

Comprehensive Health Screening Institution

# Comprehensive Examination Report

IFC Health Promotion Center Korea Medical Foundation

Registration No. :

01273436

Examination date :

20230807

Address :

Name : HAQUE KHANDOKER MOHD MAZIDUL



**What is a regular checkup?** It is to identify a specific disease for early treatment. Especially, for the lifestyle disease such as hypertension, cardiac disease, diabetes, and cancer, and liver disease, it takes quite a time until symptoms appear. In most cases, its treatment is already impossible when subjective symptoms do appear. The major purpose of a regular medical checkup is to prevent the progress of a disease by detecting these diseases while they are still in the stage possible for treatment, and by examining and correcting the wrong lifestyles or risk factors.

## Medical checkup

### Subjects for Medical checkup

When you experience the following symptoms, you should have a medical checkup.

1. Easily feeling tired, **weight loss** without reason
2. When a specific part of your body is **continuously in pain**
3. Neck stiffness or **chest pain**
4. **shortness of breath** when going up the stairs
5. **severe thirst** and frequent urination
6. Frequent abdominal discomfort, **constipation**, **diarrhea**
7. Female predisposed to **breast cancer**, **uterine cancer**, **osteoporosis**
8. Prolonged **smoking** or excessive drinking of alcohol
9. **family history** of diabetes, hypertension, and cancer

### Health Story

#### What causes cancer?

The difference of a malignant tumor (cancer) from a benign tumor is that it is metastasized to organs inside the body, and it is difficult to treat. Although there have been many studies on this cancer, it is still unclear to explain the cause of many cancers. However, based on the causality between the carcinogenic factors and the incidence of cancer through epidemiological studies, several risk factors are being discovered one after another. Recently, in particular, there are many reports on carcinogenesis by DNA mutation through environmental factors, and for important environment factors among them, there are

- Exposure to radiation energy(**X-ray or intense sunlight**)
- Environmental toxins (**pesticide**, **plastic**, pollution etc.)
- **Fried foods soaked in oil**
- Toxic heavy metals (**cadmium**, **mercury etc.**)
- **Excessive iron absorption** from food
- Excessive **stress** and Smoking

#### Causes for cancer presented by International Agency for Research on Cancer (IARC) and American Cancer Society Journals

Causes	IARC	American Cancer Society Journals	Causes	IARC	American Cancer Society Journals
Smoking	10~30 %	30 %	Reproductive and sex-related	3 %	3 %
Chronic infection	10~25 %	10 %	Drinking alcohol	3 %	3 %
Diet	30 %	35 %	Environmental contamination	3 %	2 %
Occupation	5 %	4 %	Radiation	3 %	3 %
Heredity	5 %	7 %			

Published by International Agency for Research on Cancer (IARC), WHO (World cancer Report, 2003)

#### Factors for causing the most common cancers in Koreans

- Stomach cancer : dietary habits (salty / burnt foods, nitrates etc.), helicobacter pylori
- Colon cancer : obesity, hereditary factors, high-fat diet, high meat intake, low fibers intake
- Lung cancer : direct/indirect smoking, occupational history (exposure to arsenic, asbestos etc.)
- Breast cancer : drinking alcohol, hereditary factors, high-fat diet, female hormones, obesity
- Hepatic cancer : hepatitis virus (B, C), liver cirrhosis, aflatoxin etc.
- Cervical cancer : HPV, complex sexual relationships

# Overall opinion



Name HAQUE KHANDOKER MOHD 2784301

Resident registration No. 790401-5\*\*\*\*\*

♠Body composition exam shows that you have more fat than muscle mass and abdominal obesity. Life style modification(weight reduction, low fat diet, regular exercise) is recommended.

♠HDL-cholesterol levels is decreased. HDL cholesterol is known as "good" cholesterol, because high levels of HDL seem to protect against heart attack. Low levels of HDL also increase the risk of heart disease. Regular exercise is recommended.

♠Diabetes is needed continuing medications and regular follow-up.

♠You have no immunity to HBV(Hepatitis B Virus). The vaccination to HBV is recommended.

♠Abdominal sonogram: Mild fatty liver. Post cholecystectomy state. A renal cyst in right. Recommend annual follow up.

♠Thyroid sonogram: A tiny cyst in right lobe. About 1cm sized isoechoic nodule with cystic change in right lobe. About 0.67cm sized isoechoic nodule with cystic change in right lobe. Recommend follow up after 1 year.

♠Chest X-ray: Fibrotic scar in left lower lung zone, probably sequelae of healed inflammation. Recommend regular follow up.

♠C-spine CT :

- mild intervertebral osteophyte-disc complex at the cervical vertebra4-5, cervical vertebra5-6
- no evidence of spinal stenosis nor neural foraminal stenosis
- recommend: if there is symptom such as pain or tingling sensation, please visit spine specialist

♠Upper gastrointestinal series :

Findings: Limited evaluation due to rapid gastric emptying time. Suspicious erosive gastritis in antrum.

Recommendation : gastroenterology consult and consider gastrofibroscopy.

♠If you have any questions about the results of the test, please contact us by phone. Our number is 1544-2992. We will handle your questions or queries sincerely.



Lifestyle diseases, previously known as adult disease in old times, are a disease group which has much effects on lifestyles such as dietary habits, exercise habits, drinking alcohol and smoking in the development and progress of a disease. There are hypertension, diabetes, obesity, hyperlipidemia, atherosclerosis, angina pectoris, myocardial infarction, cerebral stroke, chronic obstructive pulmonary disease, alcoholic liver disease, degenerative arthritis, and malignant tumor. It is recommended to adopt the following lifestyle habits in order to prevent and treat the lifestyle-related diseases.

## To prevent lifestyle-related diseases...

1. It is better to have a glass of **water** as soon as you wake up in the morning.
2. It is recommended to take **coffee without cream and sugar**.
3. Regular **exercises** such as walking, running, riding a bike are recommended. (longer than 40 min. daily, more than 4 days a week)
4. You **should have a breakfast**. It controls the energy supply in balance for day, and prevents overeating at lunch.
5. You should **reduce your alcohol intake**.
6. It is better to have **a meal several times in small portions**. For the purpose of reducing body fat, nutrients should be steadily supplied. Then, metabolism becomes active and fat could be reduced without losing muscle.
7. As water promotes the consumption of fat, it is recommended **to drink water more than 10 cups (2,000cc) a day**.
8. Since our brain can feel satiety 20 minutes after starting to eat food, **eat slowly**.
9. **No need to completely cut off your favorite foods**. When too strict abstinence is imposed on you, it leads to stress. Thus, it is not desirable from long-term perspectives.
10. Do not stock **high-fat, high-calorie foods** at home.
11. Make a new resolution that '**I can do it**' with **positive attitude** every morning.
12. Set one day in a week as **the day of freedom**. As a regular exercise and dietary therapy is possible when tension is well controlled, take a day off for rest from the exercise and dietary therapy regimen.

### Biological age

It means the actual age of one's body, in other words, the actual health age of an individual indicated by their body, and it is a widely conducted test recently for anti-aging and health promotion as a test method to examine whether I am currently healthy? Am I living a healthier life for my age? Do I manage my health well? Is my health regimen effective? etc. The test result is expressed as the physical age and the biological age, with normal age as  $\pm 5$  years.

### Health Story

#### Dietary therapy for patients with hyperlipidemia

Hyperlipidemia is a condition with high lipids in blood due to abnormality of lipid metabolism in the body. With high-fat, high calorie meals, drinking alcohol, hereditary reasons, liver dysfunction, diabetes, use of contraceptives, hypothyroidism as it causes, when these conditions are sustained for a long time, it could induce diseases such as atherosclerosis and cardiac disease.

- Maintain normal weight through a regular exercise.
- Limit saturated fats intake with glucose as about 20% of the total calories.
- Reduce the intake of simple carbohydrates.
- It is better to avoid foods with too much cholesterol.
- Include plenty of fibers (unrefined grain, vegetables, fruits, seaweed etc.) in your meal.
- Avoid drinking alcohol if possible.

