Pork's Slim 7					
1.02g2.98gPork tenderloin is just as lean as a skinless chicken breast!					
Skinless chicken breast Skinless chicken breast Saturated Fat Total Fat 1.15g 3.71g Sitlein park chap					
1.77g 5.17g New York pork chop (boneless top loin pork chop)					
1.77g 5.27g Ground pork, 96% lean 5.27g					
1.64g 5.34g New York pork roast (boneless top loin pork roast)					
1.83g 6.20g Porterhouse chop (bone-in center pork chop)					
2.17g 7.10g Ribeye pork chop (bone-in rib pork chop)					
2.58g 9.25g Skinless chicken thigh					
Based on 3-ounce cooked servings (roasted or broiled), visible fat and skin trimmed after cooking. Reference: U.S. Department of Agriculture, Agriculture Research Service, 2012.					
Extra Lean: Less than 5 grams total fat, 2 grams saturated fat and 95 milligrams cholesterol per serving.					

How does pork compare to other meats for fat, calories and cholesterol? Pork today compares favorably for fat, calories, and cholesterol with many other types of meat and poultry. While providing a greater amount of vitamins and minerals, many cuts of pork are as lean or leaner than chicken.

Pork tenderloin, for example, is just as lean as skinless chicken breast and meets the government guidelines for "extra lean." In total, six pork cuts meet the USDA guidelines for "lean," with less than 10 grams fat, 4.5 grams saturated fat and 95 milligrams of cholesterol per serving. Any cuts from the loin — like pork chops and pork roast — are leaner than skinless chicken thigh, according to USDA data. Pork steaks or roasts from the leg ("fresh ham") are also lean choices.

Seven common cuts of pork are, on average, 16% leaner than 20 years ago. The pork industry has responded to the consumer's desire for lean pork products. Through efforts in feeding and management

practices by pork farmers, seven of the most common cuts of pork have, on average, 16% less fat and 27% less saturated fat than 20 years ago.

Looking for Lean? Think "Loin" and "Chop." One of the easiest ways to remember lean cuts of pork is to look for the word "loin" in the name, such as pork tenderloin. Any kind of pork chop is also a lean choice, from sirloin chop to porterhouse chop.

LEAN CUTS OF PORK					
Pork Tenderloin *	120	3.0	1.0	62	
Pork boneless top loin chop **	173	5.2	1.8	61	
Pork top loin roast *	147	5.3	1.6	68	
Pork center loin chop **	153	6.2	1.8	72	
Pork sirloin roast *	173	8.0	2.4	76	
Pork rib chop **	158	7.1	2.2	56	

* Roasted, ** Broiled, *** Braised

Source: U.S. Department of Agriculture Nutrient Database Release 18 or the 2006 Revised USDA Nutrient Data Set for Fresh Pork.

Top 10 Reasons to Raise & Eat Grass-Fed Meat

July 5, 2018 in Eco-Farming, Eco-Living & Health, Eco-Philosophy, Livestock, Ranching, Uncategorized

Diana Rodgers lives on a working organic farm west of Boston, Massachusetts. Clark Farm raises lamb, goat, pastured pork, eggs, vegetables and berries. The animals look serene in the golden green pastures. They are healthy and relaxed. They are part of the landscape, shaping and impacting the grass and forest lands of the farm. Not only are they important to the health of the ecosystem, red meat from these animals is a true superfood — meaning that per calorie, there is a high level of nutrients in the food.



Healthy cattle grazing healthy pastures produce healthy beef that provides benefits to the soil, economy and people's overall health.

However, most people believe the healthiest product on Clark Farm must come from the vegetable patch. This misperception and false portrayal of red meat led Diana Rodgers, R.D., a real food registered dietitian to create the film Kale vs. Cow.

"I've been feeling increasingly frustrated with the wrongful vilification of red meat from a health and environmental perspective. There don't seem to be any films that advocate for regenerative agriculture that also admit that red meat is actually a healthy food to eat," said Rodgers.

Realizing that Rodgers is right about the public perception of raising and eating red meat, we reflected on the reasons we choose to do both. We delve into the top 10 reasons cattle, sheep and other livestock are

part of healthy living for humans and the ecosystem.

It isn't easy to get a rosy picture of meat production through common research channels like Google, magazines and blogs. The meat most vilified in the United States is beef. Is this because it is the most consumed red meat in the United States? According to the USDA, the per capita consumption of beef is projected to be 57.9 pounds in 2018.

Not all meat is created equal. Livestock are a tool that can improve or degrade ecosystem function depending on how they are managed. Beef that came from cattle properly managed across grassland is a completely different product from conventionally produced beef.

