



Cattle and HGPs

Hormone Growth Promotants

Is it safe to eat beef from HGP-treated cattle?

How do they work?

Why are they used?

safe  **meat**

What are HGP's?

Hormone Growth Promotants (HGPs) are supplements of naturally occurring hormones that are found in most animal and plant life. They are slow-release implants that contain natural or synthetic hormones used to improve growth rates and feed efficiency in the cattle industry.

These hormones are naturally present in all meat. HGPs cause no harm to the animal being implanted and research has shown meat treated with HGPs is safe for human consumption.

How do HGP's work?

HGPs come in the form of implants placed under the skin on the back of the ear of cattle, continuously releasing low doses of hormones.

Why are HGP's used?

Beef can be produced more quickly and efficiently, making individual producers and the Australian beef industry more competitive in international markets.

Cattle treated with HGPs do not suffer any discomfort and they gain weight faster with less feed.

The improvement in feed efficiency provides the added benefit of reducing costs for consumers at the retail counter and environmental benefits for the community.

HGPs can also help producers consistently meet specifications for a range of target markets¹ as they can assist in offsetting any adverse seasonal conditions.

In particular in northern Australia, where the seasonal nature of pasture quality varies widely, HGPs are used as a management tool to prepare cattle for market.¹

Is it safe to eat meat from HGP-treated cattle?

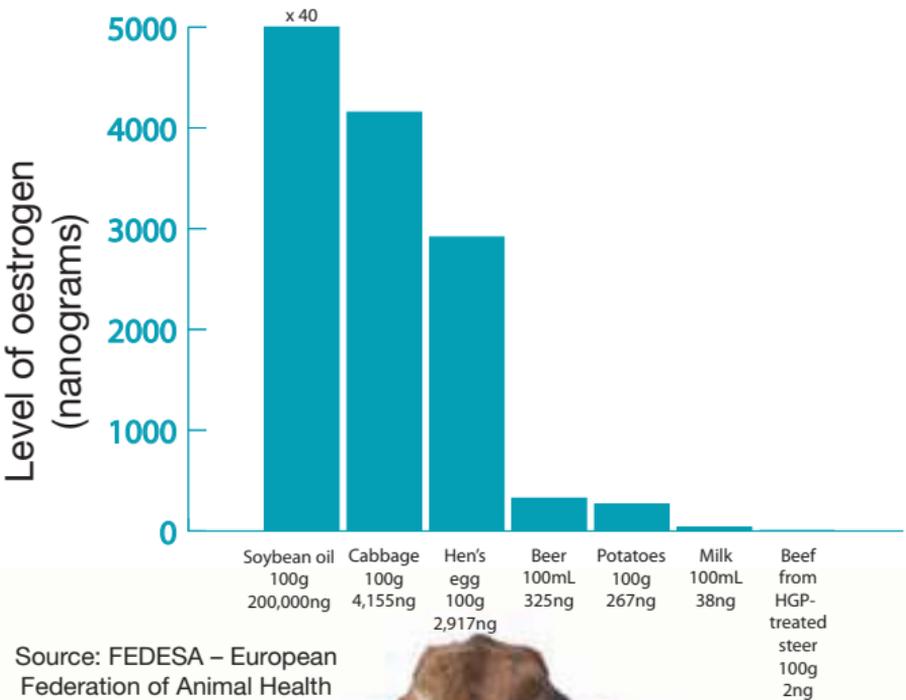
It is safe to eat meat from HGP-treated cattle.

Numerous reviews and evaluations² of safety and public health risks associated with HGP usage have been undertaken since the mid 1990s with overall international opinion being that there is no increased health risk to humans from consumption of meat from animals treated with HGPs³.

While the hormones in HGP-treated beef are additives, they supplement naturally occurring hormones and are present at much lower levels than the natural hormone levels found in many commonly consumed foods.

Consumers do have the choice to buy non-treated beef if they prefer but there is no safety concern in consuming HGP-treated beef.

Levels of hormones in common foods



If eating beef from HGP-treated cattle is safe why has the European Union (EU) banned it?