# Basic examinations



Name HAQUE KHANDOKER MOHD MAZBUL

Resident registration No. 790401-5\*\*\*\*\*

## Anthropometric assessment

Test item		20230807	Year	Year	Normal level
Height		163.5	cm	cm	
Weight		77.3	kg	kg	
Body mass index(BMI)		28.9	kg/m <sup>2</sup>	kg/m <sup>2</sup>	18.5~24.9%
Obesity(%)		135.2			90~110%
Waistline		93			
Pulse		62			60~99회/분
Blood pressure	Systolic	110			90~120mmHg
	Diastolic	70			60~80mmHg

## Auditory test

Test item		20230807	Year	Year	Normal level
Auditory sense (L/R)	500Hz	30	/ 30	/	0~30dB
	1000Hz	30	/ 30	/	0~30dB
	2000Hz	30	/ 30	/	0~30dB
	3000Hz		/	/	
	4000Hz	30	/ 30	/	0~40dB
	6000Hz		/	/	

Decision: Within normal limit

## Ophthalmologic examination

Test item		20230807	Year	Year	Normal level
Eyesight (L/R)	general	0.4	/ 0.4	/	
	corrected		/	/	
Eyesight (L/R)	L	14	mmHg		10~20mmHg
	R	14	mmHg		10~20mmHg

No pathologic finding

Ocular fundus



# Cardiopulmonary function test

**What is EKG?** Heart is a pump circulating blood to the entire body, relentlessly repeating contractions and dilations. The pumping of the heart is conducted by contracting the heart muscles, and EKG records the slight electricity generated when the heart pulsates as a graph. It is used to identify the abnormality of the heart during a consultation and a surgery, and it is effective to diagnose the cardiac diseases such as angina pectoris, myocardial infarction, and arrhythmia, hypertension, and congenital cardiac diseases.

## What are pulmonary function tests?

It is a typical testing method to examine the pulmonary functions by measuring the amount and speed of air inhaled and exhaled, but it is a necessary screening test and the standard test in diagnosis and follow-up of COPD. PFTs should be conducted, regardless of the presence of symptoms, when the subject has a history of constant exposure to risk factors like smoking for chronic pulmonary diseases.

Chronic cough is the most common and initial symptom of COPD. However, this test should not be excluded simply when there is no cough since it is possible no cough in some patients until severe pulmonary hypofunction is observed.

- **FVC(forced vital capacity)** : It refers to the maximum amount of air which is forcibly exhaled from the lungs after taking the deepest breath possible.
- **FVC(%Pred.)** : As a percentage of the predicted value and the actual vital capacity, it is considered normal when it is more than 80%.
- **FEV1(Forced expiratory volume for 1 second)** : It refers to the amount of air you can forcefully exhale in one second.
- **FEV1/FVC ratio(FEV1%)** : It is to investigate the ratio of FEV1 to FVC, and is considered normal when it is more than 70%.
- **Peak Flow(PF)** : It examines the abnormality of bronchus.

## What is chest pain?

As we get older, we experience pain in several parts of the body. It is also the case for the chest with the heart and lungs, when we experience a chest pain, it is fearful of a fatal cardiovascular disease like myocardial infarction which occurs due to a poor circulation to the heart. When this chest pain occurs, it is very important to differentiate the cause of it as a cardiovascular disease or other factors.

### Differentiation of chest pain

	Chest pain due to ischemic cardiac disease	Chest pain from outside of the heart
Patterns of pain	Squeezing sensation, compression, stiff	Dull pain, sometimes sharp pain pain aggravated by respiration
Areas	Pain in chest, sternum, between scapular Extends to arms, hands both sides, neck, teeth, and cheeks	Most frequently at lower part of breast on left, entire chest on left
Aggravating factors	Exercise, excitement, severe stress, cold weather, after meal	In resting after exercise, when moving a specific part of the body
Other symptoms and diseases	Dyspepsia, vomiting, nausea, persistent respiratory distress, previous history of myocardial infarction, important risk factors for coronary artery disease	Myalgia, herpes zoster, reflux esophagitis, intercostal neuralgia

## Health Story

### Blood pressure management tips!

Hypertension is one of the most common lifestyle diseases regardless of in the East and the West. Treatment for hypertension is better to be in early stage. However, dietary therapy and exercise should be included, not only depending on drug therapy. It may not be easy at first, but try to follow after the tips below.

#### Food Which foods are helpful in blood pressure management?

The basic principle of dietary therapy to lower blood pressure is low-salt, low calorie, and low-fat diet. It is recommended to prevent obesity by lowering calorie intake, and avoiding foods rich in salts like salted fish and stews, and to increase intake of vegetables rich in vitamins, minerals and fibers.

#### Health What are exercise tips?

Aerobic exercises like walking, riding a bike, and light jogging are good. When starting at first, do not overstrain but do exercise 20~30min. then steadily increase in consideration of your strength afterwards.

#### Stop Avoid drinking alcohol, smoking and stress.

Drinking alcohol, smoking and stress are very harmful for hypertension. Especially, smoking can roughen the walls of blood vessels in the body leading to atherosclerosis, and aggravating hypertension by contracting the blood vessels. Therefore, you **must stop smoking**.

# Cardiopulmonary exercise test



Name HAQUE KHANDOKER MOHD ABDUL MAJID SOUL

Resident registration No. 790401-5\*\*\*\*\*

## Electrocardiogram

20230807	Year	Year
Within normal limit		

## Pulmonary function tests

Test items	20230807	Year	Year	Normal level
FVC%Pred.				
FEV1				
FEV1/FVC				
PF				

Decision:

## Chest X-ray

20230807	Year	Year
Fibrotic scar in left lower lung zone, probably sequelae of healed inflammation. Recommend regular follow up.		

## Chest CT

20230807	Year	Year



Liver is a large organ about 1.2~1.3kg in weight, located in the right upper quadrant of the abdominal cavity. It is involved in the storage of nutrients absorbed in the digestive tract, and the metabolism of such nutrients and minerals, bile juice and hormones. Not only that, it plays a very important role in detoxification and sterilization of several drugs or toxic substances by disassembling them, and production of blood coagulation factors. Thus, when hepatic functions decrease, several clinical problems appear.

## Liver disease

### Hepatitis A

Fatigue or nausea, vomiting, decreased appetite, fever and pain in the right upper quadrant of the abdominal cavity are manifested, and possibly followed by jaundice. Hepatitis A is mostly recovered without sequelae, but it is required of a hospitalization in about 1/3, and 0.3% leads to death. Its diagnosis is possible through Hepatitis A antibody test.

Currently, there is no drug to treat Hepatitis A virus. However, with vaccination, it could be prevented, and the preventive effect of more than 95% could be obtained by an additional vaccination after 6-12 months after one-time vaccination.

### Hepatitis B and Antibody · Antigen test

- Symptoms, although identical to hepatitis A, could be different to the age of onset, but in most cases, it leads to chronic hepatitis and cirrhosis, and rarely to hepatic cancer.
- Vaccination is necessary when both HBsAg and HBsAb are negative.
- When HBsAg is negative and HBsAb is positive, it means the formation of antibody to hepatitis B. Thus, there is no need for hepatitis prevention vaccination.
- When HBsAg is positive and HBsAb is negative with normal liver functions (AST, ALT), it is called a carrier. In this case, for early detection of chronic liver disease, chronic hepatitis, cirrhosis, and hepatic cancer, make sure to get regular check ups (3~6months) for liver disease.
- When HBsAg is positive, it is better to take the hepatitis B activity test (HBe antigen, HBV DNA test).
- When HBsAg is positive with abnormal liver functions (AST, ALT), it could be treated with antiviral agents.

### Hepatitis C Antibody test

- When HCsAb is positive, it is possible for hepatitis C. Therefore a thorough exam is necessary.
- Hepatitis C has a relatively long latent period, and there is a slight symptom or it could be asymptomatic even in acute phase, and also is possible to progress into cirrhosis and hepatic cancer. Therefore, make sure to get a regular checkup.

### Liver function tests

Liver function tests (AST, ALT) on blood are tests to measure enzymes within hepatocytes.

In normal cases, when hepatocytes are destroyed, the normal level (10~40) is maintained by emitting hepatic enzymes into the blood, but when they are destroyed faster than normal, the serum enzyme level is increased.

In general, the enzyme level could be increased more than 300 in acute hepatitis, and when a drug harmful to liver is taken, it could also cause a temporary increase in AST and ALT.

### Health Story

#### Hepatitis B Vaccine

- For hepatitis B vaccination, 3 times of vaccination are fundamental. Vaccination was conducted once per month, and the formation of hepatitis B antibody could be identified in blood test after 2~3 months from the last 3rd vaccination date. (Sometime, antibody formation is not possible even after vaccination, in this case, please consult with your doctor.)
- Rarely, it could be positive for both antigen and antibody. In this case, changes in hepatic function should be confirmed by reexamination after about 3~6 months.

# Liver function tests



Name HAQUE KHANDOKER MOHD MAZBUL

Resident registration No. 790401-5\*\*\*\*\*

## Liver function tests

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
Total Protein	7.4			*		6.5~8.3g/dL
Albumin	5.1			*		3.5~5.3g/dl
Globulin	2.3			*		2.0~3.5g/dL
A/G ratio	2.2			*		1.0~2.5
AST	20			*		0~40IU/L
ALT	22			*		0~35IU/L
r-GTP	20			*		11~63mg/dl
Total Bilirubin	0.8			*		0.2~1.5mg/dL
Direct Bilirubin	0.3			*		0.0~0.5mg/dL
Indirect Bilirubin	0.5			*		0.2~1.0mg/dL
ALP	96			*		40~129IU/L
LAP						

## Hepatitis antigen · antibody test

Test items	20230807 Year	Year	Year	Normal level
HBsAg(qualitative)				
HBsAb(qualitative)				
HBsAg(quantitative)		Negative(0.40)		Negative
HBsAb(quantitative)		Negative(2.87)		
HBeAg(quantitative)				
HBeAb(quantitative)				
HBcAb IgG(quantitative)				
HBcAb IgM(quantitative)				
HCV Ab(qualitative)		Negative		Negative
HAV IgM(quantitative)				
HAV IgG(quantitative)				

## Other blood · additional test

Test items	20230807 Year	Year	Min	Normal	Max	Normal level



**Complete blood cell count (Hg, hematocrit, RBC)** Anemia is determined when hemoglobin is lower than the normal level. For most cases, it is iron deficiency anemia, followed by pernicious anemia, hemolytic anemia, aplastic anemia, or anemia after leukemia or metastasis of cancer to bone marrow.

