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Pricing Meat Products: An Introduction

Pricing your meat products profitably can be a challenge.

Direct marketing your meat products is a big change in focus for many producers. With a commodity-based approach, selling your finished animal is the last step. When you sell direct to market, there is a lot more involved. You also have to manage processing, packaging and delivery and think about consumer demand.

How do you capture today's great opportunities in selling direct to the consumer while making a profit? This factsheet covers a very important piece of the puzzle: *pricing your meat products*.

Three steps to success

To earn a worthwhile and sustainable profit selling your own meat products, you must have the following:

- 1. Know ALL your costs, so you can set a realistic market price for your meat.
- 2. Identify opportunities in cuts and quality, so you can create more value for your operation.
- 3. Get the best animal yields for the market you serve, so more money comes back to you.

NOTE: Throughout this factsheet, beef or pork is used as an example, but the same principles can be applied to sheep, chicken, bison and other meat products. The examples in this factsheet reflect a thought process, rather than providing a formula for your business. Your figures are unique to your location, the type of animals you raise and your farm's expenses. Your animals may yield better, or you may find a meat processor that works for a lower cost. Use the prices in this factsheet only as a guide. It is the principles that matter.

Step 1: know all your costs

The key to success is great record-keeping and making sure you include all costs to prepare your animals for market.

Beef example

Assumptions: Examples start with a finished animal and assume the owner delivers and picks up from the plant. Costs for fuel, vehicle wear and tear as well as labour/time are included. Volume will alter the final price since 1 animal or 10 animals brought at one time would have the same transportation cost, but a lower cost-per-animal. Amounts will vary depending on type of cattle, weight, genetics, feeding and other factors. Refer to the yield information later in this factsheet.

- 1,300 lb. (590 kg) live-weight steer delivered to a provincial plant 45 km from the farm
- the steer is worth \$1,625 (\$1.25 /lb. x 1,300 lb.) sold as a fat steer
- carcass weight is 780 lb. (354 kg) based on 60 per cent of live
- retail cuts taken home amount to 494 lb. (224 kg) based on 38 per cent of live (hide, organs and bones removed)

Cost of finished beef	\$1,625.00
Kill cost	\$65.00
Inspection	\$5.00
Environmental fee	\$35.00
Health fee	\$1.00
Brand inspection	\$1.00
Cutting and wrapping (780 lb. x \$0.55)	\$429.00
Sub-total cost for beef ready for retail sales	\$2,161.00
Transportation to and from plant	\$25.00
Freezer costs (power and depreciation)	\$20.00
Boxes for packaging (8 boxes @ \$1.50 each)	\$12.00
Marketing (brochure, price lists, advertising)	\$20.00
Total costs for retail ready beef	\$2,238.00



Understanding your break-even point

The break-even point is where there is neither a loss nor a profit from a sale of your product. This dollar amount represents what is needed to cover all your costs and is a valuable figure to know.

In this example:

break-even point =
$$\frac{$2,238.00}{494 \text{ lb. } (224 \text{ kg})}$$
 = \$4.53 /lb. (\$9.99 kg)

In other words, in this example, a selling price of \$4.53 per pound (or \$9.99 per kilogram) would cover your costs, but would not produce a profit.

Planning for a profit

Once you know the point at which a price will cover your costs, you can explore the profit you want.

Assume you are aiming for a 30 per cent profit above your costs:

$$0.30 (30\%)$$
 x $$2,238.00 = 671.40
 $$2.238.00 + $671.40 = $2.909.40$

\$2,909.40 total return from the animal to reach your 30 per cent profit goal.

That translates into a per-pound or per-kilogram cost of:

$$\frac{\$2,909.40}{494 \text{ lb. } (224 \text{ kg})} = \$5.89 \text{ /lb. or } \$12.99 \text{/kg}$$

This example used a 30 per cent profit. If this figure seems high, consider that this profit must cover salaries for you, your family or employees, your business overhead (power, food safety certification, business license, etc.) and other unexpected costs like animal loss.

It is a balancing act to arrive at a price where consumers see value, but you still make a sustainable profit for your business. Include both personal financial goals and the cash flow needs of the business to ensure your business is not just breaking even, but thriving.