The EU has banned the use of HGPs since 1988 however, this position is contrary to overall international opinion and reviews and evaluations by leading world health authorities.³

The United States challenged the ban shortly after it was put in place, instigating World Trade Organization litigation against the EU. In 1998, The WTO found the EU's ban was not supported by science and was inconsistent with its WTO obligations.⁴

What does the World Health Organization (WHO) say about eating beef from HGP-treated cattle?

The Joint Food and Agriculture Organization of the United Nations (FAO)/WHO Expert Committee on Food Additives has concluded that the availability of hormones to humans from food consumption is generally low. The Committee also concluded that hormone levels in beef from cattle treated with HGPs in accordance with good animal husbandry are unlikely to pose a hazard to human health.³

Similarly the Australian Commonwealth Department of Health and Ageing undertook a review of HGP safety in 2003 and concluded that "there is unlikely to be any appreciable health risk to consumers from eating meat from cattle treated with HGPs according to good veterinary practice".³

Did you know...

- A 100 gram serving of beef from a steer treated with HGPs contains 2 nanograms of oestrogen while the same serving from a non-HGP treated steer contains 1.4 nanograms.⁵
- You would need to eat more than 77kg of beef from treated steers in one sitting to get the same oestrogen as you do from eating one egg, or 200kg to get the same from a serving of cabbage.⁵

How prevalent is HGP use in the cattle industry?

HGPs have been used in Australia since 1979 and are used in most major beef producing countries around the world including the United States.

HGPs have been through a rigorous government evaluation and registration process and are registered for use in many countries. Less than half of Australia's beef production is from cattle treated with HGPs.

Are there any environmental benefits in treating cattle with HGPs?

Essentially HGP-treated cattle help Australian farmers produce more beef per animal from less feed. The growth rate of HGP-treated cattle is increased by 15–30 per cent, feed conversion efficiency by 5–15 per cent and this will decrease total lifetime greenhouse gas emissions.⁶

Australia produces about 2.3 million tonnes of beef a year. If HGPs were not used, it is estimated the Australian cattle herd would need to increase by more than two million head to produce the same amount of beef¹.



References

- ¹ Final report: *HGP Use in the Australian Beef Industry*, September 2009, report prepared by R.A. Hunter for CARGO, ISBN 9781741913415
- ² Joint FAO/WHO Expert Committee on Food Additives, the Veterinary Products Committee of the Department for Environment, Food and Rural Affairs (UK), the Committee for Veterinary Medicinal Products for the European Medicines Agency and the Chemical Review and International Harmonisation Section, Office of Chemical Safety, Therapeutic Goods Administration of the Australian Department of Health and Ageing.
- ³ Final Report: HGP Literature Review, June 2007, report prepared by Evan Sergeant, ISBN 978174192265 – Overall, the balance of international opinion is that there is no increase in the risk of adverse health risks associated with consumption of meat from animals treated with HGP's according to good agricultural practices.
- ⁴ US Trade Representative website, <http://www.ustr.gov/about-us/press-office/press-releases/2009/may/ustr-announces-delay-trade-action-beef-hormones-disput>, accessed 24 March 2010
- ⁵ *Rationale for the safety of implants*, R.L Preston, 1997
- ⁶ *Inhibiting methane production in Brahman cattle by dietary supplementation with a novel compound and the effects on growth*, G.J McCrabb, 1997

Who is SAFEMEAT?

SAFEMEAT is a red meat industry and government partnership that works to ensure the integrity of Australian red meat and provide strategic direction and policy advice to the red meat industry. Members of SAFEMEAT include representatives from the Australian Meat Industry Council, Cattle Council of Australia, Sheepmeat Council of Australia, Meat & Livestock Australia, Australian Lot Feeders' Association, Australian Livestock Exporters' Council, Australian Government Department of Agriculture, Fisheries and Forestry, the Australian Chief Veterinary Officer, the Chief Executive Officer of State/Territory Department of Agriculture/Primary Industries and the Chief Executive Officer of State/Territory Meat Industry Authority (or equivalent body).

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