

# FACT VERSUS FICTION

- Understanding the main criticisms regarding beef and veal production  
in order to better address them -



An information booklet  
for Quebec's beef and veal producers

September 2023

Dear Producers,

This booklet is the outcome of an important collaboration with the “Union des producteurs agricoles”. It is designed to help us set the record straight in a detailed fashion when it comes to our critics. I encourage you to share it with any individuals of interest, starting with your “ministère de l’Agriculture, des Pêcheries et de l’Alimentation du Québec (MAPAQ) representative, your parliamentary representatives, your mayor, your Regional County Municipality prefects, your councillors, your transporters, and anyone else with a stake in getting the facts straight amid the cacophony that certain individuals and groups have generated in recent months. While there are no farming activities with zero environmental impact, this document speaks to the undeniable benefits that beef and veal productions provide, not only in providing balance to Quebec agriculture, but also in making a major contribution to society from farm to fork.



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Jean-Thomas Maltais



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## SUMMARY

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## GREENHOUSE GASES

### Prevailing view

*“We must cut down on eating beef to fight climate change, to reduce our environmental footprint, and because beef causes pollution (by generating more greenhouse gases (GHG)).”*

### The facts

The Canadian beef production lowered its GHG emissions by 14% between 1981 and 2011.

### How was this accomplished?

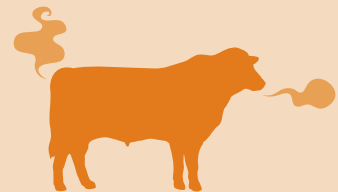
- Lowering the mortality rate on farms;
- Increasing productivity (more kilograms of meat per carcass, higher conversion rate and genetic improvement);
- Using feed grown in Canada;
- Using more digestible feed and using by-products instead of corn;
- More effective manure management (PAEF);
- Carbon sequestering from grazing.

### It is true that...

... in general, cattle farming is associated with a higher carbon footprint than that of other animal farming operations.

### Did you know?

Canadian beef production has one of the lowest GHG emission levels, at 50% lower than the world average.



## Prevailing view

*“Animal farming emits more GHGs than any form of transportation powered by fossil fuels.”*

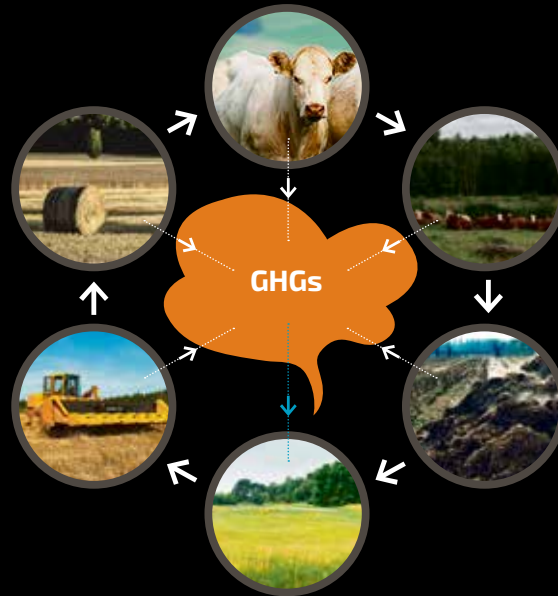
### The facts

While farming does emit GHGs, it is inaccurate to compare it to transportation as the calculation methods involved are different.

The figure that says farming accounts for 14.7% of GHG emissions worldwide was generated using the life cycle method, which means it accounts for emissions from the animal’s time of birth to the time of sale to consumers.

The global GHG inventory associated with transportation is estimated at 14% and in no way accounts for other associated GHG emissions (for example: the ones related to extracting the raw materials needed for manufacturing).

## GHG emissions and capture in cattle production



### Did you know?

According to data from the Canadian inventory, beef production is in fact responsible for 2.4% of GHG emissions compared to 28% for transportation.



