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## **Abstract**

The way industrial animal agriculture produces meat is a leading cause of climate change and antibiotic-resistant superbugs. In their report “Livestock’s Long Shadow,” United Nations’ scientists state that raising and killing animals for food is “one of the major causes of the world’s most pressing environmental problems, including global warming, land degradation, air and water pollution, and loss of biodiversity.”

Despite these issues, per capita meat consumption is rising rapidly around the world. Many studies show that the vast majority of people make their food choices based on taste, price, and convenience. That’s why most people continue to eat meat even after they become aware of the problems associated with its production.

Fortunately, there are vastly better ways of producing meat for our growing population. Making meat directly from plants – plant-based meat – is many times more efficient, and doesn’t have devastating environmental or public health consequences. In recent years, significant advances have been made in biomimicking animal meat with plants, leading Bill Gates to declare plant-based meat “the future of food.”

Clean meat – animal cells grown directly, rather than as a part of an animal – has the same benefits. Clean meat was first predicted by Winston Churchill in 1931. In just the last few years, it has gone from science fiction to a real means of producing meat. Not only are tech visionaries promoting clean meat, the world’s leading meat producers – including Tyson, Cargill, and PHW Group – have already invested in clean meat startups.

Plant-based and clean meat will give people the meat they actually want, while freeing up land and water, reducing climate change, eliminating fecal contamination, reducing the threat of antibiotic-resistant superbugs, and making our food supply safer and more secure. In terms of benefits for humanity, it will be the equivalent of a new Green Revolution.