

nutrition

# A meaty is



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Hormone-free beef has raised the stakes when it comes to our meat selection at the supermarket. But does it provide significant health benefits? **Jennifer Kang** investigates

**W**hen supermarket giant Coles announced it would only sell hormone-free beef in the interests of meat quality, it was the first time many of us had realised we were eating beef that was grown with hormones.

The news sparked heated controversy among animal welfare groups and health conscious consumers who hadn't known the meat they'd been eating all along was fed and grown with the aid of Hormonal Growth Promotant (HGP), which is used to promote weight gain and improve the rate at which grass is converted into meat in cattle.

The use of HGPs means cattle can be processed at a quicker and more efficient rate, and while this method can maintain efficiency and lower costs in production, some say it is often at the expense of flavour, quality and wellbeing – after all, it's common knowledge that natural is best.

But similar to the debate over 'organic versus non-organic produce' and 'frozen versus fresh food' where some studies indicate there are no marked differences in health benefits between the two opposing food choices, we have to wonder whether hormone-free beef has significant benefits compared with ordinary, hormone-grown beef. Here, we put hormone-free beef to the test to help you decide.

## Hello, hormone-free

Hormone-free beef guarantees that cattle have been grown

without the use of hormones such as oestrogen, progesterone and testosterone or a combination of synthetic hormones that help bulk up and fatten cattle.

With fears in the community that hormone residues in meat can contribute to the early onset of puberty in young girls and types of cancers that are sometimes associated with hormonal imbalances such as breast and ovarian cancer, hormone-free beef can resolve some health concerns. It is more natural and contains less chemical additives, giving you the assurance that a succulent steak on your plate doesn't pose any risks to your health.

However, while research into the controversial link between hormone residues in meat and developing cancer is minimal, food safety concerns over the use of hormones in beef continue to persist and are seen to be legitimate by many countries.

As an example, the European Union has banned the use of HGPs in cattle as a precautionary measure. This is despite a wealth of international scientific evidence showing that HGP-treated beef is safe to eat.

Here in Australia, the Australian Pesticides and Veterinary Medicines Authority provides assurance that cattle treated with HGPs produce beef that is safe to consume after a thorough safety assessment. This is highlighted by the fact that the amount of oestrogen derived from 77kg of HGP-treated beef is no more than the amount of natural oestrogen found in one chicken egg.

## The meaty fact file

✓ HGPs have been banned in the production of chicken meat.



✓ Antibiotics are used in salmon, pig and chicken feed to reduce the risk of disease, which also ensures food safety. However, there are some concerns that it could cause antibiotic resistance in humans through



the consumption of antibiotics contained in food sources.

- ✓ The National Residue Survey found a 99.9 per cent compliance rate among Australian beef industries with safety standards for the use of chemicals.
- ✓ Ractopamine, another growth promotant, is used in the production of pork.
- ✓ A US study of cows treated with melengestrol acetate, an artificial growth hormone, revealed residues of the hormone were traceable in soil up to 195 days after the animals were treated with it.
- ✓ In 2007, about 45 per cent of cattle in Australia were treated with HGPs.

## Quality on your plate

While hormone-grown beef may be safe to eat, the bulking up of beef compromises the quality of meat texture – it is tougher and less tender.

Quality assurance of beef is monitored by Meat and Livestock Australia, which recognises that hormone-free beef retains

more tenderness in texture, thereby improving quality.

Coles spokesperson Jim Cooper says the decision to sell hormone-free beef was mainly in the interests of improving quality rather than wellbeing.

"Using HGP in cattle speeds up the development of the animal so that it grows to the required weight faster than it would if it was

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not implanted with HGP," he says. "That's a benefit to the industry as the meat produced from the animal is faster to market and is therefore cheaper to produce.

"The down side is that the faster growth results in a less tender product on the shelf, so what we've done is taken out the use of HGPs in the supply chain. The benefit is that you get a distinct improvement in the tenderness of the end product."

Coles general manager of meat Allister Watson says there are a range of scientific studies that confirm the use of HGPs can

adversely affect eating quality.

"The Meat Standards Australia (MSA) grading system shows that meat quality is significantly better without the use of HGPs."

Taste-wise, hormone-grown beef claims to be cleaner tasting – HGP suppresses fat marbling and increases connective tissue muscle, which makes meat firmer and tougher. This can be compared with a more tender-tasting HGP-free cut of meat, which claims to be fuller in flavour and sweeter to taste.

### Helping the planet

Hormone-free beef has been

praised for being ethically 'in' – it increases animal welfare standards and it's also a more environmentally sustainable way to produce beef, free of chemical nasties or unnecessary additives in food and livestock.

Watson says the push for hormone-free beef provides a response to consumer concerns about additives in food and livestock and animal welfare practices.

It's also good for the hip pocket. At Coles, buying hormone-free beef is at no added cost to consumers, which means you can eat a better quality product for the same price.

### Hormone-free for health

While Coles hasn't questioned hormone-grown beef in light of food safety and wellbeing concerns, Cooper says hormone-free meat has been well received by the health conscious.

"There are a lot of customers who would prefer that their food was as natural as possible and didn't contain things like HGPs where they are not needed, so our hormone-free beef has had a good response from those customers who are looking for more natural food."

However, Cattle Council of Australia chief executive David Inall says there is negligible difference in the hormone levels found in beef from cattle that have been given a growth promotant compared to cattle that have not.

"There's no advantage in choosing one option over the other," Inall says. "Don't be fooled by big supermarket marketing ploys that will try to convince you otherwise."

"The use of growth promotants in cattle have been tested by human health scientists...over three decades and pass every test."

Could the campaign, as Inall says, be a marketing lure? With leading meat industry players

claiming the move has frightened consumers, perhaps Coles has responded to consumer fears surrounding the use of hormones in production despite evidence that shows HGP-treated beef is safe to consumers.

In mid-2008, a survey found one in three consumers would never eat or cook Australian beef again if they were told that hormones had been used in its production, while an additional 39 per cent of respondents said they would eat less.

Nutritionist Aloysa Hourigan of Nutrition Australia says if you're concerned about the use of hormones in meat, it's best to eat beef that has been produced using organic farming practices, which means you can avoid hormone-grown beef and any health risks attached to it.

What are the risks, then? Rapid growth in cattle can mean the beef has a higher fat content.

"As soon as rapid growth is promoted in cattle, it usually equates to a higher fat load, which is a nutritional negative," Hourigan says.

Whether the beef is grass-fed or grain-fed can also make a difference. Coles' beef is mainly grain-fed, which can lead to a higher fat profile despite being hormone-free.

"Grass-fed cattle tend to have a better monounsaturated fat level and less saturated fat in their meat," Hourigan says.

"Grain-feeding promotes more rapid growth, so based on these facts, you would have to say that grass-fed animals are nutritionally of a better health value."

### OUR VERDICT

Choose hormone-free beef if you're looking for a natural alternative, and make sure it's also grass-fed if you're looking to reduce your fat intake, too. ✨