## Blood disease test

### WBC

The reason for increased WBC is mostly bacterial infection. Decreased WBC is manifested in some infections like viral infection and typhoid fever, and blood diseases such as aplastic anemia and pernicious anemia, or dysfunction of bone marrow from side effects of drugs like anti-cancer drugs.

### Anemia

- Anemia indicates the condition of insufficiency of RBC or hemoglobin in blood, and it is determined when the hemoglobin concentration is below 13g/dL for adult males, below 12g/dL for adult females, below 11g/dL for pregnant women, and below 11g/dL for infants and children in 6 months~5 years old.
- RBC or hemoglobin plays a role in supplying oxygen throughout the body. Therefore, dizziness experienced by patients with anemia is a symptom from insufficient supply of oxygen to brain.
- For symptoms of anemia, there are respiratory distress, pallor, dizziness, tinnitus, headache, and decreased appetite. As anemia is gradually progressed, the subject becomes familiar with anemic symptoms so unable to feel subjective symptoms, which develops into chronic stage. In some cases, pernicious anemia due to absorption disorder of Vit.B12 could be observed especially in women aged 45~60 years from atrophic gastritis or hereditary disorders.
- Anemia could occur in chronic disease like chronic hepatitis, renal insufficiency, RA, tumor, endocrine disease, chronic infection, and uremia.

#### MCV, MCH, MCHC

This test is helpful to diagnose anemia. Pernicious anemia is possible even for the same anemia with large RBC, on the other hand, in iron deficiency anemia, the RBC size gets small.

### Platelet

Bleeding easily occurs when platelet drops below the standard criteria. Subcutaneous or nasal bleeding, and bleeding in gums could occur due to unidentified decrease of platelet, and sometimes platelet could be decreased in a chronic hepatic disease. Since platelet could be destroyed in spleens, in some cases, spleens are removed for treatment of thrombopenia.

### Tumor marker test

Tumor test through blood is a non-specific test, and therefore it plays a supplementary role in diagnosis of cancer. However, tests for [hepatic cancer](#), [colon cancer](#), and [prostate cancer](#) could be relatively specific tests.

AFP	Increased in <a href="#">hepatocellular carcinoma (HCC)</a> , severe cirrhosis, and reproductive tumor.
CEA	Increased in various digestive cancers ( <a href="#">colon cancer</a> , breast cancer, and lung cancer etc.)
PSA(male)	Increased in <a href="#">prostate cancer</a> , prostate hyperplasia, and severe inflammation of prostate gland.
CA19-9	Increased in <a href="#">pancreatic cancer and biliary tract cancer</a> .
CA125(female)	Increased in <a href="#">ovarian cancer</a> (especially, serous cystic adenocarcinoma), endometrial cancer, uterine myoma, and pregnancy.
CA15-3	Increased in <a href="#">breast cancer</a> . Rather than for diagnosis of breast cancer, it is mainly used to decide the progress or therapeutic effect of it.
Cyfra21-1	Increased in <a href="#">lung cancer (squamous cell carcinoma)</a> , head and neck cancer.
Ferritin	Increased in <a href="#">lymphoma</a> , <a href="#">leukemia</a> , aplastic anemia, and chronic liver disease.

# Complete blood cell count and Tumor marker test



Name HAQUE KHANDOKER MOHD MAZBUL

Resident registration No. 790401-5\*\*\*\*\*

## Hematologic examinations

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
WBC(White Blood Cell)	7.58	WBC %		*		4.00~10.00개/ul
Lymphocyte	33.2			*		15.0~40.0%
Monocyte	9.10			*		2.00~11.00%
Neutrophil	52.2			*		48.0~75.0%
Eosinophil	5.00			*		0.00~5.00%
Basophil	0.50			*		0.00~2.00%
RBC(Red Blood Cell)	5.44			*		4.20~6.50M/ul
Hb	15.0			*		13.0~17.5g/dL
Hct	45.6			*		39.0~54.0%
MCV	83.8			*		80.0~100.0fL
MCH	27.6			*		27.0~34.0pg
MCHC	32.9			*		31.0~38.0g/dl
Platelet	174			*		130~450M/ul

## Iron deficiency anemia test

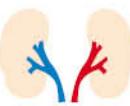
Test items	20230807 Year	Year	Min	Normal	Max	Normal level
Fe	82			*		33~193ug/dL
UIBC	250			*		125~345mg/dl
TIBC	332			*		158~538ug/dL
Ferritin						

## Tumor markers

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
AFP	1.44			*		0.00~8.10ng/mL
CEA	0.86			*		0.00~5.00ng/mL
PSA	0.44			*		0.00~3.99ng/mL
CA 19-9						
CA125						
CA 15-3						

## Blood type test (ABO, Rh type)

ABO type	
Rh type	



**What is urinalysis?** Urine is excreted while metabolic byproducts and water are filtered in kidneys after the blood circulates through the tissues of the body. When there is an abnormality in the excretion pathways such as kidneys, ureters, bladder, and urethra, urine is not excreted, or it could cause changes in urine components.

## Urinalysis

### Diseases identified with urinalysis

- When there is a lesion in kidneys producing urine, and its pathways such as ureters, bladder, and urethra, disorders like proteinuria or hematuria occur. In addition, since systemic metabolites are excreted in urine, there could be an indicative change when there is a systemic disease besides urinary system.
- The normal range for specific gravity (SG) of urine is 1.003~1.030, and when SG is low, it could be suspected of decreased urine concentration, chronic nephritis, or diabetes insipidus. When it is high, it could be renal insufficiency, diabetes, or dehydration with excessive urine concentration, but when there is no accompanying disease in normal case, it has no significance.
- The normal pH is pH 5.5 ~ 8.0. For aciduria, it could be suspected of bad quality of meal, high protein meal, infection, metabolic or respiratory acidosis. For alkalinuria more than pH 8, it could be suspected of vegetable meal, metabolic of respiratory alkalosis, and infection.

### Hematuria

When there is a disorder in organs like kidneys or ureters, bladder which are pathways, slight RBCs could be mixed in urine, which is called occult blood in urine. Hematuria could occur in renal tuberculosis, acute/chronic nephritis, cystitis, urinary calculus, urolithiasis, and prostate cancer. In addition, it could be manifested by excessive exercise, after bathing in hot water, right before/after menstruation, high fever, and drugs.

### Infection test

#### Syphilis (VDRL)

- When it is positive in syphilis test (VDRL), TPHA test is conducted to confirm syphilis. When it is positive in TPHA, you must be treated by a specialist.
- In many patients, it is still positive in TPHA test even after the treatment. It indicates the trace of infection in blood, which is same as a scar which is left on the site of a burn.

#### AIDS(HIV-Ab)

- When the result from 1st test on AIDS is positive, a reexamination must be conducted, and when the result from 2nd test (reexamination) is also positive, the final result is to be confirmed by requesting of another test on blood to the Korea National Institute of Health.

### Health Story

#### Dietary habits for Kidneys

Eat fruits and green/yellow vegetables, and organic produces, seaweed rich in fiber, unrefined or whole grains. Eat slowly in small portions, and chew well.

- Black foods* (black beans, black sesame seed, black rice etc.) are good.
- Eucommia bark tea, watermelon seed and corn silk* with excellent diuretics recover kidney functions.
- Aged pumpkin* makes kidneys younger, and *herbal tea, mungbean pancake, and silk* strengthen kidney functions.
- There are *cucumber, adlay, pumpkin, wild parsley, and rice with lotus root/leaf (with lotus seed)* for health of kidneys.
- Shrimps* are in rich of minerals and vitamin B complex, including good source of protein and calcium, good for kidneys.
- Dried chestnuts* are good for kidney functions while *raw chestnuts* are a good tonic and help break down alcohol.

