

Report of Health Behaviour Survey 2018/19

Non-communicable Disease Branch

Centre for Health Protection

Department of Health

June 2020



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Produced and published by
Non-communicable Disease Branch
Centre for Health Protection
Department of Health
Hong Kong Special Administrative Region Government
18/F Wu Chung House, 213 Queen's Road east, Wan Chai, Hong Kong

This publication is available from the Centre for Health Protection' website at:
<http://www.chp.gov.hk>

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Executive Summary

The Department of Health (DH) conducted the Health Behaviour Survey (HBS) 2018/19 to collect information on major health-related behaviours and lifestyle practices associated with prevention and control of non-communicable diseases (NCD) among the land-based non-institutional population aged 15 or above. The fieldwork of the HBS 2018/19 was conducted between April 2018 and February 2019. A total of 5 903 persons aged 15 or above in Hong Kong from 2 717 domestic households, excluding foreign domestic helpers and two-way permit holders from the mainland of China or other visitors of Hong Kong, were successfully enumerated, representing an overall household response rate of 70.8%. The survey data were adjusted for the differential response rates by District Council district and grossed-up to the control for the age and gender profile by type of housing of the study population for the second quarter of 2018. After these adjustments, the survey estimates can represent those of the study population during the survey period.

This report present the key findings of the HBS 2018/19 on: (1) physical activity, (2) diet and nutrition, (3) alcohol consumption, (4) smoking habit, (5) colorectal cancer screening, and (6) cervical cancer screening (female respondents only).

Physical Activity

Among persons aged 15 or above, 91.5% of them performed physical activities for at least 10 minutes continuously in one of the three settings in a typical week, including 15.5% performed work-related physical activity, 84.5% had transport-related physical activity (including walking or cycling), and 42.1% participated in recreation-related physical activity. Overall, 16.8% of adults aged 18 or above had insufficient physical activity according to the World Health Organization (WHO) recommendation (i.e. adults should engage in at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity activity).

Regarding sedentary behaviour, about one-fifth (20.7%) of the persons aged 15 or above reported spending 10 hours or longer sitting or reclining each day.

Diet and Nutrition

For fruit consumption, 67.7% of persons aged 15 or above ate fruit at least once a day with an overall mean of 1.2 servings per day on the days when they ate fruit. For consumption of vegetables, 89.6% of them ate vegetables at least once a day with an overall mean of 1.5 servings per day on the days when they ate vegetables. Overall, 95.6% of persons aged 15 or above had inadequate daily intake of fruit and vegetables according to WHO recommendation (i.e. consuming at least 5 servings of fruit and vegetables a day).

Regarding consumption of processed meat and associated products, 9.9% of persons aged 15 or above consumed processed meat and associated products at least once per day with an overall mean of 1.2 servings per day on the days when they ate processed meat and associated products.

Alcohol Consumption

8.8% of persons aged 15 or above drank alcohol at least once a week in the 12 months preceding the survey. The prevalence of binge drinking at least monthly in the 12 months preceding the survey was 2.9%.

Smoking Habit

17.9% of persons aged 15 or above reported that they ever had smoked, regardless of what type of products, such as cigarettes, e-cigarettes, cigar, pipe, water pipe, hand-rolled tobacco and so on.

Colorectal Cancer Screening

Among persons aged 50-75, 18.6% of them ever had a faecal occult blood test (FOBT) or faecal immunochemical test (FIT) without suspected symptoms of colorectal cancer prior to the test.

Regarding colonoscopy examination, 18.1% of them ever had received colonoscopy without suspected symptoms of colorectal cancer prior to the examination.

Cervical Cancer Screening

Among females aged 25-64, 45.8% of them ever had a cervical smear test without suspected symptoms of cervical cancer prior to the test.

1. Survey Method, Representative and Characteristics of the Sampled Respondents

The Department of Health (DH) conducted the Health Behavior Survey (HBS) 2018/19 to collect information on major health-related behaviours and lifestyle practices associated with prevention and control of non-communicable diseases (NCD) among persons aged 15 or above in Hong Kong.

1.1 Survey Method

This survey was a population-based cross-sectional household survey with a structured (interviewer- and self-administered) questionnaire. Systematic replicated sampling was deployed for selecting a sample of replicates of living quarters from the Frame of Quarters maintained by the Census and Statistics Department and domestic households therein for enumeration in the survey. All land-based non-institutional persons aged 15 or above in the enumerated households were invited to participate in the survey, excluding foreign domestic helpers and two-way permit holders from the mainland of China or other visitors of Hong Kong.

The survey adopted computer-assisted personal interview (CAPI) for data collection. Face-to-face interview was conducted by the interviewers with the respondents. As some questions might be sensitive for respondents to answer in a face-to-face manner, self-administered questionnaire was deployed to collect respondents' responses to these questions to minimise the potential reporting error. Core survey areas included:

- (a) Physical activity;
- (b) Diet and nutrition — consumption of fruit, vegetables, processed meat and associated products;
- (c) Alcohol consumption*;
- (d) Smoking habit*;
- (e) Cancer screening — colorectal cancer screening and cervical cancer screening*.

(* via self-administered questionnaire)

The CAPI programme and survey materials including questionnaire were fully tested in the pilot survey.

1.2 Enumeration Results and Sample Representativeness

The fieldwork of HBS 2018/19 was conducted between April 2018 and February 2019. A total of 5 903 persons aged 15 or above from 2 717 domestic households were successfully enumerated, representing an overall household response rate of 70.8%. The data collected from the survey were adjusted by the differential response rates for 18 District Council districts, and grossed-up to the control for the age and gender profile by three types of housing (i.e. public rental housing, subsidized sale flats and private housing) of the study population for the second quarter of 2018. After these adjustments, this sample of respondents represented 6 049 400 land-based non-institutional population aged 15 or above in Q2 2018, excluding foreign domestic helpers and two-way permit holders from the mainland of China or other visitors of Hong Kong.

1.3 Sex and Age Distribution of the Sampled Respondents

After grossing-up, 52.7% were females and 47.3% were males. The median age was 48 for both females and males. The largest proportion by age group for females and males were those in the 45-54 years old group (19.3%) and 55-64 years old group (19.7%) respectively (Table 1).

Table 1: Weighted distribution of sampled respondents by age group and gender

	Female		Male		Total	
	No. of persons (‘000)	%	No. of persons (‘000)	%	No. of persons (‘000)	%
15-24	330.9	10.4%	344.8	12.0%	675.7	11.2%
25-34	484.4	15.2%	448.1	15.7%	932.5	15.4%
35-44	553.5	17.4%	457.0	16.0%	1 010.5	16.7%
45-54	613.9	19.3%	498.1	17.4%	1 112.0	18.4%
55-64	585.3	18.4%	565.2	19.7%	1 150.5	19.0%
65-74	338.9	10.6%	329.2	11.5%	668.1	11.0%
75-84	179.0	5.6%	161.5	5.6%	340.5	5.6%
85 or above	101.4	3.2%	58.2	2.0%	159.6	2.6%
Total	3 187.3	100.0%	2 862.1	100.0%	6 049.4	100.0%
Median age*	48.0		48.0		48.0	

Base: All respondents.

Notes: *Exclude those who refused to provide exact age.

Figures may not add up to the total due to rounding.

2. Physical Activity

Key Findings	Female	Male	Overall
Proportion of population aged 18 or above who had insufficient physical activity according to WHO's recommendation	18.3%	15.2%	16.8%
Proportion of population aged 15 or above reported spending 10 hours or longer on average on sitting or reclining each day	19.9%	21.6%	20.7%

In the HBS 2018/19, the extent of the population's physical activity level was assessed using the Global Physical Activity Questionnaire (GPAQ) developed by the World Health Organization (WHO) for physical activity surveillance. The instrument collects information on the population's physical activity participation in three settings including activities at work, travel to and from places and recreational activities, as well as their total physical activity (including physical activities in all the three settings), in a typical week when these activities were performed¹.

