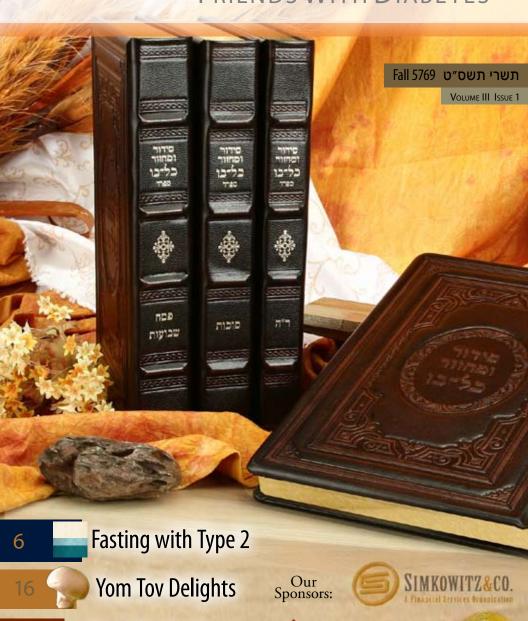
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FOREWORD

בס״ד

As I was reviewing the material in this issue, I was suddenly struck by the unbelievable turnabout we've witnessed in diabetes attitudes and standards of care. Unexpectedly, I found myself taking a mental journey through memories and musings of a seemingly different era... really, just a few short years ago. So many of yesterday's prevailing norms have been completely shattered and people with diabetes have, over recent years, literally received a new lease on life.

Gone are the days when diabetes equaled an unyielding regimen which completely ignored the realities of daily life. Once upon a time, anybody taking insulin had to arise at a specified hour to administer an injection, and then eat and snack at precise intervals throughout the day. How well I remember the family outings during which our entire group was forced to declare periodic rest stops so that I could take my insulin and eat a full meal... even though nobody was hungry yet.

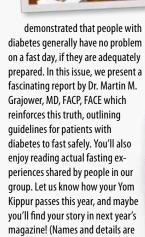
Gone are the days when people with diabetes were enslaved to strict meal plans, which mandated exactly what to eat at each meal. If your doctor prescribed 40 grams of carbohydrates for lunch, then you had better meet the quota... It mattered little whether you were actually hungry or if you abhorred the Yeshiva's lunch that day. (And remember the "exchange system",

still popular ten years ago? I have some old brochures with lengthy lists detailing how many cherries are in one "fruit exchange" and how much rice is in one "starch exchange".)

Gone are the days when, despite the monumental sacrifices made, blood sugar control was erratic and unpredictable, at best. It was almost impossible to adequately target a predawn blood sugar rise or a post dinner high. Random highs and lows were par for the course, and unfortunately, people with diabetes suffered the debilitating consequences. When I stop to think about it, I am awed at the dramatic revolution we've witnessed in methods of insulin delivery and diabetes control. The resulting improvements in quality of life and health are equally impressive.

And gone are the days when doctors gravely shook their heads and informed us that people with diabetes simply cannot fast. As one diabetes myth after another is laid to permanent rest, we have seen a complete change of attitude in this arena as well. Today, Rabbanim and doctors acknowledge and respect that diabetes does not prevent us from leading normal lives in every way. And that includes fasting on Yom Kippur.

This time last year, we shared a study on Type 1 diabetes and prolonged fasting by Dr. David Zangen. That study, which was published in DIABETIC Medicine, clearly



In conclusion, let's remember that there are exceptions to every rule. One of the greatest discoveries in the field of diabetes is that no two people are alike, and each individual requires a flexible, custom-tailored protocol of care! If your Rav or doctor does not grant you permission to fast this Yom Kippur, then that's the ultimate way for you to spend this holy day.

always altered, of course.)

