The Meat-Like Protein Market in Canada

Overall, it can be difficult to obtain figures on the distribution and specific form of consumption for meat products in Canada. Such statistics are not readily kept or must be patched together from a variety of sources. Having said that, this document attempts to pull together what does exist and provide some framework for looking at the meat market as a whole.

1.0 Market Size

Based on figures from Statistics Canada, the per capita disappearance of various protein sources is provided below.

Figure 1: Disappearance of protein in Canada

Food Statistics 2003, vol. 3, no. 1

Table 4. Food Disappearance, by Commodity (1)

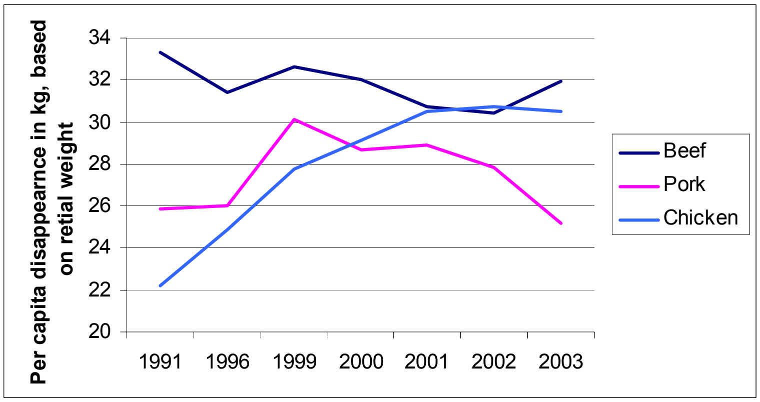
	1976	1981	1986	1991	1996	1999	2000	2001	2002	2003
	(kg per person, retail weight, unless otherwise specified)									
Cereal Products										
Breakfast food	2.77	3.58	4.34	3.96	5.06	5.33	5.27	5.06	5.13	5.24
Corn flour and meal	1.96	2.19	2.04	2.42	3.97	3.63	2.86	2.88	1.73	1.25
Oatmeal and rolled oats	1.53	1.45	1.54	1.59	3.33	1.04	0.89	0.77	2.45	2.91
Pot and pearl barley	0.05	0.14	0.09	0.05	0.11	0.06	0.06	0.06	0.05	0.04
Rice	2.59	3.36	4.35	5.51	7.21	8.01	7.90	8.00	7.52	7.68
Rye flour	0.40	0.44	0.33	0.33	0.30	0.32	0.30	0.33	0.31	0.32
Wheat flour	60.24	54.78	57.89	57.68	63.07	69.61	71.26	71.48	72.19	69.59
Total	**69.54**	**65.95**	**70.58**	**71.53**	**83.05**	**88.00**	**88.54**	**88.56**	**89.38**	**87.03**
Sugars and Syrups										
Honey	0.83	1.09	0.86	0.78	1.03	0.83	0.62	0.89	0.71	0.86
Maple sugar	0.17	0.33	0.10	0.12	0.06	0.10	0.18	0.13	0.07	0.08
Refined sugar	41.29	37.10	41.32	36.34	38.09	37.86	39.20	41.07	44.95	46.80
Total	**42.30**	**38.52**	**42.28**	**37.24**	**39.18**	**38.79**	**40.01**	**42.09**	**45.73**	**47.75**
Red Meat										
Beef, carcass weight	50.42	39.86	38.20	33.28	31.45	32.60	32.01	30.74	30.46	31.98
Mutton and lamb, carcass weight	1.00	0.69	0.90	0.87	0.75	0.86	0.94	1.03	1.03	1.10
Offal, carcass weight	1.62	1.35	1.67	1.68	1.33	1.70	1.04	0.85	1.04	1.40
Pork, carcass weight	25.19	31.16	27.90	25.86	25.99	30.09	28.69	28.94	27.83	25.17
Veal, carcass weight	2.33	1.52	1.63	1.48	1.30	1.29	1.32	1.25	1.24	1.26
Total	**80.56**	**74.58**	**70.30**	**63.17**	**60.83**	**66.53**	**64.01**	**62.81**	**61.61**	**60.90**
Total beef (including veal)	52.75	41.38	39.83	34.76	32.76	33.89	33.33	31.98	31.70	33.24
Poultry										
Chicken, eviscerated weight	14.36	16.73	19.91	22.23	24.90	27.75	29.11	30.49	30.71	30.50
Stewing hen, eviscerated weight	1.15	1.31	1.05	1.54	1.75	1.86	1.90	1.74	1.75	1.68
Turkey, eviscerated weight	3.94	4.07	4.12	4.54	4.12	4.16	4.26	4.22	4.27	4.21
Total	**19.45**	**22.11**	**25.08**	**28.31**	**30.77**	**33.77**	**35.27**	**36.45**	**36.73**	**36.39**
Total chicken (incl. stewing hen)	15.52	18.04	20.96	23.77	26.65	29.61	31.01	32.23	32.46	32.18
Fish										
Fresh and frozen seafish, edible weight	..	..	..	4.28	4.49	4.80	4.49	4.56	4.26	..
Freshwater, edible weight	..	..	..	0.21	0.30	0.42	0.46	0.42	0.44	..
Processed seafish, edible weight	..	..	..	2.63	1.97	2.49	2.18	2.66	3.05	..
Shellfish total, edible weight	..	..	..	1.51	1.65	2.29	2.35	2.11	2.11	..
Total	**..**	**..**	**..**	**8.64**	**8.41**	**10.00**	**9.48**	**9.75**	**9.87**	**..**
Dairy										
Cheese, cheddar	1.59	2.45	2.61	3.12	3.07	3.28	3.17	3.13	3.10	3.19
Cheese, cottage	1.05	1.26	1.25	1.03	0.76	0.71	0.79	0.78	0.79	0.78
Cheese, processed	2.64	2.91	2.61	2.77	2.58	2.39	2.35	2.47	2.25	2.23
Cheese, variety	2.64	3.03	4.37	5.31	5.66	6.22	6.56	6.28	6.45	6.49
Cream, cereal 10% , litres	2.44	2.75	2.91	2.81	2.89	2.88	2.92	2.95	2.92	3.06
Cream, sour, litres	0.35	0.49	0.75	0.99	0.94	1.20	1.28	1.36	1.29	1.35
Cream, table 18%, litres	0.27	0.27	0.39	0.49	0.79	1.36	1.57	1.80	1.96	2.37
Cream, whipping 32% or 35%, litres	0.50	0.66	0.89	0.82	0.87	0.92	1.05	1.03	1.10	1.18
Ice cream, litres	11.92	12.57	12.19	10.65	10.87	10.02	8.62	9.22	9.49	8.69
Ice milk, litres	1.14	1.02	1.26	1.24	1.96	1.86	2.09	2.23	2.17	2.08
Milk, buttermilk, litres	0.61	0.57	0.52	0.46	0.40	0.43	0.39	0.39	0.42	0.43
Milk, chocolate drink, litres	3.16	3.89	3.51	3.42	3.95	4.67	4.54	4.87	4.94	5.02
Milk, concentrated skim, litres	0.29	1.42	0.63	1.09	0.61	0.31	0.31	0.26	0.28	0.29
Milk, concentrated whole, litres	3.65	2.15	2.02	1.41	1.07	1.00	1.06	0.79	0.90	0.38