Step 2: opportunities in meat cuts and quality

For meat marketers, raising the animal to a finished stage is just the beginning. You will have to stop thinking of your animal as a simple commodity and begin to see it as a canvas of opportunities.

Although you would prefer an animal that produces all sirloin steaks, such a scenario is not realistic. You are now a creative marketer of the whole animal. That means knowing which cuts command a higher price, which cuts are popular in the market and how to add value to lesser cuts of meat.

Standard cuts like roasts, tenderloins, ribs and porterhouse steaks continue to be best sellers. Specialty products – such as smoked bacon, sausages and even ethnic-style meat products – can garner a good return.

Producers selling packaged meats directly to consumers need to speak knowledgably about the different cuts as well as how to prepare and cook them in order to sell at a higher price point. Even a producer selling to wholesalers or brokers needs to know the best cuts, so they can direct their meat processor to produce the products that bring the best results.

Butchering 101: carcass, primal and sub-primal cuts

Here is a simple guide to the process of cutting an animal for market.

A carcass is an animal that has had its guts and glands removed, head cut off, feet and toes removed and skin taken off. Carcass weight is typically 60 percent of the live weight of the animal. A meat cutter will separate the carcass into smaller sections to make the animal easier to handle.

Primal cuts are larger sections a wholesaler or abattoir would offer small butchers and grocery stores. Examples of primal cuts are a whole loin or loin strip that includes the backbone.

Sub-primal cuts are smaller specialty cuts that are prepared for sale to the consumer and include roasts, steaks, ribs and other cuts. Meat cut to a uniform size and thickness, with neatly trimmed fat, will result in a better retail price and more profitability for you. Shop around for experienced meat processors or butchers who know the value of a well-prepared cut. This research could mean a higher price at market for you.

Muscles and quality

Generally, the more tender the meat, the higher the price. You want to maximize the tender cuts to ensure you are taking advantage of the best areas of the animal.

Meat from areas where muscles are not as active will be more tender. Loin cuts (porterhouse, tenderloin, strip loin and T-bone) come from the section at the end of the rib cage and before the rump and have a higher value because of their tenderness. Tougher cuts from the leg area where muscles are well used (shank or round steaks) are less expensive.

A knowledge of muscling gives producers an advantage. The "flat iron steak" is a relatively new steak cut from the chuck/front shoulder of the animal. Typically, the flat iron steak was left in the lower value chuck, but is now recognized as a very tender (and therefore desirable) cut that brings a higher price.

Want to learn more about meat cuts and quality? Many online sites present helpful diagrams for different cuts of meat.

- Google search "Canadian Food Inspection Agency (CFIA) Meat Cuts Manual" for information on cuts for beef, horse, lamb, pork, poultry and veal.
- Google search the Canada Beef website for "Commercial Beef Utilization Guide."
- Google search "Beef Retail Marketing," which is a U.S. website full of helpful information.

Niche markets for meat cuts

There are many ways to butcher an animal. Each method results in different price points for the meat you are selling. In addition, you can set yourself apart from other meat producers by adding value to meat in other ways – such as smoking or marinating meat, or even spicing meat for an ethnic market. Utilizing poorer cuts of meat for sausage, hamburger and stewing beef can add value and profit with little additional cost.

The better informed you are about the different cuts, the more control you have over your final product and the price consumers will pay. Meeting market demand will help move your business towards success.

Step 3: preparing for market: the reality of yields

Yield is the amount of meat on a carcass once the fat and bone are discarded. Yield can greatly affect a producer's selling price and profitability. A good-looking live animal may seem well-positioned for profitability until it is prepared and found to have a reduced percentage of usable meat.

Fatness and the affect on yield

These beef carcass examples show how muscling, fatness and cutting affect price and profit. Use the same principles to consider the effect of these variables on pork or lamb carcasses.

Example: 400-pound (181-kilogram) side of beef

Very lean beef (waste is primarily fat and bone) Waste of 60 lb. (27 kg) or 15%, with 340 lb. (154 kg) of usable meat cuts (85%)

Average beef

Waste of 120 lb. (54 kg) or 30%, with 280 lb. (127 kg) of usable meat cuts (70%)

Very fat beef

Waste of 180 lb. (81 kg) or 45%, with 220 lb. (100 kg) of usable meat cuts (55%)

Now compare a lean carcass to a fat carcass, using the beef example and the figures from the cost section to see the difference in return.

