About 3.2 million Korean people (10.1%) aged over 30 years or older had diabetes in 2010. Based on fasting glucose, 19.9% of adults had prediabetes (impaired fasting glucose). Accordingly, 3 out of 10 people in Korea are diabetes or at high risk of future diabetes as of 2010.

Diabetes will affect 6.0 million people in Korea by 2050, which will be twice higher than that of 2010. The growth rate is expected to be 183% for the next 40 years.

Three out of ten patients with diabetes are not aware of their disorder (awareness rate, 73.4%). Furthermore, the awareness of diabetes among young people (aged 30–44) is only 54.4%.

Three out of four patients with diabetes in Korea are overweight or obese.

Most people with diabetes (85.9%) are under medical treatment, mostly being treated with oral hypoglycemic agents (75.4%), but 14.1% of diabetic patients do not receive any medical care.

Only 30% of diabetic patients in Korea have reached their glycemic target. Only about half of the patients are under adequate glycemic control, even when applying the American Diabetes Association guideline of HbA1c < 7% instead of the Korean Diabetes Association guideline of < 6.5%.

DATA SOURCE
The estimated percentages and the total number of people over the age of 30 with diabetes and prediabetes were determined from data from the 2007-2010 Korean National Health and Nutritional Examination Survey (KNHANES) conducted by the Korea Centers for Disease Control and Prevention (KCDC) and the Korean Ministry of Health and Welfare.

DEFINITION OF DIABETES AND PREDIABETES
- Diabetes was diagnosed based on fasting plasma glucose ≥ 126 mg/dL, current anti-diabetes medication, or previous diagnosis.
- Impaired fasting glucose (IFG) was defined based on fasting plasma glucose 100–125 mg/dL.
As of 2010, the prevalence of diabetes in adults 30 years or older is 10.1%: approximately 1 out of every 10 adults are diabetic patients (estimated to be approximately 3.2 million people). The prevalence increases with age, reaching 22.7% in elderly population 65 years or older.

Approximately 20% of adults 30 years or older (6.2 million people) have impaired fasting glucose (prediabetes). Therefore, 3 out of 10 adults are diabetes or potentially diabetic patients as of 2010.
Diabetic population expected to reach about 6 million in 2050.
183% increase compared to 2010:
two-fold growth expected for the next 40 years.

The highest diabetes prevalence rates were found in the order of Ulsan, Jeonbuk, Incheon, Daegu, Seoul.
The average prevalence across cities was 10.3%, and the average prevalence across the provinces was 9.1%. The major cities showed higher prevalence overall.

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FUTURE DIABETES POPULATION

REGIONAL COMPARISON OF DIABETES PREVALENCE

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The average prevalence across cities was 10.3%, and the average prevalence across the provinces was 9.1%. The major cities showed higher prevalence overall.

STATISTICAL ANALYSIS
Current (2010) diabetes prevalence by age (in decades) and gender, multiplied by estimated future population.

STATISTICAL ANALYSIS
Standardized prevalence rate by age and gender.
AWARENESS OF DIABETES

- 3 out of 10 diabetic patients are not aware of their condition (diabetes awareness rate: 73.4%).
- In a younger population of age 30 to 44, almost half (45.6%) are unaware of their diabetes.

Most patients with diabetes are being treating for their disease (85.9%), most of whom are being treated with oral hypoglycemic agents (75.4%). However, 14.1% are not receiving any treatments at all.

Combined with those who are unaware of their diabetes, 37.9% of the patients are not being treated for diabetes.

TYPE OF TREATMENT

- Most patients with diabetes are being treating for their disease (85.9%), most of whom are being treated with oral hypoglycemic agents (75.4%). However, 14.1% are not receiving any treatments at all.
- Combined with those who are unaware of their diabetes, 37.9% of the patients are not being treated for diabetes.
GLYCEMIC CONTROL

- Less than 30% of patients with diabetes have reached their target blood glucose level.
- Even if applying the recommendation of HbA1c < 7% given by the American Diabetes Association, only about half are under adequate glycemic control.
- The mean glycated hemoglobin was found to be 7.4%.

GLYCEMIC CONTROL Defined as glycated hemoglobin less than 6.5% based on treatment guideline set by Korean Diabetes Association.

BLOOD PRESSURE CONTROL

- About one-third of diabetic patients with hypertension reach their target blood pressure.

BLOOD PRESSURE CONTROL Defined as systolic / diastolic blood pressure less than 130 / 80 mmHg, based on treatment guideline set by Korean Diabetes Association.
PREVALENCE OF CHILDHOOD DIABETES 2011

- The number of children and adolescents with diabetes are estimated to be at 57.5 per 100,000 as of 2011.
- The prevalence in adolescents are about 6 times higher than that in children (age 0~9).

GESTATIONAL DIABETES

- As of 2011, 1 out of every 10 pregnant women visited the hospital for management of gestational diabetes.
- The prevalence has steadily increased annually by 1~2% since 2007.
PREVALENCE OF OBESITY IN DIABETES

74.7%

- Approximately, three-fourths of Korean patients with diabetes are overweight or obese.
- The mean body mass index (BMI) was found to be 25.2 kg/m².

DEFINITION OF OBESITY

Overweight: BMI 23.0~24.9 kg/m²
Obese: BMI ≥ 25.0 kg/m²

ABDOMINAL OBESITY IN DIABETES

- Abdominal obesity found in 40% of male diabetic patients and 60% of female diabetic patients.
- The mean waist circumference of male and female diabetic patients was 88.3 cm and 86.9 cm, respectively.

DEFINITION OF ABDOMINAL OBESITY

Waist circumference > 90 cm for men, > 85 cm for women