2.1 *Setting-specific and Total Physical Activities*

Among persons aged 15 or above, over 9 out of 10 (91.5%) of them performed physical activities for at least 10 minutes continuously in one of the three settings in a typical week, including 15.5% performed work-related physical activity, 84.5% had transport-related physical activity (including walking or cycling) and 42.1% participated in recreation-related physical activity. While the proportion of males (91.4%) participating in total physical activity was almost the same as that of females (91.5%), persons in the age group 15-24 (95.7%) had a higher proportion of total physical activity participation than persons in older age groups (Table 2 and Table 3).

¹ World Health Organization. Global Physical Activity Questionnaire (GPAQ) Analysis Guide. Available from: http://www.who.int/chp/steps/resources/GPAQ_Analysis_Guide.pdf?ua=1.

Table 2: Setting-specific physical activities§ performed in a typical week by gender

	Female		Male		Total	
	No. of persons	%	No. of persons	%	No. of persons	%
	('000)		('000)		('000)	
Work-related physical activity	325.6	10.3%	603.0	21.3%	928.6	15.5%
Transport-related physical activity	2 692.1	85.5%	2 356.1	83.4%	5 048.2	84.5%
Recreation-related physical activity	1 175.5	37.3%	1 341.8	47.5%	2 517.3	42.1%
Total physical activity	2 880.7	91.5%	2 583.2	91.4%	5 464.0	91.5%

Bases: All respondents excluding outliers.

Notes: § Setting-specific physical activities include activity at work, travel to and from place and recreational activity that last for at least 10 minutes continuously and total physical activity refers to all physical activities that lasted for at least 10 minutes continuously in the three settings as a whole.

Multiple answers were allowed.

Figures may not add up to the total due to rounding.

Table 3: Setting-specific physical activities§ performed in a typical week by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Work-related	74.9	11.3%	151.5	16.5%	175.6	17.7%	238.1	21.8%	221.1	19.3%	59.4	8.9%	8.0	2.3%	-	0.0%	928.6	15.5%
Transport-related	567.7	85.8%	786.8	85.6%	805.1	81.1%	936.4	85.7%	1 005.3	87.9%	587.3	88.3%	258.1	75.8%	101.7	63.7%	5 048.2	84.5%
Recreation-related	429.5	64.9%	445.0	48.4%	412.8	41.6%	440.5	40.3%	408.3	35.7%	260.2	39.1%	96.5	28.3%	24.4	15.3%	2 517.3	42.1%
Total physical activity	633.5	95.7%	856.1	93.2%	874.1	88.0%	989.3	90.6%	1 079.0	94.3%	630.8	94.9%	290.2	85.2%	111.0	69.5%	5 464.0	91.5%

Bases: All respondents excluding outliers.

Notes: § Setting-specific physical activities include activity at work, travel to and from place and recreational activity that last for at least 10 minutes continuously and total physical activity refers to all physical activities that lasted for at least 10 minutes continuously in the three settings as a whole.

'-' denotes a nil figure.

Multiple answers were allowed.

Figures may not add up to the total due to rounding.

2.2 Level of Physical Activity

The WHO recommended that adults aged 18 or above should perform at least 150 minutes of moderate-intensity aerobic physical activity, 75 minutes of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity physical activity for health maintenance. For persons aged 65 or above who cannot do the recommended amounts of physical activity due to health conditions, WHO recommended that they should be as physical active as their abilities and health conditions allow².

Among persons aged 18 or above, 16.8% (18.3% for females and 15.2% for males) had insufficient physical activity (i.e. not meeting the WHO recommendation) (Table 4). Persons aged 85 or above (42.8%) were more likely than their younger counterparts to report so (Table 5).

Table 4: Proportion of population aged 18 or above meeting WHO recommendation of physical activity level by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	2 510.5	81.7%	2 317.4	84.8%	4 827.9	83.2%
No	560.5	18.3%	414.2	15.2%	974.7	16.8%
Total	3 070.9	100.0%	2 731.6	100.0%	5 802.6	100.0%

Base: Respondents aged 18 or above excluding outliers.

Notes: Figures may not add up to the total due to rounding.

Caution must be taken when interpreting the figures relating to population aged 18 or above meeting WHO recommendation of sufficient physical activity reported in the report. The figures were estimated purely based on the level of physical activity reported by the respondents.

Table 5: Proportion of population aged 18 or above meeting WHO recommendation of physical activity level by age group

	18-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	432.7	88.3%	770.0	83.8%	793.1	79.9%	914.4	83.7%	987.1	86.3%	575.1	86.5%	264.2	77.6%	91.3	57.2%	4 827.9	83.2%
No	57.1	11.7%	148.8	16.2%	199.7	20.1%	178.1	16.3%	156.7	13.7%	89.8	13.5%	76.3	22.4%	68.3	42.8%	974.7	16.8%
Total	489.9	100.0%	918.7	100.0%	992.8	100.0%	1 092.4	100.0%	1 143.8	100.0%	664.8	100.0%	340.5	100.0%	159.6	100.0%	5 802.6	100.0%

Base: Respondents aged 18 or above excluding outliers.

Notes: Figures may not add up to the total due to rounding.

Caution must be taken when interpreting the figures relating to population aged 18 or above meeting WHO recommendation of sufficient physical activity reported in the report. The figures were estimated purely based on the level of physical activity reported by the respondents.

² World Health Organization. Global Recommendations on Physical Activity for Health, 2010; Available from: http://apps.who.int/iris/bitstream/10665/44399/1/9789241599979_eng.pdf.

2.3 Sedentary Behaviour

Sedentary behaviour refers to sitting or reclining at work, at home, with friends, or getting to and from places in a car, bus or train, but does not include sleeping.

Overall, 20.7% of the persons aged 15 or above reported that they spent 600 minutes (10 hours) or longer on average per day on sitting or reclining. Males (21.6%) and persons aged 85 or above (30.5%) were more likely to report spending 600 minutes or longer on average per day on sitting or reclining when compared with their respective counterparts (Table 6 and Table 7).

Table 6: Time (in minutes) spent on sitting or reclining* on a typical day by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Below 120	77.6	2.5%	62.8	2.2%	140.4	2.3%
120 or above	3 071.6	97.5%	2 762.7	97.8%	5 834.3	97.7%
120 - <240	473.4	15.0%	458.1	16.2%	931.5	15.6%
240 - <360	817.1	25.9%	727.0	25.7%	1 544.0	25.8%
360 - <480	563.9	17.9%	468.9	16.6%	1 032.8	17.3%
480 - <600	590.2	18.7%	498.3	17.6%	1 088.5	18.2%
600 or above	627.0	19.9%	610.4	21.6%	1 237.5	20.7%
Total	3 149.2	100.0%	2 825.5	100.0%	5 974.7	100.0%
Mean	388.3		392.6		390.3	

Base: All respondents excluding outliers.

Notes: * Time spent on sitting or reclining does not include time spent on sleeping.

Figures may not add up to the total due to rounding.

Table 7: Time (in minutes) spent on sitting or reclining* on a typical day by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Below 120	11.6	1.8%	15.2	1.7%	26.8	2.7%	28.5	2.6%	21.1	1.8%	23.7	3.6%	8.3	2.4%	5.1	3.2%	140.4	2.3%
120 or above	650.4	98.2%	903.5	98.3%	966.0	97.3%	1 064.0	97.4%	1 122.7	98.2%	641.2	96.4%	332.2	97.6%	154.5	96.8%	5 834.3	97.7%
120 - <240	60.0	9.1%	136.2	14.8%	176.4	17.8%	188.9	17.3%	213.7	18.7%	102.8	15.5%	43.8	12.9%	9.8	6.1%	931.5	15.6%
240 - <360	124.4	18.8%	187.7	20.4%	266.5	26.8%	273.1	25.0%	361.3	31.6%	206.1	31.0%	95.7	28.1%	29.3	18.4%	1 544.0	25.8%
360 - <480	128.8	19.5%	140.3	15.3%	137.4	13.8%	159.6	14.6%	209.4	18.3%	149.2	22.4%	79.9	23.5%	28.1	17.6%	1 032.8	17.3%
480 - <600	167.3	25.3%	200.8	21.9%	188.9	19.0%	163.9	15.0%	177.6	15.5%	101.4	15.2%	50.1	14.7%	38.5	24.2%	1 088.5	18.2%
600 or above	169.9	25.7%	238.4	26.0%	196.7	19.8%	278.4	25.5%	160.7	14.1%	81.7	12.3%	62.8	18.4%	48.8	30.5%	1 237.5	20.7%
Total	662.0	100.0%	918.7	100.0%	992.8	100.0%	1 092.4	100.0%	1 143.8	100.0%	664.8	100.0%	340.5	100.0%	159.6	100.0%	5 974.7	100.0%
Mean	432.1		411.8		383.6		410.5		353.1		351.5		377.2		454.3		390.3	

Base: All respondents excluding outliers.

