

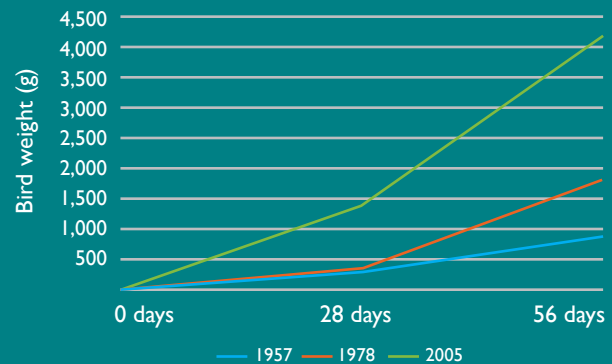
CHICKEN — A SUSTAINABLE PROTEIN

How has the growth of broiler chickens evolved?

There's no doubt that chickens grow faster today than they did in the past. At present, commercial broiler chickens in Canada generally reach 2 kilograms in 35 to 36 days.



Age-related changes in size of University of Alberta Meat Control strains unselected since 1957 and 1978, and Ross 308 broilers 2005¹.



What have been the benefits of faster growing birds?



1. Affordable food

Canadians now spend far less of their income on food. For example, in 1961 the average Canadian dedicated 28% of their personal expenditures to food², but by 2014 this had come down to less than 14%³. At the same time, the percentage of the workforce dedicated to producing food has dramatically decreased, with only about 2% of the Canadian population growing food for the other 98%⁴.

Thanks to a combination of genetic and nutritional improvements, as well as better husbandry, technology and monitoring systems, farmers are now able to grow more chickens, in less time and using less feed, resulting in more affordable food.

2. Reduced environmental impact

Improving the feed conversion ratio of broilers has in turn reduced emissions and environmental impacts of broiler production⁵. In fact, over a 20 year period from 1988 to 2008 there was a 23% reduction in global warming potential emissions from broiler production⁵.

This also means less land is required to grow feed for chickens and less manure is created. Based on improvements in the feed conversion ratio from 2000 to 2010, over 2.6 million fewer acres of land were required to grow corn for chicken feed to meet the global demand for chicken meat – double the size of P.E.I.!

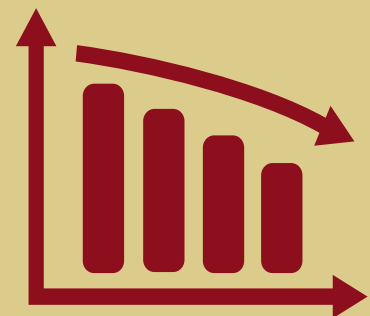
3. Improved health parameters

Thanks to a balance of selection criteria in breeding programs:

- Mortality levels have declined significantly compared to the slower growing broilers raised in the 1940s⁶.
- Selection for improved leg health has resulted in less lameness⁷.
- Condemnation rates of Canadian broiler chickens have decreased considerably since 1999⁸.
- The incidence of ascites in broiler chickens has decreased significantly over time⁸.

Selection for good health and welfare traits will always be a part of the breeding programs as they continually improve. Indeed, this already

makes up over half the traits that breeding companies measure and that emphasis will continue to address welfare problems as they arise.



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How have broiler growth rates been improved?

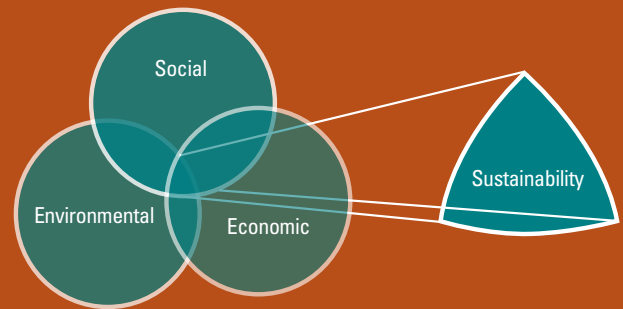
Poultry breeding companies have used the process of genetic selection to carefully select for desirable traits in broiler chickens. This is the same process that gives us Great Danes and Chihuahuas – it is *not* genetic modification. Over half of the traits that breeding companies measure are related to animal wellbeing, such as leg health and footpad dermatitis, and others are for production traits like more efficient growth. A great deal of research has gone into determining the exact nutritional requirements of broilers at all stages, and the ability to precisely meet their dietary needs is another big factor in improved growth rates of broilers.



What would a slower growing chicken be like?

“Slower-growing” chickens or “heritage breeds” are chickens that can take almost twice as long to reach market weight because they do not convert feed to muscle as quickly. Because of this, these breeds require more feed, fuel, water and land per pound of meat to sustain their growth⁹. As such, this type of chicken can cost over \$2 USD per kg more than conventional chicken¹⁰.

Given this, it’s important to consider the concerns and priorities of average Canadians. Recent research from the Canadian Centre for Food Integrity asked Canadians to rank various life issues and among the top five concerns in the 2016 were the rising cost of food and keeping healthy food affordable¹¹.



When it comes to decisions by members of the supply chain, a multitude of factors like the ones discussed above need to be considered to account for all aspects of a sustainable strategy.

The Canadian chicken industry today

Chicken Farmers of Canada (CFC) represents the approximately 2,800 broiler chicken farmers across the country. CFC takes pride in its progressive and innovative approach to animal care, as demonstrated by our third-party audited, mandatory Animal Care Program that safeguards our flocks. A summary of the Program can be found **online**. The requirements of the program are based on the Code of Practice as developed by the National Farm Animal Care Council, and covers aspects of animal care and handling throughout the entire flock cycle.

These assurances in good animal care practices are just one element that is offered with our **“Raised by a Canadian Farmer”** brand.



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