

If you think meat prices have been high, just wait!

Good (?) news has it that they are going to be even higher.

(I say "good" because I usually try to find the good in all experiences. Perhaps more of us will eat less and lose those extra pounds, and we'll all eat those less expensive, nutritious things like liver — ugh!)

Supply and demand set the price for beef. Unlike manufactured products, beef prices fluctuate up and down because supply and demand are constantly changing, but effects are not immediate because it takes three full years from the time farmers and ranchers decide to increase production until more beef is available at the market. Conversely, when consumers buy less, there is no way to stop the beef production line — the product is perishable and must be marketed when ready.

Supplying beef is no accident. It takes about two years from conception to consumption — countless management decisions resulting in profits, losses, successes, failures, huge investments, months of long hard work, and possibly thousands of miles before a steak or roast is finally cut, wrapped, and ready at the grocery store.

To get an idea why beef prices can mount, take a look at these figures: It takes nine months of a cow's "room and board" until a calf is born, six or seven months with cow and calf on pasture, plus 4,000 pounds of hay or an equal amount of dry material or browse, 70 pounds of protein, and 10,000 pounds of hay, silage, and grass just to grow the calf to weaning age of about 450 pounds. Then follows another four to six months in the feedlot, 3,200 pounds more of grain, 400 pounds of protein supplement, and 900 pounds of roughage (hay, silage and pasture) before the steer is feedlot finished at 1,000 to 1,050 pounds and sold to a packer.

A half-ton steer, on the average, yields a 615 pound carcass. An additional 196 pounds of fat, bones, and waste are lost (this will vary between 30-40%) when the carcass is processed into retail cuts, leaving only an approximate 420 pounds of retail beef cuts — less than half the initial weight. Retail prices for beef must cover price paid the producer, cost of processing, refrigeration, transportation, rent, taxes, and labor.

Well, armed with all this knowledge, I embarked on a study to find

Quantity is not Always Economical!

by Judy Chernin Teuteberg*

out whether I could save money (thereby making my husband deliriously happy) by buying beef by the side. I wanted to compare buying the side to buying the same quantity and cuts directly from a supermarket bin on a random day, maybe even having some cuts on special. Of course, if one were to buy certain cuts and stock up when they're specialized, it would throw this whole study to the wind, but one must begin somewhere with some limitations.

My family numbers four — us two adults and two well-behaved, well-adjusted, wonderful kids (I just had to put that in!). Our son is an active 14-year-old with a voracious appetite, and our daughter is a lovely 10-year-old who holds her own in the eating department. Until rather recently our food budget was rather stable owing to prices and age of the children, but seemingly overnight growth and appetites skyrocketed, along with the general trend of foodstuffs. And because we expect our family food budget to be the greatest from now until the children leave home (an awful thought!!), we decided to consider the feasibility of buying the beef portion in large quantity.

A side of beef is half the carcass and includes the forequarter and hindquarter. The hindquarter yields the most desirable steaks and roasts; the forequarter contains relatively less tender cuts.

In buying a side strictly to save money, a yes answer is necessary to the following questions:

1. Will the family eat not just the steaks but all the various cuts?
2. Will the family be able to consume all the meat within a reasonable frozen-storage period, about six to twelve months?
3. Do we have enough freezer space?

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4. Are we prepared to lay out as much as \$350 cash?
5. Do we know a dealer of good repute?

Usually, a side is sold by its "hanging" weight — its carcass or gross weight before cutting and trimming. The net, or usable, weight will depend on how much waste, fat, and bone is cut away. As a general rule, a typical USDA Choice beef carcass should yield 25% steaks, 25% roasts, 25% ground beef and stew meat, and 25% waste.

Then, I found out about yield grades! A very significant but little known item. The amount of usable meat in a carcass can be approximated by its yield grade, a U.S. Department of Agriculture measure that denotes the expected yield of closely trimmed retail cuts from a carcass:

- Yield Grade 1 = 75% or more retail cuts
- Yield Grade 2 = 70% - 74%
- Yield Grade 3 = 66% - 70%
- Yield Grade 4 = 62% - 66%
- Yield Grade 5 = 61% or less

The lower the yield grade number, the better the side in terms of usable meat.