Notes: * Time spent on sitting or reclining does not include time spent on sleeping.

Figures may not add up to the total due to rounding.

3. Diet and Nutrition

Key Findings	Female	Male	Overall
Proportion of population aged 15 or above with inadequate daily intake of fruit and vegetables according to WHO definition	94.1%	97.2%	95.6%
Proportion of population aged 15 or above consuming processed meat and associated products at least once per day	6.8%	13.3%	9.9%

Consuming a healthy diet throughout the life course helps prevent a range of non-communicable diseases and conditions linked to obesity. Specific recommendations for a healthy diet include eating at least five servings (i.e. 400 grams) of fruit and vegetables per day and cutting down on consumption of salt, sugar and fats³. While there is sufficient evidence in humans that consumption of processed meat causes colorectal cancer, people are urged to avoid processed meat⁴. The HBS 2018/19 incorporated questions on people’s usual consumption of fruit, vegetables as well as processed meat and associated products (such as canned meat, ham and sausages).

3.1. Consumption of Fruit

Daily fruit consumption was reported by 67.7% of persons aged 15 or above. Females (72.8%) and persons aged 75-84 (79.7%) were more likely to report that they ate fruit at least once a day when compared with their respective counterparts (Table 8 and Table 9).

³ Healthy diet. World Health Organization, 2018. Available from: <http://www.who.int/mediacentre/factsheets/fs394/en/>.

⁴ WCRF/AICR. Continuous Update Project Expert report 2018. Diet, nutrition, physical activity and colorectal cancer. Available at <https://www.wcrf.org/sites/default/files/Colorectal-cancer-report.pdf>.

Table 8: Frequency of eating fruit by gender

	Female		Male		Total	
	No. of persons	%	No. of persons	%	No. of persons	%
	('000)		('000)		('000)	
Do not eat / Less than once per month	23.7	0.7%	50.6	1.8%	74.3	1.2%
1-3 time(s) per month	44.6	1.4%	96.5	3.4%	141.1	2.3%
Once per week	82.7	2.6%	139.2	4.9%	221.9	3.7%
2-4 times per week	594.9	18.7%	680.5	23.8%	1 275.4	21.1%
5-6 times per week	122.1	3.8%	120.7	4.2%	242.8	4.0%
At least once a day	2 319.3	72.8%	1 773.9	62.0%	4 093.2	67.7%
<i>Once per day</i>	1 857.9	58.3%	1 489.1	52.0%	3 347.0	55.3%
<i>Twice per day</i>	402.9	12.6%	258.6	9.0%	661.4	10.9%
<i>More than twice per day</i>	58.6	1.8%	26.2	0.9%	84.8	1.4%
Don't know	-	-	0.8	<0.05%	0.8	<0.05%
Total	3 187.3	100.0%	2 862.1	100.0%	6 049.4	100.0%

Base: All respondents.

Note: '-' denotes a nil figure.

Figures may not add up to the total due to rounding.

Table 9: Frequency of eating fruit by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total		
	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		
Do not eat /																			
Less than once per month	12.1	1.8%	13.8	1.5%	4.6	0.5%	10.1	0.9%	12.2	1.1%	8.4	1.3%	7.8	2.3%	5.3	3.3%	74.3	1.2%	
1-3 time(s) per month	19.6	2.9%	24.0	2.6%	25.2	2.5%	23.5	2.1%	20.6	1.8%	17.3	2.6%	8.9	2.6%	2.1	1.3%	141.1	2.3%	
Once per week	46.2	6.8%	53.4	5.7%	35.9	3.6%	34.0	3.1%	25.0	2.2%	18.3	2.7%	4.1	1.2%	5.0	3.1%	221.9	3.7%	
2-4 times per week	203.9	30.2%	230.9	24.8%	250.0	24.7%	216.4	19.5%	216.2	18.8%	93.1	13.9%	38.4	11.3%	26.6	16.7%	1 275.4	21.1%	
5-6 times per week	24.5	3.6%	41.1	4.4%	45.7	4.5%	65.9	5.9%	33.5	2.9%	19.7	2.9%	10.1	3.0%	2.3	1.5%	242.8	4.0%	
At least once a day	368.7	54.6%	569.3	61.1%	649.1	64.2%	762.2	68.5%	843.0	73.3%	511.4	76.5%	271.3	79.7%	118.2	74.1%	4 093.2	67.7%	
<i>Once per day</i>	314.2	46.5%	494.9	53.1%	510.6	50.5%	617.3	55.5%	683.3	59.4%	392.4	58.7%	232.9	68.4%	101.4	63.5%	3 347.0	55.3%	
<i>Twice per day</i>	45.2	6.7%	68.1	7.3%	131.6	13.0%	123.9	11.1%	145.8	12.7%	96.0	14.4%	34.0	10.0%	16.8	10.6%	661.4	10.9%	
<i>More than twice per day</i>	9.3	1.4%	6.4	0.7%	6.8	0.7%	21.0	1.9%	14.0	1.2%	22.9	3.4%	4.4	1.3%	-	-	84.8	1.4%	
Don't know	0.8	0.1%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	<0.05%	
Total	675.7	100.0%	932.5	100.0%	1 010.5	100.0%	1 112.0	100.0%	1 150.5	100.0%	668.1	100.0%	340.5	100.0%	159.6	100.0%	6 049.4	100.0%	

Base: All respondents.

Notes: '-' denotes a nil figure.

Figures may not add up to the total due to rounding.

In the HBS 2018/19, one serving of fruit was defined as equivalent to half piece of large sized fruit (e.g. banana) or one piece of medium-sized fruit (e.g. apple, orange and pear).

Overall, one-fifth (20.0%) of persons aged 15 or above reported that they ate two or more servings of fruit per day on the days when they ate fruit. Females (22.2%) and persons aged 65-74 (22.4%) were more likely to report that they ate two or more servings of fruit per day when compared with their respective counterparts (Table 10 and Table 11).

Table 10: Number of servings of fruit eaten per day on the days when persons ate fruit by gender

	Female		Male		Total	
	No. of persons (‘000)	%	No. of persons (‘000)	%	No. of persons (‘000)	%
Less than 1	174.6	5.5%	233.1	8.1%	407.8	6.7%
1 to less than 2	2 304.0	72.3%	2 124.7	74.2%	4 428.7	73.2%
2 or more	708.7	22.2%	503.5	17.6%	1 212.2	20.0%
Unknown / Missing	-	-	0.8	<0.05%	0.8	<0.05%
Total	3 187.3	100.0%	2 862.1	100.0%	6 049.4	100.0%
Mean †	1.3		1.2		1.2	

Bases: All respondents.

† All respondents with valid response on the number of servings of fruit eaten per day.

Notes: ‘-’ denotes a nil figure.

Figures may not add up to the total due to rounding.

