

# GMOs: What are the benefits?



[www.GoodinEveryGrain.ca](http://www.GoodinEveryGrain.ca)

## MORE GRAIN

Canadian farmers produce 47% more grain thanks to pesticides and biotechnology.



## LESS PESTICIDES

Farmers are able to use fewer pesticides on their crops. The crops are more efficient and can withstand disease or pest outbreaks without the use of pesticides.

## LESS FOOD WASTED

GM apples won't turn brown when cut open thus eliminating the need to throw food away before it spoils. \$31 billion worth of food is wasted in Canada each year.\* This is approximately 40% of food produced yearly in Canada.

## LESS FUEL

Plant science innovations allow farmers to drive over their field fewer times, which saves up to 194 million litres of diesel fuel each year.

## MORE BIODIVERSITY

GM crops will enhance biodiversity as less land is needed for agriculture thus forests, marshes and other natural habitats aren't being used for farmland.



## LOWER WATER USE

GM crops are able to help conserve water – more of the soil's natural water is used and thus farmers don't have to supplement water loss with irrigation.

## LOWER COST

GMO crops allow food costs to be cheaper in the grocery store, as they are produced using fewer resources such as fertilizer, pesticides, water, and diesel fuel.

## LOWER GREENHOUSE GASES

Greenhouse gases and carbon emissions are reduced when farmers raise GM crops as they are able to adapt to no till or reduced tillage farming, and are able to reduce their carbon footprints.

# Can GMOs help protect the environment?

## THEY ALREADY DO.



Contrary to myths about GMOs hurting the environment, they actually allow farmers to preserve the land while doing more with less resources.

The environmental challenge

# 30%↑

POPULATION  
INCREASE  
BY 2050



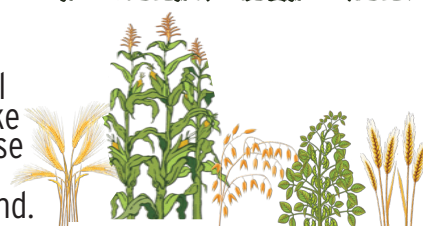
# =↑DEMAND

FOOD  
FUEL  
FIBRE

Convert more land, like forests and prairies, into agricultural production



Use agricultural technologies like GMOs to increase crop yields on existing farmland.



# 70%

by 2050

TO FEED THEM  
WE WILL NEED



will live in urban centres.

# 70%

MORE FOOD

# 1 billion

TONNES MORE GRAIN PER YEAR

# 200 million

TONNES MORE MEAT PER YEAR

## Without GMOs...

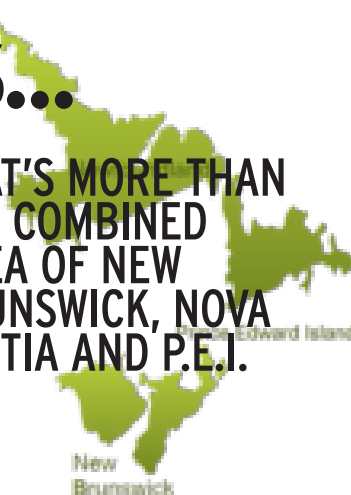
## WE WOULD NEED

# 50%

MORE FARMLAND

to grow what we do today.

THAT'S MORE THAN  
THE COMBINED  
AREA OF NEW  
BRUNSWICK, NOVA  
SCOTIA AND P.E.I.



# 37 million

MORE ACRES

to grow the same amount of food  
we do today