

MEAT CONSUMPTION IN HONG KONG

This article describes the study on the meat consumption pattern in Hong Kong conducted by the Urban Services Department and summarizes the review findings of the local consumption pattern of pork and beef during 1980 to 1988.

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1. Introduction

1.1 In Hong Kong, meat consumption comprises both fresh and frozen meat, which respectively accounts for about 70% and 30% of the total consumption in 1989. The supply of fresh meat comes from live animals mainly imported from China whereas the supply of frozen meat comes directly from imports from various countries like China, Argentina, U.S.A. and Brazil.

1.2 The live animals are slaughtered in the two public abattoirs in Kennedy Town and Cheung Shan Wan which are managed and controlled by the Urban Council, and two private slaughter-houses in Tsuen Wan and Yuen Long which are managed by private companies and controlled by the Regional Council. A total of 3.5 million live animals were slaughtered in 1989. Among the total slaughtered animals, 94.6% were pigs, 4.8% were cattle and 0.6% were animals of other kinds.

1.3 In respect of the supply of frozen meat, 85.7 million kg of frozen meat was imported and retained for local consumption in 1989. Among the total retained import of frozen meat, which is the difference between the import and the re-export amounts, 59.2% was frozen pork, 35.9% was frozen beef and 4.9% was frozen meat of other kinds of animals.

1.4 As observed, pork and beef are the two major types of meat consumed in Hong Kong. Hence in carrying out a study on the meat consumption pattern in Hong Kong which was conducted by Urban Services Department in September 1989, the analyses were restricted to consumption of pork and beef only. Specifically the local consumption pattern of pork and beef during 1980 to 1988 was studied and this article summarizes the review findings.

2. Total Meat Consumption Pattern

2.1 Looking at pork and beef only, total consumption had increased by 36.4% over the period of 1980 to 1988, from 216.4 million kilogrammes in 1980 to 295.2 million kilogrammes in 1988. However, the ratio of pork consumption to beef consumption had remained rather stable at 4:1 over the years. Only a very small increase in the proportion for beef consumption was observed since 1986. (Table 1)

2.2 Among the total amount of meat consumed in 1988, 67.3% was fresh meat and 32.7% was frozen meat. The corresponding percentages in 1980 were 80.3% and 19.7% respectively. (Table 1)

TABLE 1 ANNUAL TOTAL CONSUMPTION OF PORK AND BEEF IN HONG KONG, 1980-1988

(in million kg)

Year	Pork Consumption			Beef Consumption			Total Pork and Beef Consumption		
	Fresh Pork	Frozen Pork	Total Pork Consumption	Fresh Beef	Frozen Beef	Total Beef Consumption	Fresh meat	Frozen meat	Total
1980	145.41	25.59	171.00	28.38	17.01	45.39	173.79	42.60	216.39
1981	144.56	34.02	178.58	28.95	18.40	47.36	173.51	52.42	225.94
1982	151.81	46.58	198.39	30.49	21.63	52.12	182.30	68.21	250.51
1983	146.79	54.80	201.59	29.98	27.17	57.15	176.77	81.97	258.74
1984	152.12	55.22	207.35	29.29	27.14	56.43	181.41	82.36	263.78
1985	164.01	57.86	221.87	30.51	28.66	59.17	194.52	86.52	281.04
1986	167.78	56.07	223.85	31.66	29.73	61.38	199.44	85.80	285.23
1987	166.13	54.13	220.27	32.32	28.32	60.64	198.45	82.45	280.91
1988	166.69	60.23	226.92	31.86	36.43	68.29	198.55	96.66	295.21

Notes: 1. Frozen pork refers to the retained import of meat of swine (fresh-chilled or frozen).
 2. Frozen beef refers to the retained import of bovine animals or minced ground (fresh-chilled or frozen).
 3. Figures may not add up to total due to rounding.
 4. Figures on the retained import of meat are obtained from the Hong Kong Trade Statistics compiled by the Census & Statistics Department.