Table 11: Number of servings of fruit eaten per day on the days when persons ate fruit by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons (‘000)	%	No. of persons (‘000)	%	No. of persons (‘000)	%	No. of persons (‘000)	%	No. of persons (‘000)	%	No. of persons (‘000)	%	No. of persons (‘000)	%	No. of persons (‘000)	%	No. of persons (‘000)	%
Less than 1	46.1	6.8%	61.6	6.6%	50.7	5.0%	67.4	6.1%	74.4	6.5%	43.8	6.6%	43.5	12.8%	20.1	12.6%	407.8	6.7%
1 to less than 2	506.6	75.0%	694.7	74.5%	738.5	73.1%	820.0	73.7%	834.0	72.5%	474.6	71.0%	245.6	72.1%	114.7	71.9%	4 428.7	73.2%
2 or more	122.3	18.1%	176.2	18.9%	221.2	21.9%	224.6	20.2%	242.0	21.0%	149.7	22.4%	51.4	15.1%	24.7	15.5%	1 212.2	20.0%
Unknown / Missing	0.8	0.1%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	0.0%
Total	675.7	100.0%	932.5	100.0%	1 010.5	100.0%	1 112.0	100.0%	1 150.5	100.0%	668.1	100.0%	340.5	100.0%	159.6	100.0%	6 049.4	100.0%
Mean†	1.2		1.2		1.2		1.2		1.2		1.2		1.1		1.1		1.2	

Bases: All respondents.

† All respondents with valid response on the number of servings of fruit eaten per day.

Notes: ‘-’ denotes a nil figure.

Figures may not add up to the total due to rounding.

3.2 Consumption of Vegetables

Daily vegetable consumption was reported by 89.6% of persons aged 15 or above. Females (92.2%) and persons aged 85 or above (96.6%) were more likely to report that they ate vegetables at least once a day when compared with their respective counterparts (Table 12 and Table 13).

Table 12: Frequency of eating vegetables by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Do not eat / Less than once per month	6.8	0.2%	11.6	0.4%	18.4	0.3%
1-3 time(s) per month	3.4	0.1%	8.4	0.3%	11.7	0.2%
Once per week	10.5	0.3%	15.4	0.5%	25.9	0.4%
2-4 times per week	124.7	3.9%	203.9	7.1%	328.6	5.4%
5-6 times per week	104.7	3.3%	140.1	4.9%	244.8	4.0%
At least once a day	2 937.2	92.2%	2 482.8	86.7%	5 419.9	89.6%
<i>Once per day</i>	1 781.8	55.9%	1 681.9	58.8%	3 463.7	57.3%
<i>Twice per day</i>	1 082.8	34.0%	745.6	26.1%	1 828.4	30.2%
<i>More than twice per day</i>	72.6	2.3%	55.2	1.9%	127.8	2.1%
Total	3 187.3	100.0%	2 862.1	100.0%	6 049.4	100.0%

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 13: Frequency of eating vegetables by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Do not eat / Less than once per month	2.1	0.3%	3.8	0.4%	0.9	0.1%	2.0	0.2%	1.2	0.1%	1.7	0.3%	3.2	0.9%	3.6	2.3%	18.4	0.3%
1-3 time(s) per month	-	-	1.3	0.1%	-	-	4.5	0.4%	4.7	0.4%	-	-	1.2	0.3%	-	-	11.7	0.2%
Once per week	2.5	0.4%	5.2	0.6%	4.0	0.4%	7.9	0.7%	3.3	0.3%	2.4	0.4%	0.7	0.2%	-	-	25.9	0.4%
2-4 times per week	65.9	9.8%	64.7	6.9%	44.2	4.4%	53.9	4.8%	66.5	5.8%	21.2	3.2%	10.4	3.0%	1.9	1.2%	328.6	5.4%
5-6 times per week	47.8	7.1%	38.6	4.1%	53.8	5.3%	61.1	5.5%	24.9	2.2%	17.2	2.6%	1.3	0.4%	-	-	244.8	4.0%
At least once a day	557.3	82.5%	819.0	87.8%	907.7	89.8%	982.5	88.4%	1 049.8	91.3%	625.7	93.6%	323.8	95.1%	154.1	96.6%	5 419.9	89.6%
<i>Once per day</i>	399.9	59.2%	591.4	63.4%	577.2	57.1%	634.0	57.0%	681.8	59.3%	323.9	48.5%	167.7	49.3%	87.7	54.9%	3 463.7	57.3%
<i>Twice per day</i>	144.7	21.4%	215.0	23.1%	315.0	31.2%	325.0	29.2%	348.5	30.3%	272.5	40.8%	146.9	43.1%	60.8	38.1%	1 828.4	30.2%
<i>More than twice per day</i>	12.7	1.9%	12.6	1.3%	15.5	1.5%	23.5	2.1%	19.5	1.7%	29.3	4.4%	9.1	2.7%	5.7	3.6%	127.8	2.1%
Total	675.7	100.0%	932.5	100.0%	1 010.5	100.0%	1 112.0	100.0%	1 150.5	100.0%	668.1	100.0%	340.5	100.0%	159.6	100.0%	6 049.4	100.0%

Base: All respondents.

Notes: '-' denotes a nil figure.

Figures may not add up to the total due to rounding.

In the HBS 2018/19, one serving of vegetables was defined as equivalent to a bowl of raw leafy vegetables or half a bowl of cooked vegetables.

Overall, more than one-third (37.4%) of persons aged 15 or above reported that they ate two or more servings of vegetables per day on the days they ate vegetables. Females (40.6%) and persons aged 65-74 (42.3%) were more likely to report that they ate two or more servings of vegetables per day when compared with their respective counterparts (Table 14 and Table 15).

Table 14: Number of servings of vegetables eaten per day on the days when persons ate vegetables by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Less than 1	112.2	3.5%	152.4	5.3%	264.7	4.4%
1 to less than 2	1 780.6	55.9%	1 741.0	60.8%	3 521.7	58.2%
2 or more	1 294.4	40.6%	968.6	33.8%	2 263.1	37.4%
Total	3 187.3	100.0%	2862.1	100.0%	6 049.4	100.0%
Mean†	1.5		1.4		1.5	

Bases: All respondents.

† All respondents with valid response on the number of servings of vegetables eaten per day.

Note: Figures may not add up to the total due to rounding.

Table 15: Number of servings of vegetables eaten per day on the days when persons ate vegetables by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Less than 1	31.3	4.6%	60.7	6.5%	29.1	2.9%	33.2	3.0%	46.3	4.0%	18.0	2.7%	28.5	8.4%	17.7	11.1%	264.7	4.4%
1 to less than 2	407.5	60.3%	535.7	57.5%	583.9	57.8%	671.9	60.4%	655.3	57.0%	367.2	55.0%	200.1	58.8%	99.9	62.6%	3521.7	58.2%
2 or more	236.8	35.0%	336.1	36.0%	397.5	39.3%	406.9	36.6%	449.0	39.0%	282.8	42.3%	111.9	32.9%	42.0	26.3%	2263.1	37.4%
Total	675.7	100.0%	932.5	100.0%	1010.5	100.0%	1112.0	100.0%	1150.5	100.0%	668.1	100.0%	340.5	100.0%	159.6	100.0%	6049.4	100.0%
Mean†	1.4		1.4		1.5		1.5		1.5		1.5		1.4		1.2		1.5	

Bases: All respondents.

† All respondents with valid response on the number of servings of vegetables eaten per day.

Note: Figures may not add up to the total due to rounding.

3.3 Consumption of Fruit and Vegetables

The WHO recommends consuming a minimum of five servings of fruit and vegetables a day, or a daily intake of at least 400g of fruit and vegetables, to achieve optimal health benefits⁵. In the HBS 2018/19, the number of servings of fruit and vegetables eaten as a whole on average per day was calculated by summing the average daily servings of fruit eaten and that of vegetables.

Overall, 4.4% of persons aged 15 or above reported consuming an average of five or more servings of fruit and vegetables per day. Females (5.9%) and persons aged 65-74 (5.2%) were more likely than their respective counterparts to report that they ate five or more servings of fruit and vegetables per day (Table 16 and Table 17).

Table 16: Number of servings of fruit and vegetables eaten on average per day by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Less than 5 servings a day	2998.2	94.1%	2782.4	97.2%	5780.6	95.6%
5 or more servings a day	189.1	5.9%	79.7	2.8%	268.8	4.4%
Total	3187.3	100.0%	2862.1	100.0%	6049.4	100.0%
Mean†	2.6		2.3		2.4	

Bases: All respondents.

