odlums – Quick cake	13/10/2008
Tesco (Free From ) - Farmhouse fruit cake	07/10/2007
Jacobs – Elite chocolate Kimberley	10/05/2008
Jutrzenka – Chocolate covered biscuits	31/03/2008
Bunalun – Milk chocolate rice cakes	19/09/2008
Gateaux – Almond fingers	09/01/2008
Mr. Kipling – Mini Battenbergs	14/08/2008
Wholebake – 9 Bar	28/04/2008
Jelly Belly – Jelly beans	
The Jellybean Factory - Gourmet jelly beans	31/10/2008
Winiary – Waniliowym vanilla pudding	31/?/2008
Trek – Peanut & oat raw wholefood bar	02/03/2008
Green & Black's – Dark mint squares chocolates	31/03/2008
Opey – Cocoa biscuit with chocolate filling	01/10/2008

<b>Snack Foods</b>	<b>Best Before</b>
Marks & Spencer – Tortilla chips, lightly salted & black pepper	29/01/2008
Marks & Spencer – Tortilla chips, fire roasted chilli flavour	08/01/2008
Tayto – Mighty munch, hot and spicy	25/10/2007
Phileas Fogg – Tortillas, simply cool flavour	12/01/2008
Kelkin – Micro popcorn	31/08/2008
The Health Store – Organically grown popcorn	20/05/2008
Flips – Bacon flavoured corn snacks	26/11/2007
Orgran – Corn cakes	16/07/2008
Orgran – Corn crispbread	17/11/2008

<b>Soups</b>	<b>Best Before</b>
Marigold – Organic miso bouillon	15/12/2008
Kallo – French onion stock cubes	30/06/2008
Campbells – Cup A Soup, creamy chicken & bacon	13/09/2009
Tesco – Beef & vegetable packet soup mix	31/07/2009
Erin – Traditional oxtail packet soup mix	16/04/2009
Clearspring – Miso soup with tofu	19/02/2010
S&B – AKA miso soup	19/04/2008

<b>Sauces</b>	<b>Best Before</b>
Discovery – Chicago sticky rib sauce	30/11/2009
Schwartz – Creamy garlic mushrooms	31/07/2009
Loyd Grossman – Yellow Thai curry sauce	31/01/2009
Uncle Ben's – Sweet & sour oriental sauce	12/09/2009
Hellman's – Thousand Island dressing	22/05/2008
Meridian – Shoyo soya sauce	11/06/2009
Kraft – Light French dressing	30/06/2008

<b>Rice</b>	<b>Best Before</b>
Marks & Spencer - Long grain rice (Microwaveable)	01/05/2008
Marks & Spencer - Long grain & wild rice	06/08/2008
Marks & Spencer – Organic long grain brown rice	03/09/2008
Marks & Spencer – Easy cook long grain rice	05/08/2009
Tesco – Long grain rice	31/10/2008
The Health Store – Organic long grain brown rice	21/04/2008
Uncle Ben's – Express long grain rice	17/09/2008
Tesco Value – Long grain rice	31/05/2009
Uncle Ben's – Never sticks long grain rice	02/04/2010
Tesco – Thai fragrant long grain rice	31/03/2009
Tesco – Easy cook long grain rice	04/08/2009
Tesco – Long grain rice	27/08/2009
Tesco – Organic long grain rice	31/08/2008
Tesco – Organic long grain rice	31/07/2008
Roma – Easy cook long grain rice	31/08/2008
Golden Sun – Long grain rice	03/10/2009
Golden Sun – Parboiled long grain rice	04/10/2009
Baron – American long grain rice	06/03/2009
St. Bernard – Easy cook long grain rice	30/09/2009
Dunnes Stores – Boil-in-the-bag rice	30/06/2009
Dunnes Stores – Easy cook long grain rice	30/09/2009
Nirvana – Easy cook long grain rice	29/08/2009
Supervalu – Boil-in-the-bag long grain rice	31/12/2008
Supervalu – Easy cook long grain rice	31/12/2008

<b>Baby Foods</b>	<b>Best Before</b>
Organix – Organic banana porridge	31/03/2008
Hipp – Creamy rice pudding with apple	30/06/2008
Cow & Gate – Banana & cookie crumble dessert	02/09/2010
Milupa – Semolina & honey packet dessert	05/10/2008
Liga – Original baby biscuit	31/08/2008
Hipp – Organic growing up milk	24/04/2008

<b>Other Foods</b>	<b>Best Before</b>
King Pot Noodle – Chicken & mushroom flavour	31/05/2008
The Health Store – Maize flour, ploenta	06/09/2008
Crosse & Blackwell – Bob the Builder pasta in tomato sauce	28/02/2009
Stonewall Kitchen – Potato pancake mix	31/12/2007
Neal's Yard – Soya protein chunks	30/09/2008
Alpro – Soya organic, soya and water blend	25/06/2008
The Health Store – Organically grown soya beans	18/05/2008
The Health Store – Soya four	21/09/2008
Nutella – Chocolate flavoured hazelnut spread	21/08/2008
Options – Instant hot chocolate drink, Belgian chocolate	28/02/2009
Alpro – Soya drink, chocolate flavour shake	27/08/2008
Direct Foods – Burgamix, soya protein burger mix	28/02/2009
The Health Store – T.V.P. brown mince	10/07/2008
Soya Delight – Soya drink	28/08/2008

## 6. Conclusion

No breaches of GM food legislation were identified as a result of this survey. In December 2007, the majority of Member States in the EU voted in favour of amending Commission Decision 2006/601/EC on emergency measures regarding the presence of illegal GM rice LLRICE601 in rice products from the US. As a result of the systems now in place in the US, EU Member States will no longer be required to test certain rice imports at the point of entry, and export certification will suffice.

## 7. Further Information

### **GM food legislation:**

[http://www.fsai.ie/legislation/food/legislation\\_gmos.asp](http://www.fsai.ie/legislation/food/legislation_gmos.asp)

### **EU register of GM food and feed:**

[http://ec.europa.eu/food/dyna/gm\\_register/index\\_en.cfm](http://ec.europa.eu/food/dyna/gm_register/index_en.cfm)

### **FSAI GM Food Leaflet:**

*Food Safety and Genetically modified Foods*

[http://www.fsai.ie/publications/leaflets/GM\\_leaflet04.pdf](http://www.fsai.ie/publications/leaflets/GM_leaflet04.pdf)

### **Further information on this survey can be obtained from:**

Food Safety Information Centre,  
Food Safety Authority of Ireland,  
Abbey Court, Lower Abbey Street, Dublin 1  
Tel: 1890 336677 Fax: (01) 817 1301  
E-mail: [info@fsai.ie](mailto:info@fsai.ie). Website: [www.fsai.ie](http://www.fsai.ie)