(1) Does not allow for losses, such as waste and/or spoilage, in stores, households, private institutions or restaurants or losses during preparation.

Statistics Canada - Cat. No. 21-020-XIE 19 Canada Food Stats

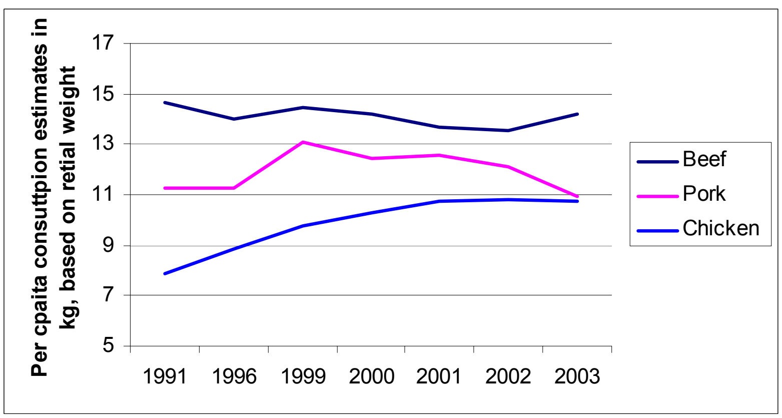
For major meats, this disappearance can be illustrated graphically as below.