† All respondents with valid response on the number of servings of fruit and vegetables eaten per day.

Note: Figures may not add up to the total due to rounding.

Table 17: Number of servings of fruit and vegetables eaten on average per day by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Less than 5 servings a day	648.9	96.0%	893.1	95.8%	964.7	95.5%	1 059.2	95.2%	1 093.8	95.1%	633.5	94.8%	329.0	96.6%	158.5	99.3%	5 780.6	95.6%
5 or more servings a day	26.8	4.0%	39.4	4.2%	45.8	4.5%	52.8	4.8%	56.7	4.9%	34.6	5.2%	11.5	3.4%	1.1	0.7%	268.8	4.4%
Total	675.7	100.0%	932.5	100.0%	1 010.5	100.0%	1 112.0	100.0%	1 150.5	100.0%	668.1	100.0%	340.5	100.0%	159.6	100.0%	6 049.4	100.0%
Mean†	2.2		2.3		2.5		2.5		2.5		2.6		2.4		2.2		2.4	

Bases: All respondents.

† All respondents with valid response on the number of servings of fruit and vegetables eaten per day.

Note: Figures may not add up to the total due to rounding.

⁵ Healthy Diet. World Health Organization, 2018. Available from: <http://www.who.int/mediacentre/factsheets/fs394/en/>.

3.4 Consumption of Processed Meat and Associated Products

9.9% of persons aged 15 or above ate processed meat and associated products such as canned meat, ham and sausages on average at least once a day. Males (13.3%) and persons aged 15-24 (14.8%) were more likely to report that they ate processed meat and associated products on average at least once a day when compared with their respective counterparts (Table 18 and Table 19).

Table 18: Frequency of consumption of processed meat and associated products by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Do not eat / Less than once per month	873.5	27.4%	517.9	18.1%	1 391.4	23.0%
1-3 time(s) per month	729.3	22.9%	487.7	17.0%	1 217.0	20.1%
Once per week	574.2	18.0%	445.6	15.6%	1 019.8	16.9%
2-4 times per week	653.1	20.5%	779.5	27.2%	1 432.6	23.7%
5-6 times per week	133.1	4.2%	242.7	8.5%	375.8	6.2%
At least once a day	216.6	6.8%	380.6	13.3%	597.3	9.9%
<i>Once per day</i>	187.5	5.9%	314.9	11.0%	502.4	8.3%
<i>Twice per day</i>	24.7	0.8%	57.4	2.0%	82.1	1.4%
<i>More than twice per day</i>	4.4	0.1%	8.3	0.3%	12.8	0.2%
Don't know	7.5	0.2%	8.0	0.3%	15.5	0.3%
Total	3 187.3	100.0%	2 862.1	100.0%	6 049.4	100.0%

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 19: Frequency of consumption of processed meat and associated products by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
Do not eat /																			
Less than once per month	71.7	10.6%	114.6	12.3%	137.3	13.6%	187.7	16.9%	312.1	27.1%	263.6	39.5%	191.0	56.1%	113.3	71.0%	1 391.4	23.0%	
1-3 time(s) per month	106.2	15.7%	147.2	15.8%	144.2	14.3%	223.2	20.1%	304.0	26.4%	196.9	29.5%	79.3	23.3%	16.1	10.1%	1 217.0	20.1%	
Once per week	110.1	16.3%	192.1	20.6%	175.7	17.4%	201.2	18.1%	192.0	16.7%	100.3	15.0%	33.9	10.0%	14.4	9.0%	1 019.8	16.9%	
2-4 times per week	236.2	35.0%	282.6	30.3%	302.2	29.9%	292.2	26.3%	221.0	19.2%	67.6	10.1%	22.0	6.4%	9.0	5.6%	1 432.6	23.7%	
5-6 times per week	50.0	7.4%	58.2	6.2%	115.0	11.4%	104.6	9.4%	38.6	3.4%	6.7	1.0%	2.7	0.8%	-	-	375.8	6.2%	
At least once a day	99.8	14.8%	136.4	14.6%	135.1	13.4%	102.1	9.2%	80.3	7.0%	30.3	4.5%	8.6	2.5%	4.6	2.9%	597.3	9.9%	
<i>Once per day</i>	85.1	12.6%	104.9	11.2%	114.2	11.3%	84.3	7.6%	72.5	6.3%	28.2	4.2%	8.6	2.5%	4.6	2.9%	502.4	8.3%	
<i>Twice per day</i>	11.7	1.7%	30.4	3.3%	18.7	1.9%	13.2	1.2%	6.0	0.5%	2.0	0.3%	-	-	-	-	82.1	1.4%	
<i>More than twice per day</i>	3.1	0.5%	1.1	0.1%	2.1	0.2%	4.6	0.4%	1.9	0.2%	-	-	-	-	-	-	12.8	0.2%	
Don't know	1.7	0.3%	1.4	0.2%	1.0	0.1%	1.0	0.1%	2.5	0.2%	2.7	0.4%	3.0	0.9%	2.1	1.3%	15.5	0.3%	
Total	675.7	100.0%	932.5	100.0%	1 010.5	100.0%	1 112.0	100.0%	1 150.5	100.0%	668.1	100.0%	340.5	100.0%	159.6	100.0%	6 049.4	100.0%	

Base: All respondents.

Notes: '-' denotes a nil figure.

Figures may not add up to the total due to rounding.

In the HBS 2018/19, one serving of processed meat and associated products was defined as equivalent to the size of a mahjong tile or ping-pong ball.

Overall, more than one-fourth (26.8%) of persons aged 15 or above reported that they ate two or more servings of processed meat and associated products per day on the days they ate processed meat and associated products. Males (32.4%) and persons aged 15-24 (38.4%) were more likely than their respective counterparts to report that they ate two or more servings of processed meat and associated products per day on the days they ate processed meat and associated products (Table 20 and Table 21).

Table 20: Number of servings of processed meat and associated products eaten per day on the days when persons ate processed meat and associated products by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Less than 1	821.6	25.8%	453.3	15.8%	1 275.0	21.1%
1 to less than 2	1 662.1	52.1%	1 473.7	51.5%	3 135.8	51.8%
2 or more	696.1	21.8%	927.0	32.4%	1 623.1	26.8%
Unknown / Missing	7.5	0.2%	8.0	0.3%	15.5	0.3%
Total	3 187.3	100.0%	2 862.1	100.0%	6 049.4	100.0%
Mean†	1.1		1.3		1.2	

Bases: All respondents.

† All respondents with valid response on the number of servings of processed meat and associated products eaten per day.

Note: Figures may not add up to the total due to rounding.

Table 21: Number of servings of processed meat and associated products eaten per day on the days when persons ate processed meat and associated products by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Less than 1	70.2	10.4%	118.7	12.7%	150.0	14.8%	214.5	19.3%	268.8	23.4%	210.6	31.5%	144.8	42.5%	97.5	61.1%	1 275.0	21.1%
1 to less than 2	344.5	51.0%	483.5	51.9%	520.9	51.5%	618.8	55.6%	622.3	54.1%	329.7	49.3%	163.0	47.9%	53.1	33.3%	3 135.8	51.8%
2 or more	259.2	38.4%	328.8	35.3%	338.6	33.5%	277.7	25.0%	256.9	22.3%	125.2	18.7%	29.8	8.7%	6.9	4.3%	1 623.1	26.8%
Unknown / Missing	1.7	0.3%	1.4	0.2%	1.0	0.1%	1.0	0.1%	2.5	0.2%	2.7	0.4%	3.0	0.9%	2.1	1.3%	15.5	0.3%
Total	675.7	100.0%	932.5	100.0%	1 010.5	100.0%	1 112.0	100.0%	1 150.5	100.0%	668.1	100.0%	340.5	100.0%	159.6	100.0%	6 049.4	100.0%
Mean†	1.5		1.4		1.4		1.2		1.1		1.0		0.8		0.6		1.2	

Bases: All respondents.

† All respondents with valid response on the number of servings of processed meat and associated products eaten per day.

Note: Figures may not add up to the total due to rounding.