2.4%



28%



## WATER MANAGEMENT

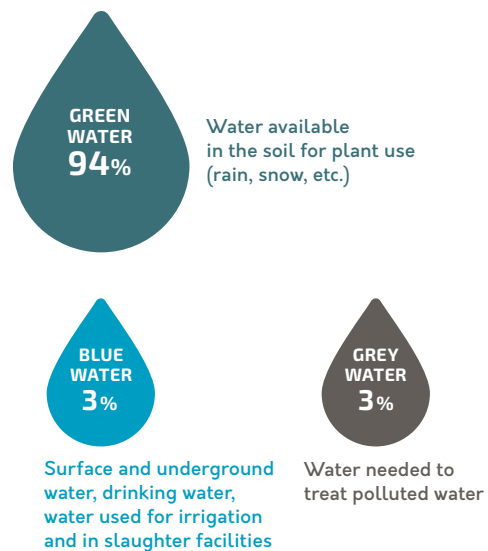
### Prevailing view

*“It takes 15,000 L of water to produce 1 kg of beef. Cattle production pollutes bodies of water.”*

### The facts

- These figures include all types of water:

According to international standards,



only blue water should be considered.

### The facts

- Data from recent Canadian studies indicate that it takes between 459 and 631 L of blue water to produce 1 kg of boneless beef.

Furthermore, raising cattle on grazed land in Quebec requires no irrigation at all, which means less water consumption.

### The facts

- Under the “*Règlement sur les exploitations agricoles*”, it is mandatory for Quebec farmers to prevent any leakage or spreading from manure storing that may threaten local bodies of water.

### It is true that...

... with climate change, irrigation needs are expected to increase in future years, both in Quebec and in the rest of Canada.

... the leading sources of water contamination targeted by the “Ministère de l’Environnement et de la Lutte contre les changements climatiques du Québec” (MELCC) are municipality wastewater discharges and the spreading of liquid and solid manure from all types of animal farming.



#### Did you know?

Only 3% of the water used to raise cattle comes from drinking water sources.



#### Did you know?

It takes about 3,158 L of water (most of it irrigated) to produce 1 kg of almonds.

## SOIL MANAGEMENT AND LAND USE

### Prevailing view

*“Eating meat contributes to deforestation and land degradation; raising livestock takes up land that could be used to feed people.”*

### The facts

- A major portion of land used to raise cattle could never be used to support crops for human consumption.
- Beef cattle can transform into quality meat food that would otherwise end up in landfills, therefore reducing food waste while not compromising their health (for example: residues from food processing plants, brewing grains, etc.).
- Beef and veal producers reduced their land needs by adjusting their animals' feed and by increasing crop yield.
- Raising beef in Canada does not contribute significantly to deforestation.
- Deforestation is strictly regulated in Quebec.

### It is true that...

... raising animals on pasture preserves permanent grassland.

... proper manure management, water protection, and monitoring by agronomists all serve to reduce the soil impacts of animal farming.

...beef cattle consumes corn. However, 86% of its feeding comes from products unsuitable for human consumption.

### Did you know?

The land area required to produce beef went down by a quarter between 1981 and 2011, thanks to increased animal productivity.





## Prevailing view

*“Animal farming threatens biodiversity.”*

### The facts

- Permanent grassland increases biodiversity.
- Over 1,000 plant, animal and insect species make their home on Canadian rangeland.

### It is true that...

... sustainable soil management (which includes pasture rotation, animal pasture management, grassland regeneration, etc.) helps maintain plant species.



The Canadian cattle industry has a research organization that actively participates in continuously improving production across the country.



### Did you know?

Producers can demonstrate that they are applying sound environmental practices through the VBP+ program.



## ANIMAL WELFARE

### Prevailing view

*“The animal industry murders animals, and it is cruel to kill animals for food when vegetarian options are available.”*

### The facts

- Slaughter is highly regulated in Quebec and the rest of Canada, which limits the animals' suffering and distress.
- Inspectors ensure the compliance of the slaughtering procedures.
- All living creatures are by nature destined to die or be killed so that others may live.