Imagine the impact on the environment if even half of those almost 58 pounds of beef per person consumed this year came from cattle working to sequester carbon and enhance ecosystem function. Let's explore further through the top 10 reasons we've found to include healthy red meat in your farm plan and diet.

1. Put your cattle (sheep or goats) to work: How livestock can be used as a tool to improve the land.

All of our landscapes evolved with the pressure of grazing animals on the land. Through this evolution, symbiosis between large graziers, plants and soil developed. When properly managed, livestock are moved in a thoughtful way to stimulate these symbiotic relationships and abundance occurs. Spencer Smith explains: When plants grow leaves they are maximizing their opportunity to catch the sun's energy. As photosynthesis happens, the plants are exuding some of the precious sugars they create into the soil. This process is referred to as root exudation. These exudates feed the soil biology, which in turn mineralize nutrients that are tied up in the soil particles.

In essence the soil biology has the power to unlock nutrients from rock and provide them to the plant. Let's call this symbiotic relationship number one: the plants feed root exudates to the soil life, and the soil life feeds minerals to the plants.

Livestock prepare the soil by breaking the soil crust that inhibits germination and clear old foliage from the plants so new growth can occur. As they graze, they trigger the plants to push more root exudates into the soil. This maximizes soil biology and potential for nutrient uptake by the plants. This is merely scratching the surface of how properly managed livestock improve soil and plants.

One of the most exciting benefits to properly managed livestock on the ground is their role in maximizing the mineral cycle by laying down plant litter on the soil surface. This litter composts in place and allows for efficient cycling of nutrients in the root zone of plants. As livestock chip the soil crust and lay down this important litter they also add a lot of dung and urine, which provides nutrients like nitrogen to the ground. This nitrogen stimulates more plant growth, while the dung adds new biology to the soil surface and partially decomposed plant material.

This is great fertilizer for future plants in the area. This entire process increases the soil's ability to infiltrate water and hold moisture for future crops, making our landscapes more resilient to drought.

2. Grass-fed animals create a lot of healthy food.

Diana Rodgers, in an article on SustainableDish.com, reports, "One cow produces an average of 490 pounds of edible beef. If you were to purchase one cow (490 pounds) for your freezer and eat it over the course of a year, that would give you 1.3 pounds of meat per day. When you're looking to cause 'least harm,' one cow is a much more efficient life to lose than the number of chickens it would take to equal 490

pounds."

Many people balk at the price of grass-fed beef compared to conventional beef, but buying in bulk and cooking real food can be surprisingly economical. In our household last year we committed to staying out of supermarkets and other places with too many opportunities for spontaneous purchases and hyper-palatable food.



A Surprise Valley, California, shared meal among friends is a celebration of nutrient-dense food, including tri-tip and meatballs.

We purchase meat in bulk (buying halves and wholes and trading with neighbors), buy vegetables from our local food hub, farmers' market, our own garden and a local food co-op (also in bulk) and get the rest of our goods through a local Azure Standard food co-op. The result: we cut our monthly grocery bill in half, felt healthier and generated less packaging waste. Rodgers' research confirmed our personal experiment. Eating real food is actually cheaper.

"If you compare ... grass-fed beef to a common junk food item like a Snickers bar, you might be surprised to learn that the organic, grass-fed beef is \$0.17 cheaper by weight than a snickers bar," Rodgers wrote on SustainableDish.com.

3. Whole-animal eating is healthier and cheaper than eating steaks all the time.

If you take Rodgers' advice and purchase (or raise) your own red meat animal, you have the opportunity to eat the most nutritious food available. According to Your Personal Paleo Code by Chris Kresser, liver is the most nutrient-dense food available. He recommends eating one to two 3-ounce servings of liver per week.

We should also be eating homemade bone broth and tougher cuts like stews made from shanks, oxtails, brisket and chuck roast. Why? These cuts provide key nutrients not found in other dietary sources that work synergistically with the nutrients found in muscle meats, according to Your Personal Paleo Code.

My daughter started drinking bone broth when she was 2 and has always loved it. Our weekly routine is to make a crockpot of beef or chicken bone broth. We add it to soups, stews, sauces or sip it hot in the morning. It is harder to get my family to eat liver. I developed a taste for it over time and now really enjoy it. It is a rich food and needs to be prepared carefully, but it can be so tasty.

Sliced very thin and fried with spices, onions and bacon, or made into a pate with coconut oil, are great ways to incorporate liver into your weekly meal plan. Kresser also recommends adding small amounts to ground-beef dishes or cutting it into tiny chunks, freezing and then swallowing a whole chunk each day as if it were a multivitamin pill.