# Renal function and Infection tests



Name HAQUE KHANDOKER MOHD 2784301

Resident registration No. 790401-5\*\*\*\*\*

## Renal function test

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
BUN	11			*		5~23mg/dL
Creatinine	0.9			*		0.5~1.2mg/dL
BUN/Creatinine ratio	12.2			*		7.0~29.0
GFR	97			*		60~999

## Urinalysis

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
Microscopic exam	WBC	0~2		*		0~2HPF
	RBC	0~2		*		0~2HPF
	Epi. cell	0~2		*		0~2HPF
	Bacteria					
pH	5.5			*		5.5~8.0
Glucose	Positive(+)			*		Negative
Protein	Negative			*		Negative
Urobilinogen	Negative			*		Negative
Bilirubin	Negative			*		Negative
WBC	Negative			*		Negative
Occult blood	Negative			*		Negative
Nitrite	Negative			*		Negative
Ketone	Negative			*		Negative
Specific gravity	1.025			*		1.005~1.025

## Electrolyte test

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
Na						
K						
Cl						
Ca	9.7			*		8.6~10.5mg/dL
P	3.5			*		2.5~4.9mg/dL

## Infection test

Test items	20230807 Year	Year	Year	Normal level
Syphilis serum (VDRL)(qualitative)	Negative			
AIDS(HIV-Ab)(qualitative)				



Cardiovascular disease mostly occurs in the heart and major arteries. For cardiac diseases, there are congenital disease which is born and acquired cardiac disease which occurs while on living. Cardiac diseases could be classified by diseases on the site as the structure of the heart is divided by the cardiac muscles, blood vessels of the heart, valves, and the conducting system for electric signals which make heart pulsate. For major vascular diseases, they are diseases causing an obstruction or dilation or rupture of major arteries such as aorta, pulmonary artery, carotid (neck) artery, cerebrovascular, renal artery, and lower extremity artery.

# Cardiovascular disease-related tests

## Blood lipid

- Smoking and high-fat diet could cause an increase of cholesterol.
- When total cholesterol, **LDL-cholesterol**, and triglycerides excessively increase high, it predisposes to the onset of cardiovascular diseases such as angina pectoris or cerebral infarction.
- **HDL-cholesterol** plays a role of moving cholesterols in several areas within the body to liver. It is good cholesterol to prevent atherosclerosis.
- Therapeutic criteria for hyperlipidemia according to the fat concentration in blood are not absolute, and it could be different by risk factors (advanced age, hypertension, smoking, diabetes, and family history of cardiac disease etc.) for coronary artery diseases.

## LDH (lactate dehydrogenase)

LDH(lactate dehydrogenase) is the name of an enzyme acting at the last stage in the glycolysis. It is distributed in plenty in liver, muscle, skeleton, brain, kidneys, RBC, and heart. Thus, when these organs suffer from an inflammation, LDH could be increased.

## Risk factors for cardiac disease

The risk for cardiac disease becomes higher as the value increases.

## Diabetic test and Pancreas

- When the fasting glucose is less than 100mg/dL it is considered as normal. It is diagnosed as diabetes when the fasting glucose is more than 126mg/dL, more than twice, and when HbA1C is over 6.5%.
- When the fasting glucose is 100~125mg/dL, it is called as a condition of fasting glucose disorder, and it indicates a possibility of progress to diabetes in future.
- HbA1C reflects the mean glucose level for last 2, 3 months. Since there is nearly no change in HbA1C by dietary changes or other conditions, it is very useful as a long-term follow-up of diabetes.

## CPK (Creatine Phosphokinase)

CPK, one of enzymes, is often used as a sensitive marker for myocardial infarction, and is used for diagnosis on damage to muscles, brains, and heart according to the specified types. Except when there is a **fever, and during excessive exercise**, it could be temporarily increased.

## Health Story

### Metabolic syndrome

Metabolic syndrome, known as syndrome X or insulin-resistance syndrome, is a collection of conditions such as **disturbed glucose tolerance** (previous stage of diabetes), **hypertension**, **hyperlipidemia**, **abdominal obesity**, and **atherosclerosis** that occur together in an individual by chronic metabolic disorder; and it **promotes aging**, predisposes to the onset of **cardiac disease**, **cancer**, **Alzheimer's disease**, **diabetes**, **hypertension**, various nervous diseases, and **arthritis**, and for symptoms, there are **feeling tired** always, difficult to lose weight, **decreased concentration and attention**, and easy to get angry.

In general, it could be defined as metabolic syndrome when it is applicable to more than 3 of the following criteria.

- Central obesity : waistline male  $\geq$  90cm, female  $\geq$  85cm
- Hypertriglyceridemia :  $\geq$  150mg/dL or in drug therapy for hyperlipidemia
- When HDL-cholesterol is low: Male  $<$  40mg/dL, Female  $<$  50mg/dL
- Fasting plasma glucose :  $\geq$  100mg/dL or in drug therapy for diabetes
- Hypertension :  $\geq$  systolic BP 130mmHg or diastolic BP  $\geq$  85mmHg or in drug therapy for hypertension

# Lifestyle disease and metabolism related disease



Name HAQUE KHANDOKER MOHD ABDUL RAHMAN

Resident registration No. 790401-5\*\*\*\*\*

## Blood lipid test

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
T-cholesterol	145			*		110~199mg/dL
Triglyceride	135			*		0~149mg/dL
HDL cholesterol	38		*			60~999mg/dL
LDL cholesterol	80			*		0~129mg/dL

## Cardiovascular related tests

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
CPK	189			*		39~308IU/L
LDH	156			*		135~225IU/L
CRF	3.8			*		0.0~5.0

## Pancreatic test

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
Amylase	90			*		28~100u/l

## Diabetes test

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
FBS	126			*		70~99mg/dL
HbA1C						
Fructosamine						

## Metabolic syndrome test


## Atherosclerosis test


## Blood test for atherosclerosis

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
Homocysteine						



**What is Thyroid function test?** Thyroid gland, a butterfly-shaped organ located at the front of the neck, controls metabolism of our body by producing thyroid hormones. The abnormality of thyroid function could be checked by measuring thyroid hormones and TSH secreted in pituitary gland.

# Thyroid function test

## Hyperthyroidism

When thyroid hormones are excessively secreted, excessive perspiration, palpitation, increased appetite, decreased weight, intolerance of hot weather, shaking, and agitation are manifested, and excessively decreased strength and easily feeling tired are experienced. In also, when eating well because of an increased appetite, weight is decreased, in severe cases, more than 10kg in months. Digestion is activated with frequent bowel movements, more than 2-3 times of loose stools a day.

## Hypothyroidism

When thyroid hormones are insufficiently secreted, feeling lethargic, and swelling on face, hands, feet, and around the eye, intolerance of cold, malaise, decreased memory, excessive menstruation and myalgia are manifested, and also a weight increase even with decreased appetite. For ENT symptoms, there could be hoarse voice from laryngeal edema and difficulty of hearing from inner ear edema.

## Health Story

### Functions of Vitamin D (Vt.D)

- Previously, Vt. D, was known to strengthen bones by involving in the metabolism of calcium and phosphorus. However, it was recently disclosed that Vt. D deficiency could be the cause not only for osteoporosis and reduced bone mass, but also **it is related to 20 types of cancer** and also to **cardiac disease, hypertension, stroke, autoimmune disease, diabetes, chronic pain, CFS, dementia, and senile depression**.
- Vt. D is known to be generated in our body from UV rays (B) on skin surface. Vt. D deficiency is common in people living at north latitude 35° such as U.S. and Canada.

### Active oxygen

- Active oxygen is very unstable oxygen generated in the process of metabolism within the body, mostly in respiration, exercise or digestive process. When excessive active oxygen is accumulated in the body, it causes not only cardiac disease, stroke, diabetes, and lifestyle disease like obesity along with atherosclerosis, but also acceleration of various cancers and aging, atopic dermatitis, dementia, asthma, and rheumatoid disease.
- Active oxygen is much generated in the body by stress, smoking, excessive drinking, fatigue, excessive eating, burnt foods, and instant foods or obesity, and by exposure to environmental contaminations such as mercury, pesticides, and radiation exposure.

### Relationship of active oxygen with disease

Aging	Accelerating the physical aging from cell damage, and the <b>skin aging</b> such as aging spots, freckles, and wrinkles	Obesity	Acceleration of damage by active oxygen, Increase in possibility of <b>cardiac disease</b> and <b>stroke</b>
Hypertension, atherosclerosis	<b>Blood vessels</b> are oxidized and hardened by lipoperoxide action	Cardiac disease, stroke	Increase in possibility of a <b>sudden death</b> by decrease in elasticity of blood vessels
Liver	Inducing hepatitis and <b>hepatic cancer</b> by causing inflammation in hepatocytes	Damage to RBC	Disorder of function in oxygen transport and coagulation at the wound site
Cancer	Increase of probability to change of common inflammatory cells into <b>cancer cells</b>		
Atopic dermatitis	Inhibition of moisturizing function of the <b>skin</b> and aggravation of symptoms	Diabetes	Increase of probability to induce <b>chronic diabetic disease</b> and other complications

Besides, a close relationship with **dementia, asthma, rheumatism**, and infection in digestive system is established.

