

# **Kwun Tong Government Secondary School**

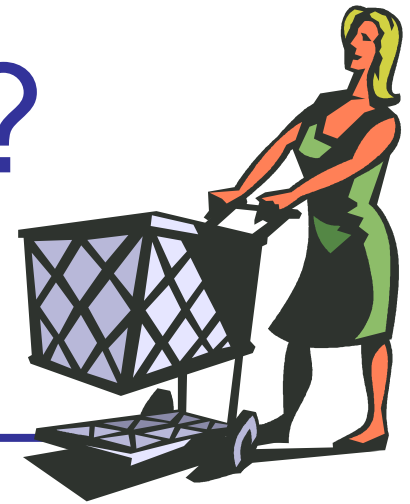
Ku Chui Chi (3B)

Law Ho Ting (3B)

*Loading .....*



Attitude of the consumers  
towards GM food :  
how does it affect  
the environment?



## Talking about environmental protection...



4R

Reuse  
Reduce  
Recycle  
Replace



**Consumers rights  
and education**



**What is Genetically modified food?**

## Genetically modified food

Using engineering transformation's food or food includes gene transformation ingredients.



# Impacts of GM food

Advantages of GM food	Disadvantages of GM food
Increase crop yields	Disturbing the balance of ecosystems
Provide resistance to crop pests and reduce the use of pesticides	Development of super pests
Improve sensory attributes of food, e.g. flavour, texture	Unintended modification of similar species in the neighbouring fields due to cross pollination
Improve processing characteristics so as to reduce wastage and costs	Whether it is acceptable to move genes between plants or animals which do not normally interbreed

## *Objectives*

**(1)**

**To investigate the attitude of the consumers towards GM food**

**Attitude**

**Affection**

**Cognition**

**Behavior**

## *Objectives*

**(2)**

**To investigate the impacts of GM food to the environment**

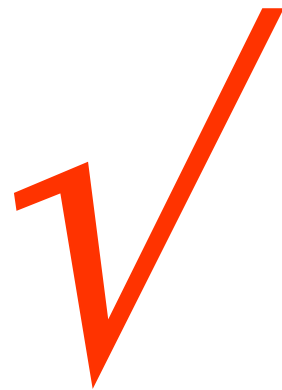
**(3)**

**To investigate whether government should take measures to safeguard consumers' interests**

# Labeling System

## Voluntary labelling approach

Significantly different in  
Composition  
Nutritional value  
Allergenicity



## Mandatory labelling approach

All the food with GM  
content

## GM food labeling system in foreign country

Canada and the United States	The food which have any significantly different characteristics as a result of genetic modification, <b>must be labelled.</b>
the European Union	Food products produced or imported <b>had to be labelled</b> starting from 7 December 2001 when any of their ingredients contains more than 1% GM element.
Australia and New Zealand	The food <b>must be labeled</b> when it contains more than 1% GM element. Additional labelling was also required for GM food ingredients with significantly altered characteristics.
Japan	For the processed food items, only those ingredients that are ranked within the top three constituents in terms of weight and the weight ratio of which account for five percent or more of the total weight <b>have to be labelled.</b>
Korea	Corn, soya bean and bean sprout which contain more than 3% GM elements <b>have to be labelled</b> starting from March 2001

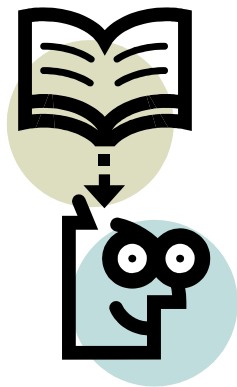
# How about Consumers' right?



