

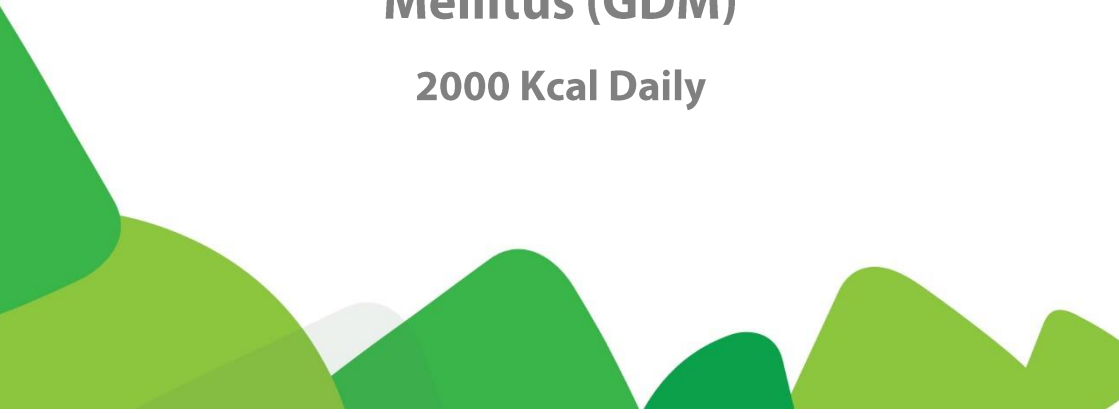


مدينة الملك فهد الطبية  
King Fahad Medical City



# **Gestational Diabetes Mellitus (GDM)**

**2000 Kcal Daily**



**Gestational diabetes mellitus (GDM)** is a condition in which a woman without diabetes develops any degree of glucose intolerance with onset or first recognition during pregnancy.

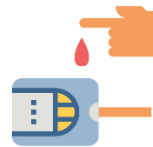
**GDM** is caused by a placenta that makes hormones resisting the actions of insulin that cause glucose to build up in the blood. GDM raises the risk of getting type 2 Diabetes Mellitus later in life so any pregnant woman should visit and follow up regularly during pregnancy and after delivery.



## Be aware of GDM complications:

- Incidence of frequent Urinary tract infection.
- Dystocia (Obstructed labor).
- Abortion.
- Fetal Macrosomia (large baby).
- Fetal congenital anomalies (birth defect).

## Blood Glucose level ranges:



- Fasting Blood Glucose should be **70 – 105** mg/dl  
(Equivalent 3.9 – 5.8 mmol/l)
  - 2 hours after meal should be **70 – 120** mg/dl  
(Equivalent 3.9 – 6.7 mmol/l)
- ❖ Controlled Blood Glucose level within normal ranges is the best way to prevent diabetes mellitus **type 2** and its complications.

## Symptoms of Hypoglycemia:

- ❖ Polyphagia
- ❖ Sweating
- ❖ Rapid heartbeat
- ❖ Dizziness and Syncope
- ❖ Confusion and Trembling
- ❖ Feeling irritable
- ❖ Poor concentration
- ❖ Blurred vision
- ❖ Coma



## Symptoms of Hyperglycemia:

- ❖ Polydipsia
- ❖ Fatigue
- ❖ Polyuria
- ❖ Loss of appetite and feeling vomiting
- ❖ Abdominal pain
- ❖ Dizziness and Hyperventilation
- ❖ Slow wound healing



## General Guidelines:

- ✓ Follow a healthy diet plan to meet the nutrition requirements of pregnancy and manage blood glucose levels.
- ✓ Distribute the foods between three meals and two or three snacks at the same time each day to help and keep the blood glucose at a stable level.
- ✓ Follow the diet plan that is provided by a clinical dietitian with the same serving size and you can exchange any type of food from an exchange lists groups.
- ✓ Read the food label before purchasing any product to know the calories, fats and sugar content.
- ✓ Always check the blood glucose before and after meals and record the results for follow up visiting.

## **Prohibited foods:**

Sugar, honey, sweetened juices, soda, ice cream, Middle Eastern sweets, cake, chocolate, jelly, custard, cream caramel, pastries like donuts and croissant, dried fruits, jam, sugar preserved food, evaporated milk, mayonnaise, ready-made salad dressing, whole fat cheddar cheese, cream cheese, fried foods, fast foods and all kinds of sweets.

## **Make Sure to:**

- ✓ Substitute whole fat milk and dairy products with low fat or skimmed products.
- ✓ Eat only 2-3 dates per day as one exchange of fruit in the diet plan.
- ✓ Substitute white bread with brown bread.
- ✓ Consume high fiber foods, like brown bread and green leafy vegetables according to your diet

plan. Fiber takes a long time to digest and increases the feelings of fullness. It also helps to control the blood glucose level within the normal range and prevents constipation.