4. Grow strong kids (and grown-ups).

Is grass-fed meat healthier for you? Researchers from Newcastle University in England concluded that meat and fat from animals who lived their whole lives on pasture was healthier than grain-fed livestock, according to an Eating Well magazine article.

Grass-fed meats are higher in omega-3 fats which boost brain, heart and immune function. In reviewing many studies, Chris Kresser found that the fat ratios in pasture-raised beef are in line with the ratios found in our ancestral diets. Meat and fat from pastured animals is also high in conjugated linoleic acid (CLA), which has anti-cancer properties. In fact, pasture-raised products are the richest source of CLA, according to Your Personal Paleo Code.

Continuing with the nutrition facts in Your Personal Paleo Code, Kresser writes that grass-fed beef has seven times more beta-carotene, twice as much Vitamin B2, three times as much B1 and 30 percent more calcium than grain-fed beef.

A close friend of ours, who operates a successful chiropractic practice in the San Jose, California, area and follows a paleo lifestyle, recently started her infant son on solid food. While supermarket store aisles are filled with powdery rice cereal in the baby food section, our friend started her son on solid foods with lamb, then egg yolks.

Guided by the book Super Nutrition for Babies, by Katherine Erlich, M.D. and Kelly Genzlinger, C.M.C., C.M.T.A., young Owen is starting out life eating the most nutrient-dense and easily digestible foods available. What a wonderful way to raise a healthy, happy human.

5. Grow more nutrient-dense crops.

There are many peer-reviewed studies that investigate the decrease in food quality during the last 40 to 50 years. A recent review of these studies published in Scientific American, shows how vegetable crops in the United States have dropped by up to 40 percent in nutrient density.

On most of our cropland, livestock have been removed. This affects the multitude of symbiotic relationships that we summarized in the first point of this article. When we remove livestock from any agricultural system we lose the opportunity for plants to stimulate the soil and the soil to mineralize nutrients that the plants would not otherwise access. No graziers on land means less plant exudation. This starves out soil biology.

With a simplified, reduced soil life community, less nutrients are made available to plants, and this leads to fruits and veggies that lack taste and nutrition.

6. Grass-fed meat as an income stream.

Even though less than 1 percent of the 30 million cattle brought to market each year are grass-fed, according to Eating Well magazine, grass-fed beef is a growing sector of the beef market. Consumers want access to a better food system, and they are aware of the positive benefits of local grass-fed beef to their health, rural economies and the environment.

When grass-fed beef (or lamb, goat, etc.) is properly produced, it tastes amazing. This demand for flavorful grass-finished meat is increasing the income of many farms and ranches across the country. This stimulates rural economies and revitalizes communities that no longer depend on the volatile commodity

market.

Consider the typical price of organic ground grass-fed beef at \$8.99 per pound compared to \$4.99 to \$6.99 per pound for commodity ground beef. That is a lot of profit that makes its way back to the farm, especially when producers direct market to their consumers.

An indicator of this increase in direct marketing grass-fed beef may be the creation of online products like GrazeCart. This is an online platform for farms and direct marketers, produced by Seven Sons Farms in Indiana. The product is designed specifically for pastured protein products. About 130 farms now use the platform, said Blaine Hitzfield of Seven Sons Farms.

7. Bring the best food to the party: Grass-fed meat doesn't have to taste "gamey."



Grass-finished beef can be marbled and delicious when producers graze healthy pastures.

You may hear producers of grass-fed beef tell their less-than-happy customer, "you must not have cooked it correctly." We feel that this hurts the market. If we as producers sell a product that is fat and finished on forages, the consumers should be able to cook it anyway they like. The problem is that most grass-fed beef is taken to market severely underfinished, or it is finished on the wrong types of forages. Spencer Smith explains: When you finish cattle in the feedlot, or in the field, on high-energy feeds you will end up with a product that is fat and delicious. However, if you finish cattle on lush, high protein forages, you will get an underfinished product lacking in fat and flavor.

Lots of producers make the mistake of trying to finish their cattle on the lushest green grass on the ranch, thinking that this feed source will add to and benefit flavor. In fact they are doing just the opposite. I have gotten a lot of blowback from the grass-fed community for saying publicly that 80 percent of the grass-finished beef on the market isn't worth eating and 20 percent is the best beef you have ever tasted. I say this because we in the grass-finished world are ignoring what the grain finishers know in spades. Finishing

cattle on high-energy (carbohydrate) diets, rather than high-protein rations, makes cattle fat and ready for processing.