# Questionnaire

Aims:

- (1) check consumers' knowledge of GM food
- (2) investigate their buying habits of GM food
- (3) ask their opinions about labeling system



# 觀塘官立中學 問卷調查

(綜合人文科)  
2007-2008

你好！我們是觀塘官立中學中三級的學生，現正進行一個有關基因改造食物的意見調查。請你花幾分鐘時間完成問卷。(此問卷只作研習之用，用後立刻銷毀)

1.你的年齡組別是：

21至30歲    31至40歲    41至50歲    51歲或以上

2.你是否知道甚麼是基因改造食物？

是    否    有一點認識

3.你認為以下那些是對基因改造食物的正確描述？

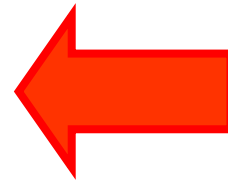
基因是遺傳的單位  
基因改造食物是品種稀有的食物  
把遺傳的物質植入的食物即是基因改造食物

4.你認為種植基因改造食物對環境：

有害    有益

5.以下那項是基因改造食物對環境的正確描述？

基因改造農作物能適應不利的生長環境  
基因改造食物會破壞土壤  
基因改造食物可能導致「超級害蟲」的出現



**(1)check consumers'  
knowledge of GM food**

6. 你會否購買基因改造食物?

會 不會

基因改造食物	
好處	壞處
增強農作物對蟲害的抵抗力，從而減少使用除害劑	基因改造農作物的花粉和種子可能會意外地傳播到鄰近田野，令相近的傳統品種改變
令農作物更能適應不利的生長環境，例如乾旱	強勢的基因改造生物會令自然界原有的品種絕種，破壞生物多樣性。
增加農作物的產量	令自然界原來的品種絕種，減少生物多樣性，破壞生態平衡。

7. 當你知道了基因改造食物的好處和壞處後，你會否仍然購買基因改造食物？

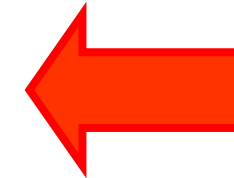
會 不會

8. 你想知道所購買的是否基因改造食物嗎？

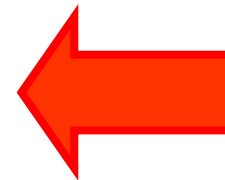
想 不想

9. 你是否支持政府設立基因改造食物強制性標籤制度？

支持 不支持



**(2) investigate their buying habits of GM food**



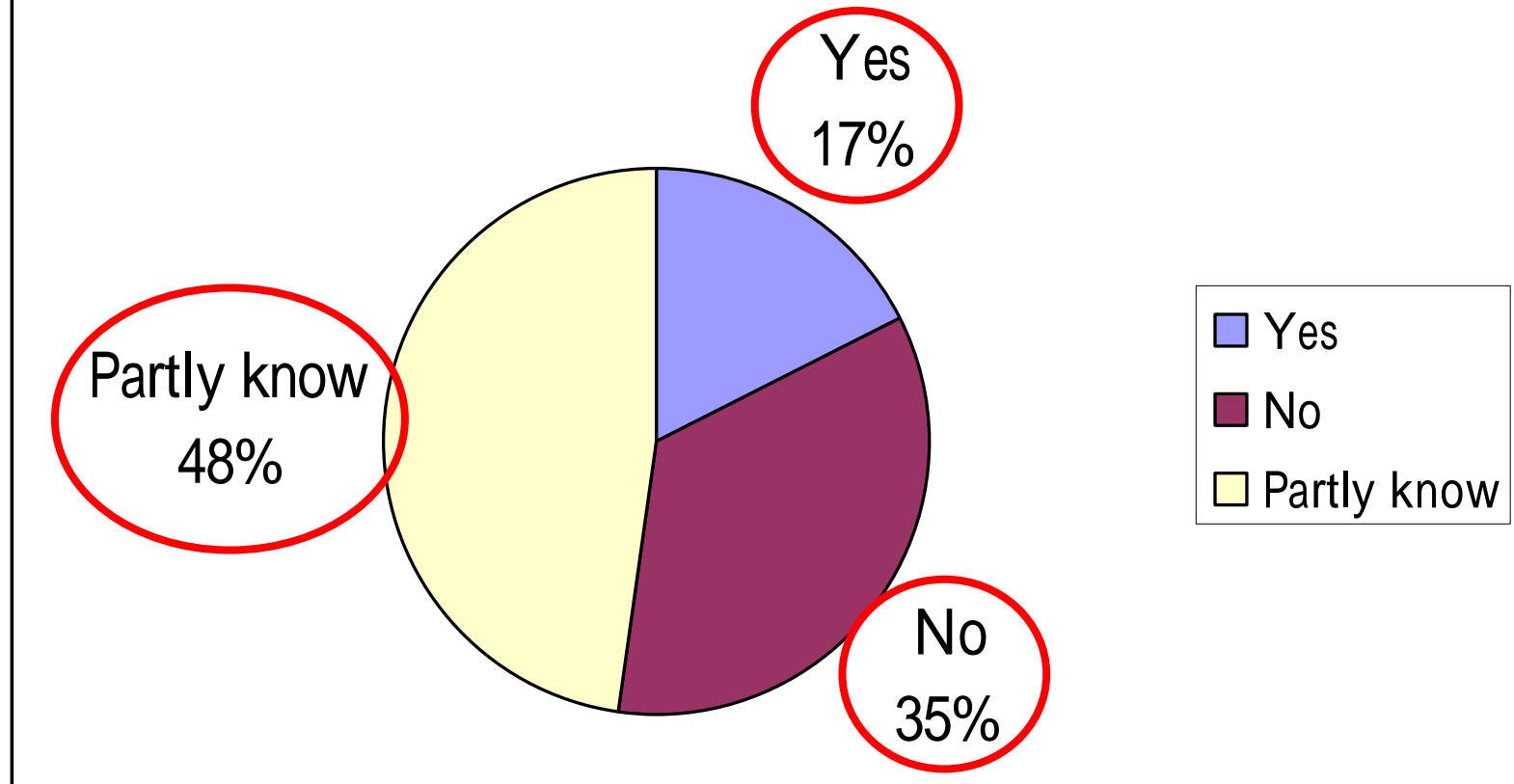
**(3) ask their opinions about labeling system**

