

Directions: In this section, you are going to read a passage with ten statements attached to it. Each statement contains information given in one of the paragraphs. Identify the paragraph from which the information is derived. You may choose a paragraph more than once. Each paragraph is marked with a letter. Answer the questions by marking the corresponding letter on *Answer Sheet 2*.

Why More Farmers Are Making The Switch to Grass-Fed Meat and Dairy

- A) Though he didn't come from a farming family, from a young age Tim Joseph was fascinated by the idea of living off the land. Reading magazines like *The Stockman* *Grass Farmer* and *Graze*, he got hooked on the idea of grass-fed agriculture. The idea that all energy and wealth comes from the sun really intrigued him. He thought the shorter the distance between the sun and the end product, the higher the profit to the farmer.
- B) Joseph wanted to put this theory to the test. In 2009, he and his wife Laura launched Maple Hill Creamery, an organic, all grass-fed yogurt company in northern New York. He quickly learned what the market has demonstrated: Demand for grass-fed products currently exceeds supply. Grass-fed beef is enjoying a 25-30% annual growth rate. Sales of grass-fed yogurt and kefir, on the other hand, have in the last year increased by over 38%. This is in comparison with a drop of just under 1% in the total yogurt and kefir market, according to natural and organic market research company SPINS. Joseph's top priority became getting his hands on enough grass-fed milk to keep customers satisfied, since his own 64-cow herd wasn't going to suffice.
- C) His first partnership was with Paul and Phyllis Amburgh, owners of the Dharma Lea farm in New York. The Amburghs, too, were true believers in grass-fed. In addition to supplying milk from their own 85-head herd, they began to help other farmers in the area convert from conventional to certified organic and grass-fed in order to enter the Maple Hill supply chain. Since 2010, the couple has helped 125 small dairy farms convert to grass-fed, with more than 80% of those farms coming on board during the last two years.
- D) All this conversion has helped Maple Hill grow 40-50% every year since it began, with no end in sight. Joseph has learned that a farmer has to have a certain mindset to successfully convert. But convincing open-minded dairy people is actually not that hard, when you look at the economics. Grass-fed milk can fetch up 2.5 times the price of conventional milk. Another factor is the squeeze that conventional dairy farmers have felt as the price of grain they feed their cows has gone up, tightening their profit margins. By replacing expensive grain feed with regenerative management practices, grass-fed farmers are insulated from jumps in the price of feed. These practices include grazing animals on grasses grown from the pastureland's natural seed bank, and fertilized by the cows' own fertilizer.
- E) Champions of this type of regenerative grazing also point to its animal welfare, climate and health benefits: Grass-fed animals live longer out of confinement. Grazing herds stimulate microbial activity in the soil, helping to capture water and separate carbon. And grass-fed dairy and meat have been shown to be higher in certain nutrients and healthy fats.
- F) In the grass fed system, farmers are also not subject to the wildly fluctuating milk prices of the international commodity market. The unpredictability of global demand and the lag-time it takes to add more cows to a herd to meet demand can result in events like the recent cheese surplus. Going grass-fed is a safe refuge, a way for family-scale farms to stay viable. Usually a farmer will get to the point where financially, what they're doing is not working. That's when they call Maple Hill. If the farm is well managed and has enough

land, and the desire to convert is sincere, a relationship can begin. Through regular regional educational meetings, a large annual meeting, individual farm visits and thousands of phone calls, the Amburghs pass on the principles of pasture management. Maple Hill signs a contract pledging to buy the farmer's milk at a guaranteed base price, plus quality premiums and incentives for higher protein, butter-fat and other solids.

- G) While Maple Hill's conversion program is unusually hands-on and comprehensive, it's just one of a growing number of businesses committed to slowly changing the way America farms. Joseph calls sharing his knowledge network through peer-to-peer learning a core piece of the company's culture. Last summer, Massachusetts grass-fed beef advocate John Smith launched Big Picture Beef, a network of small grass-fed beef farms in New England and New York that is projected to bring to market 2,500 head of cattle from 125 producers this year. Early indications are that Smith will have no shortage of farm members. Since he began to informally announce the network at farming conferences and on social media, he's received a steady stream of inquiries from interested farmers.
- H) Shinn says he'll provide services ranging from formal seminars to on-farm workshops on holistic management, to one-on-one hand-holding and an almost 24/7 phone hotline for farmers who are converting. In exchange, he guarantees an above-market price for each animal and a calf-to-customer electronic ear tag ID system like that used in the European Union.
- I) Though advocates portray grass fed products as a win-win situation for all, they do have downsides. Price, for one, is an issue. Joseph says his products are priced 10-20% above organic versions, but depending on the product chosen, compared to non-organic conventional yogurt, consumers could pay a premium of 30-50% or more for grass-fed. As for the meat, Smith says his grass-fed hamburger will be priced 20-25% over the conventional alternative. But a look at the prices on online grocer Fresh Direct suggests a grass-fed premium of anywhere from 35-60%.
- J) And not every farmer has the option of going grass-fed. For both beef and dairy production it requires, at least in the beginning, more pastureland. Grass-fed beef production tends to be more labor-intensive as well. But Smith counters that if you factor in the hidden cost of government corn subsidies, environment degradation, and decreased human health and animal welfare, grass-fed is the more cost-effective model. "The sun provides the lowest cost of production and the cheapest meat," he says.
- K) Another grass-fed booster spurring farmers to convert is EPIC, which makes meat-based protein bars. Founders Taylor Collins and his wife, Katie Forrest, used to be endurance athletes; now they're advocates of grass-fed meat. Soon after launching EPIC's most successful product—the Bison Bacon Cranberry Bar—Collins and Forrest found they'd exhausted their sources for bison raised exclusively on pasture. When they started researching the supply chain, they learned that only 2-3% of all bison is actually grass-fed. The rest is feed-lot confined and fed grain and corn.
- L) But after General Mills bought EPIC in 2016, Collins and Forrest suddenly had the resources they needed to expand their supply chain. So the company teamed up with Wisconsin-based rancher Northstar Bison. EPIC fronted the money for the purchase of \$2.5 million worth of young bison that will be raised according to its grass-fed protocols, with a guaranteed purchase price. The message to young people who might not otherwise be able to afford to break into the business is, "'You can purchase this \$3 million piece of land here, because I'm guaranteeing you today you'll have 1,000 bison on it.' We're bringing new blood into the old, conventional farming ecosystem, which is really cool to see," Collins explains.

36. Farmers going grass-fed are not affected by the ever-changing milk prices of the global market.

37. Over the years, Tim Joseph's partners have helped many dairy farmers to switch to grass-fed.
38. One advocate believes that many other benefits should be taken into consideration when we assess the cost-effectiveness of grass-fed farming.
39. Many dairy farmers were persuaded to switch to grass-fed when they saw its advantage in terms of profits.
40. Tim Joseph's grass-fed program is only one example of how American farming practice is changing.
41. Tim Joseph was fascinated by the notion that sunlight brings energy and wealth to mankind.
42. One problem with grass-fed products is that they are usually more expensive than conventional ones.
43. Grass fed products have proved to be healthier and more nutritious.
44. When Tim Joseph started his business, he found grass-fed products fell short of demand.
45. A snack bar producer discovered that the supply of purely grass-fed bison meat was scarce.