by Greg McClure, KSU-Riley County Extension Agriculture Agent For Release 06/11/18

## FREEZER MATH

I've been on a cooking spree over the last month, turning roasts into pulled pork, chops into fall-off-the bone deliciousness, and bacon into,.......well, bacon. Freezer filling time is just around the corner and we need to start making room for the next batch of 4-H hogs.

We'll put three hogs in the freezer again this summer and that seems to be about the right amount for our family of 5 or 6 . To be clear, I actually do know how many people are in our family. I just don't know how many will be living in our house a few months from now.

Lots of folks stock their freezers at county fair time. From the Riley County Fair there will usually be two or three steers, one or two lambs, and maybe a couple of goats sent to local local plants for processing. And, a whole bunch of hogs.

Last year, for the first time, every hog sold after the Riley County Fair was processed locally. Hogs were sold one by one to local buyers so 4-H members could receive a better price, and so local consumers could enjoy a home-grown and processed product.

To be truthful, the motivation to make the change in the way we market county fair 4-H hogs was the changing hog market itself. As hog farms have become larger, it has become more and more difficult for small producers to receive the same price as larger producers. The way to overcome that price challenge was to market locally.

Consumers who aren't accustomed to putting a hog in their freezer can sometimes be surprised by the seemingly small amount of meat they get from a 285 pound hog. Depending on
whether you choose mostly boneless or mostly bone-in cuts of meat, you will likely carry home between 133 and 154 pounds of meat from a 285 pound live hog.

An average dressing percentage for hogs is $72 \%$. That's the number used to calculate the carcass weight expected from a freshly harvested hog after discarding blood, hide, internal organs and gut fill. Doing the math, a 285 pound live hog should yield about a 205 pound hanging carcass.

The next step in processing a hog is to break down the carcass into the various cuts of meat. In the process, some bone and fat will be discarded, and some moisture loss will occur. Only about $65-75 \%$ of the carcass will end up in the box of meat that you take home. Once again doing the math, $65 \%$ of a 205 pound carcass is 133 pounds and $75 \%$ is 154 pounds.

There you have it. That's how you end up with roughly half as much weight as you hauled to the processor as a live hog. It's not a mistake, and they didn't take part of your hog home for themselves. It's just simple math.

The math works the same when calculating how much meat to expect from a steer or a lamb, but the dressing percentages will be lower. The difference is in the way they are made inside - more gut to discard - and the weight of the hides on the outside that get discarded. The dressing percent for beef carcasses will be about $62 \%$, and for lambs it will be about $55 \%$.

You can expect to carry home $55-65 \%$ of a beef carcass as meat for your freezer, once all processing has been completed. Remember, that's $55-65 \%$ of the carcass and about $38 \%$ has already been discarded in the initial harvesting process. The bottom line for beef cattle is that you'll get between 440 and 520 pounds of meat from a 1,290 pound steer.

Doing the math on a lamb, we can start with a 132 pound lamb that dresses $55 \%$, yielding a 70 pound carcass. Lamb will usually be cut mostly bone-in, so you can expect to net about
$70 \%$ of the carcass as meat for your freezer. From a 132 pound lamb, expect about 50 pounds of meat to carry home.

That's enough math for now. We haven't started making our list of county fair hog buyers, but we'll be doing that soon. If you want to be first in line to buy a county fair hog this year, give us a call.

If you have questions, you can reach me at the Riley County Extension Office at 785/5376350. Or, you can send e-mail to gmcclure $@$,ksu.edu.

K-State Research and Extension is an equal opportunity provider and employer.

