

## **Time to Upgrade**

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Beef cattle marbling has been in the news a lot lately with record levels of cattle grading USDA Choice or above. The amount reaching the Choice threshold has been on a constant incline for over a decade. Not surprisingly, upper two thirds Choice and Prime percentages are also at all-time highs. Prime carcasses no longer reside in the range of three percent of all fed cattle but instead are over double that rate with a serious chance to triple it.

There are certainly several reasons for this constant improvement: better feeding, heavier carcasses, better health management, shifting breed percentages, instrument grading and others. However, do not discount the impact of genetic evaluations and the use of carcass ultrasound.

It is obvious that purebred breeding stock today is significantly different than those we were scanning in 1998, the beginning of centralized processing. With those changes come new challenges to how we describe cattle with ever increasing levels of marbling. Scanners and more importantly, IMF algorithms need to improve in accuracy in order to describe the cattle of today. Sure, software from 10 or 20 years ago can generate IMF values that positively correlate to carcass, we know that we can do better. We need to do better.

In 2018 The CUP Lab®, LLC introduced several new and improved IMF models. CUP software has always been the industry leader with correlations to carcass of 0.75-0.85. The new models, however, have dramatically improved our ability to accurately describe IMF across a broader range. The ability to accurately describe the differences between animals for a measurable trait is the entire basis of EPD calculations

Imagine if you will, a scale that only reports weights from 500 lbs. to 650 lbs. Also imagine that the producer using the scale has absolutely no idea that the weights out of those ranges are not being reported. Any calf that weighs 500 lbs. or less is automatically reported as 500 lbs. Any calves that weight 650 lbs. or more will be reported at 650. It is easy to see that making any kind of progress by identifying the outlier calves on both ends of the normal distribution is going to be impossible.

Now, transition that example to ultrasound IMF. If software truncates the data on the ends and describes a narrower distribution than that of the normal population, how does that impact reported IMF values and more importantly, marbling EPDs? Obviously the ability to make genetic progress is slowed.

Our new models have increased the range of reported IMF values to the point where it matches that of carcass IMF. This is a huge advancement. It is also the reason why we are suggesting that all field technicians seriously consider upgrading to the newest technology. If you cannot make the leap to a complete upgrade, please consider upgrading your image capture software. While the folks making the transition to ExaGo or Evo will be able to get the full bump in range, folks that have a New Aloka 500 or Aquila can also get a significant boost over their old systems by upgrading to UICS2.

Contact us today to find out how you can maximize your value to your customers by giving them the best possible ultrasound data.