全問卷完，謝謝你接受訪問

惠康 wellcome



Do you know what is Genetically Modified Food?



**Promotion and education are needed !**



quality and quantity

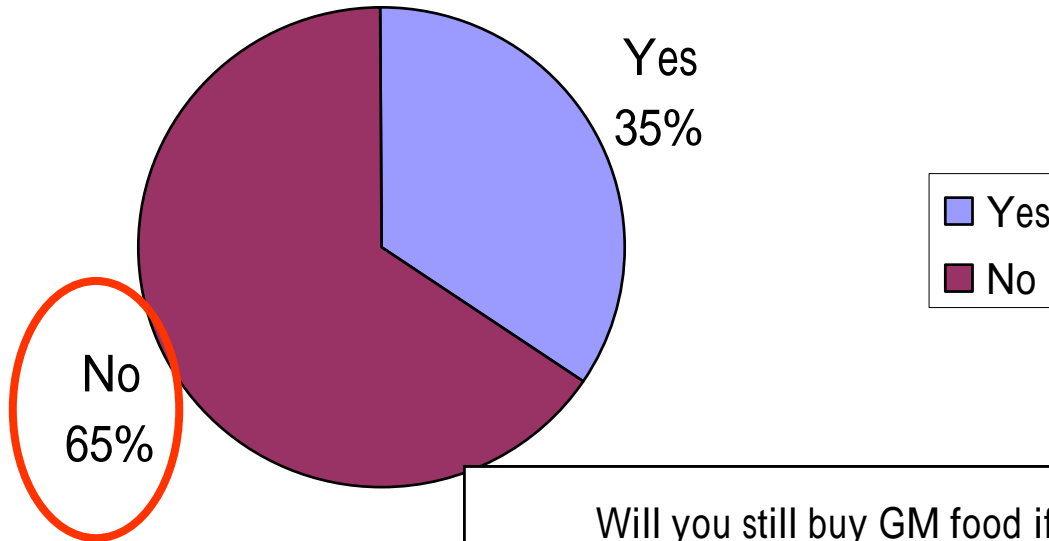


effects to the environment

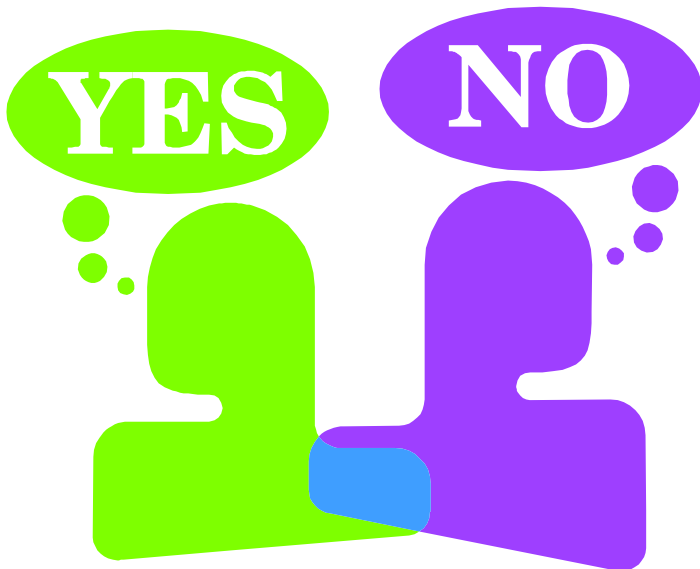
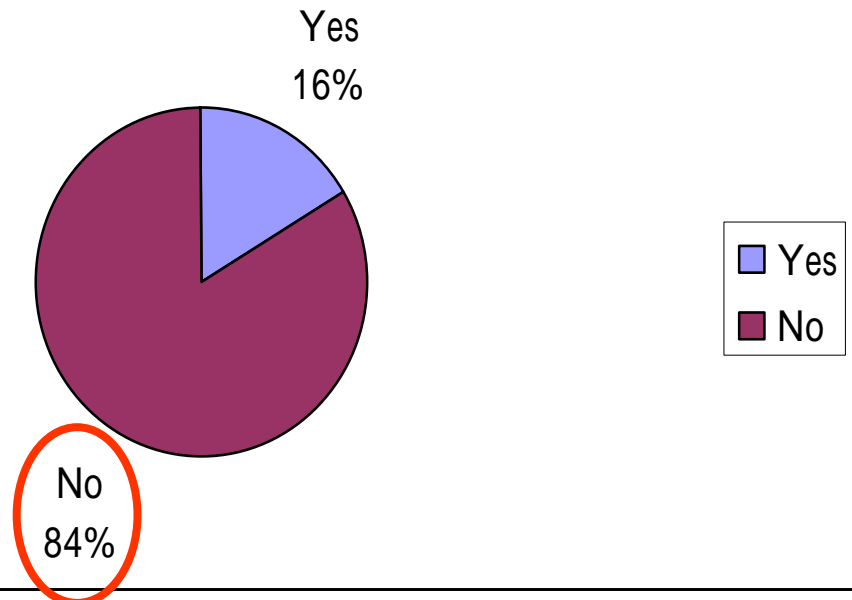
<b>Advantages of GM food</b>	<b>Disadvantages of GM food</b>
Increase crop yields	disturbing the balance of ecosystems
Provide resistance to crop pests and reduce the use of pesticides	development of super pests
Improve sensory attributes of food, e.g. flavour, texture	unintended modification of similar species in the neighbouring fields due to cross pollination
Improve processing characteristics so as to reduce wastage and costs	whether it is acceptable to move genes between plants or animals which do not normally interbreed

*(All from Food and Environmental Hygiene Department of Hong Kong, 2005)*

Will you buy GM food?



Will you still buy GM food if you know the advantages and the disadvantages of them?