- ✓ Do not add sugar to foods and beverages. Also, avoid using artificial sugar substitutes as the effect on the infant is not clear.
- ✓ Limit caffeine-containing beverages like coffee, tea, chocolate or soda since it interferes with iron and calcium absorption.
- ✓ Drink 6-8 cups of water daily.

### **Nutritional Guidelines:**

- ✓ Prepare the foods with proper ways (**boiling, grilling and steaming**) and avoid frying. Also, remove excess meat fat and chicken skin before cooking.

- ✓ Avoid processed and junk foods that contain high fat and sugar.
- ✓ Substitute Maggi and sauces with spices and herbs because they contain a high amount of salt.
- ✓ limit intake of salt and foods rich in Sodium.
- ✓ Consume raw fruit instead of juices because it contains high fiber.
- ✓ Substitutes sweetened juices with nature juice because sweetened juices have low nutritional value and rich in sugar.
- ✓ Consume dark green leafy vegetables that contain high iron to prevent anemia and to increase the absorption of iron it is better to add vitamin C like lemon or tomato to the salad.



## Diet Plan (2000 kcal per day)



- **Breakfast:**

- 1 cup of low fat milk or laban without sugar.
- 1/4 Arabic brown bread or 1 slice brown toast.
- 1 boiled egg or 30 gm (2 tbsp.) low fat white cheese or 2 slices low fat cheese.
- Slices of cucumber, tomato or lettuce.

- **Snack:**

- 1 cup unsweetened juice or 2 exchanges of fruit.

- **Lunch:**

- ½ cup of low fat milk or laban without sugar.
- Green salad without fat.
- 90 gm of chicken, meat or fish (equal half chicken breast, chicken thigh or 6 tbsp. of meat or chicken minced)
- ½ cup cooked vegetable without add potato and without fat.
- ½ cup (6 tbsp.) of rice or pasta or groats.
- 1 slice of brown bread + ½ cup unsweetened juice.

- **Snack:**

- ½ cup low fat milk without sugar + 4 pieces unsweetened biscuits.

- **Dinner:**

- Same lunch meal and can exchange meat or chicken with (6 tbsp. beans without fat or low fat cheese).

- **snack:**

- 1 cup low fat milk or laban without sugar + half sandwich (1 slice brown bread + one egg or 2 slice cheese).

## Food exchange lists

### Milk group:

$\frac{3}{4}$  cup whole fat milk, 1 cup low-fat milk, 1  $\frac{1}{4}$  cup skim milk, 1 cup low-fat yogurt, 1 cup low-fat laban,  $\frac{1}{3}$  cup low-fat powder milk,  $\frac{1}{2}$  cup evaporated milk.

### Vegetable group:

1 cup raw vegetables,  $\frac{1}{2}$  cup cooked vegetables,  $\frac{1}{2}$  cup tomato juice.

### Fruit group:

One orange, one apple, one peach,  $\frac{1}{2}$  piece of grapefruit,  $\frac{1}{2}$  piece of a small mango, 2 slices of watermelon or melon, 15 pieces of small grapes or 8 pieces of large grapes, 2-3 pieces of dates,  $\frac{1}{2}$  cup unsweetened juice,  $\frac{1}{4}$  cup mango or pineapple.

### **Starch group:**

One medium potato, 1 slice of brown or white toast,  $\frac{1}{4}$  Arabic brown or white bread,  $\frac{1}{2}$  brown or white hotdog sandwich,  $\frac{1}{2}$  hamburger burger, 4 pieces of small unsweetened biscuits,  $\frac{1}{2}$  cup of cereal, 2 tbsp. grits, 2 pieces of rusk,  $\frac{1}{2}$  cup of peas,  $\frac{1}{2}$  cup of corn.

### **Fats group:**

1 tsp. of butter, margarine or oil, 1 tsp. mayonnaise, 2 tsp. tahini, 5 pieces olives, 6 pieces of almonds, 1 tbsp. reduced-fat mayonnaise or margarine, 1 tbsp. nuts, 1 tbsp. cream cheese.

**Note:** Avoid consuming these foods.

### **Meat group:**

30gm cooked meat, chicken or fish,  $\frac{1}{4}$  cup tuna canned in water, whole egg or 3 egg whites, 30gm (2 tbsp.) low-fat cheese or labna,  $\frac{1}{4}$  cottage cheese, 5 pieces of prawns,  $\frac{1}{2}$  cup lentils or beans.

# لأن الوعي وقاية ..

إدارة التغذية الصحي

Clinical Nutrition Adult Department



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