Figure 2: Per capita disappearance (kg) of protein sources based on retail weight



Taking into account wastes and losses during preparation, Statistics Canada estimates consumption of the major meats as shown below.

Figure 3: Per capita consumption of meats in kg



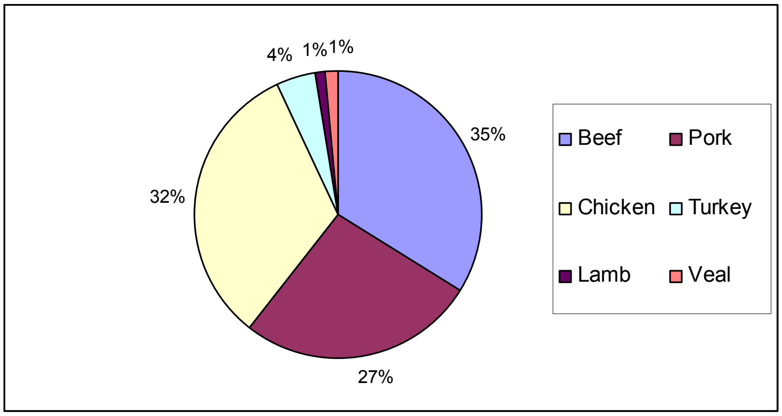
From this data, the following summary table for meat type product disappearance is derived.

Figure 4: Per capita disappearance of protein sources (kg)

	1991	1996	1999	2000	2001	2002	2003
Beef	33.28	31.45	32.60	32.01	30.74	30.46	31.98
Pork	25.86	25.99	30.09	28.69	28.94	27.83	25.17
Chicken	22.23	24.9	27.75	29.11	30.49	30.71	30.50
Turkey	4.54	4.12	4.16	4.26	4.22	4.27	4.21
Lamb	0.87	0.75	0.86	0.94	1.03	1.03	1.10
Veal	1.48	1.3	1.29	1.32	1.25	1.24	1.26
Meat Analogue	--	--	--	--	--	--	***0.26***
TOTAL	88.26	88.51	96.75	96.33	96.67	95.54	**94.48**

With over 31.6 million Canadians, this puts the protein meat-type market size at approximately **2,988,307,000 kilograms**. By volume, meat can assume market share as follows.

Figure 5: Market share of various meats in Canada



2.0 Product Form

In terms of product form, there are few statistics available. However, the following helps to show that a good portion of meat consumed is consumed as non- whole muscle pieces.

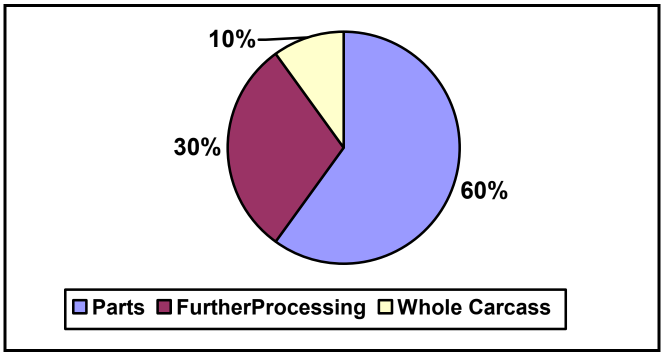
The US National Cattlemen's Beef Association reports that approximately 43% of beef is consumed as ground beef, as shown below. This includes all beef not sold as retail cuts, including steaks and roasts. It can be assumed that the Canadian marketplace is similar in the way in which beef is consumed.

Figure 6: Amount of beef sold as ground beef or cuts (retail weight, in pounds)

Year	Cuts	Ground Beef	Total	Percent Ground
1990	38.1	29.7	67.8	43.3%
1991	37.1	29.7	66.8	42.5%
1992	36.8	29.7	66.5	42.7%
1993	35.4	29.7	65.1	45.3%
1994	38.0	29.0	67.0	43.3%
1995	40.6	26.9	67.5	43.2%
1996	37.8	29.9	67.7	44.2%
1997	37.6	29.3	66.9	43.8%
1998	38.7	29.4	68.1	43.2%
1999	39.5	30.1	69.6	43.2%
2000	39.5	30.0	69.5	**43.2%**
2001	37.9	28.8	66.7	**43.2%**

According to a report titled The Canadian Poultry Meat Processing Industry from the Food Value Chain Bureau, AAFC, an estimated 60% of chicken meat on a volume basis is sold as parts, 10% is sold as whole carcasses or whole birds and 30% is used in further processing.

