

### **Meat Confusion?**

**As if there weren't enough confusion on what is what that you are eating, natural, organic, grass fed, grass finished or conventional raised meat. Now there are some newer players on the market. Plant based or vegan meat, which actually has been around for some time, but getting some new attention as being advertised by fast food chains.**

**What is new the plant based burgers have some genetically engineered heme to make them bleed! Which is problematic for vegans if their plant burger bleeds onto the beef burger during preparation.**

**Now the buzz is cultured meat, lots of money being poured into this project. Cultured meat collects stem cells from living animals and then are grown in a lab. A typical growth medium contains an energy source like glucose, synthetic amino acids, antibiotics, fetal bovine serum, horse serum and chicken embryo extract. These are a problem for vegans because it is still animal based. The go-to for culturing tissue involves the use of fetal bovine serum, byproduct of pregnant cows being slaughtered, then collected from fetuses. It is uncertain if they will come up with animal free alternative. All sorts of things have to be added to keep the cultured meat growing.**

**Real meat is a high quality protein with a full range of essential amino acids, vitamins and minerals. If cultured meat is to match or exceed, all of this would need to be added. Vitamin b12 can only be derived from animal origin. However, it can be produced by microbes in fermentation tanks, that sounds natural!**

**One of the investors claims that they will take burger production out of pastures and into factories! Now wait just a minute, I thought consumers were against "factory farming". It's so confusing.**

**You just have to ask yourself why? Cultured meat will require more industrial energy than the livestock that produce the same amount of protein. It could use less land and ag inputs, but at a higher reliance for industrial energy. Green house emissions? All of agriculture only attributes 9% of green house emissions for the United States and livestock production is 4%. Transportation is at 80%. The roaming wild and free buffalo of the past, had more green house emissions than we have today in the livestock industry. So why?**

**June 2019 AT Kearney claims that "in 10 years only 40% of global meat consumption will still come from conventional sources". By 2040 cultured meat will make up 35 percent, plant based 25% and the other 40% will be raised on four feet. By 2040 the demand for meat with egg, fish and dairy added will be**

**1752 million metric tons.**

**Using their prediction, and simple math means there should be 886 trillion plant based burgers and 1.2 trillion cultured meat, that is amazing for an industry that has yet to produce one single product.**

**As producers, we need to recognize these “new innovations” and remember that we are raising a good wholesome product “naturally”. That cow is the most efficient at taking that grass, that humans cannot use for food and converting it to protein. I think I can speak for a majority of people, I want my meat raised on four hooves, not four petri dishes!**