



August 5, 2010

Dear Mrs. Beyer,

After seeing your story this morning, "Valley farmer says he sells a healthier meat than the rest," I am concerned that the message is confusing and misrepresented. The story disparages beef that is raised in manners other than Mr. Holbrook's, implying that it is unsafe and not nutritious. Let me assure you that this is not the case.

Arizona cattle ranchers grow a wide variety of options of beef from which consumers can choose, all of which are safe, wholesome and nutritious. Grain-finished, natural, grass-finished and organic beef are defined solely by production and marketing distinctions, not by nutritional or safety differences.

The number one priority of Arizona ranchers is to produce high quality beef for the consumer. Arizona ranchers care about the health and well-being of the cattle that they raise with utmost respect and appreciation and they care about being stewards of the natural resources that they manage.

All beef in Arizona is subject to the same stringent government regulations and inspection procedures that ensure safety. While cattle ranchers provide a range of different products that consumers demand, safety is the common denominator among every kind of beef that you buy. The article and interview implies mistruths about our beef supply. Let me dispel any confusion.

Concerning hormones: It is important to recognize that many common foods naturally contain estrogen (the hormone in question when discussing added hormone levels to beef of cattle implanted with growth promotants) at levels many times higher than what is present in beef. Please see Table 1.

In addition, note that there is a minimal difference in estrogen levels in beef from treated and untreated animals.

Also interesting: The average soy latte, made with one cup of soy milk, contains 30,000 nanograms* of estrogen. Compare that with 1.9 nanograms of estrogen produced in 3 ounces of beef from an implanted animal. *one nanogram is one billionth (10^{-9}) of a gram.

Concerning Beef Nutrition: Beef, no matter the growing technique, plays an important role in a healthy lifestyle, providing nine essential nutrients including zinc, iron, protein, vitamin B₁₂, selenium, phosphorous, niacin, vitamin B₆ and riboflavin to fuel your body.

Research demonstrates that there are few differences between the various options of beef in nutrient composition or nutritional quality. Grass-finished beef does have *slightly* higher levels of Vitamins A and E, omega-3 fatty acids and conjugated linoleic acid. However, the differences are not significant for human health. I will use omega-3 fatty acids as an example: grass-fed beef contains 0.052 grams of omega-3 fatty acids per 3oz serving; grain-fed beef contains 0.039 grams omega-3 fatty acids per 3oz serving.

All of the calves raised on ranches in Arizona start out on grass like those you may see along highways and country roads, grazing in herds on large pastures, for at least the first seven months of their lives.

Why feed corn: Cattle can get the nutrients they need from eating a wide range of plants, including a variety of grains and grasses. Most beef raised in the United States comes from grain-fed cattle, which spend most of their lives on pasture eating grass before going to a feedlot for four to six months. While at a feedlot, cattle are fed a combination of grain and hay formulated by a professional nutritionist to ensure a well-balanced and nutritious diet.

Grain feeding isn't new, it's just more sophisticated. In the United States, cattle have been fed grain for at least 200 years. Cattle are fed grains like corn because they are nutritious and energy-rich and can be stored for use throughout the year. Since grass doesn't grow year-round in most of the United States, feeding grains like corn to cattle help farmers and ranchers raise a consistent, year-round supply of great-tasting beef.

**Table 1: Daily Endogenous Hormone Production (nanograms) (for estrogen)
In Relation To Amounts In A Birth Control Pill And Certain Other Foods**

	nanograms		
	Estrogen	Testosterone	Progesterone
Pre-pubertal girl, daily	54,000	32,000	250,000
Pre-pubertal boy, daily	41,500	65,000	150,000
Adolescent girl	93,000	-----	-----
Non-pregnant woman, daily	480,000 ^a	240,000	10,100,000
Pregnant woman, daily	3,415,000 ^b	435,000	294,000
Normal adult man, daily	136,000	6,400,000	410,000
3 oz. steak from non-implanted animal	1.3	0.3	0.3
3 oz. steak from implanted animal	1.9	0.6	0.5
Birth control pill	35,000	---	---
3 oz. of milk	11	---	---
3 oz. of potatoes	225	---	---
3 oz. of peas	340	---	---
3 oz. of ice cream	520	---	---
3 oz. of cabbage	2,016	---	---
3 oz. of hens egg	2,625	---	---
3 oz. of wheat germ	3,400	---	---
3 oz. of soybean oil	1,680,000	---	---

SOURCES: Hoffman and Evers (1986); FSIS-USDA (1994); Scanga *et al.* (2004); Smith *et al.* (2005).

^aActually, 192,000 to 1,190,000 (varies with stage of menstrual cycle).

^bActually, 2,000,000 to 64,000,000 (varies with stage of pregnancy).

Please contact me with any questions that you may have. I would be very happy to assist you with a story and interview. I can also connect you with ranchers who raise both grass-fed and grain-fed beef.

Regards,

Lauren Scheller
 Director of Consumer Marketing and Public Relations
 LScheller@arizonabeef.org