### Antioxidation capacity

It is an ability to protect our body from the attack by active oxygen, and this antioxidation capacity is determined by the enzymes possible for synthesis in our body and the sum of antioxidant substances absorbed in foods and drugs, and it is different by the lifestyle or the presence of a disease in an individual. Antioxidants to remove active oxygen are Vitamins C, E, beta-carotene, and selenium.

# Thyroid and endocrine related diseases



Name HAQUE KHANDOKER MOHD ABDUL

Resident registration No. 790401-5\*\*\*\*\*

## Thyroid related test

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
TSH	2.78			*		0.35~5.50uIU/mL
Free T <sub>4</sub>	1.17			*		0.89~1.76ng/dl
T <sub>3</sub>						

## Arthritis test

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
RF(Rheumatoid factor)	Negative			*		Negative
CRP	Negative			*		Negative
ESR						

## Gout test

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
Uric Acid	5.3			*		3.4~7.0mg/dL

## BMD test

20230807 Year	Year	Year

## Wellbeing life test

Test items	20230807 Year	Year	Min	Normal	Max	Normal level
Vitamin D						
Antioxidation capacity						
Active oxygen						

## Stress test




What is cervical cancer specimens test (Pap smear)? For the types of uterine cancer, there are cervical cancer, corpus carcinoma, and endometrial cancer, and in general for uterine cancer, it means cervical cancer. Test on corpus carcinoma and endometrial cancer is possible with ultrasound, and Pap smear is conducted for cervical cancer. It is a test to diagnose inflammation, cytologic atypia (previous stage of cancer), and uterine cancer by observing the smeared cell collected from the cervix under microscope.

## Female · Male scan

### What is Prostate gland?

Prostate gland, as one of sex accessory glands only found in males, produces and stores fluid components of the semen. It has an influence on male hormones.

Prostatitis could be classified into 4 types such as acute bacterial prostatitis, chronic bacterial prostatitis, chronic non-bacterial prostatitis and prostalgia, and prostatism is the general term. The most common type among these is non-bacterial prostatitis, with the following symptoms.

#### Symptoms

- Dysuria (frequent urination, unfinished urination, narrowed urine stream, painful urination, pyuria etc.)
- Discomfort in urethra, itching, pain in lower abdomen, discomfort or pain in perineum (area between anus and scrotum)
- Lumbago, arthralgia, pain in groin and testicles or hyposexuality, when severe, sexual neurosis
- Pain in ejaculation, blood in semen, or epididymitis

### What is Prostate hyperplasia?

The disease occurs when prostate gland enlarges. In general, it starts to appear before/after 40, and it occurs about in half of males in 50s, and more than half in 60~70s. Diagnosis could be concluded by consultation, International Prostate Symptom (IPSS), digital rectal examination, ultrasound by rectum, uroflowmetry, Postvoid residual urine (PRU), PSA test.

### How to diagnose prostate cancer?

It could be diagnosed with prostate ultrasound and serum PSA test, and for confirmation of diagnosis, a biopsy should be taken.

#### Health Story

### Good foods for prostate gland

**T**omatoes Tomatoes are known for their excellent preventive effect on cancer. Especially, the research team at Harvard University of America disclosed that foods containing lots of tomatoes largely decreased the incidence rate of prostate cancer.

**E**ggplants Eggplants are widely used as medicinal purpose in folk remedy by alleviating heat and aiding the blood circulation. When unable to urinate due to prostate hyperplasia, eat eggplants once daily.

**W**atermelon Watermelon is high in Citrulline, an amino acid to promote excretion of urine, and it is good for people easily swollen due to hypofunction of their kidneys. It decreases the incidence rate of cancer and prevents accumulation of foreign substances in arteries.

### Preventions for depression

Recently, depression is common to be considered 'cold in our mind,' and the prognosis is good when it is early detected and treated like other disease.

1. Have a positive and flexible thinking.
2. Do not tolerate unconditionally but do express in words.
3. Make a habit of forgiving and letting go.
4. Decrease desire and stress.
5. Be active in social activities.
6. Love yourself.
7. Take your drugs for treatment.
8. Live with humor and laughter.
9. Maintain with proper nutrition, healthy body with good posture.
10. Be grateful.

# Female · Male scan I



Name HAQUE KHANDOKER MOHD MAZBUL

Resident registration No. 790401-5\*\*\*\*\*

## Female scan

Test items	20230807	Year	Year
Mammography			
Breast sono			

## Male scan

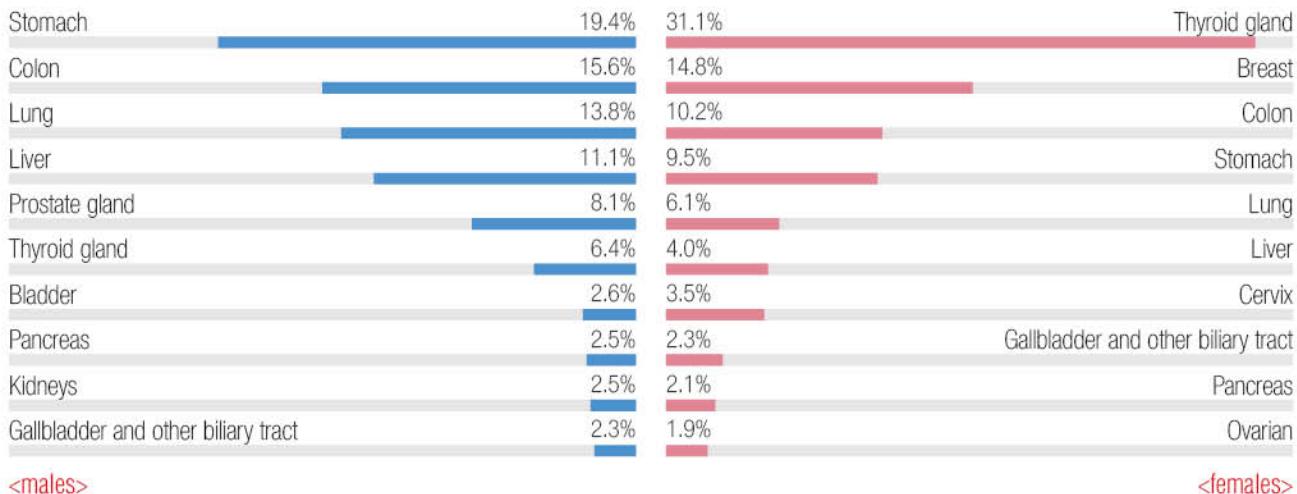
Test items	20230807	Year	Year
Prostate sono			



Characteristics of cancer are various as its types. For example, metastasis of **brain tumor** to other organ is very rare while in **breast cancer and esophageal cancer**, it is well metastasized to other area in early stage. In addition, **blood cancer** is reacted well to the anti-cancer drug therapy while it is not for **pancreatic cancer and biliary tract cancer**. While the progress rate of **thyroid cancer, kidney cancer, and prostate cancer** is very slow, its rate for **lung cancer and hepatic cancer** are very fast. Like this, cancer shows very different patterns, but there is one thing in common. For most cases, when cancer is early detected, its therapeutic effect is very good.

## Cancer examination

The incidence of major cancers in 2011 (Source: The National Cancer Statistics Registry, 2011)



<males>

<females>

\* According to the national cancer statistics analysis in 2011, the most occurred cancer was thyroid cancer regardless of gender in 2011. Also stomach cancer, colon cancer, lung cancer, liver cancer, breast cancer and prostate cancer is followed by thyroid cancer.

## For early diagnosis of cancer?

Incidence rate of cancer is drastically increasing after 40s, especially recently, it is on drastic increase even in 20~30s. When cancer is early diagnosed and treated, a full recovery is possible, but a treatment for cancer in progress is nearly impossible. For early diagnosis of 5 major cancers, the following tests should be conducted accordingly.

5 major cancers for males	Method of early diagnosis	5 major cancers for females	Method of early diagnosis
1. Stomach cancer	stomach endoscopy, UGI	1. Thyroid cancer	ultrasound
2. Colon cancer	colon endoscopy	2. Breast cancer	breast X-ray, ultrasound
3. Lung cancer	chest CT, chest X-ray	3. Colon cancer	colon endoscopy
4. Hepatic cancer	abdominal ultrasound, abdominal CT	4. Stomach cancer	stomach endoscopy, UGI
5. Prostate cancer	ultrasound, PSA	5. Lung cancer	chest CT, chest X-ray

## Causes and prevention for cancer

The onset of cancer is affected by genetic or environmental factors, but also by dietary habits. Thus, for a full recovery by preventing or early detecting a cancer, it is necessary of an improvement of dietary habits and a regular examination for cancer.

### Health Story

#### 7 Lifestyle Tips for Cancer Prevention (Korean Cancer Association)

1. Do not smoke.
2. Limit your fat intake and reduce your calorie.
3. Limit excessive alcohol consumption.
4. Limit too salty/spicy or burnt foods on direct fire.
5. Consume sufficient fruits, vegetables and grains.
6. Exercise in moderation.
7. Avoid stress and live happy.

