

Annual Health Check

How to understand your results

1. Height / weight measurements

Body Mass Index (BMI) is a numerical value used to determine whether your weight is appropriate for your height. It is calculated as: $\text{weight (kg)} \div [\text{height (m)}]^2$. Based on epidemiological data showing that Japanese people have the lowest frequency of illness at a BMI of around 22, the ideal body weight is calculated as: $22 \times [\text{height(m)}]^2$. It is known that both excessive and insufficient body weight can increase the risk of health problems. In particular, if your BMI is below 16.5 or over 30, or if your body weight changes significantly in a short period of time (more than ± 5 kg within one year), there may be underlying conditions such as metabolic or hormonal disorders. Please be sure to come for a follow-up examination at the Health Administration Center.

2. Blood pressure measurement

Blood pressure is the pressure generated when the heart pumps blood throughout the body. In some people, blood pressure may rise simply due to the tension of "having their blood pressure measured" or "undergoing a health checkup." If your blood pressure was 140/90 mmHg or higher, please visit the Health Administration Center on another day to have it measured again. If your blood pressure is consistently high, leaving it untreated can damage the heart and blood vessels and may lead to heart failure or cerebral hemorrhage. In addition, there may be an underlying condition called secondary hypertension that causes high blood pressure. Even if you do not have any symptoms, please be sure to come for a follow-up examination at the Health Administration Center.

3. Urine test

Protein: This is a test to check for kidney diseases such as chronic nephritis. The result can be affected by, for example, fever up or vigorous exercise.
Sugar: A positive result is suspicions for diabetes mellitus. If you have positive results, visit Health Administration Center for re-check.

☆Grading of results☆

- A:** Within normal range or no findings.
- B:** Slightly out of normal range, please follow up the data.
- C:** You may have a re-examination. Lifestyle advice will be given by a physician, a nurse, or a dietician at Health Administration Center.
- D:** Advanced examination or medical treatment are required. Please receive an explanation of your results from a physician at the Health Administration Center. A physician will make reference letter to the hospital.
- E:** Please continue your treatment according to your attending physician's instructions.



4. Eye sights

If your visual acuity in both eyes is below 0.7, you may have difficulty at the class, which could interfere with your studies. If your re-examination is still below 0.7 after a at the Health Administration Center, please consult an ophthalmologist.

5. Hearing

During the medical examination, the doctor will check whether there are any problems hearing conversational speech levels. If you feel any difficulty, such as trouble hearing lectures, please consult the Health Administration Center.

6. Chest X-ray photo

This examination checks for lung diseases such as pneumonia and pulmonary tuberculosis, abnormalities of the spine, and enlargement of the heart. If any abnormalities are detected, please visit the Health Administration Center to receive an explanation from a physician.

7. Physical examination

A doctor conducts a medical interview and physical examination. The examination includes auscultation to listen to heart sounds and breath sounds, palpation of the neck to check the thyroid gland and lymph nodes, and observation of the palpebral conjunctiva and skin condition. If any findings are noted, please visit the Health Administration Center.

Based on the responses in the medical questionnaire, individuals who indicated that they are currently receiving treatment for a medical condition, etc., may be asked to come for confirmation, such as whether there are any issues affecting their studies, even if no abnormalities were found in the examination results. Please visit the Health Administration Center.

★Blood tests were also conducted for new students.

8. Blood analysis

Liver function test: AST (GOT) and ALT (GPT) are enzymes that are found in large amounts in the liver. When liver cells are damaged due to disease or other conditions, these enzymes are released into the bloodstream and show elevated levels.

If abnormal values are detected, conditions such as viral hepatitis or fatty liver may be suspected. In such cases, a follow-up test or a detailed examination at a medical institution is required.

	Item	Normal range
Liver function	AST (GOT) (IU/L)	≤ 40
	ALT (GPT) (IU/L)	≤ 30
Lipids	Triglyceride (mg/dl)	< 150
	HDL cholesterol (mg/dl)	$40 \leq$
	LDL cholesterol (mg/dl)	< 140
Glucose metabolism	Blood sugar (casual) (mg/dl)	< 140
	HbA1c (%)	< 5.5
Uric acid	Uric acid (mg/dl)	≤ 7.0

Lipids test: If triglycerides or LDL cholesterol remain high, or HDL cholesterol remains low, it can promote atherosclerosis, a condition in which the arteries lose elasticity and become hard and fragile, increasing the risk of cerebral infarction (stroke) and myocardial infarction (heart attack). If abnormal values are found, genetic or constitutional factors may be strongly involved, so please consult a medical institution. It is also important to review your daily lifestyle habits, such as your diet.

Glucose metabolism test: Blood glucose refers to the concentration of glucose in the blood. Blood glucose levels are strictly regulated within a range of 70–140 mg/dL by the actions of various hormones, including insulin and glucagon secreted by the pancreas, growth hormone, and adrenal cortical hormones. If the level is high, conditions such as diabetes mellitus or hormonal abnormalities may be suspected. Hemoglobin A1c (HbA1c) reflects the average blood glucose level over the past 1–2 months, and the value increases when the average blood glucose level is high.

If abnormal values are indicated in either test, a detailed examination at a medical institution is required.

Uric acid measurement: Uric acid is a waste product produced when purines, a type of protein-related substance, are metabolized in the body, and it is excreted in the urine. When there is a problem with the balance between its production and excretion, and the level of uric acid in the blood remains high, it can form crystals that accumulate in the joints and cause sudden joint pain. This is called a gout attack. It can also make urinary tract stones more likely to form. Both genetic factors and dietary habits influence uric acid levels, so if your level is high, please consult a medical institution.

Antibody tests for infectious diseases

This test measures antibody levels, which indicate the amount of immunity against viruses that cause measles, rubella, mumps, and varicella. These viruses are highly contagious, and in severe cases they may lead to death or long-term complications.

Rubella is a particularly serious infection because if it occurs during pregnancy, it can cause disorders in the baby such as congenital rubella syndrome. However, if sufficient antibodies are acquired through vaccination, it is possible to be protected from these infections for life.

	Ideal level
Measles	$16.0 \leq$
Rubella	$8.0 \leq$
Mumps	$4.0 \leq$
Chicken pox	$4.0 \leq$

Some people do not have sufficient antibodies against these infectious diseases, please check your vaccination records. If you have not received at least two doses in your lifetime, additional vaccination is strongly recommended.

You can also receive additional vaccinations at the Gifu University Hospital. Please make an appointment through the Health Administration Center.

Only a person with sufficient antibody can participate in teaching practice, hospital practice, and nursing care practice.