We can now diversify and strengthen the protein supply by producing meat in a new, more efficient way. Rather than raising and slaughtering animals, we can cultivate meat directly. This starts with the basic building block of all life—the cell.

From a small sample of animal cells, we can grow the same beef, pork, poultry, and seafood we enjoy eating today. In conventional animal farming, cell growth occurs in an animal. But we can grow the same cells in what is known as a cultivator.

The cultivator facilitates the same biological process that happens inside an animal by providing warmth and the basic elements needed to build muscle: water, proteins, carbohydrates, fats, vitamins, and minerals. Cultivating meat is similar to growing plants from cuttings in a greenhouse, which provides warmth, fertile soil, water, and nutrients.

This new method of meat production enables the natural process of cell growth but in a more efficient environment. The result is an abundance of cultivated meat, identical to conventional meat at the cellular level but free of pathogens and other contaminants. Cultivated meat looks, tastes, and cooks the same.

Compared with conventional meat production, meat cultivation is less resource-intensive, decreasing methane emissions, deforestation, biodiversity loss, water use, water pollution, antibiotic resistance, and foodborne illnesses.

Innovators around the world are working to bring cultivated beef, poultry, pork, fish, and seafood to market at a competitive price point. The FDA and the USDA will jointly regulate this new form of meat production in the United States.

Meat cultivation will expand the protein options available to consumers, providing the meat so many people desire, just produced in a new and sustainable way.

A collaboration between Mattson and The Good Food Institute. Thanks to Memphis Meats for serving as technical advisor.
Start with a small cutting from a plant.

Place cutting in a nutrient-rich environment that allows it to grow.

Enjoy your vegetable. Bon appétit!

Start with a small sample of cells from an animal.

Place sample in a nutrient-rich environment that allows it to grow.

Enjoy your meat. Bon appétit!