2.3 Over the same period, the population of Hong Kong increased by 12.2%. After discounting this factor, the per capita total meat consumption increased by 21.6%. In 1988, a person in Hong Kong consumed, on average, 39.9 kg of pork and 12.0 kg of beef per year or 109.4 g of pork and 32.9 g of beef per day. (Table 2).

TABLE 2 ANNUAL PER CAPITA CONSUMPTION OF PORK AND BEEF IN HONG KONG, 1980-1988

(in kg)

Year	Mid-year Population	Per Capita Consumption of Pork			Per Capita Consumption of Beef			Total per Capita Consumption of Pork and Beef
		Fresh Pork	Frozen Pork	Total	Fresh Beef	Frozen Beef	Total	
1980	5 063 100	28.72	5.05	33.73	5.60	3.36	8.96	42.73
1981	5 183 400	27.89	6.56	34.45	5.79	3.55	9.14	43.59
1982	5 264 500	28.84	8.85	37.68	5.79	4.11	9.90	47.58
1983	5 345 100	27.46	10.25	37.71	5.61	5.08	10.69	48.40
1984	5 397 900	28.18	10.23	38.41	5.43	5.03	10.45	48.86
1985	5 456 200	30.06	10.60	40.66	5.59	5.25	10.84	51.50
1986	5 532 600	30.33	10.13	40.46	5.72	5.37	11.09	51.55
1987	5 613 400	29.60	9.64	39.24	5.76	5.05	10.80	50.04
1988	5 681 300	29.34	10.60	39.94	5.61	6.41	12.02	51.96

Notes: 1. Mid-year population is obtained from the Hong Kong Monthly Digest of Statistics compiled by the Census & Statistics Department.
2. Figures may not add up to total due to rounding.

3. Consumption Pattern of Pork

3.1 Pigs are classified by their live weight and age into porkers (large pigs of 9 months old or above, with live weight around 100 kg), roasters (medium size pigs of around 4 months old, with live weight around 40 kg), and sucklings (young pigs of around 6 weeks old, with live weight below 12 kg). The relative percentages of porkers, roasters and sucklings among total kills were maintained at the level of 75%, 17% and 8% respectively in the past few years.

3.2 To obtain an estimate of fresh pork consumption, the number of pigs slaughtered is multiplied by the average meat yield of pigs. The average meat yield is defined as the net weight of fresh meat available from the average dressed carcass weight or the weight of meat with bones for cutting up after the animal is slaughtered. For analysis purpose, the net weight of fresh meat is assumed 86% of the dressed carcass weight⁽¹⁾.

3.3 The annual number of pigs slaughtered in Hong Kong increased steadily by 7.3% over the period of 1980 to 1986. It declined gradually afterwards and dropped by 4.9% from 1986 to 1988. (Table 3)

3.4 Since 1983, the average meat yield of pigs no longer stayed but increased continuously. It increased by 12.4% over the reference period. In particular, the average meat yield of pigs had increased by 4.3% during 1986 to 1988, which compensated for the 4.9% decrease in number of pigs slaughtered over the same period (Table 3). Hence, total consumption of fresh pork rose gradually from 1980 and became levelled off during 1985 to 1988.

TABLE 3 ANNUAL CONSUMPTION OF FRESH PORK AND FRESH BEEF IN HONG KONG, 1980-1988

Year	No. of Pigs Slaughtered (in million)	Average Meat Yield of Pigs (in kg)	Fresh Pork Consumption (in million kg)	No. of Cattle Slaughtered (in million)	Average Meat Yield of Cattle (in kg)	Fresh Beef Consumption (in million kg)	Total Fresh Pork and Fresh Beef Consumption (in million kg)
1980	3.41	42.59	145.41	0.23	121.28	28.38	173.79
1981	3.40	42.48	144.56	0.22	131.12	28.95	173.51
1982	3.47	43.76	151.81	0.21	142.32	30.49	182.30
1983	3.43	42.83	146.79	0.20	149.60	29.98	176.77
1984	3.52	43.17	152.12	0.18	164.80	29.29	181.41
1985	3.59	45.73	164.01	0.19	163.60	30.51	194.52
1986	3.66	45.89	167.78	0.18	172.08	31.66	199.44
1987	3.58	46.42	166.13	0.18	178.16	32.32	198.45
1988	3.48	47.86	166.69	0.18	176.32	31.86	198.55

Notes: 1. Figures in brackets are percentages of fresh pork and fresh beef consumption among total meat consumption.
2. Figures on the number of animals slaughtered are provided by the Privatisation Division, USD.

