BEEF NUTRIENT-DENSITY TEST RESULTS

Ripley Cove Farms participated in a Nutrient-Density Beef Study through Utah State University Metabolomics Lab, directed by Stephan van Vliet. These tests show various minerals, heavy metals, and fatty acids in the beef market. As you can see in the test results below, Ripley Cove Farms Beef has 2x and sometimes 4x the beneficial fatty acids and minerals compared to other grass-fed and grain-fed beef.

PLENTY OF THE GOOD WITHOUT THE BAD!

Group	Compound	Ripley Cove Farms	Grass Fed (Average)	Grain Fed (Average)	Biological effects
Heavy Metal	Aluminum	0.00	0.30	0.04	Exposure to high levels of aluminum can have toxic effects on the body, particularly on the nervous system and bones.
Heavy Metal	Arsenic	0.00	0.05	0.00	Long-term exposure to high levels of arsenic can have detrimental effects on human health, as it is a known carcinogen.
Heavy Metal	Barium	0.00	0.00	0.00	Barium is a naturally occurring chemical element found in rocks, soil, and water. It has various industrial applications but can be toxic to human health in high amounts.
Minerals	Boron	0.11	0.12	0.02	In humans, boron is considered an essential nutrient, and it may have beneficial effects on bone health and brain function.
Minerals	Calcium	9.26	7.67	0.00	Plays a vital role in maintaining strong bones and teeth, regulating muscle contractions, supporting nerve function, and facilitating blood clotting.
Heavy Metal	Cadmium	0.00	0.03	0.00	Cadmium is a toxic heavy metal that can be harmful to human health. Prolonged exposure to cadmium has been associated with kidney damage, lung cancer, and skeletal disorders.
Minerals	Cobalt	0.00	0.03	0.02	An essential trace mineral involved in various biological processes, including the production of red blood cells.
Minerals	Chromium	0.02	0.04	1.87	A trace mineral essential for proper insulin function and metabolism of carbohydrates, fats, and proteins. Found in foods like broccoli, whole grains, and animal sourced foods.
Minerals	Copper	0.29	1.02	0.00	An essential trace mineral that plays a key role in various biological processes, including energy production, iron metabolism, and antioxidant defense.
Minerals	Iron	1.95	2.34	0.05	An essential mineral involved in many physiological functions, such as oxygen transport, energy production, and DNA synthesis.
Minerals	Potassium	377.05	335.85	0.00	A vital mineral that plays a crucial role in maintaining fluid balance, nerve function, and muscle contractions.
Minerals	Magnesium	21.24	20.44	2.05	An essential mineral involved in numerous biochemical reactions in the body, including energy production, muscle function, and bone health.
Minerals	Manganese	0.00	0.02	266.96	Manganese plays a role in bone development, carbohydrate metabolism, and antioxidant defense.
Minerals	Molybdenum	0.04	0.04	18.89	Molybdenum plays a crucial role in metabolism, particularly in the breakdown of certain amino acids and purines. It also contributes to the body's antioxidant defense system.
Minerals	Sodium	45.53	49.52	0.00	An essential mineral that plays a vital role in maintaining fluid balance, nerve function, and muscle contractions.
Heavy Metal	Nickel	0.00	0.15	0.00	While nickel is essential in small amounts for certain enzyme functions, excessive exposure to nickel can lead to health concerns, such as skin allergies and respiratory issues.
Minerals	Phosphorus	195.84	177.45	41.48	A vital mineral involved in numerous physiological processes, including bone formation, energy metabolism, and DNA synthesis.
Heavy Metal	Lead	0.00	0.00	169.52	Lead is a toxic heavy metal that can have harmful effects on the body, particularly on the nervous system, kidneys, and blood cells.
Minerals	Sulfur	192.83	182.98	185.90	Sulfur plays a critical role in the structure and stability of proteins, as well as in the synthesis of important molecules such as glutathione, which acts as a powerful antioxidant.
Minerals	Silica	0.00	0.81	0.64	Silica is an essential mineral for the human body, playing a role in maintaining healthy connective tissues, bones, and teeth.
Minerals	Selenium	0.35	0.00	0.00	Selenium functions as a cofactor for various enzymes and plays a crucial role in antioxidant defense, thyroid hormone metabolism, and immune function.
Minerals	Strontium	0.00	0.03	0.00	Strontium is a chemical element that is commonly found in the environment and can also be found in certain foods. It has been studied for its potential effects on bone health.
Minerals	Zinc	4.43	4.45	4.77	Zinc is an essential mineral that plays a crucial role in various bodily functions. It is involved in immune system function, wound healing, DNA synthesis, and cell division.