4. Alcohol Consumption

Key Findings	Female	Male	Overall
Proportion of population aged 15 or above who drank at least once a week in the 12 months preceding the survey	3.2%	15.0%	8.8%
Proportion of population aged 15 or above who had binge drinking at least monthly in the 12 months preceding the survey	0.6%	5.5%	2.9%

Alcohol consumption is a causal factor in more than 200 diseases and injury conditions. Consuming too much alcohol, either on a single episode or on a regular basis over a period of time, is associated with increased risk of cardiovascular diseases, liver cirrhosis, some cancers, injuries, alcohol dependence and mental disorders in a dose dependent manner⁶. The HBS 2018/19 adopted a self-administered questionnaire to assess the pattern of alcohol consumption, including binge drinking, among persons aged 15 or above.

4.1 Pattern of Alcohol Consumption

Around one-fifth (20.1%) of the population aged 15 or above drank alcoholic beverages occasionally (i.e. drank in three days or less a month) and 8.8% drank regularly (i.e. drank at least once a week) in the 12 months preceding the survey. Males (15.0%) and persons aged 55-64 (12.0%) were more likely than their respective counterparts to report that they drank alcohol regularly (Table 22 and Table 23).

⁶ World Health Organization. Alcohol, 21 September 2018; Available from: <http://www.who.int/mediacentre/factsheets/fs349/en/>.

Table 22: Pattern of alcohol consumption in the 12 months preceding the survey by gender

	Female		Male		Total	
	No. of persons	%	No. of persons	%	No. of persons	%
	('000)		('000)		('000)	
Not in the past year / Never	2 637.7	82.8%	1 664.9	58.2%	4 302.6	71.1%
Drink alcohol occasionally	446.2	14.0%	767.7	26.8%	1 213.9	20.1%
<i>Less than once a month</i>	324.2	10.2%	396.2	13.8%	720.4	11.9%
<i>1 day per month</i>	63.6	2.0%	187.2	6.5%	250.8	4.1%
<i>2-3 days per month</i>	58.4	1.8%	184.3	6.4%	242.8	4.0%
Drink alcohol regularly	103.4	3.2%	429.4	15.0%	532.8	8.8%
<i>1 day per week</i>	47.3	1.5%	159.5	5.6%	206.8	3.4%
<i>2-3 days per week</i>	31.5	1.0%	123.7	4.3%	155.1	2.6%
<i>4-6 days per week</i>	0.0	0.0%	27.3	1.0%	27.3	0.5%
<i>Everyday</i>	24.7	0.8%	119.0	4.2%	143.6	2.4%
Total	3 187.3	100.0%	2 862.1	100.0%	6 049.4	100.0%

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 23: Pattern of alcohol consumption in the 12 months preceding the survey by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Not in the past year / Never	526.6	77.9%	595.3	63.8%	680.0	67.3%	771.0	69.3%	769.0	66.8%	515.6	77.2%	294.7	86.6%	150.4	94.2%	4 302.6	71.1%
Drink alcohol occasionally	131.7	19.5%	253.3	27.2%	224.7	22.2%	228.8	20.6%	243.0	21.1%	97.6	14.6%	29.2	8.6%	5.6	3.5%	1 213.9	20.1%
<i>Less than once a month</i>	71.4	10.6%	145.2	15.6%	128.3	12.7%	133.4	12.0%	159.5	13.9%	62.7	9.4%	16.0	4.7%	3.8	2.4%	720.4	11.9%
<i>1 day per month</i>	26.0	3.9%	51.7	5.5%	47.6	4.7%	50.6	4.5%	45.1	3.9%	20.0	3.0%	7.9	2.3%	1.8	1.1%	250.8	4.1%
<i>2-3 days per month</i>	34.2	5.1%	56.4	6.0%	48.8	4.8%	44.7	4.0%	38.4	3.3%	14.8	2.2%	5.4	1.6%	0.0	0.0%	242.8	4.0%
Drink alcohol regularly	17.4	2.6%	83.9	9.0%	105.8	10.5%	112.2	10.1%	138.5	12.0%	54.9	8.2%	16.5	4.9%	3.6	2.3%	532.8	8.8%
<i>1 day per week</i>	9.3	1.4%	39.4	4.2%	46.7	4.6%	51.3	4.6%	40.8	3.5%	17.3	2.6%	1.9	0.6%	0.0	0.0%	206.8	3.4%
<i>2-3 days per week</i>	7.2	1.1%	28.0	3.0%	39.7	3.9%	28.8	2.6%	36.2	3.1%	10.4	1.5%	4.1	1.2%	0.8	0.5%	155.1	2.6%
<i>4-6 days per week</i>	0.0	0.0%	0.0	0.0%	5.5	0.5%	4.5	0.4%	11.9	1.0%	5.4	0.8%	0.0	0.0%	0.0	0.0%	27.3	0.5%
<i>Everyday</i>	0.9	0.1%	16.5	1.8%	13.9	1.4%	27.6	2.5%	49.6	4.3%	21.8	3.3%	10.6	3.1%	2.8	1.8%	143.6	2.4%
Total	675.7	100.0%	932.5	100.0%	1 010.5	100.0%	1 112.0	100.0%	1 150.5	100.0%	668.1	100.0%	340.5	100.0%	159.6	100.0%	6 049.4	100.0%

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

4.2 Binge Drinking

In this survey, binge drinking was defined as drinking at least 5 cans of beer, 5 glasses of table wines or 5 pegs of spirits on a single occasion.

Among persons aged 15 or above who had a drink containing alcohol in the 12 months preceding the survey, 22.6% reported that they had binge drinking during this period. Males (28.7%) and persons aged 45-54 (31.1%) were more likely to report that they had binge drinking in the 12 months preceding the survey when compared with their respective counterparts (Table 24 and Table 25). Overall, 2.9% of population aged 15 or above had binge drinking at least monthly in the 12 months preceding the survey.

Table 24: Frequency of binge drinking in the 12 months preceding the survey by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Ever in 12 months preceding the survey	50.7	9.2%	343.2	28.7%	393.9	22.6%
<i>Less than monthly</i>	31.3	5.7%	186.0	15.5%	217.3	12.4%
<i>Monthly</i>	12.0	2.2%	72.1	6.0%	84.1	4.8%
<i>Weekly</i>	3.4	0.6%	75.4	6.3%	78.8	4.5%
<i>Daily or almost daily</i>	4.0	0.7%	9.7	0.8%	13.8	0.8%
Prevalence of binge drinking at least monthly*	N.A.	0.6%	N.A.	5.5%	N.A.	2.9%
Never in the 12 months preceding the survey	498.9	90.8%	854.0	71.3%	1 352.8	77.4%
Total	549.6	100.0%	1 197.2	100.0%	1 746.8	100.0%

Base: All respondents who had a drink containing alcohol in the past 12 months preceding the survey.

Notes: *Prevalence of binge drinking at least monthly was calculated by dividing the number of persons who had binge drinking at least once a month by the estimate of population aged 15 or above of respective age / gender subgroup and expressed as a percentage.

'N.A.' denotes not applicable. Figures may not add up due to rounding.

Table 25: Frequency of binge drinking in the 12 months preceding the survey by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Ever in 12 months preceding the survey	22.8	15.3%	81.5	24.2%	94.8	28.7%	105.9	31.1%	71.8	18.8%	17.1	11.2%	-	-	-	-	393.9	22.6%
<i>Less than monthly</i>	12.6	8.4%	57.5	17.1%	58.4	17.7%	36.1	10.6%	42.1	11.0%	10.5	6.9%	-	-	-	-	217.3	12.4%
<i>Monthly</i>	9.5	6.4%	16.7	5.0%	13.3	4.0%	31.8	9.3%	10.3	2.7%	2.4	1.6%	-	-	-	-	84.1	4.8%
<i>Weekly</i>	0.7	0.4%	6.2	1.9%	18.2	5.5%	33.7	9.9%	15.8	4.2%	4.1	2.7%	-	-	-	-	78.8	4.5%
<i>Daily or almost daily</i>	-	-	1.0	0.3%	4.9	1.5%	4.3	1.3%	3.6	0.9%	-	-	-	-	-	-	13.8	0.8%
Prevalence of binge drinking at least monthly*	N.A.	1.5%	N.A.	2.6%	N.A.	3.6%	N.A.	6.3%	N.A.	2.6%	N.A.	1.0%	N.A.	0.0%	N.A.	0.0%	N.A.	2.9%
Never in the 12 months preceding the survey	126.4	84.7%	255.7	75.8%	235.7	71.3%	235.0	68.9%	309.7	81.2%	135.4	88.8%	45.8	100.0%	9.2	100.0%	1 352.8	77.4%
Total	149.1	100.0%	337.2	100.0%	330.5	100.0%	341.0	100.0%	381.5	100.0%	152.5	100.0%	45.8	100.0%	9.2	100.0%	1 746.8	100.0%

Base: All respondents who had a drink containing alcohol in the past 12 months preceding the survey.

