

# FACT SHEET: Growth Promotant Use in Cattle Production

<p><b>What are Growth Promotants?</b></p>	<p>Growth promotants used in modern beef production are typically small pellets implanted under the skin on the back of an animal's ear. The pellet releases tiny amounts of hormone and safely dissolves as the treatment is completed. The hormones in beef cattle growth-promotant implants can include estradiol (a type of estrogen), progesterone, testosterone, trenbolone acetate and zeranol.</p> <p>It is important to note that growth-promoting implants simply replace or supplement existing hormones in the animal's body.</p>												
<p><b>FDA Approved</b></p>	<p>Growth promoting products are approved by the Food and Drug Administration (FDA) based on rigorous scientific testing procedures similar to those used for human medications. Safety must be demonstrated in food from treated animals intended for human consumption, in the health of the treated animal and in the environment.</p>												
<p><b>Declared Safe Worldwide</b></p>	<p>The use of growth promotants in cattle production has been declared safe by scientific organizations worldwide, including the Food and Agriculture Organization/World Health Organization, the European Commission Agriculture Division and the Codex Committee on Veterinary Residues.</p>												
<p><b>Safety Assured</b></p>	<p>The safe use of growth promotants in beef production is assured by the product approval procedures required by FDA, as well as by the on-going testing policies and procedures administered by the Food Safety Inspection Service (FSIS), a division of the U.S. Department of Agriculture (USDA). FSIS regularly tests for residues in meat to assure there is no misuse of growth promoting products.</p> <p>Growth promotants have been used in agriculture for more than 50 years without any negative affect on human health. Beef producers feed their animals the best science-based diet available and use humane animal husbandry practices. Growth promotants allow producers to deliver leaner beef and use fewer acres for grain, which is better for the environment.</p>												
<p><b>FDA-Approved Safe Levels</b></p>	<p>One serving of beef from a steer implanted with a growth promotant has:</p> <ul style="list-style-type: none"> <li>Nearly 20 times less estrogen than the level permitted by FDA and</li> <li>A fraction of the phytoestrogen levels present in foods such as soybean oil, cabbage and grains.</li> </ul> <p>Additionally, the difference in levels of estrogen found in beef from cattle raised with or without growth promotants is miniscule.</p> <table border="1" data-bbox="378 1247 1520 1425"> <thead> <tr> <th>Growth promotants vs. no growth promotants</th> <th>Estrogen (in nanograms*)</th> </tr> </thead> <tbody> <tr> <td>3-Ounce serving of beef from a steer treated with growth promotants</td> <td>1.9</td> </tr> <tr> <td>3-Ounce serving of beef from a steer raised without growth promotants, such as certified organic beef</td> <td>1.3</td> </tr> </tbody> </table>	Growth promotants vs. no growth promotants	Estrogen (in nanograms*)	3-Ounce serving of beef from a steer treated with growth promotants	1.9	3-Ounce serving of beef from a steer raised without growth promotants, such as certified organic beef	1.3						
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<p><b>Hormones in the Human Body</b></p>	<p>The human body naturally produces hormones in quantities much greater than could ever be consumed by eating any food. In fact, <u>the average man or woman produces 35,000 times more hormones on a daily basis</u> than could be present in beef or other food.</p> <table border="1" data-bbox="378 1528 1520 1709"> <thead> <tr> <th>Male vs. Female</th> <th>Estrogen (in nanograms*)</th> </tr> </thead> <tbody> <tr> <td>Woman</td> <td>480,000</td> </tr> <tr> <td>Pregnant woman</td> <td>3,415,000</td> </tr> <tr> <td>Man</td> <td>136,000</td> </tr> <tr> <td>Male child (before puberty)</td> <td>41,500</td> </tr> <tr> <td>Female child (before puberty)</td> <td>54,000</td> </tr> </tbody> </table> <p>* A nanogram is one billionth of a gram, which is analogous to one blade of grass in an entire football field.</p>	Male vs. Female	Estrogen (in nanograms*)	Woman	480,000	Pregnant woman	3,415,000	Man	136,000	Male child (before puberty)	41,500	Female child (before puberty)	54,000
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Sources: Food and Drug Administration; Hoffman and Evers; Scanga et al.; FSIS-USDA; Dr. Harlan Ritchie, Michigan State University

For more info, visit [www.BeefFromPastureToPlate.org](http://www.BeefFromPastureToPlate.org)  
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