3.5 The consumption of frozen pork, which was measured by the difference between import and re-export of pork (fresh-chilled or frozen), increased rapidly by 11.4.1% from 1980 to 1983 (Table 1). It remained rather stable afterwards, and with only minor fluctuation from year to year.

3.6 Although consumption of frozen pork increased rapidly from 1980 in 1983, this did not have significant impact on the total consumption of fresh pork. The relative shares of consumption between fresh pork and frozen pork were rather stable during 1983 to 1988 and attained an average ratio of 7:3. (Table 1)

3.7 The annual per capita consumption of pork climbed up rapidly by 20.4% during 1980 to 1985. Nevertheless, a small drop in per capita consumption of pork was observed in the following years.

SPECIAL REVIEW

4. Consumption Pattern of Beef

4.1 The number of cattle slaughtered annually remained rather constant during 1984 to 1988 after a significant decline by 21.7% from 1980 to 1984. (Table 3) The decrease in number of cattle slaughtered during 1980 to 1984 was attributed to the reduction in the import of small cattle, which were cattle of live weight around 200 kg. After 1984, few small cattle were seen importing into Hong Kong.

4.2 Similar to that for pigs, the average meat yield of cattle is estimated at 80% of average dressed carcass weight, also according to the standard adopted for food inspection⁽¹⁾. A rapid increase in average meat yield of cattle by 35.9% during 1980 to 1984 was found. It had more than compensated for the decline by 21.7% in slaughter number over the same period. Hence the annual total consumption of fresh beef was rising steadily throughout the period. (Table 3)

4.3 Although fresh beef consumption was only slightly increasing, overall consumption of beef did show a greater increment as a result of remarkable increasing frozen beef consumption. Consumption of frozen beef (meat of bovine animals and minced ground, fresh-chilled or frozen) rose rapidly by 59.7% from 1980 to 1983 but showed a marked levelling off afterwards until 1987. (Table 1)

4.4 There was again a significant increase in the import of frozen beef in 1988. This had made the consumption of frozen beef exceed the consumption of fresh beef for the first time in the past ten years. In particular, the ratios of fresh beef and frozen beef to total consumption were very stable during 1983 to 1987, maintaining at the level of 52% and 48% respectively. The relative proportion reversed to 47% for fresh beef and 53% for frozen beef in 1988.

4.5 Taking population growth into account, it was found that annual per capita consumption of fresh beef was very stable over the reference period. Correspondingly, annual per capita consumption of frozen beef increased greatly from 3.4 kg in 1980 to 6.4 kg in 1988. (Table 2)

5. Conclusion

5.1 Obviously, pork formed the main portion of the meat diet in Hong Kong. Annual total pork consumption followed an increasing trend over the reference period, and fresh pork had always been preferable to frozen pork. Moreover, the increase of frozen pork consumption had not led to decrease of fresh pork consumption.

5.2 Similarly, annual total consumption of beef followed an increasing trend over the reference period, with even a greater change in magnitude for frozen beef consumption. Also, the increase of frozen beef consumption had not given a negative impulse to fresh beef consumption.

5.3 As a result, the total consumption of meat had increased throughout the period of 1980 to 1988, with the most rapid increase found during 1980 to 1984. There was, however, no indication of whatever kind of substitution between pork and beef and between fresh meat and frozen meat.

(1) The percentage is a suggestion from Horace Thornton, "Text Book of Meat Inspection", Bailliere, Tindall & Casell (London) Fifth Edition, 1970.