Wishing you all a truly cleansing Yom Kippur and a thoroughly sweet new year,

Rabbi Hirsch Meisels

Rabbi Meisels comments: This article has been shortened and revised from its original version based on discussions between Dr. Grajower, Rabbi Weissmandl and myself. The recommendations in this article are in keeping with both the halachic rulings of Rabbi Weissmandl as well as the medical opinions expressed by Dr. Grajower in the original paper published in Endocrine Practice.

GUIDELINES: FASTING

ON YOM KIPPUR AND OTHER FAST DAYS

with TYPE 2 diabetes



INTRODUCTION

One of the challenges of patients with diabetes is fasting on Yom Kippur and the other five fast days. Until recently, there were no published guidelines for doctors or diabetes educators to follow. Many patients were therefore advised by their doctors not to fast, for fear of developing hypoglycemia (low blood sugar). In April, 2008, I published an article for diabetes professionals (Grajower, MM: "Management of Diabetes Mellitus on Yom Kippur and Other Jewish Fast Days", Endocrine Practice 2008; Volume 14, pages 305-311) which contains general concepts and specific guidelines on managing both types 1 and 2 patients during a fast day. These MARTIN M. GRAJOWER, MD, FACP, FACE

guidelines were based on my 30 years of experience practicing endocrinology as well as an understanding of how currently available drug therapy works.

In this article, the guidelines are re-written for patients, and the focus is just on type 2 diabetes. A person with type 2 diabetes is, by definition, insulin resistant, meaning although the body makes insulin, it is resistant to using the insulin effectively. It has long been known, that the most effective way to reverse this insulin resistance is by restricting the intake of all carbohydrates. Studies have previously shown that a type 2 diabetic who fasts will normalize his blood sugar, yet will not develop a low blood sugar (hypoglycemia). Thus, the only way a type 2 diabetic can become hypoglycemic while fasting is as a result of taking medicine that lowers blood sugar. It therefore stands to reason that as long as these medicines are out of the body during the fast, the person should be able to safely fast.

In contrast, a type 1 diabetic is insulin deficient, and therefore must take insulin in order to survive. Type 1 diabetics must have insulin on board during a fast day, but must carefully regulate the amount of insulin so as to avoid a low blood sugar. This difference between type 1 and type 2 diabetics (even type 2's on insulin) raises certain halachic issues which we will not address here. Consequently, this article addresses only type 2 patients.

When patients with diabetes ask their doctors whether they may fast, they should expect the doctor to have knowledge of the scientific facts, an understanding of that patient's health, and a sensitivity to the religious feelings of the patient. When physicians have carefully considered the individual needs of each patient, rather than issuing a blanket statement that "patients with diabetes should not fast," Jewish law would generally mandate that patients listen to their physicians, especially those who are specialists.

As an Orthodox Jew and practicing endocrinologist, I try to synthesize Jewish law with good medical practice. Each year, rabbis call me regarding people with diabetes who were told by their physicians (including endocrinologists) not to fast. My nearly 30-year experience has been that, from the perspective of blood glucose alone, almost all patients not taking insulin can

safely fast. The vast majority of patients taking insulin can also safely fast, again with consideration of just blood glucose control.

CONCEPTS

During the past decade, the treatment of diabetes has become quite complex with the introduction of many new medications. Accordingly, I believe that understanding certain concepts would be helpful before outlining my approach to the individual patient.

Most importantly, because each patient will be fasting as infrequently as once a year (Yom Kippur) and up to a maximum of 6 times, the main objective is to avoid a low blood sugar, which would require the patient to end the fast.