Notes: *Prevalence of binge drinking at least monthly was calculated by dividing the number of persons who had binge drinking at least once a month by the estimate of population aged 15 or above of respective age / gender subgroup and expressed as a percentage.

'-' denotes a nil figure. 'N.A.' denotes not applicable. Figures may not add up due to rounding.

5. Smoking Habit

Key Finding	Female	Male	Overall
Proportion of population aged 15 or above who had ever smoked, regardless of what type of products, such as cigarettes, e-cigarettes, cigar, pipe, water pipe, hand-rolled tobacco and so on	5.4%	31.7%	17.9%

Smoking causes a wide range of diseases, including various cancers (including lung cancer, colorectal cancer and liver cancer), cardiovascular diseases (including coronary heart disease, peripheral arterial disease and stroke) and respiratory diseases (including chronic bronchitis, emphysema and chronic obstructive pulmonary disease)⁷. The survey used a self-administered questionnaire to ask respondents their smoking habit regardless of what type of products, such as cigarettes, e-cigarettes, cigar, pipe, water pipe, hand-rolled tobacco and so on.

5.1 Ever Smoking

Overall, 17.9% of persons aged 15 or above reported that they had ever smoked (5.4% for females and 31.7% for males) (Table 26). Analysed by age group, the proportion of persons who had ever smoked was the highest at 22.3% among persons aged 35-44 (Table 27).

Table 26: Distribution of population who had ever smoked by gender

	Female		Male		Total	
	No. of persons (‘000)	%	No. of persons (‘000)	%	No. of persons (‘000)	%
Yes	172.3	5.4%	907.6	31.7%	1 079.9	17.9%
No	3 015.0	94.6%	1 954.5	68.3%	4 969.5	82.1%
Total	3 187.3	100.0%	2 862.1	100.0%	6 049.4	100.0%

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

⁷ The Health Consequences of Smoking- 50 Years of Progress. A Report of the Surgeon General. U.S. Department of Health and Human Services, 2014. Available at https://www.ncbi.nlm.nih.gov/books/NBK179276/pdf/Bookshelf_NBK179276.pdf

Table 27: Distribution of population who had ever smoked by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	26.1	3.9%	139.6	15.0%	225.1	22.3%	227.0	20.4%	225.9	19.6%	142.0	21.3%	71.8	21.1%	22.3	14.0%	1 079.9	17.9%
No	649.6	96.1%	792.9	85.0%	785.4	77.7%	885.0	79.6%	924.6	80.4%	526.1	78.7%	268.7	78.9%	137.3	86.0%	4 969.5	82.1%
Total	675.7	100.0%	932.5	100.0%	1 010.5	100.0%	1 112.0	100.0%	1 150.5	100.0%	668.1	100.0%	340.5	100.0%	159.6	100.0%	6 049.4	100.0%

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

5.2 Currently and Previously Smoking

Among persons aged 15 or above who had ever smoked, 73.9% (75.4% for females and 73.6% for males) of them reported that they currently had habit of smoking (whether on a daily basis or less often) (Table 28). Analysed by age group, the proportion of current smokers was the highest at 86.0% for persons aged 25-34 (Table 29).

Table 28: Distribution of population who previously or currently had habit of smoking by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Previously smoke, and have already quit	42.4	24.6%	239.3	26.4%	281.7	26.1%
Currently smoke, whether on a daily basis or less often	129.9	75.4%	668.3	73.6%	798.2	73.9%
Total	172.3	100.0%	907.6	100.0%	1 079.9	100.0%

Base: All respondents who had ever smoked.

Note: Figures may not add up to the total due to rounding.

Table 29: Distribution of population who previously or currently had habit of smoking by age group

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Previously smoke, and have already quit	3.9	15.1%	19.6	14.0%	35.8	15.9%	37.4	16.5%	65.7	29.1%	62.4	43.9%	39.8	55.5%	17.0	76.4%	281.7	26.1%
Currently smoke, whether on a daily basis or less often	22.2	84.9%	120.0	86.0%	189.3	84.1%	189.6	83.5%	160.2	70.9%	79.6	56.1%	32.0	44.5%	5.3	23.6%	798.2	73.9%
Total	26.1	100.0%	139.6	100.0%	225.1	100.0%	227.0	100.0%	225.9	100.0%	142.0	100.0%	71.8	100.0%	22.3	100.0%	1 079.9	100.0%

Base: All respondents who had ever smoked.

Note: Figures may not add up to the total due to rounding.

6. Cancer Screening

Key Findings	Female	Male	Overall
Proportion of population aged 50-75 who ever had faecal occult blood test (FOBT) or faecal immunochemical test (FIT) without suspected symptoms of colorectal cancer prior to the test	18.3%	19.0%	18.6%
Proportion of population aged 50-75 who ever had colonoscopy without suspected symptoms of colorectal cancer prior to the examination	18.2%	18.1%	18.1%
Proportion of females aged 25-64 who ever had a cervical smear test without suspected symptoms of cervical cancer prior to the test	45.8%	N.A.	N.A.

Cancer screening aims to detect early cancers or to identify precancerous disease in apparently healthy (asymptomatic) individuals, so that treatment can be carried out early and more effectively.⁸ The Cancer Expert Working Group on Cancer Prevention and Screening (CEWG) established under the Cancer Coordinating Committee of the Hong Kong Government recommends that average-risk individuals aged 50-75 without significant family history of bowel diseases should consult their doctors to consider colorectal cancer screening by one of the following screening methods: annual or biennial FOBT or FIT; or sigmoidoscopy every 5 years; or colonoscopy every 10 years⁹. Moreover, the CEWG recommends women aged 25-64 who ever had sexual experience to have cervical cancer screening by cytology every three years after two consecutive normal annual smears. Screening may be discontinued in women aged 65 or above if three previous consecutive smears within 10 years are normal¹⁰.

In this survey, respondents were asked whether they ever had a FOBT or FIT as well as colonoscopy, including whether they had any suspected symptoms of colorectal cancer prior to the test or examination.

⁸ Hong Kong Cancer Strategy 2019. Hong Kong SAR: Food and Health Bureau, Department of Health and Hospital Authority, July 2019. Available at https://www.fhb.gov.hk/download/press_and_publications/otherinfo/190700_hkcs/e_hkcs_fully.pdf.

⁹ 2017 Recommendations on Prevention and Screening of Colorectal Cancer for Health Professionals. Cancer Expert Working Group on Cancer Prevention and Screening and Department of Health, October 2017. Available at https://www.chp.gov.hk/files/pdf/3_cewg_crc_professional_hp.pdf.

¹⁰ Recommendations on Prevention and Screening for Cervical Cancer for Health Professionals. Cancer Expert Working Group on Cancer Prevention, May 2018. Available at https://www.chp.gov.hk/files/pdf/cervical_cancer_professional_hp.pdf.

Female respondents aged 25 or above were further asked whether they ever had a cervical smear, including whether they had any suspected symptoms of cervical cancer prior to the test.