- 1,300 lb. (590 kg) live-weight steer delivered to a provincial plant 45 km from the farm
- the steer is worth \$1,625 (\$1.25/lb. x 1,300 lb.) sold as a fat steer
- carcass weight this time is 800 lb. (363 kg)
- saleable meat = 2 sides x 340 lb./154 kg for lean carcass or 220 lb./100 kg for fat carcass

	Lean Carcass	Fat Carcass
Cost of finished beef	\$1,625.00	\$1,625.00
Kill cost	\$65.00	\$65.00
Inspection	\$5.00	\$5.00
Environmental fee	\$35.00	\$35.00
Health fee	\$1.00	\$1.00
Brand inspection	\$1.00	\$1.00
Cutting and wrapping (800 lb. x \$.55)	\$440.00	\$440.00
Sub-total cost for beef ready for retail sales	\$ 2,172.00	\$ 2,172.00
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Transportation to and from plant	\$25.00	\$25.00
Freezer costs (power and depreciation)	\$20.00	\$20.00
Boxes for packaging (8 boxes @ \$1.50 each)	\$12.00	\$12.00
Marketing (brochure, prices lists, advertising)	\$20.00	\$20.00
Total costs for retail ready beef	\$2,249.00	\$2,249.00
Add 30% profit	\$674.70	\$674.70
Total needed to make 30% profit	\$2,923.70	\$2,923.70
Divided by total saleable meat	680 lb.	440 lb.
(two sides)	(308 kg)	(200 kg)
Return needed to cover costs (break-even)	\$4.30/lb. or \$9.49/kg	\$6.65/lb. or \$14.62/kg

The lean and fat carcasses make the same dollar amount of profit, but the lean carcass results in a lower price per pound (or kg), giving the producer greater flexibility in setting their price. They could ask \$4.75/lb., which gives them a much higher profit (\$3,230 minus \$2,249 = profit of \$981), or they can afford to offer a discount to their customers. The producer of the fat carcass has little chance of being successful because he has to ask too much in order to cover the costs of his product.

Deeper into yields: dressing percentage and carcass cutting yield

Two major factors affect yield:

Dressing percentage = the per cent of live animal that ends up as carcass

Carcass cutting yield = the per cent of carcass that ends up as meat

The formula to determine the amount of meat you get from a market animal is as follows:

(live weight) x (dressing percentage) x (carcass cutting yield) = pounds (kg) of meat

Factors affecting dressing percentage

- 1. Gut fill: the fuller the stomach of a live animal, the lower the dressing percentage (can be up to 5%)
- 2. Muscling: well-muscled animals result in a higher dressing percentage
- 3. Fatness: fat animals result in higher dressing percentage than lean animals
- 4. Mud: animals with a lot of mud or manure will have a lower dressing percentage
- 5. Wool: lambs with long wool have a lower dressing percentage than shorn lambs

Factors affecting carcass cutting yield

- 1. Fatness: leaner animals will have a higher yield than fat animals
- 2. Muscling: well-muscled animals have a higher yield
- 3. Bone-in vs. boneless: the more boneless cuts made, the lower the yield (the bones stay at the plant rather than in your freezer)
- 4. Fat on cuts: closely trimmed meat with lower fat will have a lower yield, but the edible meat does not change
- 5. Leanness of ground meat: if the ground product has little added fat (extra lean), then the yield is lower

Comparing animals and yields

Certain factors can significantly affect yields. Using the 1,300 lb. (590 kg) live-weight steer again, the outcomes below show changes according to following factors: type of animal, how it is cut, how empty the stomach is and the genetics.

The following beef examples show the dressing percentage in the first set of brackets and the carcass cutting yield in the second set of brackets.

Beef example 1

Average beef with full belly, boneless steaks and roasts, lean ground, closely trimmed:

$$(.61)$$
 x $(.62)$ = 38% x 1,300 = 494 lb. (224 kg) of saleable meat

Beef example 2

Very fat beef with full belly, boneless steaks and roasts, lean ground, closely trimmed:

$$(.62)$$
 x $(.46)$ = 29% x 1,300 = 377 lb. (171 kg) of saleable meat

Beef example 3.

