

DIABETES MELLITUS AND RAMADAN FASTING

Shahid Athar, MD, FACP, FACE

Diabetes Mellitus affects people of all faiths. Muslims are no exception. Many diabetic Muslims have a desire to fast during the month of Ramadan, although if they cannot for health reasons, they have a valid exemption. The dilemma for physicians and Muslim scholars is whether or not Muslim diabetic patients (1) should be allowed to fast if they decide to; (2) can fast safely; (3) can be helped to fast if they decide to; (4) can have their disease monitored at home; and (5) are going to derive any benefit or harm to their health.

Fasting during Ramadan by a Muslim diabetic patient is neither his right nor Islamic obligation, but only a privilege to be allowed by his physician, at the patient's request, knowing all the dangers and assuming full responsibility in dietary compliance and glucose monitoring, with good communication between the physician and the patient

PSYCHOLOGICAL STATE OF DIABETEC PATIENTS DURING

RAMADAN FASTING

Diabetes mellitus itself adversely affects patients' psychological states by changes in glucose metabolism, blood and CSF osmolality, needs for discipline and compliance, fear of long term complications and threat of hypoglycemic attacks and the possibility of dehydration and coma.

On the other hand, fasting during Ramadan has a tranquilizing effect on the mind, producing inner peace and decrease in anger and hostility.

Fasting Muslims realize that manifestations of anger may take away the blessings of fasting or even nullify them. Diabetics know that stress increases the blood glucose by increasing the catecholamine level and any tool to lower the stress ; i.e., biofeedback or relaxation improves diabetic control. Thus, Islamic fasting during Ramadan should have a potentially beneficial effect with regard to diabetic control.

EDUCATIONAL PROGRAM FOR DIABETICS DURING RAMADAN

It should be directed toward

(a) diabetic home management;

(b) preparing them for Ramadan;

(c) recognizing warning symptoms of dehydration, hypoglycemia and other possible complications. Patients should be taught home glucose monitoring, checking urine for acetone, doing daily weights, calorie-controlled diabetic diet, need for sleep and normal exercise. They should be able to take pulse,

temperature, look for skin infection and notice changes in the sensorium (mental alertness) . They should be on special alert for any colicky pain, a sign for renal colic, or hyperventilation, a sign of dehydration, and to be able to seek medical help quickly rather than wait for the next day.

CRITERIA ALLOWING DIABETICS TO FAST DURING RAMADAN

- a. All male diabetics over age 20.
- b. All female diabetics over age 20 if not pregnant or nursing.
- c. Body weight normal or above ideal body weight
- d. Absence of infection, co-existing unstable medical conditions, ie, coronary artery disease, severe hypertension (B/P 200/120), kidney stones, COPD or emphysema.
- d. absence of infection or co- existing unstable medical condition ie Coronary artery disease, severe hypertension (BP 200.120), kidney stones ,COPD, or Emphysema,
- e, stable Diabetic on oral hypoglycemic or selected cases of Insulin
- f. fasting blood Glucose under 120 , after meal blood sugar under 160 and HbA1c under 7 For patients with mild to moderate obesity , hypertension and hyperlipidemia which constitute Metabolic Syndrome , Ramadan Fasting gas a therapeutic effect

WHO SHOULD NOT FAST IN RAMADAN

- A. JUUVENILE Type 1 brittle and unstable Diabetic
- B.HbA1c over 12 or history frequent hypoglycemia
- C. Presence of infection, sever heart disease, gall bladder or kidney disease, renal colic , emphysema unless certified by a Physician experience in treating such patients

CHEK UP OF DIABETIC PARTIENTS BEFORE ABD DURING RAMADAN

- A. For three months before Ramadan, he should have a monthly visit which will include physical exam, blood pressure, blood sugar , HBA1c , cholesterol. BUN AND CREATININE
- B. During Ramadan he should have weekly visit to show hid log book. A1c, BUN And cholesterol can be done after fast is over.

DIABETIC Medication and fasting

Oral agents: Glypizide can continue in half the dose taken before sahoor and immediately after Iftaar. Metformin should be stopped. Drugs like avanda and actos can continue

Insulin : Do not recommend NPH or Regular insulin. Low dose Lantus (Glargine) would be the best .Low means \hat{A} ½ to 1/3 of pres Ramadan dose given after dinner. Supplemental Humalog or Novolog before iftaar and sehoor ie 6-12 units depending on response and post prandial hyperglycemia would be appropriate. Use of new drugs Byetta and Symlin had not been studied in Ramadan fasting though Byetta seems to be promising.

Ethical questions from fasting Muslim patients:

- Can we have finger stick blood draw for blood sugar? (answer: yes)
- Can we use mouth wash during fasting? (answer: no)
- Can we take medicine during fasting? (tablet - no, patch ‘yes, inhaler ‘yes , injection-no)
- When a diabetic break his fast before iftaar? (When blood glucose is less than 60 or over 400).

Dietary Guidelines and menu for a 1500 calorie ADA Diet

(courtesy Kauser Siddiqui RD)

Sahoor (PRE-DAWN BREAKFAST)

	American	Indo- Pakistani	Middle Eastern
Fruit 1	1/2 c Orange Juice	1/2 Grapefruit	1/2 Grapefruit
Starch 3	1/2 c Oatmeal 1 English Muffin	1 Pita Bread 1/2 Potato Bhujia	1 Pita Bread 1/3 c Fool
Meat 2	1 Boiled Egg 1/4 c Cottage Cheese	2 egg Omelet 1 oz Feta Cheese	1 Boiled Egg
Fat 1	1 tsp Margarine Oil And 2 Black Olives	1 tsp Olive Oil	1 tsp. Olive
Skim Milk 1	1c Skim Milk	1 c Skim Milk	1 c Laban
Free Foods	2 tsp Sugar Free Jam	Tea	Tea

IFTAR- POST-SUNSET ENDING THE FAST

Fruit 1	2 large Dates	2 large Dates	2 large Dates
Starch 1	6 small Vanilla Wafers	1/3 c Chana Chaat	1/3 c
	Salatet Hummus		
Skim Milk 1	1 c Skim Milk	1 c Lassi	1 c Rabat
	fort tz I		

DINNER

Meat 3	3 oz Roast Beef	3 oz Bhuna Gosht	3 oz Tikka Kebab
Starch 2			
	1 sm Baked Potato	1/3 c Daal	1/3 c Lentil Soup
	1 Dinner Roll	1 Chapati	1 Pita Bread
Vegetable 2:	1 c Tossed Salad	1 c Sliced Raw Vegetables	1/2 c
	Tomato and Onion		
	(carrot, cucumber, with Tikka	(tomato, cucumber, onion)	(cooked Kebab)
	tomato, radish)		
	1/2 c Steamed	1/2 c Bhindi Bhujia	1/2 c
Cooked			
		Cauliflower in Tomato Broccoli Sauce	
Fat 1	2 tsp Sour Cream	1 tsp Oil used in cooking	1 tsp
	Oil (used in cooking)		
Fruit 1	1 Fresh Apple	15 sm Grapes	1 Fresh
	Apple		
Free Foods	Lettuce (for salad) -as desired	Tea	Tea
	2 Thl Reduced Calorie Dressing		

C coffee

BEDTIME SNACK

Fruit/Starch Tangerines	3 Graham Cracker	1/2 Mango	2
Skim Milk 1 Laban	1 c Skim Milk	1 c Skim Milk	1 c