# Female · Male scan II



Name HAQUE KHANDOKER MOHD ABDUL

Resident registration No. 790401-5\*\*\*\*\*

## Female scan

Test items	20230807	Year			Year	
Pap smear						
HPV						
Pelvic sono						

## Blood tests for females

Test items	20230807	Year	Year	Min	Normal	Max	Normal level
Estradiol							
FSH							
Folate							
Rubella IgG							
Rubella IgM							

## Blood tests for Males

Test items	20230807	Year	Year	Min	Normal	Max	Normal level
Testosterone							



# Stomach Cancer · Colorectal Cancer

**Importance of Early Examination** For most patients, they visit a hospital when a disease occurs and they experience an abnormality in their functions. At that time, however, it could be that the disease is quite progressed. As early extinguishing is important in fire, it is also true that a full recovery rate is increased and the cost for treatment could be reduced when a disease is diagnosed at the earliest possible time.

## Early Examination of Stomach Cancer

- Stomach cancer is the most common cancer in both males and females. In early stage, about 80% of stomach cancer is asymptomatic. Therefore, stomach cancer in early stage is mostly discovered with no subjective symptoms at examination. Treatment for early stage of stomach cancer is possible by EMR and laparoscopic surgery, with more than 90% of 5 year survival rate. While stomach cancer in progress is required of Gastrectomy with lymph node dissection and additional chemotherapy, in some cases, complete recovery is impossible, with decreased 5 year survival rate to 20~40%.
- For diagnostic methods of stomach cancer, there are UGI and EGD(Esophagogastric-duodenoscopy), but in Korea, endoscopy is widely used, and because the examination cost is inexpensive compared to other countries, an examination using stomach endoscopy is general. For early detection of stomach cancer, it is recommended to receive the exam every 2 years in males and females older than 40, but it is better to take the exam **every year** when you have a family history of stomach cancer or precancerous disease such as intestinal metaplasia visible to the naked eye.

## Early Examination of Colorectal Cancer

Recently, the mobility rate and mortality rate of colon cancer are on increase. Diagnosis of colon cancer is possible by stool occult blood test, barium enema, colonoscopy, and CEA test. **Colonoscopy** is the most effective exam in early diagnosis and prevention of colon cancer since it could immediately remove a polyp, a precancerous finding for colon cancer.

### Checkup Recommendations for Risk group with Colon Cancer

High risk group		Age	Examination cycle	Method
Family history	Cancer in parents, siblings <ul style="list-style-type: none"> <li>• Onset age of cancer is younger than 55</li> <li>• Or cancer in more than 2 persons (regardless of age)</li> </ul>	40 years old <sup>①</sup>	5 year	Colonoscopy
	Cancer in parents, siblings <ul style="list-style-type: none"> <li>• Onset age of cancer is older than 55</li> </ul>	50 years old <sup>②</sup>	5 year	
proliferative polyp		following the mean risk group		
Polyp	Adenomatous polyp	< 1cm	1 year after polypectomy	Colonoscopy
		≥ 1cm or multiple	6 months ~1 year after polypectomy	
Inflammatory bowel disease	Limited to left colon	15 year after onset	1~2 year	Colonoscopy
	Lesion on entire colon	8 year after onset	1~2 year	Colonoscopy
Hereditary cancer	Family history about familial polyposis	12 years	1~2 year	Sigmoidoscopy
	Family history about hereditary non-polyposis	21~40 years	2 year	Colonoscopy

(The Korean Society of Coloproctology)

Footnote1) In cases of hereditary cancer, genetic testing is to be considered upon starting the examination.

Footnote2) In case of hereditary non-polyposis family history, an examination is started 10 year before the youngest onset age of a cancer patient within the family.

## Early Examination of Lung Cancer

- Lung cancer is No.1 in mortality rate of cancer worldwide, not only in Korea. It means that the number of patients dying of lung cancer among cancers is the largest. While there are many patients completely recovered with treatment such as surgeries after diagnosis of stomach cancer which is the most common type of cancer in Korea, it is not the case for lung cancer. Early diagnosis for lung cancer is very important when it is discovered by symptoms since it could mean that the lung cancer is already progressed.
- Diagnosis for lung cancer was previously conducted by chest X-ray and specimen exams on sputum, but it is disclosed that these tests are not very effective in early diagnosis of lung cancer, and recently for early diagnosis of lung cancer, **low dose CT test** is mostly conducted. With **low dose CT test**, an exam is possible with low dose, about 1/10 of exposure in general CT test and therefore it is a relatively safe test method. It is helpful to increase the 5 year survival rate when lung cancer is early detected. In other words, the 5 year survival rate of lung cancer early detected in 1 staging is more than 60% when the surgical dissection is performed, and the rate becomes 80~90% when the size of a tumor is less than 3cm.

# EGD and UGI



Name HAQUE KHANDOKER MOHD TANZEEL

Resident registration No. 790401-5\*\*\*\*\*

## EGD(Esophagogastro-duodenoscopy) and UGI

20230807	Year	Year	Year	Year
U.G.I Series Findings: Limited evaluation due to rapid gastric emptying time. Suspicious erosive gastritis in antrum.  Recommendation : gastroenterology consult and consider gastrofibroscopy.				

## H.pylori test

Test items	20230807	Year	Year	Normal level
H.pylori Ab(IgG)				
CLO				

## Colonoscopy

20230807	Year	Year	Year	Year

## Stool Test

Test items	20230807	Year	Year	Normal level
Stool Occult blood				
Parasite egg exam				

**Purpose of abdominal ultrasound** It is a test method to diagnose the lesion with imaging of the organ by receiving the echo (reflection waves) reflected from the organ in the abdominal cavity after irradiation of ultrasound. It is an essential test in diagnosis of liver or gallbladder, pancreas, kidneys, and spleen, and among these, it is a huge help in detection of gallstone or early hepatic cancer. It is not a big problem when there is a gallstone in the test result without a symptom of abdominal pain or jaundice and therefore it is only necessary of an observation on progress. When there is a symptom, a gallbladder could be removed with a laparoscopy.

# Ultrasonography Test

## Related diseases

The following diseases can be diagnosed with ultrasonography.

Liver	Hepatic cancer, cirrhosis, hepatic hemangioma, degree of fatty liver, acute/chronic hepatitis, hepatic calcification etc.	Gallbladder	Gallstone, cholecystitis, polyp in gallbladder, gallbladder cancer etc.
Pancreas	Pancreatitis, pancreatic cyst, pancreatic cancer etc.	Spleen	Degree of enlargement of spleen and metastasis of mass etc.
Thyroid gland	Thyroiditis, thyroid tumor and node etc.	Carotid artery	Atherosclerotic carotid stenosis, atherosclerosis, carotid artery stenosis etc.
Heart	Hypertrophy of heart, myocardial infarction, cardiac insufficiency, valvular disease, cardiac output etc.	Uterus	Uterine myoma, hyperplasia of endometrium, uterine neoplasia, location of loop, adenomyosis
Ovaries	Ovarian cancer, cyst, lesion in uterus and around ovaries	Kidneys	Renal calculus, renal cyst, hydronephrosis, renal cancer, chronic renal failure etc.
Prostate gland	Prostate hyperplasia, prostate cancer etc.	Bladder	Cystolithiasis, bladder cancer etc.
Other	Various diseases such as aortic aneurysm, ascites		

## Health Story

### Early Examination of Hepatic cancer

Hepatic cancer is almost asymptomatic in early stage. When the major symptoms of hepatic cancer such as weight loss, right epigastric pain, and abdominal distention are manifested, it means that hepatic cancer is quite progressed. Thus, it is necessary for an early diagnosis.

#### Checkup Recommendations for Hepatic cancer

Goal	By conducting a regular checkup in subjects with high risk of hepatocellular carcinoma (hereafter, hepatic cancer), it is to decrease the mortality rate from hepatic cancer with an increased opportunity of early detection and proper treatment, and to extend the survival period.
Target Subjects	An examination is recommended to subjects with the following risk facts in males over 30, and females over 40 years old. - Patient with chronic hepatic disease by hepatitis B or C - High risk group for cirrhosis and other hepatic cancer with negative all to HBsAg and HCAb
Examination method	Abdominal ultrasound and alpha-fetoprotein
Considerations	1. Besides the above target subjects for examination, when it is decided that the risk of hepatic cancer is high, regardless of age, an examination could be recommended, and when it is unnecessary in consideration of the age and health conditions of the patient, they could be excluded from subjects for examination. 2. When the risk is high in consideration of the age, gender, progress of cirrhosis, alcohol intake habit, family history and the test result on anamnesis, the examination interval could be shortened or an abdominal CT could be added to the test.

