## Health and lifestyle Questionnaire

The number of colorectal cancer patients and accompanying deaths have been increasing in Korea in spite of improvements in early detection and treatment. Several dietary, lifestyle, and genetic factors are considered to influence colorectal cancer risk, while there is a lack of studies that investigate those risk factors in Korean for prevention of the cancer. Therefore, the National Cancer Center is conducting association studies between dietary, lifestyle, and genetic factors and colorectal cancer risk to identify people at high-risk of colorectal cancer and provide evidence-based findings about public environmental interventions for our community to prevent colorectal cancer.

You will be given a separate paper to provide a written consent and this health and lifestyle questionnaire will be handled as such. All data you provide in this questionnaire will be under strict confidentiality. Please read the following questionnaire carefully and fill them out correctly. If you have any questions while you are filling out the questionnaire, please ask the nurses. We appreciate your participation.

(Please answer all questions based the facts before your cancer diagnosis.)

Resistration number		Name	
			<u>YYYYMMDD</u>
Sex	Men · Women	Date of Birth	(Gregorian · Lunar
			Calendar)
Date of Visit		Interviewer	

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He	alth	Exa	mın	ation
	/WILII	느ㅅ伍		auoi

1. If you have ever had any of the examination or operation listed below, please mark the relevant items with a check  $(\sqrt{)}$ .

Те	st		Rea	ason	No.		Test result	First	Last
Yes	No	Test item	Abnormal condition	Regular examination	of tests	Normal	Other results	tested year	tested year
	$\square_2$	Gastroscope	□1	$\Box_2$		□ <sub>1</sub>	$\Box_1$ gastritis $\Box_2$ gastric ulcer $\Box_3$ esophagitis $\Box_4$ cancer $\Box_5$ polyp $\Box_6$ other ( )		
$\Box_1$	$\square_2$	Upper GI	□ <sub>1</sub>	$\square_2$		□ <sub>1</sub>			
$\Box_1$	$\square_2$	Colo-rectal endoscope	□1	$\square_2$		$\Box_1$			
$\Box_1$	$\square_2$	Barium enema	□1	$\square_2$		$\Box_1$			
$\Box_1$	$\square_2$	Fecal occult blood	$\Box_1$	$\square_2$		$\Box_1$			
$\Box_1$	$\square_2$	Digital rectal exam	$\Box_1$	$\square_2$		$\Box_1$			
$\Box_1$	$\square_2$	Abdomen supersonic waves	$\Box_1$	$\square_2$		$\Box_1$			
$\Box_1$	$\square_2$	α-fetoprotein test	$\Box_1$	$\square_2$		$\Box_1$			

Disease	History
Discase	I HOLDIY

cancers, please write down them all.)

$\square_1$ Yes			$\square_2$ No	o (🐷 (	Go to	o que	stion #	3)						
(2-1) If yes,	please	write	down	which	typ	e of	cancer	and	the	year	in	which	ı yol	ı were
diagnosed. (	If there	was a	another	type	of o	cancei	r, or i	f you	were	e dia	gno	sed v	vith	several

2. Have you ever been diagnosed with cancer? (except colorectal cancer)

Type of cancer	Year of diagnosis		Therapy method	
		□ <sub>1</sub> medication	□ <sub>2</sub> surgery	□ <sub>3</sub> immunotherapy
		□ <sub>4</sub> bone-marrow transplantation	$\square_{5}$ endoscopic exeresis	$\square_6$ radiotherapy
		$\square_7$ alternative medicine	$\square_8$ other ( )	$\square_9$ none
		$\square_1$ medication	$\square_2$ surgery	□ <sub>3</sub> immunotherapy
		□ <sub>4</sub> bone-marrow transplantation	$\square_{5}$ endoscopic exeresis	$\square_6$ radiotherapy
		$\square_7$ alternative medicine	$\square_8$ other ( )	$\square_9$ none

3.	Have you	ever been	diagnosed of any of the diseases by a c	doctor?
	$\square_1$ Yes		$\square_2$ No ( $\square$ Go to question #4)	

Disease	Full	Undergoing treatment	Ever been treated	Never been treated	First diagnosed year
Colorectal polyp	□1	$\square_2$	□3	□ <sub>4</sub>	
Behcet's disease, Crohn's disease, Ulcerative colitis	□1	$\square_2$	$\square_3$	$\square_4$	
Gallstone	□1	$\square_2$	□3	□4	
Chelecystitis	□1	$\square_2$	□3	□ <sub>4</sub>	
Surgery History					

Type of Type of Site Year Site Year surgery surgery Heart Colon Brain Appendix Stomach (include endoscopy) Hemorrhoids Uterus (except curettage) Liver Gallbladder Ovary Kidney, bladder Breast (include biopsy) Pancreas Other ( )

(4-1) If you have ever had any of the operations listed below, please write down the name

## Medication

and year of surgery.