One major difference among medications is that some lower 'basal' sugar (the reading approximately 3 hours after a meal until the next time food is eaten), and some lower 'prandial' blood glucose levels (the readings within 3 hours after eating). In addition, there is a wide variation in their duration of action. Some medications have an effect lasting 24 hours, while others work for only several hours. Similarly, when insulin doses are adjusted, the main consideration is the duration of action of the prescribed insulin. Therefore, before the four daytime-only fasts, because the patient eats normally the night

before the fast, no need exists for reducing any short-acting prandial evening medications. One exception is if the patient tends toward a low blood sugar during the night or early morning; in such a case, I would reduce the dose of the medication (tablets or insulin) that is likely causing this low blood sugar. In contrast, because prior to Yom Kippur and Tisha B'Av the patient may eat dinner earlier than usual and will not have a bedtime snack, the before-dinner medication may need to be reduced to avoid a low blood sugar during the night.

On the morning of the fast, patients with type 2 diabetes rarely need medication. Even if the blood glucose level is high, the absence of eating any carbohydrates will improve insulin sensitivity and thereby lower the blood sugar level.

A final consideration is the potential for each medication to cause a low blood sugar, either alone or in combination therapy. Certain medicines are glucose-dependent, meaning their effect is relative to the existing blood sugar; when the blood sugar is high, these medicines are very active whereas as the blood sugar falls, the effect of the medicine diminishes. When used alone, therefore, these medicines rarely cause a low blood sugar. Examples of glucose-dependent medicines are metformin. Avandia (rosiglitazone) and Actos (pioglitazone), as well as Januvia (sitagliptin), the first of a new class of drugs called DPP-4 inhibitors, and Byetta.

The other main therapeutic objective is to avoid hypotension (low blood pressure), especially in older patients. Everyone who refrains from eating and drinking for 25 hours will become dehydrated, and many otherwise healthy people will experience a decrease in their blood pressure as a result. In my 30-year experience in practice, the most common reason a patient with diabetes could not complete a fast was not due to a low or high blood sugar but because of dehvdration and resultant hypotension. Therefore, one of my criteria for advising a patient with diabetes not to fast is my concern regarding dehydration. Examples of such scenarios would be a patient who has had considerably out-of-control blood glucose levels during the 2 weeks before the upcoming fast, a patient with a recent "stroke," or a cardiac patient who tends to run low blood pressure.

There are other conditions which may make it unadvisable for a person with diabetes to fast. Some of these conditions, such as cardiac disease, adrenal insufficiency, and kidney disease, to name a few, can exist without diabetes, but may pose an increased risk in a person with diabetes. These conditions are not addressed here as they are beyond the intended scope of this article. It is important that patients review ALL their medicines with their doctor prior to fasting.

om Kippur and Tisha B'Av

GUIDELINES

As mentioned, the main objective is avoiding a low blood sugar. Should the blood sugar drop too low and the patient must eat, then the therapeutic plan did not accomplish its purpose. On the other hand, should the blood glucose level increase during the course of one day up to about 300 mg/ dl, it will not create either a shortterm or a long-term problem (see pregnancy exception discussed subsequently). If anything, as mentioned earlier, fasting itself has been shown to quite effectively lower the blood glucose level. At the same time, fasting in the absence of any diabetes medications will never cause the sugar to drop below the normal range.

I continue all medicines as usual the morning before the fast day. I do not give any glucose-lowering medication (except insulin; see subsequent information) on the day of the fast itself. After the fast is over, I resume all medications at their usual times (that is, I do not have the patient take a tablet at night that normally would have been taken that morning). The following guidelines refer to medication taken either at lunch or later on the day before the fast and to insulin on the day of the fast itself (Table 1).

Table 1: Guidelines for adjusting diabetes medications surrounding fast.

