



Pig Improver



Another Innovation Accelerates Genetic Gains

Direct Measurement of Primal Cuts Added to PIC's Genetic Improvement Program



In yesterday's Pig Improver, PIC announced the exciting news: **direct measurement of pork tenderness will now be included in PIC genetic indices.**

Now, as part of the same commitment to accelerate genetic improvement, PIC is measuring primal weights directly and is using this data in our breeding decisions.

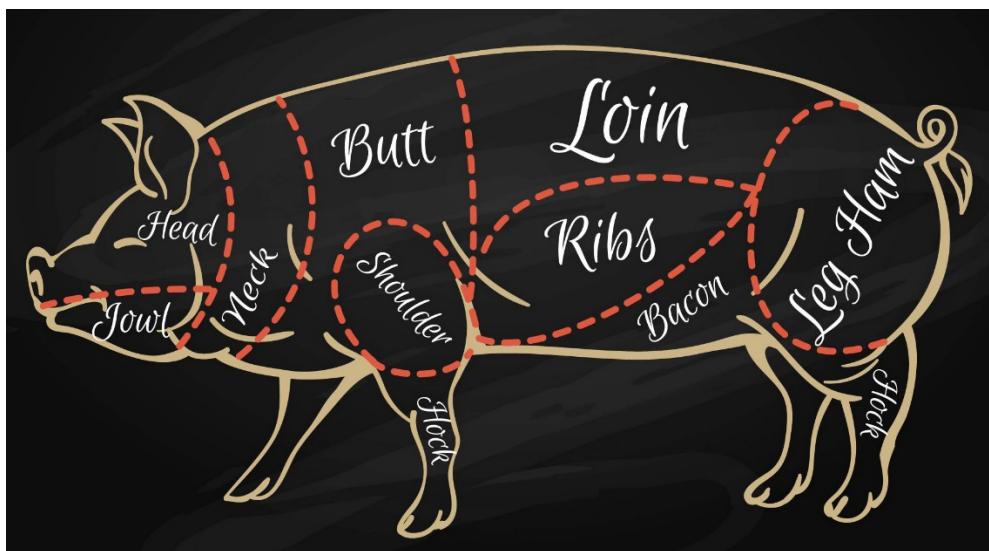
PIC is the **first breeding company in the world** to select directly for tenderness and primal values across our multiple terminal populations. By focused measurement on all major factors that influence profitability, **PIC continues to accelerate profit potential. We are driven to help make PIC customers the most successful pork producers in the world.**

Read on for the quick summary of **what, when, how and why direct measurement for primal value** has been added to the PIC Genetic Improvement Program.

WHAT

Primal values such as loin, ham and belly weight (in simple terms, how much meat is on the carcass) have a direct impact on pork chain profits. Up to this point, PIC has included an estimation of primal value by using measurements of back fat depth and loin depth.

PIC now has the capacity to measure primal values directly. "Genetic selection for a given factor requires a large amount of data," notes Dr. Matt Culbertson, PIC Director of Product Development and Technical Services. "Now that we have the capacity to gather primal value measurements on thousands of pigs every week, we will use this direct measurement data in our genetic selections. This will cause PIC's genetic gains to accelerate at an even faster rate than before."



WHEN

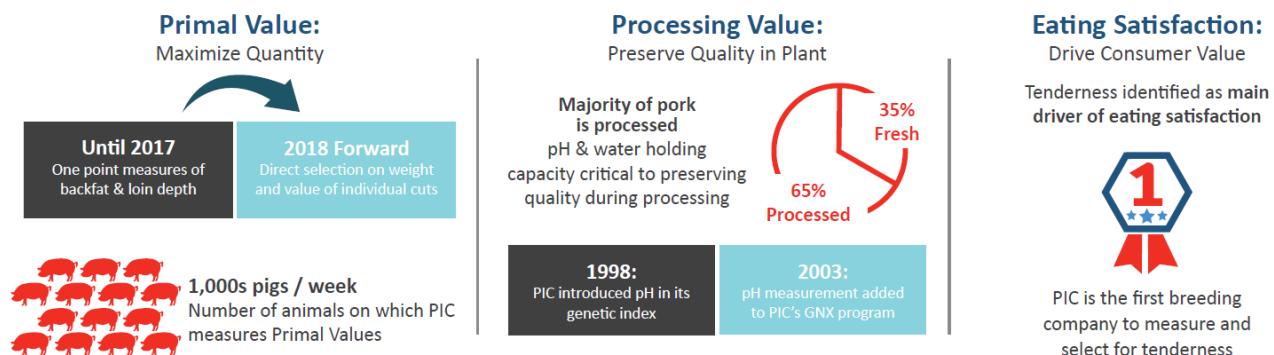
Primal cut weights are now included in the terminal sire indices.

HOW

This exciting development is built upon the strong and growing foundation of the PIC GNX program, wherein elite terminal genetics are continuously tested for growth, efficiency, robustness and carcass value under real-world commercial conditions. Each week, thousands of commercial pigs with known pedigrees are grown and harvested across commercial facilities with various measurements taken that are related to primal yield and lean quality.

WHY

Using direct measurement of a characteristic in genetic selection, results in **faster genetic improvement** than a prediction of the same measurement. PIC is dedicated to driving carcass value higher through innovations in **primal value (direct measurement of primal cuts)**, **processing value (direct measurement of pH)** and **eating satisfaction (many factors, including just-added direct measurement of tenderness)**:



The addition of primal values in the PIC genetic improvement program is yet another example of how PIC works continually to ensure maximum productivity and profitability of your operation.

In the last 30 years, this is one of many improvements PIC has made to its breeding program to enhance total carcass value:

PIC Pork Quality Achievements: 1990 to Today															
Introduced Halothane test		First PIC Pork Quality Blueprint		Removed Halothane stress gene from PIC lines		Extensive consumer taste panels		Analyzed muscle quality & fiber type		Added lactate testing as stress indicator		Characterized fatty acid profiles of pure lines		Started recording of primal cuts	
1990	1994	1996	1998	2000	2001	2002	2003	2005	2007	2009	2010	2012	2017	2018	Benchmarked pork quality with taste panels
Started pure line carcass dissections	Using Marker Assisted Selection for pork quality	Removed RN gene from Hampshires	Set up GNX program	Introduced ultrasound to select for Intramuscular Fat	Added fitness to breeding goals	Identified drivers of fat quality and Iodine value	Added EBVs for primal cuts								
	Added pHu in breeding goals														Started direct selection for tenderness.

PIC will continue to innovate so our customers see the best profits in the industry. Our future – and yours – has never looked so bright, as PIC continues to deliver on our promise to Never Stop Improving.