5.	Have	you	ever	had	to	take	any	of	the	medications	or	nutritional	supplements	listed	below
reg	gularly	in re	ecent	2 ye	ar?	)									

$\square_1$ Yes (if yes, please write down in de	letail) □₂ No □٩ Don't knov
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		Tota	al intake amo	ount		
Type of medication	1∼3 pills per week	4~6 pills per week	1 pill per day	2 pills per day	3 pills per day	Total intake duration
Hypotensive drug	$\Box_1$	$\square_2$	$\square_3$	□ <sub>4</sub>	$\square_5$	year(s)month(s)
Heart medicine	$\Box_1$	$\square_2$	$\square_3$	□4	$\square_5$	year(s)month(s)
Aspirin	$\Box_1$	$\square_2$	□3	□4	□5	year(s)month(s)
Antiplatelet agent drug	$\Box_1$	$\square_2$	$\square_3$	□4	$\square_5$	year(s)month(s)
Diabetes medicine	$\Box_1$	$\square_2$	□3	□4	□5	year(s)month(s)
Hyperlipidemia medicine	$\Box_1$	$\square_2$	$\square_3$	$\Box_4$	$\square_5$	year(s)month(s)
Anti-ulcer drug	□1	$\square_2$	□3	□4	$\square_5$	year(s)month(s)

Anti-infla	ammatory		□ <sub>1</sub>	$\square_2$		□3	<b>□</b> 4		year(s)month(s)
Nutrition/	health		□ <sub>1</sub>				□ <sub>4</sub>		year(s)month(s)
	c (painkille	er)				$\square_3$	$\square_4$		year(s)month(s)
	suppleme								year(s)month(s)
Multiple (Name: _	vitamins	_)	$\Box_1$	$\Box_2$		□3	$\square_4$		year(s)month(s)
Single vi			□ <sub>1</sub>	$\Box_2$		□3	<u></u> 4	□5	year(s)month(s)
Others 1	(	)	$\Box_1$	$\square_2$		$\square_3$	$\square_4$	$\Box_5$	year(s)month(s)
Others 2	(	)	□ <sub>1</sub>	$\square_2$		Пз	<b>□</b> 4		year(s)month(s)
	Туре			take dura			Type		Total intake duration
Chine	ese medici	ne	year(s	s)moi	nth(s)	Fo	lk medicin	е	year(s)month(s)
(5-1) If y with a ch □₁ Iror		ent $\square_2$ C	hlorella □₃	Spirulina	<b>a</b> □ <sub>4</sub> '	Yeast	□₅ Glu	cosamine	□ <sub>6</sub> Gamma Linolenic Acid
with a ch	supplem	□ <sub>8</sub> C	hitosan □9	Red gin	seng □ <sub>10</sub>	Omega-3	3 □ <sub>11</sub> DH	A/EPA	
with a ch	supplem	□® C	hitosan □9 drink co	Red gin	seng □10	Omega-3	3 □ <sub>11</sub> DH	A/EPA	
with a ch  I lror  Alcohol  Alcohol  amount o	supplem	□® C	hitosan □9 drink co onsumed	Red gin	seng □10	Omega-3 ol, pleas t year.	3 □11 DH	A/EPA	average frequency and
with a ch  I lron  Lec  Alcohol  6. If you	supplem	□® C	hitosan □9 drink co onsumed	Red gin	seng □10 g alcoho	Omega-3 ol, pleas t year.	3 □11 DH	A/EPA	
with a ch    Iror   Type of	supplem sithin	nad a ol you c  1 time per	hitosan □9  drink co onsumed  Average  2~3 times	ntaining I during intake fr	seng □10  g alcoho the las  requency 2-3 times	Omega-3  ol, pleas t year.  for the pa	se chec	A/EPA	average frequency and Average intake amount per
Alcohol  Alcohol amount o	ever halcoho	nad a ol you c	drink coonsumed  Average  2~3 times per month	ntaining I during intake fr 1 time per week	seng □10  g alcoho the las requency 2~3 times per week	Omega-3  Ol, pleas t year.  for the pa  4-6 times per week	se checast year	A/EPA  k the  2+ times per day	average frequency and Average intake amount per once
with a ch  I lror  Alcohol  Alcohol  amount o  Type of drink  Beer	ever he alcoho	nad a ol you c	drink coonsumed  Average  2~3 times per month	ntaining I during intake fr 1 time per week	seng □10  g alcoho the las  requency  2~3 times per week  □4	Omega-3  Ol, pleas t year.  for the pa  4-6 times per week	se checast year  1 time per day	A/EPA  k the  2+ times per day	average frequency and  Average intake amount per once beer cups(200cc)
with a ch  I lror  Alcohol  Alcohol  Alcohol  Type of drink  Beer  Soju  Western	eithin  supplem  eithin  la ever he alcoho  Never	nad a ol you c  1 time per month	drink coonsumed  Average  2~3 times per month	ntaining I during intake fr 1 time per week  3  3	seng □10  alcoho the las  requency  2-3 times per week □4 □4	Omega-3  Ol, pleaset year.  for the paragraph week 55	se chec	A/EPA  k the  2+ times per day  7	average frequency and  Average intake amount per once beer cups(200cc) Soju glass(50cc)
Alcohol  Alcohol  Alcohol  Type of drink  Beer  Soju  Western liquid	supplem sithin  a ever he alcoho	nad a a ol you c	drink coonsumed  Average  2~3 times per month  2  2  2	ntaining I during intake fr 1 time per week  3  3  3	seng □10  g alcoho the las  requency  2~3 times per week  □4 □4	Omega-3  ol, pleas t year.  for the pa  4-6 times per week  5  5  5	se chectast year  1 time per day  6  6	A/EPA  Lk the  2+ times per day  7  7  7	average frequency and  Average intake amount per once beer cups(200cc) Soju glass(50cc) liquid galss(30cc)
Alcohol  Alcohol  Alcohol  G. If you amount of drink  Beer Soju Western liquid Makkoli	supplem sithin  a ever had alcohologous solution supplem sithin  between the supplem sithin supplem sithin	nad a all you c	drink coonsumed  Average  2~3 times per month  2  2  2  2	ntaining I during intake fr 1 time per week 3 3 3 3	seng □10  alcoho the las  requency  2~3 times per week □4 □4 □4 □4	Omega-3  Ol, please tyear.  for the paragraph week  5  5  5  5	se chectast year  1 time per day  6  6  6	A/EPA  k the  2+ times per day  7  7  7	average frequency and  Average intake amount per once beer cups(200cc)boin glass(50cc)liquid galss(30cc)Makkoli cups(240cc)