Group	Compound	Ripley Cove Farms	Grass Fed (Average)	Grain Fed (Average)	Biological effects
Saturated					
C10:0	Capric acid	0.06	0.08	0.06	Can be metabolized into ketones, which serve as an alternative energy source for the brain.
C11:0	Undecylic acid	0.02	0.01	0.00	Limited information available on human health significance.
C12:0	Lauric acid	0.06	0.12	0.07	Exhibits antimicrobial properties and may have benefits for immune function and heart health.
C14:0	Myristic acid	1.60	3.09	2.99	Can raise LDL cholesterol levels and may contribute to an increased risk of heart disease.
C15:0	Pentadecanoic acid	0.49	0.66	0.45	Limited information available on human health significance.
C16:0	Palmitic acid	21.40	28.75	26.13	Common in the Western diet, high intake may increase LDL cholesterol and cardiovascular risk.
C17:0	Heptadecanoic acid	0.83	1.29	1.15	Limited information available on human health significance.
C18:0	Stearic acid	12.72	17.62	14.51	May have a neutral effect on cholesterol levels and cardiovascular health compared to other SFAs.
C20:0	Arachidic acid	0.02	0.10	0.06	Some work suggests higher of long chain SFAs are associated with a decreased risk of heart disease.
C22:0	Behenic acid	0.06	0.05	0.02	Some work suggests higher of long chain SFAs are associated with a decreased risk of heart disease.
Monounsaturated					
C14:1n5	Myristoleic acid	0.43	0.60	0.68	May have anti-inflammatory properties and contribute to cardiovascular health.
C16:1 n7t	Palmitoleic acid (trans)	0.45	0.31	0.23	Limited information available on human health significance.
C16:1 n7c	Palmitoleic acid (cis)	3.34	2.82	3.39	May have beneficial effects on lipid metabolism and insulin sensitivity.
C18:1t9	Elaidic acid	0.26	0.42	0.42	A trans fatty acid with negative effects on cholesterol levels and cardiovascular health.
C18:1n9	Oleic acid	31.88	32.93	39.32	Most abundant MUFA in the diet, associated with heart health and reduced inflammation.
C18:1n7	Vaccenic acid	1.75	1.08	1.54	Can be converted to conjugated linoleic acid (CLA), which may have anticancer properties.
C24:1n9	Nervonic acid	0.02	0.05	0.09	Important for maintaining the integrity of the myelin sheath in nerve cells.
N-6 Polyunsaturated					
C18:2n6	Linoleic acid	9.08	2.99	3.94	Essential fatty acid important for growth, skin health, and synthesis of other compounds.
C18:3n6	Gamma linolenic acid	0.11	0.11	0.04	Precursor to beneficial prostaglandins and may have anti-inflammatory effects.
C20:3n6	Homo-gamma-linolenic acid	1.20	0.29	0.25	Limited information available on human health significance.
C20:4n6	Arachidonic acid	4.07	0.98	0.84	Important for inflammation regulation, immune response, and brain function.
N-3 Polyunsaturated					
C18:3n3	Alpha linolenic acid	3.04	1.22	0.31	Essential fatty acid converted to EPA and DHA, important for brain and heart health.
C20:5n3	EPA	1.61	0.38	0.10	Important for cardiovascular health, reducing inflammation, and brain function.
C22:5n3	DPA	2.98	0.70	0.26	May contribute to cardiovascular health, but limited information is available compared to other omega-3s.
C22:6n3	DHA	0.30	0.10	0.06	Crucial for brain development, cognitive function, and eye health.
Trans/cis fatty acids					
C18:1t11	trans-Vaccenic acid	1.87	2.61	2.64	Limited information available on human health significance.
c-9, t-11 CLA	cis-9, trans-11 CLA	0.31	0.48	0.30	May have anticancer properties and beneficial effects on body composition.
C20:1n9	cis-11-Eicosenoic acid	0.06	0.13	0.17	Limited information available on human health significance.
Ratios and Totals					
Total N6	Total Omega 6	14.45	4.37	5.06	Essential for various physiological processes, but excessive intake may promote inflammation.
Total N3	Total Omega 3	7.94	2.41	0.73	Crucial for brain health, heart health, and inflammation regulation.
N6/N3 Ratio	Omega 6:Omega 3	1.82	2.25	8.14	A lower omega 6:3 ratio is typically considered beneficial. Lower levels mean a higher abundance of omega-3.