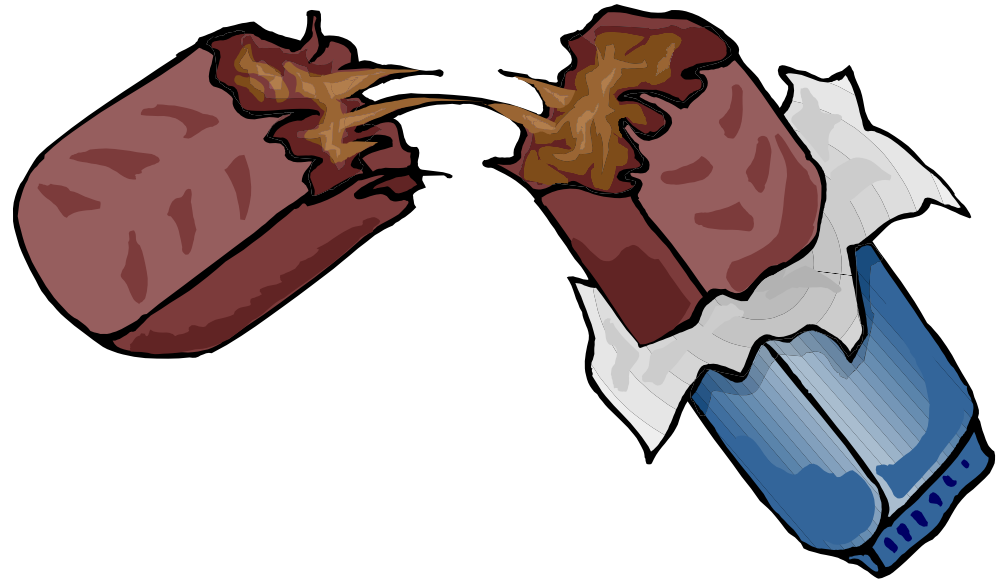
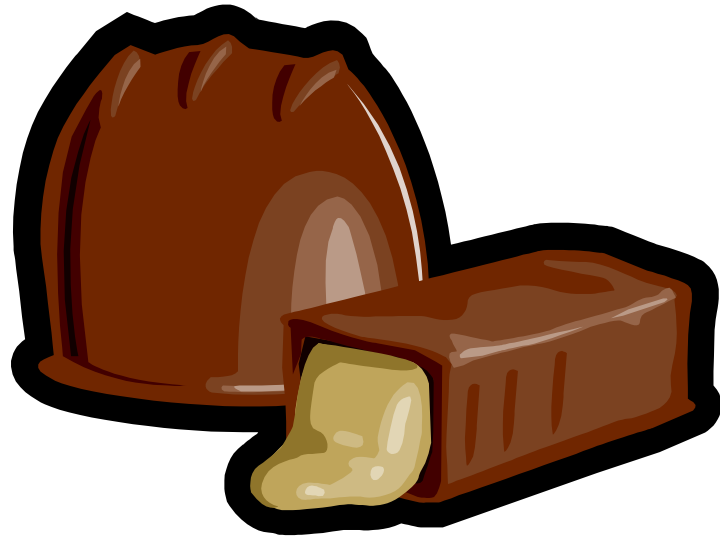


**The more customers know about GM food,  
the higher demand to the producers.**



# Consumer = Murderer?





# 避免基因改造食物指南

## SHOPPERS' GUIDE TO AVOIDING GE FOOD 2008

**綠色 GREEN ✓**

承諾不使用含有基因改造成份的原料。  
Promised not to use GE ingredients.

**紅色 RED ✗**

沒有承諾不使用含有基因改造成份的原料，或沒有回應綠色和平的查詢。  
Did not promise to stop using GE ingredients or did not reply to our enquiry.

綠色和平網頁將定期更新指南內容，請瀏覽：  
For updates, please visit our website: [www.greenpeace.org/foodguidehk](http://www.greenpeace.org/foodguidehk)

**GREENPEACE 綠色和平**

### 綠色、紅色分別代表什麼？

**綠色** 承諾不使用含有基因改造成份的原料。

**紅色** 沒有承諾不使用基因改造成份的原料，或沒有回應綠色和平的查詢。

本指南可於 [這些地點](#) 免費索取，或於 [這裡下載](#) (全本PDF版, 1MB)



### 食物分類指南

- ▶ 早餐食品及果醬
- ▶ 豆類製品
- ▶ 奶類及嬰兒食品
- ▶ 薯片
- ▶ 小食
- ▶ 朱古力
- ▶ 糖果
- ▶ 餅乾
- ▶ 即食甜品
- ▶ 雪糕雪條
- ▶ 冷凍食品
- ▶ 食油及調味料
- ▶ 米
- ▶ 罐頭食品
- ▶ 粉麵及意粉

