# Oral Glucose Tolerance Test (75g Glucose)

**CPT Code:** 82951 (3 samples; Fasting, 1 hour, 2 hour)

Each additional sample: 82952

## **Order Code Options:**

OGTT, 3 Samples (Fasting, 1 hour, 2 hour): C505

OGTT, 2 Samples (Fasting, 1 hour): 1368

OGTT, 2 Samples (Fasting, 2 hour): 1369

OGTT, Additional Glucose 1: C506 OGTT, Additional Glucose 2: C540

**ABN Requirement:** No

Synonyms: Glucose Tolerance Test; GTT; OGTT

## **Acceptable Specimen Types:**

Serum collected in separate gel-barrier (SST, Tiger Top) tubes for each specific draw time

Plasma collected in separate fluoride/oxalate (Gray Top) tubes for each specific draw time

Whole blood collected in separate fluoride/oxalate (Gray Top) tubes for each draw time

**Note:** Whole blood gray top samples are not recommended due to short stability time

Volume: 1.0 mL per individual sample

 $\textbf{Minimum Volume} \colon \ 0.5 \ \text{mL per individual sample}$ 

Container: Gel-Barrier Tube (SST, Tiger Top) or Gray Top (Sodium

Fluoride/Oxalate) Tube

#### **Collection Instructions:**

## **All Specimen Types:**

1. Collect and label fasting sample according to standard protocols. Each sample <u>must</u> be labeled with the time of draw.

2. After administration of the prescribed dosage of glucose beverage, collect and label all subsequent timed samples according to standard protocols. Each sample <u>must</u> be labeled with the time of draw.

## Serum (SST, gel-barrier):

- 1. Gently invert tube 5 times immediately after draw.
- 2. Allow blood to clot 30 minutes.
- 3. Centrifuge for 10-15 minutes.

## Plasma (Fluoride/Oxalate):

- 1. Draw and gently invert tube 8 to 10 times.
- 2. Centrifuge immediately for 10-15 minutes.
- 3. Aliquot plasma into labeled transport tube labeled as 'NaF plasma' or 'Gray Top plasma' and cap tightly. Each aliquot sample must be labeled with the time of draw. Discard original tube.

## Whole Blood (Fluoride/Oxalate):

- 1. Draw and gently invert tube 8 to 10 times.
- 2. Do not centrifuge

**Patient Preparation:** Patient should be fasting for 12 hours prior to being drawn.

**Special Instructions:** Each timed specimen <u>must</u> be labeled with the draw time. Serum and plasma submissions must be separated from cells. Whole blood submissions not recommended due to short stability time.

**Transport:** Store all samples at 2°C to 8°C after collection and ship the same day per packaging instructions included with the provided shipping box.

# **Stability:**

## Serum (SST, gel-barrier):

**Ambient (15-25°C):** 4 days **Refrigerated (2-8°C):** 7 days

**Frozen (-20°C):** 28 days

## Plasma (Fluoride/Oxalate):

**Ambient (15-25°C):** 7 days **Refrigerated (2-8°C):** 7 days

**Frozen (-20°C):** 28 days

#### Whole Blood (Fluoride/Oxalate):

**Ambient (15-25°C):** Not acceptable

**Refrigerated (2-8°C):** 72 hours **Frozen (-20°C):** Not acceptable

**Causes for Rejection**: Samples not labeled with the time of draw; samples that are grossly hemolyzed or lipemic; specimens other than acceptable sample type; improper labeling; samples not stored properly; samples older than stability limits.

Methodology: Photometric

**Turn Around Time:** 1 to 3 days

## **Reference Ranges:**

\*The test uses a glucose load containing the equivalent of 75g anhydrous glucose dissolved in water.

\*\*Diagnosis must be confirmed by testing on a subsequent day.

#### **Critical Value:**

## **Urgent Value:**

**Clinical Significance:** An oral glucose tolerance test can be used to identify diabetic and pre-diabetic individuals among a healthy, asymptomatic population.

**Additional Information:** The oral glucose tolerance test can be useful in individuals with symptoms of diabetes who have had a normal glucose test.

#### **References:**

• American Diabetes Association "Standards of Medical Care in Diabetes 2015"

• The Journal of Clinical and Applied Research and Education. January 2015, Volume 38, Supplement 1.

The CPT codes provided are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.