Heavily muscled, lean beef with empty belly, bone-in steaks and roasts, regular ground, normal trim:

$$(.65)$$
 x $(.80)$ = 52% x 1,300 = 676 lb. (307 kg) of saleable meat

Note that Beef example 3 has 79 per cent more saleable meat (299 lb. or 136 kg more) than Beef example 2. Killing and butchering costs will be nearly the same for both animals, so Beef example 3 gives you a lot more flexibility and a good profit margin, whereas Beef example 2 may have you selling at a loss.

Next steps: other options in pricing

This information is a great starting point for pricing your meat products for direct marketing. While this factsheet deals mostly with cost-based pricing, other pricing methods include competition-based pricing (how your price/product compares to competitors) and customer-based pricing (price based on consumer demand or need for product).

For more information on other methods of pricing, see Alberta Agriculture and Rural Development's factsheet "Methods to Price Your Products" Agdex 845-2 or online at http://www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/agdex1133

For information on other considerations when direct marketing meats – including pork, chicken and lamb – see the factsheet "Direct Marketing Meat...Getting Started" Agdex 845-13 or online at http://www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/agdex10396

Bringing It All Together

Here is an example that ties all the information in this factsheet together.

Just a reminder that although pork is used in this example, these same principles can be applied to beef, sheep, chicken and other meat products. This example provides a process for you to slot in pricing and information applicable to your unique business.

A producer takes two pigs to a provincial abattoir. One pig weighs 271 lb. (123 kg) and the other 241 lb. (109 kg) live weight (total 512 lb./232 kg live weight). The pigs would be worth \$260 in total if they had been shipped as market hogs, and this amount becomes the "cost of finished pork" in the example.

One hog dressed out at 217 lb. (98.5 kg) and the other at 193 lb. (87.5 kg) for a total dressed weight of 410 lb. (186 kg).

Figuring out costs

First calculate "Step 1" costs for the hogs:

Cost of finished pork (512 lb. live weight)	\$260.00
Kill cost (2 x \$25)	\$50.00
Inspection	\$5.00
Environmental fee (2 x \$6)	\$12.00
Health fee (2 x \$1)	\$2.00
Inspection (2 x \$2)	\$4.00
Cutting and wrapping (410 lb. x \$.45)	\$184.50
Surcharge (2 x \$5)	\$10.00
Curing (61 lb. x \$1)	\$61.00
Transportation to and from plant	\$25.00
Freezer costs (power and depreciation)	\$20.00
Boxes (6 x \$1.50)	\$9.00
Marketing (brochure, prices lists, advertising)	\$20.00
Sub-total cost for pork ready for retail sales	\$ 662.50

Processing Costs: 125 lb. of ground pork was made into sausage and was included in the cut and wrap charge above. Below is the cost to make the sausage:

Sub-total for processing	\$368 75
125 lb. Cryovac packaged (\$0.45/lb.)	\$56.25
Garlic sausage (25 lb. x \$2.50/lb.)	\$62.50
Farmers' sausage (50 lb. x \$2.50/lb.)	\$125.00
Pepperoni sausage (50 lb. x \$2.50/lb.)	\$125.00

Total costs for retail ready pork (\$662.50 + \$368.75) = \$1,031.25

To break even on two hogs, the producer needs a return of \$1,031.25.

Adding in Quality and Yield

Next, include information gained in "Step 2 and 3" looking at the quality and yields for the hogs:

Saleable yields	lb.
Pork cutlets	26.77
Sweet and sour ribs	12.76
Back ribs	6.13
Tenderloin	4.04
Bacon	25.00
Back bacon	25.00
Pepperoni sausage	47.00
Farmers' sausage	47.00
Garlic sausage	23.00
Sub-total saleable	216.70

(Note that some of these parts – like hocks – could be sold, but would be a bonus if they are sold, rather than a sure thing, so they will not be included in the calculations)

Sub-total non-saleable	52.90
Organs	3.50
Feet	4.36
Hocks	10.64
Skin	4.40
Lard	30.00

The producer began with 512 lb. live weight and ended up with 216.7 lb. of saleable meat, which nets out a yield of 42.3 per cent (216.7/512). To figure the break-even price, the producer divides the total cost (\$1,031.25) by total saleable weight (216.7 lb.) to arrive at \$4.76 per pound.