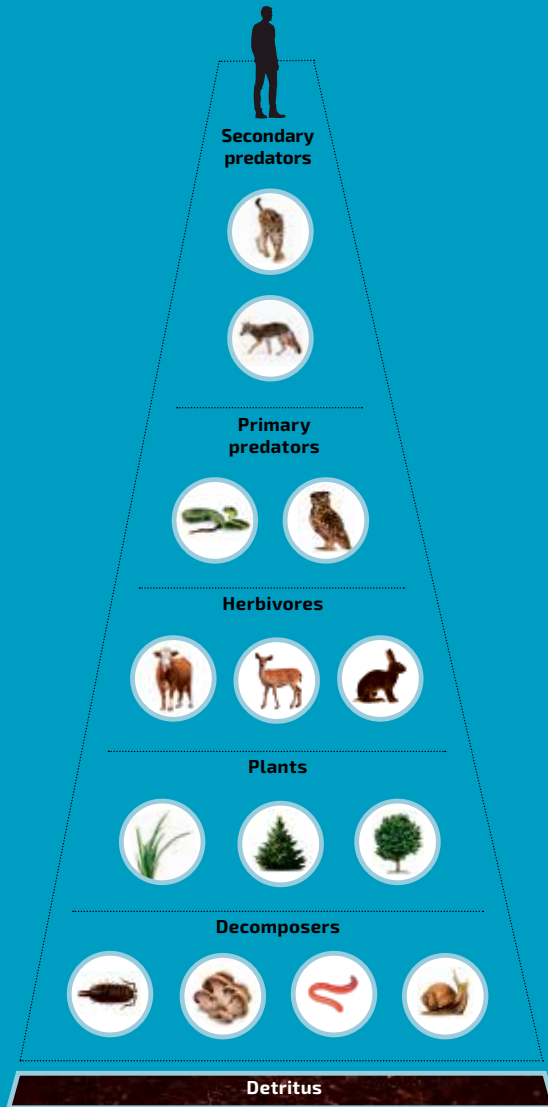
### It is true that...

... eating meat is not a cruel or unethical act, but rather a natural part of the life cycle.

... often, the views of people who are opposed to farming animals for meat are incompatible with those of producers.

... beef and veal can be part of a healthy diet.

## Food Pyramid



## Prevailing view

*“The animal industry abuses animals, meat consumption causes animal cruelty, and animals are treated as property rather than sentient beings with physical and psychological needs.”*

## The facts

- A number of federal and provincial laws regulate animal welfare.
- Quebec distinguishes itself by its “*Loi sur la sécurité et le bien-être de l’animal*” which recognizes animals as sentient beings, endowed with biological imperatives. The MAPAQ can file charges against animal owners who do not abide by this law.
- Farmers have access to codes of practice. These codes of practice are the result of a consensus among producers, governments, researchers, and animal rights groups.
- Producers must follow the animal welfare requirements stipulated in their marketing regulations (i.e.: VBP+ certified producers, Quebec Certified Grain-Fed Veal, etc.).



## Did you know?

The MAPAQ is responsible for enforcing the “*Loi sur la sécurité et le bien-être de l’animal*”, and exerts a zero-tolerance approach.

Agronomists and veterinarians are obligated to speak out against situations where animal welfare is not respected.

Citizens may use a toll-free phone line to report animal owners who are at fault.

## HUMAN HEALTH

### Prevailing view

*“Eating red meat is associated with increased risk of cancer and cardiovascular diseases.”*

### The facts

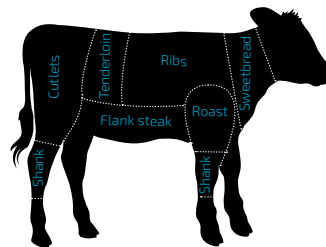
- Meat contains a number of essential nutrients that are easily absorbed by the body (bioavailable), which is an undeniable nutriment for the human diet.
- Eating a varied and balanced diet that includes other food groups, like fruits and vegetables, can reduce the risks of cancer and cardiovascular diseases, and increase the benefits associated with meat.
- Canada’s food guide recommends opting for the least processed foods possible.

