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The Grass-Fed Revolution

Beef raised wholly on pasture, rather than grain-fed in feedlots, may be better for your health--and for the planet

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Until he saw the light, Jon Taggart--6 ft. 5 in., jeans, white cowboy hat, Texas twang--was a rancher like any other in the southern Great Plains. He crowded his cattle onto pasture sprayed with weed killers and fertilizers. When they were half grown, he shipped them in diesel-fueled trucks to huge feedlots. There they were stuffed with corn and soy--pesticide treated, of course--and implanted with synthetic hormones to make them grow faster. To prevent disease, they were given antibiotics. They were trucked again to slaughterhouses, butchered and shrink-wrapped for far-flung supermarkets. "It was the chemical solution to everything," Taggart recalls.

Today his 500 steers stay home on the range. And they're in the forefront of a back-to-the-future movement: 100% grass-fed beef. In the seven years since Taggart began to "pay attention to Mother Nature," as he puts it, he has restored his 1,350 acres in Grandview, Texas, to native tallgrass prairie, thus eliminating the need for irrigation and chemicals. He rotates his cattle every few days among different fields to allow the grass to reach its nutritional peak. And when the steers have gained enough weight, he has them slaughtered just down the road. Finally, he and his wife Wendy dry-age and butcher the meat in their store, Burgundy Boucherie. Twice weekly, they deliver it to customers in Fort Worth and Dallas happy to pay a premium for what the Taggarts call "beef with integrity--straight from pasture to dinner plate."

Ranchers like the Taggarts are part of a growing revolt against industrial agriculture. With more consumers questioning how their food is grown and organic fruits and vegetables exploding into a multibillion-dollar market, grass-finished meat and dairy look like the next food frontier. In the past five years, more than 1,000 U.S. ranchers have switched herds to an all-grass diet. Pure pasture-raised beef still represents less than 1% of the nation's supply, but sales reached some \$120 million last year and are expected to increase more than 20% a year over the next decade. Upscale groceries like Whole Foods and Trader Joe's are ramping up grass-fed offerings, including imports from Australia and Uruguay. Last month the U.S. Department of Agriculture (USDA) proposed a certified grass-fed label to provide a federal standard.

Dr. Steve Atchley is one of many health-conscious carnivores fueling the trend. "I got tired of telling my patients they couldn't eat red meat," says the Denver cardiologist. So three years ago, he launched Mesquite Organic Foods, which sells grass-fed beef to 74 Wild Oats stores nationwide. The company, which contracts with ranches from South

Texas to the Canadian border, has quadrupled sales since December. Mesquite's ground beef is 65% lower in saturated fat and its New York strips are 35% lower than conventional beef, as measured by the USDA. "Any feedlot-fattened animal has a much higher level of saturated fat than a forage-fed steer," says Atchley.

It makes sense. Grass is a low-starch, high-protein fibrous food, in contrast to carbohydrate-rich, low-fiber corn and soybeans. When animals are 100% grass-fed, their meat is not only lower in saturated fats but also slightly higher in omega-3 fatty acids, the healthy fats found in salmon and flaxseed, which studies indicate may help prevent heart disease and bolster the immune system. Ground beef and milk from grass-finished cattle also have more conjugated linoleic acid (CLA), which recent data suggest may help prevent breast cancer, diabetes and other ailments. Moreover, grass-finished meat is higher than grain-finished meat in vitamin A and vitamin E, two antioxidants thought to boost resistance to disease. "Grass-fed meat is beef with benefits," says nutritionist Kate Clancy, author of a recent Union of Concerned Scientists (UCS) report. UCS, a Washington-based nonprofit, reviewed scores of studies and concluded that a change from grain-based feedlots back to a purely pasture-based system "would be better for the environment, animals and humans."

Radical as that scenario may seem, it was only after World War II that the U.S. began confining cattle in factory farms that can fatten 50,000 head a year on high-calorie grain. Until then, cattle grazed on grass their full lives--as they still mostly do in Europe, South America, New Zealand and other beef-producing nations. The new U.S. system grew thanks to vast surpluses of government-subsidized corn and soybeans, produced with modern petroleum-based fertilizers. Traditionally, steers had taken three to four years to fatten on pasture. Today they grow to slaughter size in less than two years--an efficient industrial process that has transformed beef from a luxury meal into a cheap fast food.