國家/地區

送出

#### 指南其他版本

- ▶ English (HK)
- ▶ 中国内地



- ▶ 首頁
- ▶ 認識我們
- ▶ 項目簡介
- 食品安全與農業
  - 基因改造食物
    - 基因改造食物的問題
    - 基因改造水稻
    - 避免基因改造食物指南 2008年版
    - 朱古力
  - 氣候變化
  - 保護森林
  - 電子廢物
  - 空氣污染
  - 水污染
- ▶ 最新消息
- ▶ 活動消息
- ▶ 會員專區
- ▶ 視聽區
- ▶ 常見問題
- ▶ 職位空缺
- ▶ 聯絡我們
- ▶ 支持我們

### 朱古力

▶ 列印 ▶ 發送 English 简体中文

#### 綠色 GREEN

#### 紅色 RED

M&M's  
 麥提莎 Maltesers  
 金莎 Ferrero Rocher  
 蒙雪麗 Mon Cheri  
 雪莎 Raffaello  
 健達 Kinder  
 費列羅 Ferrero  
 特趣 Twix  
 瑪氏 Mars  
 德芙 Dove  
 士力架 Snickers  
 阿華田 Ovaltine  
 洛磯山 Rocky Mountain  
 能多益 Nutella  
 Tronky

吉百利 Cadbury  
 聰明豆 Smarties  
 雀巢 Nestle  
 甘脆 Crunch  
 吉百利 Cadbury  
 瑞士三角 Toblerone  
 瑞士蓮 Lindt  
 奇脆 Kit Kat  
 明治 Meiji  
 樂天 Lotte  
 森永 Morinaga- Yamakawa  
 不二家 Fujiya Peko  
 美祿 Milo  
 安迪斯 Andes  
 北海道 Hokkaido  
 金舵全

#### 其他食物類別

- ▶ 主頁
- ▶ 奶類及嬰兒食品
- ▶ 豆類製品
- ▶ 目錄食品及田游



#### 認識食品安全問題

- ▶ 蔬果農藥殘留
- ▶ 基因改造食物
- ▶ 食品與農業的出路—生態農業及有機農業
- ▶ 保障食品安全，你也可以行動
- ▶ 捍衛食品安全，我們在行動

訂閱 e 通訊  
 想收到食品安全的最新資訊，請即訂閱!

## 基因改造食物黑白名單

爲了幫助消費者作出知情的選擇，綠色和平製作一份定期更新的基因改造食物黑白名單。由於現時香港未有標籤制度，連政府也沒有基因改造食物在本港售賣的資料，故此，下述資料並非全面和沒有遺漏的，只能作參考之用。

綠色和平的建議 Greenpeace Recommendation:

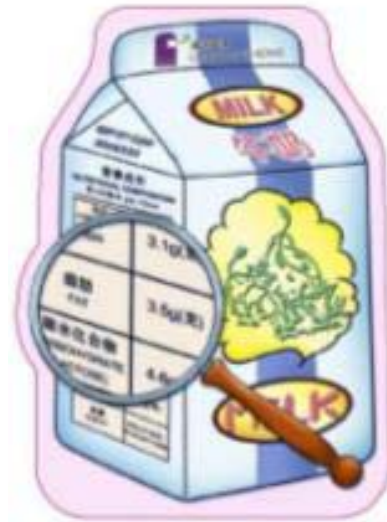
黑名單 Black List	會被驗出含基因改造成份 Found to have GE ingredients	不要購買 Don't buy them
灰名單 Grey List	會被驗出不含基因改造成份，但有關公司未有作出不用基因改造成份的宣佈 No GE ingredient has been found. But no GE-free commitment has been made by the producers.	可自行決定是否購買 Up to your decision
白名單 White List	已宣佈不用基因改造成份的生產商 Producers declared to be GE-free	可放心購買 Yes
有機食品 Organic	有機食品不使用農藥，而且其國際標準不容許使用基因改造技術 Organic Food is produced without agro-chemicals and genetic engineering	對你和自然最好的選擇 Best choice for yourself and the environment