Famil	y Histo	ry								
	e any c oy a doo	•	nmily mem	nbers ever	been di	agnosed	with ar	ny type	of ca	ncer listed
$\Box_1$	Yes (if y	es, pleas	se write d	own in det	ail) 🗆	<sub>2</sub> No				
Туре					Relations	hip				
of cancer	Father	Mother	Brother	Sister	Offspring (son)	Offspring (daughter		n Gra	ndfather	Grandmother
		$\square_2$	□ <sub>3</sub>	□ <sub>4</sub>	$\square_5$	□ <sub>6</sub>	$\Box_7$		□8	<u></u> 9
	□ <sub>1</sub>	$\square_2$	$\square_3$	$\Box_4$	$\square_5$	□ <sub>6</sub>	$\Box_7$		□8	<u></u> 9
	□ <sub>1</sub>	$\square_2$	$\square_3$	□ <sub>4</sub>	$\square_5$	□ <sub>6</sub>	$\Box_7$		□8	<u></u> 9
below k	by a doc	ctor?		amily mem			liagnosed □ <sub>9</sub> Don			ease listed
							Relatio	onship		
		DIsea	se		Father	Mother	Brother	Sister	Offsprin (son)	g Offspring (daughter)
Diabet	es					$\square_2$	$\square_3$	$\square_4$	$\square_5$	□6
Hyper	ipidemia					$\square_2$	$\square_3$	$\square_4$	$\square_5$	□6
Colorectal polyp				$\Box_1$	$\square_2$	□3	$\square_4$	$\square_5$	□ <sub>6</sub>	
Behcet's disease, Crohn's disease, Ulcerative colitis				S 🗆 1	$\square_2$	□3	$\square_4$	$\square_5$	□ <sub>6</sub>	
Gallstone					$\square_2$	□3	□ <sub>4</sub>	$\square_5$	□6	
Cheled	cystitis					$\square_2$	□3	□ <sub>4</sub>	$\square_5$	$\square_6$
Physi	cal Acti	vity								
activity answer minutes 9. How bic	means the fole per a tele many ycling?	the activi lowing qui ime. days didDay(s	ty which uestions of you perfect s) a week d you per	ous physic makes you considering form vigor form vigor _minute(s)	l lose you activitie	ur breaths that y dities suc □ <sub>0</sub> No	n much rou perfo h as ru	more to more the more the more that the more the more the more the more that the more than the mo	han us at leas aerobio	ual. Pleasest over 10

Please think about the all moderate physical activity in the last 7 days. Moderate physical activity means the activity which makes you lose your breath more than usual. Please answer the following questions considering activities that you performed at least over 10 minutes per a time.