The producer wants a 30 per cent target profit $(\$1,031.25 \times 1.30 = \$1,340.63)$ and calculates the "target price" to be \$6.19 per pound (\$1,340.63 / 216.7 lb.). Great value can be added by creating sausage and higher-end cuts like back bacon.

Deciding on Price

The following chart shows the types of cuts, yield for each, a local price and calculated return. Adding all up will determine whether the return covers cost and profit. (Please note: prices are for illustration purposes only and may not apply to your situation.)

Cuts	Weight (lb.)	Local Price	Total
Pork cutlets	26.77	\$6.50	\$174.00
Sweet and sour ribs	12.76	\$4.50	\$57.42
Back ribs	6.13	\$7.80	\$47.81
Tenderloin	4.04	\$6.50	\$26.26
Bacon	25.00	\$5.50	\$137.50
Back bacon	25.00	\$12.50	\$312.50
Pepperoni sausage	47.00	\$6.30	\$296.10
Farmers' sausage	47.00	\$7.25	\$340.75
Garlic Sausage	23.00	\$6.00	\$138.00
Total	216.70		\$1,530.34

As shown earlier, the producer needs to make \$1,340.63 to cover his costs and generate a 30 per cent profit. Using local prices, the producer's return (\$1,530.34) is slightly higher than his target.

Adding in Experience

Here is where experience and opportunity come in. Can the producer get more for certain cuts than the local price? Maybe the local price is too high for other cuts? The producer adjusts his prices based on what he knows:

- Pork cutlets: Local prices are for leg cutlets; his are shoulder cutlets and he can get \$6.00/lb.
- Sweet and sour ribs: Ribs are popular and he is sure he can get \$4.75/lb.
- Back ribs: \$7.80/lb. is high compared to the sweet and sour, but he thinks he can get \$7.00/lb.
- Tenderloin: This is a high-end cut and very tender; he has customers who will pay \$7.75/lb.
- Bacon: A popular seller and his bacon is very lean, so he knows he can get \$6.00/lb.
- Back bacon: He feels \$12.50/lb. is high, but he wants to have his customers try it since it is an unusual product.

He knows once they try it, they will purchase again, so he decides on a "trial price" of \$11.00/lb.

• Sausages: All sausages sell, and customers (especially kids) love them. He knows he can get \$7.50/lb.

Now he adds the new prices into the chart to see how it affects his return:

Cuts	Weight (lb.)	Local Price	Total	Your Price	Total
Pork cutlets	26.77	\$6.50	\$174.00	\$6.00	\$160.62
Sweet and sour ribs	12.76	\$4.50	\$57.42	\$4.75	\$60.61
Back ribs	6.13	\$7.80	\$47.81	\$7.00	\$42.91
Tenderloin	4.04	\$6.50	\$26.26	\$7.75	\$31.31
Bacon	25.00	\$5.50	\$137.50	\$6.00	\$150.00
Back bacon	25.00	\$12.50	\$312.50	\$11.00	\$275.00
Pepperoni sausage	47.00	\$6.30	\$296.10	\$7.50	\$352.50
Farmers' sausage	47.00	\$7.25	\$340.75	\$7.50	\$352.50
Garlic Sausage	23.00	\$6.00	\$138.00	\$7.50	\$172.50
Total	216.70		\$1,530.34		\$1,597.95

The return is now \$1,597.95, which is higher than the 30 per cent target and actually results in a 55 per cent profit (\$1,597.95 - \$1,031.25 = \$566.70/1,031.25 = 55%).

The producer still has further options when setting prices:

- sell at prices the same as the local prices since that level meets the 30 per cent profit target
- stay with these prices for a few weeks to see if the products sell at this price
- drop the prices on products that are not selling (consumers respond better to a price drop than a price increase)

Remember that one of the reasons businesses fail is because they have not asked for a high enough price that covers their costs and allows a realistic profit margin. This factsheet and the processes described will help you determine the prices your business needs to charge to succeed.

Prepared by Alberta Agriculture and Forestry

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