黑名單 Black List	灰名單 Grey List	白名單 White List
----------------	---------------	----------------

### Baby Milk and Baby Food 嬰兒奶粉及食品

Enfamil Infant Formula 安嬰兒奶粉 Isomil Soy Protein Infant Formula 愛心美高營養嬰兒豆奶粉 ProSobe Milk-Free Infant Formula Wyrath Nurser Soy Based Infant Formula	Cow & Gate Follow-On High Protein Milk Powder 牛欄牌寶兒康高蛋白奶粉 Enfapro Follow Up Formula 安嬰寶高蛋白奶粉 Frisolac H Formula 美素力口嬰奶粉	Gerber Baby Food 嘉寶嬰兒食品
---	--	----------------------------

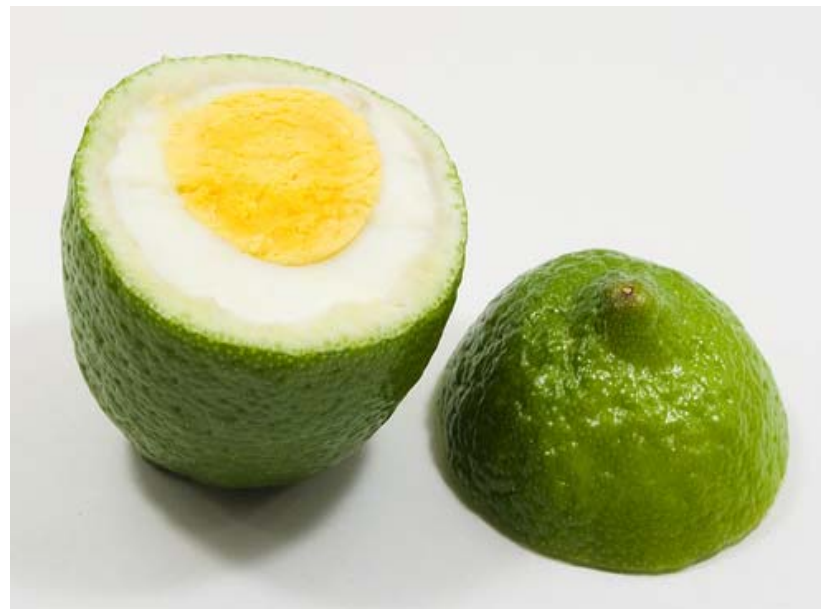
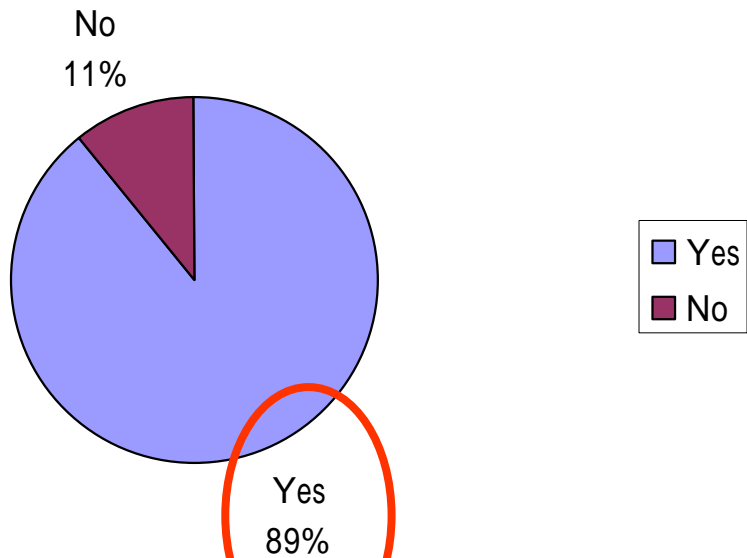
# Labeling system:



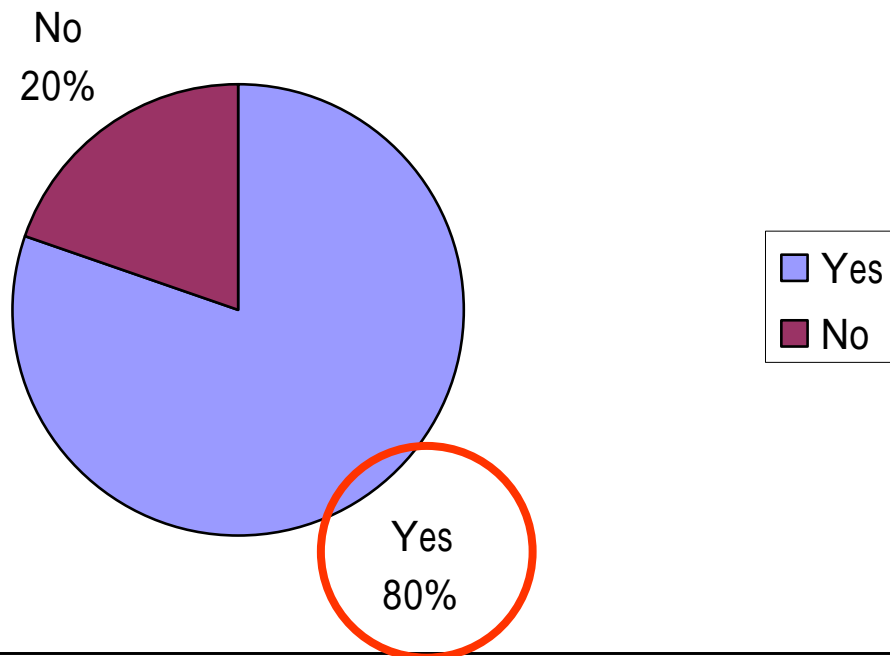
# Needs:



Do you support the government set up polices to enforce the GM food label system?



know if the food you buy is GM food?





## **Education and promotion**

GM food as an environmental issue  
Government, media, NGOs, school

## **Legislation**

( government labeling system)

## **Knowledge and understanding of GM food**

### **Consumer behavior**

### **Consumer rights**

**Buy GM food**

**Not willing to buy**

**Harm the environment Benefit the environment**



**Propaganda  
Education**



# Mandatory labelling approach



Is it worth the  
trade-off?

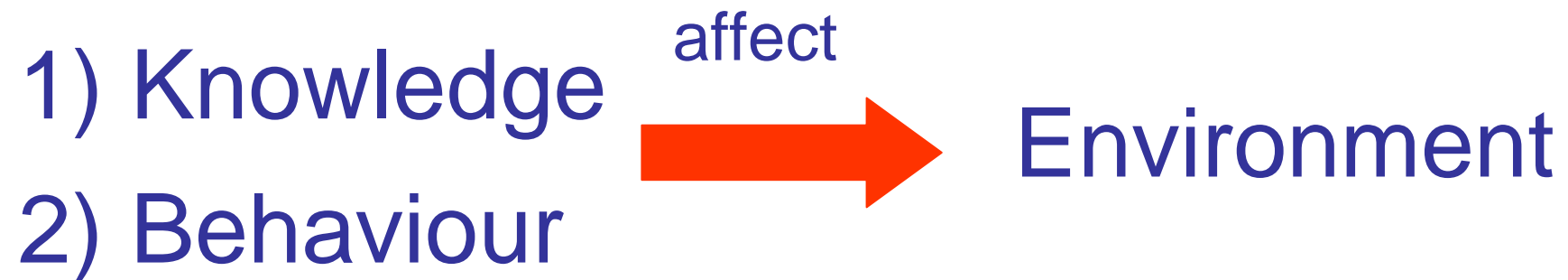




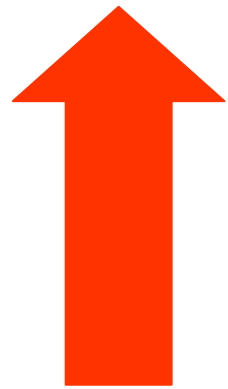
**How about our environment?**

**Our project aims:**

**To understand environmental protection in an UNUSUAL way!**



# Know more about GM food



**Environmental  
awareness**



**Q&A**