Meat wholesomeness and meat quality are quite different matters, and each of these attributes is officially rated in different ways. All meat must be inspected for wholesomeness by either USDA or USDA-certified state inspectors. Beef that is wholesome is stamped with a passed-inspection mark. Quality and/or yield grading, on the other hand, is a strictly voluntary service, paid for by meat processors, that indicates the meat's tenderness, juiciness, flavor, and/or expected yield. Only meat that has passed inspection may be given the USDA quality or yield grade, which is indicated by the familiar shield mark with USDA Prime, Choice, Good, or a special yield mark, respectively. Some meat dealers do not use USDA grades. This does not mean that their beef is of poor quality, but I must take their word that the quality is equivalent. Both inspec-

TABLE 1. The following table compares what is obtainable in usable meat from a side of beef. The list is based on the standard variety and types of cuts, with 1/4 inch fat trim and 20% fat content ground beef. Yield grade percentages show amount of each cut in a side of that yield grade. To get equivalent retail costs, multiply the number of pounds in a side by its retail price per pound. To get the average price per pound of the side and the equivalent cuts at retail, divide the total costs by the usable weight.

Cuts in a Side	Waste	Yield Grades					No. of Lbs. in Side	X	Retail Price Per Lb.	=	Retail Cost
		1	2	3	4	5					
	25.0%	28.0%	32.0%	36.0%	39.0%	96.00					
Round Steak (Full-Cut Boneless)	11.5	11.1	10.5	9.9	9.4	31.5	X	1.89	=	59.54	
Rump Roast (Boneless)	3.4	3.3	3.1	3.0	8.2	9.3	X	1.89	=	17.58	
Porterhouse, T-bone, Club Steaks	4.9	4.9	4.9	4.8	4.8	14.7	X	2.19	=	32.19	
Sirloin Strip Steak	8.5	8.2	7.9	7.6	7.3	23.7	X	1.79	=	42.42	
Rib Roast (7" cut)	5.9	5.9	5.8	5.8	5.8	17.4	X	1.67	=	29.06	
Blade Chuck Roast (Pot Roast)	9.2	8.9	8.5	8.1	7.7	25.5	X	1.09	=	27.80	
Arm Chuck Roast (Boneless)	6.0	5.8	5.5	5.3	5.1	16.5	X	1.69	=	27.89	
Ground Beef	12.4	11.5	10.6	9.6	8.7	31.8	X	1.19	=	37.84	
Stew Meat	11.4	10.7	9.8	8.9	8.1	29.4	X	1.39	=	40.57	
Brisket (Boneless, Rolled)	2.3	2.2	2.0	1.8	1.7	6.0	X	1.59	=	9.54	
Flank Steak	.5	.5	.5	.5	.5	1.5	X	1.79	=	2.69	
						303.3	Total			\$327.12	Total
						207.3	Total Usable Meat			\$285.00	Retail Cost Side

tion and grade marks, as well as yield marks, are made on the outside of the carcass and may be eliminated as the meat is trimmed, so these marks must be seen before the carcass is cut.

Since the hanging weight price includes a certain percentage of waste, the actual price per pound of usable meat will have to be determined. To do so, I divided the total price of the side (hanging weight times quoted price per pound) by the weight of usable meat as indicated by the yield grade. (I used yield grade 3 for computations.) Cutting, wrapping, and freezing usually are included in the quoted price — about eight to ten cents per pound. If they are extra, these charges must be put into the cost-per-pound calculation. (see table)

I consulted a local supermarket that also sells beef by the side to get the going price, which was 95¢ a pound. (It was the same market from which I took the over-the-counter price on the before-mentioned table.)

Inasmuch as I do not already own a free-standing freezer, I explored the alternatives of purchasing a freezer or renting a frozen food locker. Well, I theoretically selected a freezer I considered to be adequate — in fact, a little bit more than adequate because when one buys a freezer, it should be able to also hold a few extra items. However, the electrical rates to run that freezer must be considered too, in this day and age.