6.1 Faecal Occult Blood Test (FOBT) or Faecal Immunochemical Test (FIT)

A FOBT or FIT (a newer version of FOBT) is a test to detect invisible and small amounts of blood in the stool. Overall, 11.4% of persons aged 15 or above (11.0% for females and 11.8% for males) reported that they ever had received a FOBT or FIT without suspected symptoms of colorectal cancer prior to the test. Among persons aged 50-75, 18.6% (18.3% for females and 19.0% for males) ever had a FOBT or FIT without suspected symptoms of colorectal cancer prior to the test (Table 30 and Table 31).

Table 30: Proportion of population who ever had a FOBT or FIT by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	397.8	12.5%	381.2	13.3%	779.0	12.9%
Without suspected symptoms of colorectal cancer prior to test	350.1	11.0%	337.0	11.8%	687.1	11.4%
Had test because of suspected symptoms of colorectal cancer	47.7	1.5%	44.2	1.5%	91.9	1.5%
No	2 789.5	87.5%	2 480.9	86.7%	5 270.4	87.1%
Total	3 187.3	100.0%	2 862.1	100.0%	6 049.4	100.0%

Base: All respondents

Note: Figures may not add up to the total due to rounding.

Table 31: Proportion of population who ever had a FOBT or FIT by age group

	15-39		40-49		50-59		60-69		70-79		80 or above		50-75		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	63.6	3.0%	103.9	10.0%	180.3	15.1%	245.6	26.3%	134.1	30.3%	51.6	16.2%	521.1	21.4%	779.0	12.9%
Without suspected symptoms of colorectal cancer prior to test	58.8	2.8%	98.0	9.4%	153.0	12.8%	213.0	22.8%	123.5	27.9%	40.9	12.8%	453.7	18.6%	687.1	11.4%
Had test because of suspected symptoms of colorectal cancer	4.8	0.2%	5.9	0.6%	27.2	2.3%	32.6	3.5%	10.6	2.4%	10.8	3.4%	67.4	2.8%	91.9	1.5%
No	2 053.8	97.0%	937.6	90.0%	1 015.2	84.9%	687.1	73.7%	308.8	69.7%	267.8	83.8%	1 913.9	78.6%	5 270.4	87.1%
Total	2 117.4	100.0%	1 041.5	100.0%	1 195.5	100.0%	932.7	100.0%	442.9	100.0%	319.4	100.0%	2 435.0	100.0%	6 049.4	100.0%

Base: All respondents

Note: Figures may not add up to the total due to rounding.

6.2 Colonoscopy

The colonoscopy examination is done by using a thin flexible tube with a small camera attached on the end to detect any abnormality on the wall of the large bowel. Overall, 11.2% of the persons aged 15 or above (11.1% for females and 11.3% for males) ever had colonoscopy without suspected symptoms of colorectal cancer prior to the examination (Table 32). Among persons aged 50-75, 18.1% (18.2% for females and 18.1% for males) ever had colonoscopy without suspected symptoms of colorectal cancer prior to examination (Table 33).

Table 32: Proportion of population who ever had colonoscopy examination by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	404.7	12.7%	372.2	13.0%	776.9	12.8%
<i>Yes, without suspected symptoms of colorectal cancer prior to examination</i>	353.2	11.1%	322.6	11.3%	675.8	11.2%
<i>Yes, had examination because of suspected symptoms of colorectal cancer</i>	51.5	1.6%	49.6	1.7%	101.1	1.7%
No	2 782.6	87.3%	2 489.9	87.0%	5 272.5	87.2%
Total	3 187.3	100.0%	2 862.1	100.0%	6 049.4	100.0%

Base: All respondents

Note: Figures may not add up to the total due to rounding.

Table 33: Proportion of population who ever had colonoscopy examination by age group

	15-39		40-49		50-59		60-69		70-79		80 or above		50-75		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	60.4	2.9%	109.3	10.5%	198.9	16.6%	222.4	23.8%	128.7	29.0%	57.2	17.9%	512.4	21.0%	776.9	12.8%
<i>Yes, without suspected symptoms of colorectal cancer prior to examination</i>	57.0	2.7%	96.3	9.2%	170.0	14.2%	189.2	20.3%	118.2	26.7%	45.1	14.1%	441.9	18.1%	675.8	11.2%
<i>Yes, had examination because of suspected symptoms of colorectal cancer</i>	3.5	0.2%	13.0	1.2%	28.9	2.4%	33.2	3.6%	10.5	2.4%	12.1	3.8%	70.5	2.9%	101.1	1.7%
No	2 057.0	97.1%	932.2	89.5%	996.6	83.4%	710.3	76.2%	314.2	71.0%	262.2	82.1%	1 922.6	79.0%	5 272.5	87.2%
Total	2 117.4	100.0%	1 041.5	100.0%	1 195.5	100.0%	932.7	100.0%	442.9	100.0%	319.4	100.0%	2 435.0	100.0%	6 049.4	100.0%

Base: All respondents

Note: Figures may not add up to the total due to rounding.

6.3 Cervical Smear Test (for females aged 25 or above)

Cervical smear is a screening test for detecting early abnormal changes in the cervix. Overall, 41.2% of females aged 25 or above ever had received cervical smear without suspected symptoms of cervical cancer prior to the test. Among women aged 25-64, 45.8% reported that they ever had a cervical smear without suspected symptoms of cervical cancer prior to the test (Table 34).

Table 34: Proportion of females who ever had a cervical smear by age group

	25-34		35-44		45-54		55-64		65-74		75 or above		25-64		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	158.0	32.6%	282.2	51.0%	313.8	51.1%	303.9	51.9%	123.3	36.4%	47.5	16.9%	1 057.9	47.3%	1 228.7	43.0%
<i>Yes, without suspected symptoms of cervical cancer prior to test</i>	156.8	32.4%	275.3	49.7%	304.2	49.5%	289.2	49.4%	109.4	32.3%	41.0	14.6%	1 025.5	45.8%	1 175.9	41.2%
<i>Yes, had test because of suspected symptoms of cervical cancer</i>	1.2	0.3%	6.9	1.2%	9.6	1.6%	14.7	2.5%	13.9	4.1%	6.5	2.3%	32.4	1.4%	52.8	1.8%
No	326.4	67.4%	271.3	49.0%	300.1	48.9%	281.4	48.1%	215.6	63.6%	232.9	83.1%	1 179.2	52.7%	1 627.7	57.0%
Total	484.4	100.0%	553.5	100.0%	613.9	100.0%	585.3	100.0%	338.9	100.0%	280.4	100.0%	2 237.1	100.0%	2 856.4	100.0%

Base: Females aged 25 or above

Note: Figures may not add up to the total due to rounding.

Cautionary Notes

➤ *Reliability of the Estimations and Survey Limitations*

The estimates of this survey were based on the information obtained from a particular sample which might be different from the true population of interest. To minimise the potential bias in the selection of the sample, this survey adopted a solid random sample design.

The cross-sectional approach of the survey can only be used to reflect health-related behaviours and lifestyle practices of the population of interest at a particular point in time. Therefore, the survey interviewed only part of the population. Although efforts were made to ensure randomness in selection of participants and representativeness of the results, bias might still exist if the selected persons who could not be reached or refused to participate were having different health status or lifestyles.

This survey assessed respondents' health-related behaviours and lifestyle practices through self-reporting that was subjected to recall bias and recall error. Respondents might not be willing to disclose to interviewers some of their behaviours or lifestyle practices (such as having a cervical smear test), under-report those behaviours or practices that were commonly considered to be unhealthy (such as binge drinking), or over-report those behaviours or practices that were generally regarded to be desirable (such as physical activity participation). However, a self-administered questionnaire was used for those questions considered 'sensitive' to minimise the potential reporting error.

Some estimates on certain health-related behaviours and lifestyle practices (such as sub-group analysis by age) were quite small and might be subject to large error.

➤ *Comparison of Survey Findings with Other Local Surveys*

The findings of HBS 2018/19 are not strictly comparable to the figures derived from other household surveys (such as Population Health Surveys of the Department of Health or Thematic Household Surveys of the Census and Statistics Department) because of different data collection mode, questionnaire design, response behaviour, sample size, sampling and estimation method, etc. Great caution must be taken in regard to various data and survey limitations when making comparison, where necessary.