### It is true that...

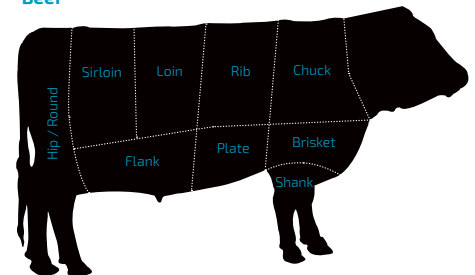
... according to the World Health Organization (WHO), such risks may be associated especially with processed meat.

... a reanalysis of existing studies was conducted by a panel of researchers from seven countries and published by the American College of Physicians in an article. The authors did not support the recommendations (based on the WHO’s findings) of certain governments to encourage their citizens to eat less red meat, describing the degree of certainty in the supporting studies as “weak”.

Veal



Beef





## Prevailing view

*“It is unnatural to use antibiotics and hormones to produce meat, since the meat we eat will be contaminated by these products.”*

### The facts

- Antibiotics are used to treat animals that are ill.
- They are used under veterinary supervision.
- Inspectors from the Canadian Food Inspection Agency (CFIA) visit slaughter facilities to ensure that producers respect withdrawal periods and that carcasses are safe for consumption.
- More and more cattle producers are adhering to certification programs that require close monitoring of the use of products containing antibiotics or growth hormones on cattle farms.
- Antibiotic use and the phenomenon of antibiotic resistance are closely monitored in Canada, both in animals and humans—authorities conduct inspections at farms, at slaughter facilities and at retailers.
- In Quebec, the use of Category 1 antibiotics in animal production, widely used in human medicine, is subject to a strict regulatory framework.

### It is true that...

... moderate use of antibiotics (specifically by reducing preventative treatment) and sound farming practices reduce the presence of antibiotic-resistant bacteria.



### Did you know?

Since 1984, all use of antibiotics on Quebec farms requires a prescription from a veterinarian in order to comply with authorized practices. Since February 2018, Health Canada has banned all claims about stimulating growth on the labels of animal antibiotics in order to lower their use.

### The facts

- There is no such thing as “hormone-free” beef. Animals, humans and plants all produce hormones naturally.
- Hormone use in beef production is subject to regulation by Health Canada. The CFIA is responsible for monitoring farmers’ use of growth hormones. These products are strictly used under prescription from a veterinarian.

### Into perspective

The level of hormones found in various food products, such as beef, is extremely low to be life threatening to human health.



**75 g**

Beef from an animal carcass fed with growth stimulants



**2**

**nanograms**  
of estrogen



**355 ml**

Beer



**15**

**nanograms**  
of estrogen



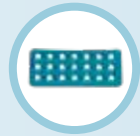
**75 g**

Raw cabbage



**2,976**

**nanograms**  
of estrogen



**1**

**single**  
birth control pill



**35,000**

**nanograms**  
of estrogen

### It is true that...

... in Canada, growth hormones for cattle are approved for beef production only; they enable leaner meat to be produced at a lower cost.



The Quebec Certified Grain-Fed Veal, Verified Veal and VBP+ programs provide proof that animal health products are used judiciously on farms.



### Did you know?

No growth stimulant is used in either grain-fed or milk-fed veal production.



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## Useful links

[bovin.qc.ca](http://bovin.qc.ca) / [beefresearch.ca](http://beefresearch.ca) / [verifiedbeef.ca](http://verifiedbeef.ca) / [cattle.ca](http://cattle.ca)



### Les Producteurs de bovins du Québec

555, Roland-Therrien Blvd, Suite 305 • Longueuil (Québec) J4H 4G2 • 450 679-0540, ext. 8287 • [pbq@upa.qc.ca](mailto:pbq@upa.qc.ca) / [bovin.qc.ca](http://bovin.qc.ca)