And feedlot beef has the taste and uniformity that U.S. consumers have come to expect. Grass-fed meat, by contrast, varies according to the breed of cattle and the pasture on which it was raised. The National Cattlemen's Beef Association (NCBA), which represents ranchers and feedlots, welcomes grass-finished beef as another market choice but contends that it is no healthier than grain fed. NCBA nutritionist Mary Young acknowledges that grass-fed beef has "slightly" more omega-3 fats than grain fed but says the amount is negligible compared with those in salmon, which has 35 times more. And while grass-fed beef has more CLA, she says, scientists have yet to determine exactly how much is needed for human health. According to the NCBA, growth hormones leave only "minuscule" traces in beef and, by law, meat cannot be sold with antibiotic residues. "All beef, no matter how it's raised, can be part of a lean, low-fat lifestyle," says Young, noting that there are 29 lean cuts of beef, from flank steak to tenderloin.

But feeding steers grain and supplements can create safety issues--for cattle and humans. Biologically, cattle are ruminants, exquisitely evolved to graze grass, and researchers have found that a grain diet raises the acidity in steers' guts. This breeds an acid-resistant form of E. coli that can spread from feces-contaminated carcasses to meat. Although USDA inspections are supposed to detect E. coli, the system is not perfect. In 1993, 600

people in Seattle got sick and three children died after eating E. coli-- tainted hamburger. Since then, outbreaks have triggered more recalls and led to a federal recommendation that consumers cook beef thoroughly. According to USDA research, more than half of grain-fed cattle have been found to have acid-resistant E. coli in their feces; the proportion drops to 15% if they are switched to hay.

Mad-cow disease, which can jump to humans in the form of a fatal brain illness, is another concern. It's believed to be a product of serving cattle parts to cattle. The practice was banned in the U.S. in 1997, but beef tallow is still allowed in feed (along with other "supplements" like chicken feathers)--a source of continuing controversy.

By many accounts, the grain diet contributes to one more public-health problem. Overuse of antibiotics has caused more and more bacteria to become resistant to treatment, a factor in the deaths of more than 60,000 Americans each year. An estimated 70% of the nation's antibiotics are fed to livestock and poultry to prevent illnesses and promote growth. Some 300 organizations, including the American Medical Association, have called for an end to nontherapeutic use of antibiotics in animal feed. The NCBA counters that antibiotics are judiciously applied. But the line between necessary treatment and routine use is blurred by the fact that a grain-based diet often leads to stomach ulcers and liver abscesses in cattle--a problem that has fueled the wrath of animal-rights groups. Grass-fed steers rarely require antibiotics.

Consumers seeking to avoid chemicals have turned to certified-organic beef in recent years, but often it is merely feedlot beef that is fed pesticide-free grain. Grass-fed advocates say such beef does not offer the improved fat profile and other benefits of pasture-raised cattle. A fight has erupted recently over whether milk from feedlot cows can legally bear the USDA organic label. "We need to raise animals on species-appropriate diets," says Jo Robinson, founder of Eatwild.com a website that links consumers to some 800 grass-fed-beef ranches.

Allen Williams, an industry consultant, pegs the potential for grass fed at 20% of the beef market--but supply is nowhere near demand. Grass-fed beef can cost from 20% to 100% more than feedlot beef, reflecting in part a longer growth cycle. And quality can be a problem. Bonnell's, a Fort Worth restaurant, sells 65 Taggart steaks a week. "Our customers rave about its tenderness and nutty flavor," says chef Jon Bonnell. But some grass-fed meat is too tough. And it's not easy to revive the art of producing tasty pasture-raised beef. It requires not only rotational grazing but also the genes that allow animals to fatten naturally on grass. Bill Kurtis, a former CBS newsman, launched the Tallgrass Beef Co., which sells on the Internet. "We searched for purebred Angus with genes that date to the Mayflower," he says.

At the Taggart ranch, the black Angus swish their tails contentedly. And the Taggarts are content too. Since they switched to pasture, they have doubled their income. More than 1,000 customers are in their database, and they are planning a store in Dallas with grass-fed lamb, pasture-based cheese, and classes on slow-cooking grass-fed beef. Says Wendy Taggart: "People are tuning in to what I call real food."