Sources) The Korea Association for the Study of Liver, National Cancer Center

### Program for Early Diagnosis of Hepatic cancer

	Subjects	Examination cycle	Examination method
Hepatic cancer	<ul style="list-style-type: none"> <li>Male and female over 40 years old</li> <li>Subjects confirmed with cirrhosis or positive to hepatitis B Ag or hepatitis C Ab</li> </ul>	6 months	Liver ultrasound + AFP test

Sources) Ministry of Health and Welfare, National Cancer Center, National Cancer Information Center

# Ultrasonography



Name HAQUE KHANDOKER MOHD ABDUL RAHMAN

Resident registration No. 790401-5\*\*\*\*\*

## Abdominal ultrasound

20230807	Year	Year
Mild fatty liver. Post cholecystectomy state. A renal cyst(1cm) in right. Recommend annual follow up.		

•What is abdominal ultrasound? It could diagnose tumor, lithiasis and inflammation of liver, gallbladder, pancreas, spleen, and kidneys.

## Thyroid ultrasound

20230807	Year	Year
A tiny cyst in right lobe. About 1cm sized isoechoic nodule with cystic change in right lobe. About 0.67cm sized isoechoic nodule with cystic change in right lobe. Recommend follow up after 1 year.		

•What is Thyroid ultrasound? It could be tested for benign carcinomas such as thyroid cancer and thyroid cyst, and thyroid calcification, and lymph nodes around the thyroid gland.

## Carotid ultrasound

20230807	Year	Year

•What is Carotid ultrasound? It could prevent the risk of stroke by examining the degree of atherosclerosis in the carotid artery and the presence of blood clots within the carotid artery.



**What is heart calcification CT using 128 Channel CT?** Heart itself is supplied with blood into the blood vessel called coronary artery. Coronary arteries are consisted of 3 strands of large blood vessels, when blood supply is not sufficient to cardiac muscles from narrowing or blockage of more than one of these vessels, a coronary artery disease occurs. The most important cause of carotid artery disease is atherosclerosis in which cholesterol are accumulated in blood vessels, and risk factors are stress, distress, overstrain, obesity, smoking, and excessive intake of fatty foods.

## Special test

### What is MRI (magnetic resonance imaging)?

MRI is a test using changes in magnetic field, and as irradiating a strong magnetic field to the related site in the body, nuclei of cells in the body are rearranged by the influence of the magnetic field, and they go back to the original position when this magnetic field is cut off. In the process of returning of these nuclei to their positions, a signal is emitted, and MRI is what this signal is used in creating images. It is advantageous in that a test could be conducted without irradiation of radiation and there is no specific influence on the body, and it is excellent in description of a lesion in the body without contrast medium and also excellent in contrast of the soft tissue.



### Health Story

### What is Low dose Lung CT?

Lung CT is conducted for diagnosis of a disease within pulmonary parenchymal tissue and a small size of pulmonary nodule, and a lesion in the bronchial tubes, and is a test to examine the presence/size of lung cancer, staging, and metastasis from other organ.

Low dose Lung CT is a method to diagnose lung cancer by decreasing X-ray exposure about to 1/10 compared to the previous lung CT. A simple chest radiograph has a disadvantage in detecting lung cancer in early stage since it is difficult to discover the lesion of early lung cancer less than 1cm or the lesion hidden by the heart and diaphragm. On the other hand, with low dose lung CT, it is advantageous to discover a small pulmonary nodule in 0.67mm and lung cancer with ground-glass opacity which is not well detected under chest x-ray even though the size is relatively large.

### Characteristics of PET test

With Positron Emission Tomography (PET), a disease could be discovered by observing functional and biochemical changes prior to changes in anatomical form. In addition, it is used for many areas of early diagnosis in brain specific disease such as senile dementia, and of detection of myocardial site, not only in diagnosis of various cancers. Previous x-ray, ultrasound, CT or MRI are methods to record anatomical images of cancer cells or tumor generated within our body. Because of the limit in resolution, it is mostly unable to detect a minute cancer cell or tumor less than 1cm. Also, even after it was detected, it was difficult to differentiate whether it is benign or malignant.

However, with PET-CT, it is not only able to detect a minute cancer cell or tumor tissue in early stage, which was unable to be discovered by the previous method, but also able to treat while checking on the metastasis and reappearance of cancer, and the effect of anticancer agent. Furthermore, it is possible for follow-up of the site first manifested with cancer or tumor.

#### Advantages

- Cancer difficult to be detected by other tests (CT, MRI) could be early diagnosed.
- Only test to diagnose the systemic cancer with one time of test (takes 1hr)

# Specific equipment test



Name HAQUE KHANDOKER MOHD MAZBUL

Resident registration No. 790401-5\*\*\*\*\*

## CT:Computed Tomography

20230807	Year	Year
C-spine CT - mild intervertebral osteophyte-disc complex at the cervical vertebra4–5, cervical vertebra5–6 - no evidence of spinal stenosis nor neural foraminal stenosis - recommend: if there is symptom such as pain or tingling sensation, please visit spine specialist		

## MRI:Magnetic Resonance Image

20230807	Year	Year

## Echocardiography

20230807	Year	Year

## Additional tests with equipment

20230807	Year	Year

# Regulations for National Cancer Prevention



In Korea, national regulations for cancer prevention were enacted and announced in October 2006. It is to promote that **cancer could be prevented** and to educate risk factors of cancer, and to prevent cancer by practicing these regulations. From practicing on these preventive regulations, cancer, which once put us in fear, is now becoming a preventable disease. The contents of regulations for national cancer preventions are as follows.

## No smoking, also avoiding second-hand smoking

It is widely known that there are thousands of carcinogenic substances in small amount, and smoking is a cause for several cancers including lung cancer. Cancers currently known to be related to smoking are laryngeal cancer, oral cancer, esophageal cancer, pancreatic cancer, kidney cancer, bladder cancer, cervical cancer and leukemia, including lung cancer.



## Eat in a balanced meal with sufficient intake of vegetables and fruits

Fruits are effective in prevention of lung cancer, bladder cancer, oral cancer, laryngeal cancer, esophageal cancer, stomach cancer, colon cancer, and rectal cancer, and vegetables are known to be effective in prevention of esophageal cancer, breast cancer, lung cancer, stomach cancer, and colon cancer and rectal cancer.



## Avoid salty foods, overcooked (burnt) foods

It is known that salty foods and overcooked (burnt) foods are causes for stomach cancer.



## Drink only two glasses of alcohol for day

It means two glasses by the 'standard glass,' which is about 12 grams of pure alcohol in one glass.



## Walk or exercise to sweat, more than 5 times a week, over 30 min daily

According to recommendations by the WHO, a regular exercise over 30 min every day is effective in prevention of colon cancer, breast cancer, and cardiovascular disease and chronic diseases like diabetes. According to the result of another research, it is also disclosed that there is a correlation between exercise and prostate cancer, endometrial cancer and lung cancer.



## Maintain a healthy weight for your body

Abnormal weight gain leads to obesity, and it is known to increase colon cancer, breast cancer, endometrial cancer, kidney cancer, esophageal cancer, and thyroid cancer (esp. in women).



## Get vaccinated for hepatitis B in accordance with the guideline for vaccination

It is well known that there is a close relationship between chronic hepatitis B and the onset of hepatic cancer in Korea. According to the 'Guideline for National Vaccination' in Korea, it is to be vaccinated against hepatitis to those with a high risk of exposure to hepatic B virus when HBsAg and Ab are negative, and to all infants.

## Safe sex life from sexually transmitted diseases (STDs)

HPV infection, known as sexually transmitted infection (STI), could cause not only cervical cancer, but also oral cancer, laryngopharyngeal cancer, skin cancer. Besides, human immunodeficiency virus (HIV) could be infected through sexual contacts to cause cancer.



## Follow health and safety instructions at work places to avoid exposure to carcinogen

In case of exposure to carcinogen attributable to occupation, mostly young people are exposed and there are diverse risk factors for cancer according to cancer-causing agents and process. Thus, adoption of safety equipment and protective clothing must be necessary.

## Undergo routine check-ups following the cancer screening programs

Although difference varies according to a type of cancer and screening cycle, an incidence of stomach cancer, colon cancer, and cervical cancer could decrease by a regular checkup according to studies conducted in Japan, America, and Europe.

# Healthy People, Healthy World with Korea Medical Foundation

*"We aspire to be a medical institution  
of advanced treatment in practice of love."*

Our medical foundation will do our best in creating a happy world by careful watch on public health, and becoming the best medical institution loved by people through our advanced treatment in practice of love in pursuit of a healthy life for mankind.