<ol> <li>How many days did you perform moderate physical activities such as lif tennis, and bicycling? (except walking)</li> </ol>	ting light things,
Day(s) a week □₀ None (☞ Go to qu	uestion #11)
(10-1) How long times did you perform moderate physical activities in those days?	
hour(s)minute(s) a day   \	
Please think about the time of walking in the last 7 days. It includes the office, house, walking for transportation, exercise, and in the leisure time.	walking at the
11. How many days did you walk for at least 10 minutes in the last 7 days?	
Day(s) a week □₀ None (☞ Go to qu	uestion #12)
(11-1) How long times did you walk in those days?	
hour(s)minute(s) a day $\square_{99}$ Don'k know	
The followings are questions of your sitting times in the last 7 days. It inc times at work, house, school, or in the leisure time. It may also include the s	_
as chatting with friends, reading a book, or watching TV.	
12. How long times did you sit in the weekdays last week?	
hour(s)minute(s) a day $\square_{99}$ Don'k know	
13. Do you exercise regularly?	
$\square_1$ Yes $\square_2$ No ( $\multimap$ Go to question #14)	
(13-1) If yes, what kind of exercise do you participate in most frequently?	
_ , , , , , , , , , , , , , , , , , , ,	

	Type of exercise Average exercise time (per week)			
1		hour(s)minute(s) $\square_{99}$ Dont' know		
2		hour(s)minute(s) $\square_{99}$ Dont' know		
3		hour(s)minute(s) $\square_{99}$ Dont' know		

Dietary Habits
14. Do you have your meal more than 10 minutes, on average?
15. Do you eat vegetables (except kimchi), seaweeds, or mushrooms for every meal?
16. Do you eat burnt meat?
General Information
17. Now, we will ask about your height and weight.  (17-1) What are your height and weight in current?kgcm  (17-2) What was your weight two years ago?kgkgkgkg
* Questions for women only
<ul> <li>18. Please write down your age at menarche and age at start of regular menstruation cycle.</li> <li>• Age at menarche • Age at start of regular menstruation cycle ——————————————————————————————————</li></ul>
□1 Yes (days on average, ex: 28 days) □2 No  (18-2) Is your duration of each menstruation period regular? □1 Yes (days on average, ex: 7 days) □2 No  (18-3) When did you have your last menstruation?(month)(day) □1 Menopausal
19. Please answer the following questions for postmenopausal women only.  (19-1) Please write down your age at menopause and the reason.  • Age at menopause

20. Please write down about your fertility history	if relevant.	
<ul><li>Total number of pregnancy</li></ul>	• Number of natural aborti	on
Number of artificial abortion	<ul> <li>Number of stillbirth</li> </ul>	
• Number of normal delivery	• Number of cesarean	
(20-1) Please write down your ages at the firs	t pregnancy, full term no	rmal delivery (week
37~42), and the last delivery.		
<ul><li>First pregnancy</li></ul>	years old	
<ul> <li>First full term normal delivery</li> </ul>	years old	
<ul><li>Last delivery</li></ul>	years old	
(20-2) What was the result of your first pregnand	cy?	
$\square_1$ Normal delivery $\square_2$ Stillbirth (deadborn)	$\square_3$ Abortion by extrau	iterine pregnancy
$\square_4$ Natural abortion	$\square_5$ Artificial abortion	
(20-3) Have you ever been diagnosed with gesta	ational diabetes?	
$\square_1$ Yes $\square_2$ Never	$\square_9$ Don't know	
(20-4) Have you ever been diagnosed with gesta	ational hypertension?	
$\square_1$ Yes $\square_2$ Never	□9 Don't know	
04 14		0 '1 1
21. Have you ever breast-fed?	$\square_1$ Yes $\square_2$ No $\square$	<sub>9</sub> Don't know
Please write down if relevant.	T	
(21-1) Number of child you breast-fed in	Total	□ <sub>99</sub> Don't know
(21-2) Your age at first breast-fed	years old	□ <sub>99</sub> Don't know
(21-3) Duration of the first breast-fed	month(s)	□ <sub>99</sub> Don't know
(21-4) Duration of total breast-fed	Totalmonth(s)	□ <sub>99</sub> Dont'know
22. Have you ever used oral contraceptives?		
$\square_1$ Never $\square_2$ Yes, but not current	□₃ Yes. I still use it.	□∘ Don't know
(23-1) At what age you start to use oral contract		
years old	□ <sub>99</sub> Don't know	
(23-2) How long did you use oral contraceptives		
year(s)month		