Figure 7: How chicken is sold/consumed on a meat type basis



Further research from AAFC shows that in 2003-2004 baked and roasted chicken consumption grew 20% in family dining restaurants. Chicken strips grew 40% in two years in foodservice. Wings are up 14% and rotisserie chicken up 12%. Organic chicken is predicted to grow 24%.

Turkey meat is marketed primarily as a whole bird (66% by volume marketed as frozen product and 18% fresh) and a minor proportion as cut-up parts (7%) and processed product (7%).

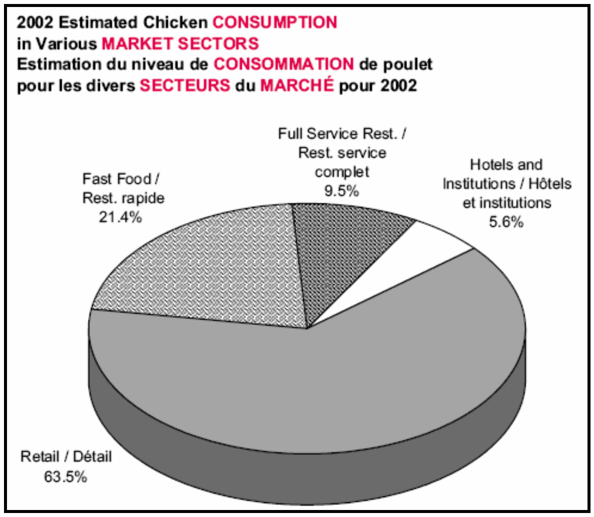
3.0 Distribution

Statistics from the Canadian Cattle Industry indicate that 70% of beef consumed is purchased at retail and consumed at home. This leaves 30% to be utilized in food service and institutional outlets.

If we assume that given the enormity of the fast food sector, that 75% of the beef that is consumed in food service is as ground beef, than, patties and related products would account for food service and would account for 22.5% of total beef consumption.

Figures from the Canadian chicken industry are somewhat more detailed. They indicated that 63.5% of chicken is sold at retail. This is illustrated below.

Figure 8: Estimated chicken consumption in Canada in 2002 by distribution channel



Although purely an estimation, it could be assumed that much of the chicken distributed via fast food outlets and institutions is in the form of patties, strips, and pieces. If even 75% of chicken consumed in these locations, is in these forms, the percentage would be 20% of total chicken.

4.0 Retail Value

AAFC, via AC Neilson has statistics available on grocery retail sales of specific food product items. The following is a selection from that report which is of interest.

Figure 9: Retail sales in grocery stores of selected meat products in Canada in 2002.

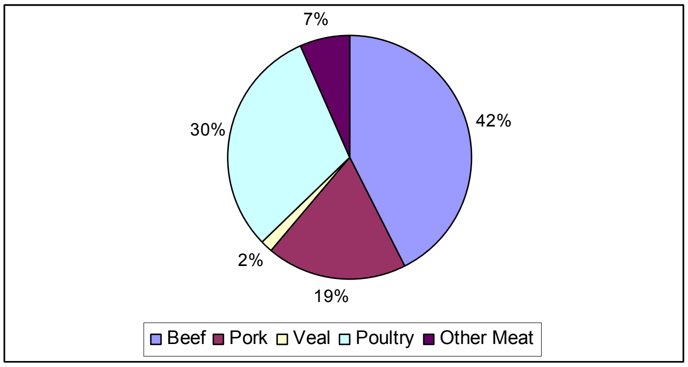
Products	Retailer Dollar Sales	% CHG '02 vs 01
Tofu And Meat Analog Products	**58,909,064**	**16**
Frozen Prepackaged Meat, Fish, Poultry	**510,654,416**	**9**
Frozen Prepackaged Fish/Seafood	*375,309,131*	*10*
Frozen Fish Sticks	*15,619,195*	*-5*
Frozen Shrimp	*134,598,780*	*12*
Fish & Chips	*5,671,181*	*-4*
Other Frozen Fish/Seafood	*219,419,975*	*11*
Frozen Meat Patties	*100,085,088*	*5*
Frozen Prepackaged Meat Remaining	*35,260,197*	*13*
Frozen Prepared Foods	**1,552,375,575**	**13**
Total Frozen Dinners & Entrees Inc Egg/Spring Rolls	*1,104,027,322*	*15*
*Chicken***	*544,001,856*	*20*
*Turkey***	*23,090,355*	*16*
*Beef***	*89,702,846*	*12*