When grass-finished operations focus on feeding their cattle high-protein lush forages during their finishing months, the cattle simply never put on enough fat, frame yes, yield sure, but not the fat that good beef requires to finish. What we should be doing is timing the finishing graze on grass that is starting to increase energy (carbs) relative to protein. This looks like grasses that are beginning to send up their reproductive structures. Being aware of the life cycle state the plant is in when grazed by finishing animals will help you produce meat products that are juicy and delicious.

8. Save the world: Properly managed grazing benefits carbon drawdown.

When we plan our grazing in a way that maximizes plant performance and forage production, we also sequester large amounts of atmospheric carbon. This goes back to number one in this article. While plants remain in their productive photosynthetic state, they exude plant sugars to feed the soil. Photosynthesis is carbon sequestration.

Photosynthesis happens when plants take in carbon dioxide from the air and transform it, with solar energy and water, to make carbohydrates. These sugars are then used as plant fuel to grow additional leaves, roots, stems and seeds (all made of carbon that was once in the air).

As these plants grow they share some sugar with soil biology in the form of root exudation. This process is called the liquid carbon pathways. The carbon, or sugar, fed to the soil biology then transforms the carbon to humus. Additional ways that plants sequester carbon are through decomposition pathways. This is when animals trample, graze or stress plants to make them shed roots or knock leaves to the ground where decomposing soil life can make them their breakfast.

To say that grass-fed beef (or lamb or goat, etc.) sequesters carbon and leave it at that may be a stretch. If the livestock are not managed in a way that stimulates the soil and allows the plants to flourish, we will see the opposite effect — desertification and increased bare land — resulting in more carbon released into the atmosphere.

9. Keep more critters around: Properly managed grazing improves biodiversity.

Grass-fed livestock operations hold some of the most diverse biological communities in agriculture. Livestock producers have the opportunity to increase the biodiversity of their properties and enhance the habitat for millions of other critters.

We can plan our livestock moves to ensure habitat is created for ground-nesting birds, for example. We can utilize pastures in a manner that promotes vegetation types for wildlife, as well as our livestock. As we increase our understanding of how the grassland biome functions, we can graze livestock in a way that maximizes the germination of new species of grasses and forbs and improve the biodiversity in our fields.

10. Properly managed livestock improve the water-holding capacity of soil.

When we talk about water in the Western United States, usually we discuss it in terms of scarcity or whose fault it is that we are short of it. Mark Twain famously said, "Whiskey is for drinking and water is for fighting over," and this is probably the most accurate statement about how Western communities see this valuable resource. We wish he had said that "Water is for managing," as fewer problems would arise in our Western states if people took charge and called for better resource management.

Healthy pastures hold water — a lot of water. This water has the opportunity to infiltrate the soil and fill aquifers. As the groundwater fills, springs redevelop and watersheds improve. These improved watersheds

create an abundance of water that flow into rivers and tributaries throughout the year, not just during snowmelt season. This improved water cycle mitigates the drought-flood cycle that Western states chronically experience.

When we remove livestock from pastures in the arid West, we end up with capped, sealed soils that can no longer accept the water that falls from the sky. The result is that water runs off the soil surface and engorges rivers and streams in March. By June, they are bone dry.

If we manage livestock for a healthy water cycle, we will prepare the soil for water infiltration and water holding capacity. As livestock graze pastures they also knock down a lot of plant material to the soil surface, and as we discussed before, this feeds soil biology and improves soil carbon and the mineral cycle. It also protects and insulates the soil — a huge benefit when we acknowledge that protected, insulated soils maintain a cooler temperature in the summer and aid in moisture retention.

When soil temperature is at 70°F, all moisture is plant-available and no water is lost to evaporation. When soil temperature increases to 100°F, nearly all of the water in the soil is lost to evaporation (about 85 percent of soil water is lost).

As we produce grass-fed meat that was properly managed, we also sequester carbon. As we increase our soil organic matter by only 1 percent, we gain 20,000 gallons of water-holding capacity per acre. This is a real game changer in the West certainly, and in all environments.

In recent years, biologists and hydrologists are studying the role of livestock in a healthy water cycle. In the Sierra Nevada Mountains of California, a dramatic number of livestock grazing permits have been revoked. Thus many hundreds of miles of mountain grazing land has been overrested, and the Alpine meadows that were maintained by the livestock have disappeared as trees encroached.

These meadows used to function as a sponge in the mountains, trapping and holding water throughout the winter and spring and enhancing water flows throughout the summers. Now California, our home state, has lost many of these meadows and the state can go from record drought to record flood and back in the same year. Luckily, decision-makers are starting to better understand the role of livestock in a healthy environment.

By Abbey & Spencer Smith. This article appeared in the June 2018 issue of Acres U.S.A.