<p><b>Diagnosis by advanced equipments</b> Operation of 2012 MRI, CT(128channel) Operation of advanced medical equipments such as ABVS, general ultrasound</p>	<p><b>Convenient Reservation system for customers</b> Prompt and convenient examination by a thorough reservation with proper number of subjects</p>	<p><b>Medical staff with plenty of clinical experiences</b> Consisted of experienced specialists from each department of gastroenterology, circulatory system, family health, and radiology etc.</p>
<p><b>Health Promotion Center Korea Medical Foundation</b></p>		
<p><b>Prompt notification of the result</b> Personal exam: consultation of the result on the same day Corporate exam: consultation of the result within 5 days Notification service of the test result by email</p>	<p><b>Visiting physician services</b> Consultation of the result on the on-site visit by specialist and consultant</p>	<p><b>Professional follow-up management system</b> Prompt measures not only for prescription and treatment for subjects with symptoms, follow-up management of subjects with symptoms by stage, but also for proper treatment by the best medical staff in Korea when in need of professional treatment</p>

## 1. Most advanced medical equipments and the best medical staff

Our Health Promotion Center always endeavors to provide the best services with the most advanced medical equipments and the best medical staff for public health of our local community.

## 2. 10 Major Cancer scan

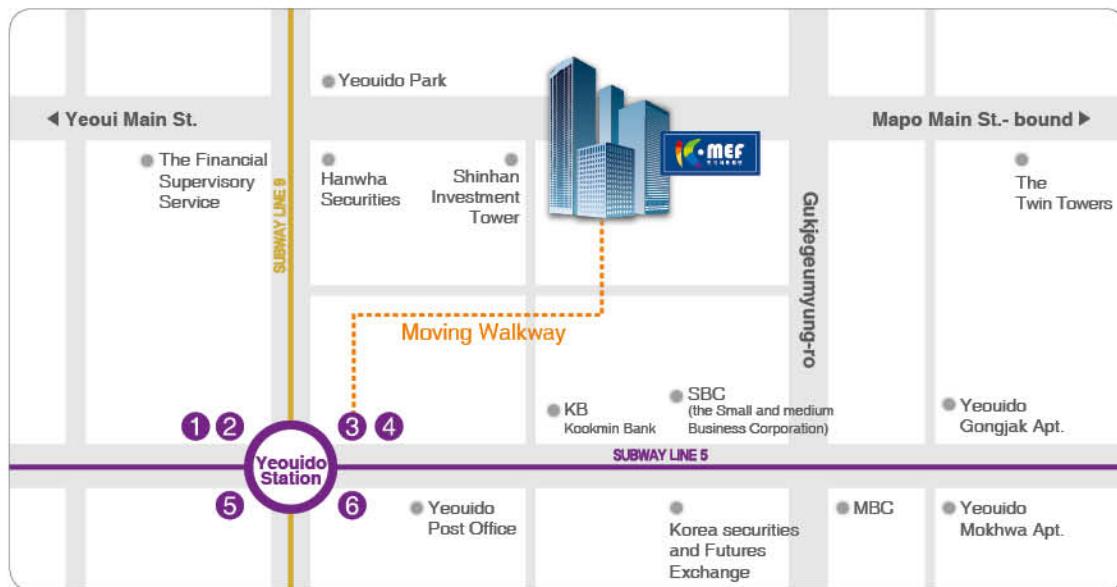
The IFC Health Promotion Center under our foundation is operated as a complete examination center for 10 major cancers to prevent and treat cancer in early stage so contribute to the health and happiness of you and your family.

## 3. IFC Health Promotion Center Korea Medical Foundation

At our Health Promotion Center, accurate examinations for basic medical checkup, cancer scan, 3 major diseases, specialized examination and youth examination are conducted by the specialist of each department, and an individually-customized examination is in process.

## Location

For those wish to have sleep endoscopy, please use the public transportation to reach our center because driving is not possible on the examination date.



### By Subway

From Subway Line 5,9, Exit 3 of Yeouido Station, directly connected to the second basement level (L2) of IFC MALL through the 320m underground moving walk.

Subway Line 5, Exit 3 of Yeouido Station ► directly connected to IFC MALL

Subway Line 9, Exit 3 of Yeouido Station ► directly connected to IFC MALL

### By Bus

Get off at the Transfer center of Yeouido Station

B Blue bus : 160, 162, 260, 261, 262, 360, 461, 600, 661, 662

G Green bus : 2012, 5615, 5618, 5623, 6513, 6623, 6628

R Gyeonggi : 10, 10-1, 11-2, 83, 88, 301, 320, 2500, 3601, 5601, 8600

회원번호 01273436 (칸도커)	신장 163.5cm	나이 44	성별 남성	검사일시 2023.08.07. 11:02
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## 체성분분석 Body Composition Analysis

체수분 Total Body Water	측정치 (L) 39.9 (33.0~40.4)	체수분 39.9	근육량 51.4 (42.5~51.9)	제지방량 54.5 (45.0~55.0)	체중 77.3 (50.0~67.6)
단백질 Protein	10.9 (8.8~10.8)				
무기질 Minerals	3.75 (3.06~3.74)	non-osseous			
체지방 Body Fat Mass	22.8 (7.1~14.1)				

## 골격근·지방분석 Muscle-Fat Analysis

체중 Weight	표준이하			표준			표준이상			%	
	55	70	85	100	115	130	145	160	175	190	205
골격근량 Skeletal Muscle Mass	70	80	90	100	110	120	130	140	150	160	170
체지방량 Body Fat Mass	40	60	80	100	160	220	280	340	400	460	520

## 비만분석 Obesity Analysis

B M I Body Mass Index	표준이하			표준			표준이상			%	
	10.0	15.0	18.5	22.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0
체지방률 Percent Body Fat	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0

## 부위별근육분석 Segmental Lean Analysis

오른팔 Right Arm	표준이하			표준			표준이상			세포외수분비 0.377	
	55	70	85	100	115	130	145	160	175	%	
왼팔 Left Arm	55	70	85	100	115	130	145	160	175	%	0.378
몸통 Trunk	70	80	90	100	110	120	130	140	150	%	0.370
오른다리 Right Leg	70	80	90	100	110	120	130	140	150	%	0.366
왼다리 Left Leg	70	80	90	100	110	120	130	140	150	%	0.369

## 세포외수분비분석 ECW Ratio Analysis

세포외수분비 ECW Ratio	표준이하			표준			표준이상					
	0.320	0.340	0.360	0.380	0.390	0.400	0.410	0.420	0.430	0.440	0.450	
세포외수분비 ECW Ratio	0.320	0.340	0.360	0.380	0.390	0.400	0.410	0.420	0.430	0.440	0.450	0.371

## 신체변화 Body Composition History

체중 Weight	77.3	●	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
골격근량 Skeletal Muscle Mass	30.8	●	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
체지방률 Percent Body Fat	29.5	●	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
세포외수분비 ECW Ratio	0.371	●	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

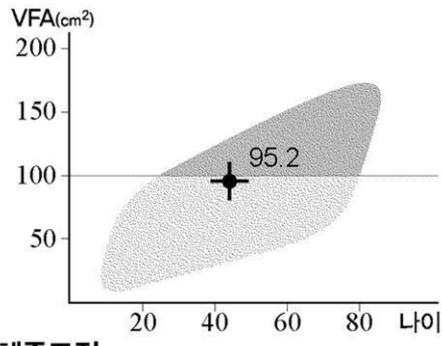
최근 □전체 23.08.07. 11:02

## 인바디점수 InBody Score

71 / 100 점

\* 체성분 종합점수입니다. 근육이 매우 많은 경우 100점을 넘을 수 있습니다.

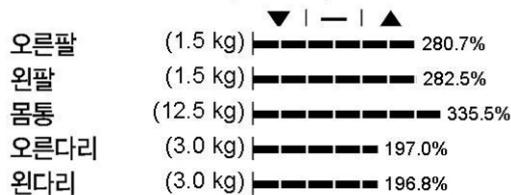
## 내장지방단면적 Visceral Fat Area



## 체중조절 Weight Control

적정체중	64.1 kg
체중조절	- 13.2 kg
지방조절	- 13.2 kg
근육조절	0.0 kg

## 부위별체지방분석 Segmental Fat Analysis



## 연구항목 Research Parameters

세포내수분	25.1 L	( 20.5~25.1 )
세포외수분	14.8 L	( 12.6~15.4 )
기초대사량	1548 kcal	( 1647~1931 )
복부지방률	0.95	( 0.80~0.90 )
체세포량	36.0 kg	( 29.3~35.9 )

## QR코드 QR Code



웹사이트에서 결과를  
확인하려면, 좌측의  
QR코드를 스마트폰으로  
인식하세요.

## 전신 위상각 Whole Body Phase Angle

φ(°) 50 kHz | 6.6 °

## 임피던스 Impedance

Z(Ω)	1 kHz	RA	LA	TR	RL	LL
	5 kHz	308.7	305.8	24.1	289.2	275.6
	50 kHz	270.1	270.4	20.3	246.9	235.3
	250 kHz	242.4	242.9	16.7	219.0	208.8
	500 kHz	234.9	234.5	15.4	212.3	202.7
	1000 kHz	230.5	228.5	14.9	207.6	198.1