*Pasta**	*222,668,714*	*5*
*Fish/Seafood**	*20,247,756*	*38*
*Pork**	*43,526,127*	*12*
*All Other Frozen Dinners/Entrees**	*160,789,668*	*10*
Frozen Meat Pies	*50,264,514*	*0*
Fr & Refrig. Pizza, French Brd & Sub	*299,036,810*	*16*
Frozen Pizza Snacks	*92,897,284*	*0*
Frozen Remaining Foods	*6,149,645*	*2*
Fresh & Cured Meat & Poultry+	**6,486,220,154**	**5**
Fresh Meats (sold by random weight)**	4,622,509,675	5
*Fresh Beef**	*1,967,345,294*	*6*
*Fresh Pork**	*862,488,715*	*5*
*Fresh Veal**	*72,323,212*	*1*
*Fresh Poultry**	*1,410,441,124*	*4*
Other Fresh Meat	*309,911,330*	*5*
Tl Deli Meat**	980,364,915	2
Packaged Meats	817,761,578	4
Wieners	*259,145,070*	*4*
Packaged Bacon	*282,852,035*	*2*
Packaged Sliced Meats (Cold cuts)	*177,298,169*	*5*
Packaged Sausages Fr/Refrig	*98,466,304*	*10*
Refrigerated Imitation Seafood	18,257,457	19
Beef Jerky	21,012,330	3
Meat Sticks	26,314,199	35
Canned Meats & Specialty Foods	**66,416,223**	**0**
Corned Beef	8,879,621	3
Canned Luncheon Meats	12,096,320	0
Flaked Ham	13,060,492	-2
Flaked Turkey	5,278,107	2
Flaked Chicken	5,939,791	8
Canned Ham & Picnics	7,521,534	-1
Cocktail Sausage & Wieners	2,963,411	5
Canned Meat Spreads	9,021,133	-7
Remaining Canned meat	1,655,814	-5
Chili	11,109,189	23
Meatball Stews	26,733,854	-2
Canned Pasta	71,109,492	-4

From this there are a few key points. Highly processed deli and packaged meats combined are worth almost $1.8 billion. Frozen prepared meals, excluding those made mainly of pasta and seafood are valued at over $860 M. The meat analogue category is valued at over $58 million. Meat pies are valued at over $50 million and frozen prepackaged meat category, excluding patties and seafood is worth over $35 million.

In the fresh meat category, worth over $4.6 billion, the distribution in value is closely aligned with that in consumption.

Figure 10: Value of various fresh and cured meats at retail.



5.0 Conclusions

As shown, the market for protein is segmented by type of product and by distribution channel. Between 30% and 35% of meat is likely consumed through food service channels.

Beef maintains the biggest market share at 35-40% with poultry in at 30-35%, pork at 20-25% and other meats accounting for 10-15%.

In terms of value, fresh market retail remains the biggest category.

For the major meats, 30-40% is further processed and not consumed as muscle pieces. We assume that much of the chicken and beef consumed in food service is in a further processed form and accounts for 20-22% of total consumption. Thus, only 10-20% of further processed meat is purchased at retail and consumed at home.

Thus, for a product to compete with true meat in terms of volume in retail markets, it must closely resemble un-processed meat. If the product resembles highly processed meat, it may be better suited to food service outlets.

However, processed meat categories in retail have a high value. As well, these types of categories continue to grow (for example, frozen entrées at 15% and chili at 23% from 2001-2002). Likewise, the meat analogue market also continues to grow (16% for 2001 to 2002). Thus, being involved in these markets early on will prove successful in terms of value, if not long term protein market volume.

NOTE:

This paper is for discussion purposes and feedback is welcome.
For additional information please contact Soy 20/20.