What are Antibiotics?	Antibiotics, also known as antimicrobials, are medications that fight bacterial infections. Antibiotics made specifically for cattle are used to help an animal regain or maintain superior health and produce safe beef. Antibiotics can prevent infection when bacterial pathogens are suspected or known to be in an animal's environment, or when an animal encounters high-stress situations that increase susceptibility to illness.
Food and Drug Administration (FDA) Approval Process	Antibiotics used in beef cattle production must go through a rigorous testing process before being approved by the Food and Drug Administration (FDA) to assure the safety of cattle as well as beef products entering the food supply. • FDA has developed an approval process which stringently manages antibiotic use and specifically monitors for potential resistance. This system helps protect human health while giving veterinarians and beef producers the tools needed to keep animals healthy. • Guidance 152 is an FDA recommended process introduced in 2002 that subjects all antibiotics to a thorough and stringent resistance risk assessment that identifies any potential risk of using a particular antibiotic.

Safe Use of Antibiotics in Cattle	Producers and veterinarians take great care to administer only the amount of antibiotics needed to bring an animal back to health in order to maintain the continued effectiveness of medicines. The Beef Quality Assurance program has been training beef producers about the safe and appropriate use of antibiotics since the 1980s.
	• The National Cattlemen's Beef Association Producer Guidelines for "Judicious Use of Antimicrobials" have been in place since 1987 and specifically outline the appropriate use of these products:
	  • Avoid using antibiotics that are important in human medicine.
	  • Use a narrow spectrum of antimicrobials whenever possible.
	  • Treat the fewest number of animals possible.
	  • Antibiotic use should be limited to prevent or control disease and should not be used if the primary intent is to improve performance.
	• The amount of antibiotics used in farm and companion animals in the United States continues to decline, dropping 8 percent from 2002 to 2003.

Antibiotic Resistance	In the mid-1980s, the National Cattlemen's Association adopted policy discouraging feeding low levels of antibiotics to promote growth in response to initial concern about resistance. In addition to early industry action, the U.S. government strictly tracks antibiotic resistance as well as monitors and reviews products and interventions. • Multiple studies have reviewed whether antibiotic use in cattle production causes an increased risk to consumers by developing antibiotic-resistant foodborne or other pathogens, and none have found a connection (*Journal of Food Protection*, July 2004; *Journal of Antimicrobial Chemotherapy*, 2003). • The National Antimicrobial Resistance Monitoring System (NARMS http://www.fda.gov/cvm/narms_pg.html) was established in 1996 as a collaborative effort among FDA's Center for Veterinary Medicine, U.S. Department of Agriculture and the Centers for Disease Control and Prevention. This program provides an early-warning system for detecting any change in pathogen resistance patterns. The most recent data demonstrate that the incidence of resistant foodborne pathogens in humans is declining.
Residue Testing	Beef producers and veterinarians take great care to use the optimal amount of antibiotics needed to return an animal to good health, and the government supports this effort through regular testing. • The United States government mandates that no beef with antibiotic residues that exceed FDA standards be allowed in the food supply; therefore, all beef sold in the United States is safe from antibiotics. • The Food Safety Inspection Service's National Residue Program (FSIS NRP) (http://www.fsis.usda.gov/) is a multi-component, analytical testing program for residues in domestic and imported meat, poultry and egg products. • The FSIS NRP has been in effect since 1967 and provides a variety of sampling plans to prevent concerning levels of residues from entering the food supply. The program also provides national data on the occurrence of chemical residues to support risk assessment, enforcement and educational activities.

For more info, visit www.BeefFromPastureToPlate.org

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