The rental of a frozen food locker is another good alternative, but things to consider here are: good advance planning, lack of convenience, and

time and gasoline (if there is any available!) expended getting to and from the locker.

Then, of course, if you don't happen to have about \$350 sitting about doing nothing, you'll have to allow for some financing with attendant charges.

So, I sat down, pencil in hand (with large erasure too since my mathematical prowess leaves something to be desired!) and began figuring. NOW, are you ready for this? Yes, there is a savings of \$42 in buying a side as opposed to buying the same quantity from the bin. BUT, to purchase beef in bulk, the *storage* of that meat *must* be considered a part of the cost. Assuming a home freezer having an average life of eight years (actually, a life expectancy of 10 years, but eight years without any repair or maintenance), that cost amortized for the year (a \$250 freezer) equals about \$30. The cost of electricity to run the freezer is a real \$90 a year — and will probably go up. The cost of financing the side and buying the freezer initially and paying it back in a year comes to about \$35. (And this is a bargain because we get this reduced rate from a credit union.)

Therefore, here's what emerged:

\$ 35.00—interest on \$600 for one year
(financing freezer and side)
30.00—amortized freezer cost
90.00—additional electric bills for one year

—————
\$155.00—COSTS

\$155.00—costs

42.00—savings on one side in relation to bin price

\$113.00—NET COST to buy one side in one year

—Benefit: Capital investment of a freezer with slightly excess storage space

Of course, the second year I would not be financing \$250 for a freezer, but I could conceivably finance \$350 more for beef, would still have higher electric bills, and would still have to pro-rate \$30 per year for the freezer.

Conclusion: THE ECONOMICS OF BUYING A SIDE OF BEEF ARE PRIMARILY AFFECTED BY THE NUMBER OF PEOPLE IN THE FAMILY AND THE BEEF-EATING HABITS OF THAT FAMILY. The freezer (amortized) and electricity costs are the same in one year. *Not* including any financing charge makes the *break-even* point come when about *three* sides are turned over in one year! (That's a lot of beef!)

Other factors to muddle over might be: Could my Psyche stand laying out a large sum of money or assuming installment paying? Would we eat more just having all that food around? Would I really keep track of what meat is frozen and plan accordingly? Would brownouts cause damage? And would there be any real savings in time for grocery shopping since I'd still have to shop weekly for fresh produce, staples, and household items?

My personal conclusion on whether to buy a side — or not to buy — was a resounding NO! How would it be for you?

Agricultural use of Pesticides in Arizona

(From page 11)

declined slightly while soil fumigants dropped to about one-half of the 1972 sales.

broken into the classic Arizona list which has remained stable for the past several years.

In summary, there were on record, purchases of 10,020,300 lbs. of tech-

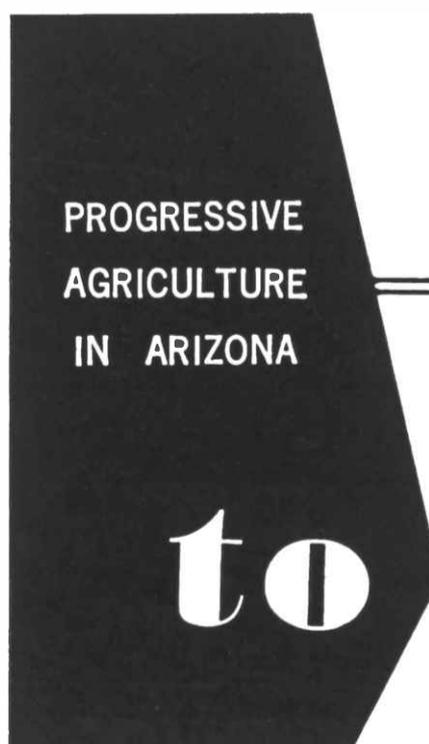
nical pesticides in Arizona for 1973. Of this 69% was insecticides, 13% herbicides, 11.5% defoliant and desiccants, 5.2% soil fumigants, and 1.2% fungicides.