Disease His
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 $\square_2$  6-12 months

 $\square_1$  Yes, in the next 1 month.  $\square_2$  Yes, in the next 6 months.  $\square_3$  Yes, more than 6 months  $\square_4$  No ( $\square$  Go to question #3)

Disease	Full recovery	Undergoing	Ever been treated	Never been treated	First diagnosed
Hypertension		treatment			your
Diabetes			$\square_3$		
Hyperlipidemia		$\square_2$	$\square_3$	$\Box_4$	
Myocardial Infarction					
Angina		$\square_2$	$\square_3$	$\Box_4$	
Arrhythmia		$\square_2$	$\square_3$	$\Box_4$	
Stroke		$\square_2$	$\square_3$		
Gastritis		$\square_2$	$\square_3$	$\square_4$	
Gastric ulcer	1	$\square_2$	<u>_</u> 3	□ <sub>4</sub>	
Duodenal ulcer	□ <sub>1</sub>	$\square_2$	$\square_3$	$\square_4$	
Irritable bowel syndrome	□1	$\square_2$	□3	<u>4</u>	
Hepatosis	□1	$\square_2$	$\square_3$	□ <sub>4</sub>	
Fatty liver	□1	$\square_2$	$\square_3$	□ <sub>4</sub>	
Hepatitis type B	□1	$\square_2$	$\square_3$	□4	
Hepatitis type C	$\Box_1$	$\square_2$	$\square_3$	$\square_4$	
Hepatocirrhosis	□1	$\square_2$	$\square_3$	<u>4</u>	
Other ( )	□1	$\square_2$	$\square_3$	$\square_4$	
Smoking and Alcohol  2. Have you smoked at lea  1. No (nonsmoker) ( 1. Very part of the control	Go to question smoker). (☞ Go ke (current smo	#4) to question ker) ( Go	#2-1) to question :	#2-2)	

 $\square_3$  More than 1 year: ( )year(s) ( Go to question #3)

(2-2) (Questions for current smoker only) Do you have plan to quit smoking?

<ul> <li>3.(Questions for both ex-smoker and current smoker) Please answer the questions below.</li> <li>At what age did you start smoking? Age</li> <li>How many years have you been smoking? Total year(s)</li> </ul>
•On average, how many cigarettes or packs do you smoke per day?
Aboutcigarette(s) orpack(s)
<ul> <li>4. Do you currently drink alcohol beverages?  □₁ Never □₂ Yes, former (☞ Go to question #4-1) □₃ Yes, current</li> <li>(4-1) (Questions for former drinker only) How long has it been since you quit drinkin alcoholic beverages?</li> </ul>
$\square_1$ Less than 6 months
$\square_2$ 6-12 months
□3 More than 1 year : ( )year(s)
General Information
5.Which statement corresponds to your current marital status? $\Box_1$ Not married $\Box_2$ Married and/or Living together $\Box_3$ Separated $\Box_4$ Widowed $\Box_5$ Divorced $\Box_6$ Other
6.What is your educational attainment?  □1 Did not go to school or did not graduate from elementary school □2 Graduated from elementary school □3 Graduated from middle school □4 Graduated from high school □5 More than college (university)
7. Which statement describes your current employment situation?  □1 Professional (Legislators, cleric, artist, health care provider, etc.)  □2 Administrator (Senior officials, corporate managers, general managers, etc.)  □3 Office worker (General office worker, customer-service office worker, etc.)  □4 Sales  □5 Service worker  □6 Agricultural worker, Forestry and related worker, Fishery worker  □7 Manual worker
$\square_8$ Soldier $\square_9$ Miner $\square_{10}$ Unemployed $\square_{11}$ House maker $\square_{12}$ Other

8.	What is your estimate of your average monthly household income? (Korean won)
	$\square_1$ Less than 1,000,000
	□ <sub>2</sub> 1,000,000~<2,000,000
	□₃ 2,000,000~<3,000,000
	□ <sub>4</sub> 3,000,000~<4,000,000
	$\square_5$ Equal or more than 4,000,000