

# **EVIDENCE** SHEET ANSWER KEY (ANSWERS MAY VARY)

# CARD #1

Inquiry: 32 million Evidence A: NASS—National Agricultural Statistic Service Evidence B: July 24, 2020 (at the time of publication)

## CARD #2

Inquiry: 11% grain, 89% human inedible forage, plant leftovers, biofuel, food industry byproducts Evidence A: C. Alan Rotz Evidence B: 10-15%

#### CARD #3

**Inquiry:** North American beef production systems have some of the lowest carbon footprints. **Evidence A:** Food and Agriculture Organization of the United Nations **Evidence B:** Methane (CH4), nitrous oxide (N2O), and carbon dioxide (CO2)

#### CARD #4

Inquiry: 2%

Evidence A: EPA

**Evidence B:** Original text to paraphrase: From 1990 to 1995 emissions increased and then generally decreased from 1996 to 2004, mainly due to fluctuations in beef cattle populations and increased digestibility of feed for feedlot cattle. Emissions increased from 2005 to 2007, as both dairy and beef populations underwent increases and the literature for dairy cow diets indicated a trend toward a decrease in feed digestibility for those years. Emissions decreased again from 2008 to 2014 as beef cattle populations again decreased.

### CARD #5

Inquiry: Lowering total and LDL "bad" cholesterol

Evidence A: The American Journal of Clinical Nutrition

**Evidence B:** Original text to summarize: The inclusion of lean beef or the partial replacement of carbohydrates with protein (including lean beef) in a low-fat diet significantly decreased TC and LDL cholesterol compared with in a HAD. These reductions were similar in magnitude to those observed for the DASH diet.

### CARD #6

Inquiry: VeterinariansEvidence A: The U.S. Food and Drug AdministrationEvidence B: In order to minimize the development of antimicrobial resistance.

#### CARD #7

**Inquiry:** The nutrients in beef have an important role in muscle maintenance, weight management, and the prevention of chronic diseases. Iron, zinc and B vitamins play an essential role in developing and maintaining cognitive ability in children and adults.

#### Evidence A: 2006

**Evidence B:** Original text to summarize: Increasing protein or amino acid intakes may optimize muscle strength and metabolism and thereby improve health.

#### **CARD #8**

**Inquiry:** Using supplemental growth promoting hormones helps the beef community raise beef with fewer natural resources like land and water.

Evidence A: Journal of Animal Science

**Evidence B:** Original text to paraphrase: Withdrawing growth-enhancing technologies (GET), such as supplemental hormones, from U.S. beef production would reduce both the economic and environmental sustainability of the industry.

### CARD #9

**Inquiry:** Cattle upcycle resources humans can't use directly into desirable and high-quality protein, micronutrients and products, like leather.

Evidence A: 90%

Evidence B: National Academies of Sciences, Engineering, and Medicine