TABLE OF AGRICULTURE USE OF PESTICIDES IN ARIZONA
(All in 1,000 lbs. of Technical Material unless marked gals.)

HERBICIDES	1967	1968	1969	1970	1971	1972	1973
2,4-D	1.2	9.3	10.5	14.2	19.1	16.8	25.7
2,4,5-T	3.6	3.1	3.2	0.0	0.0	1.6	.9
MCPA	12.9	16.3	7.6	18.5	8.5	4.2	2.4
Dicamba (Banvel)	—	—	1.9	35.0	6.9	6.9	7.4
Fenac	—	—	9.5	3.3	0.0	0.0	0.0
Endothall	—	1.1	0.9	0.8	14.0	8.9	27.8
DCPA (Dacthal)	49.7	72.6	108.8	73.0	94.9	70.8	117.8
Dinoseb	13.1	39.3	80.9	137.0	97.8	88.0	182.2
Dalapon	168.0	44.1	57.6	38.0	37.5	45.9	65.3
TCA	0.8	0.8	14.6	10.0	5.3	13.1	18.8
Benefin (Balan)	12.3	22.5	50.9	36.5	31.9	25.5	33.6
Nitralin (Planavin)	1.2	0.3	4.9	0.3	0.0	0.7	1.8
Trifluralin	74.2	129.2	82.2	114.5	112.3	98.0	141.0
Bensulide	—	4.8	14.2	19.0	25.6	24.8	22.0
EPTC (Eptam)	1.4	1.1	2.5	9.1	13.7	14.6	150.2
IPC	2.2	4.5	10.1	11.6	12.5	7.7	18.6
Amitrol	3.9	6.9	1.9	5.4	1.6	0.6	1.1
Atrazine	33.0	46.2	33.4	28.8	24.3	15.3	14.3
Prometryn (Caparol)	13.6	70.8	83.3	114.0	85.9	73.5	127.5
Diquat	0.3	0.5	0.5	0.6	0.0	0.4	3.6
Paraquat	3.9	19.4	35.5	32.0	13.9	22.2	27.7
Prometone	—	—	1.7	1.6	2.3	3.4	8.5
Pyrazon (Pyramin)	—	10.4	9.3	1.5	0.0	0.0	0.0
Propazine	1.3	0.3	0.2	4.5	0.8	0.5	0.0
Simazine	3.6	13.1	14.8	20.1	16.8	13.0	25.3
Fluometuron (Cotoran)	—	—	15.2	8.6	4.7	0.0	1.0
Bromacil	3.2	4.3	4.7	28.0	11.8	4.6	5.7
Monuron	17.0	12.5	17.8	15.6	15.8	8.1	3.0
Diuron	38.2	53.9	37.4	57.2	55.8	52.3	51.5
Linuron	—	2.4	5.8	4.5	11.3	4.6	3.0
Chloroxuron (Tenoran)	—	—	1.9	1.4	4.4	0.0	3.0
DSMA	8.2	7.2	65.1	37.8	24.7	61.0	8.7
MSMA	76.1	244.6	329.7	275.0	194.3	112.6	149.3
Cacodylic acid	8.7	3.8	0.0	7.0	4.1	24.0	69.7
	551.6	845.3	1,118.2	1,164.0	952.5	823.6	1,318.4

Generally, use of the more persistent organochlorine insecticides has consistently declined, beginning in 1968, while the carbamate-formamidine insecticide volume has increased steadily since 1966. The microbial insecticide, *Bacillus thuringiensis*, has also realized a continually growing acceptance. The organophosphates probably reflect more accurately the total annual insect pest situation than any other insecticide class.

New materials which are making their presence felt are Benlate, a fungicide, first sold in quantity in 1972, and three relatively new insecticides, Monitor, Furadan and Carzol. There are more new herbicides making their appearance on the horizon than any other class of pesticides, but none have



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