Type 2 not on insulin

| | | (includes injectable incretin mimetics)* | Type 2 on insulin and oral agents | Type 2 on only insulin |
|---|--|--|---|---|
| | ay Before begin- ning at lunchtime | Don't take sulfonylureas* or DPP-4 inhibitors*; take all other medications normally taken before lunch and supper. | Don't take sulfonylureas*; take all other medications before the last meal. Take usual dose of short- <mark>acting</mark> insulin before supper, and one-half to one-third the usual evening dose of intermediate- acting or basal insulin. | Take usual dose of short–acting insulin before supper, and one–half to one–third the usual evening dose of intermediate acting or basal insulin |
| ı | Day of Fast | Don't take any medications. | Don't take any medications including insulin. | Don't take any insulin unless blood sugar is above 250 mg/dL (then take some short- acting insulin analog and aim to lower only to 110-140 mg/dL range.). |
| | After the Fast | Resume all usual pre-supper and bedtime medications. Do not take any missed medi- cines from the morning. | Resume all usual pre-supper and bedtime medications. Adjust the dose of the short-acting insulin if the patient feels he will be eating a smaller supper than usual. | Resume all usual pre-supper and bedtime doses; adjust the dose of the short-acting insulin if the patient feels he will be eating a smaller supper than usual. |
| | Day Before begin- ning at lunchtime | Don't take sulfonylureas or DPP-4 inhibitors; take all other medications before the last meal. | Don't take sulfonylureas; take all other medications before the last meal. Take usual dose of short-acting insulin before supper; reduce the dose of the intermediate acting or basal insulinby 20%. | Take usual dose of short– acting insulin. Reduce intermediate or long-acting insulin to about 80% of the usual dose. |
| [| Day of Fast | Don't take any medications. | Don't take any medications including insulin. Take short acting analog insulin if blood sugar > 250 mg/dL. | Don't take any insulin unless blood sugar is above 250 mg/dL (then take some short- acting insulin analog and aim to lower only to 110-140 mg/dL range.). |
| | After the Fast | Resume all usual pre-supper and bedtime medications. Do not take any missed medi- cines from the morning. | Resume all usual pre-supper and bedtime doses. Adjust the dose of the short-acting insulin if the patient feels he will be eating a smaller supper than usual. | Resume all usual pre-supper and bedtime doses; adjust the dose of the short-acting insulin if the patient feels he will be eating a smaller supper than usual. |
| | ٧ | 26 | | |

Table 2: List of currently available diabetes medications: Brand names (generic names)

| SULFONYLUREAS | BIGUANIDES | THIAZOLIDIN- EDIONES | GLITANIDES | INCRETIN MIMETICS | DPP-4 INHIBITORS |
|--|-----------------------------------|------------------------------|-----------------------|----------------------------------|-----------------------|
| Glucotrol (glipizide) | Glucophage, Glumetza metformin | Actos (pioglitazone) | Prandin (repaglinide) | By <mark>etta (Exenatide)</mark> | Januvia (sitagliptin) |
| Amaryl (glimepiride) | | Avandia (rosigli- tazone) | Starlix (nateglinide) | Symlin (Amylin) | Liraglutide |
| DiaBeta, Glynase PresTab, Micronase (glyburide) | | | | | |

Medicines that lower blood sugar but never below the normal range, can be taken as usual. Examples are metformin, Actos, and Avandia. Januvia and other DPP-4 inhibitors soon to be marketed when they are the only diabetes drug being taken rarely cause a low blood sugar, but can result in a low blood sugar if used in combination with any other sugar-lowering medication. Because their effect lasts for 24 hours, they should not be taken later than with breakfast before the fast day. Other medicines with a long duration of action, such as sulfonylureas (examples: glyburide, alipizide)(Table 2), should also not be taken later than the morning before the fast because their prolonged action extending into the day of the fast could cause a low blood sugar. Medications with a shorter duration of action, such as Prandin, Starlix, Byetta, and Symlin, can be taken before lunch or supper on the day before the fast, inasmuch as these will be the patient's normal (or even increased) meal.

Patients need be extra careful in that many currently available medicines are combinations of two different blood sugar-lowering agents (Table 3). Each component

of these combination pills needs to be considered individually.

Patients with type 2 diabetes who require insulin always need to adjust their dose beginning with the evening before the fast. In general, the degree of glucose control during the 1 to 2 weeks preceding the fast day will influence the reduction in the insulin dose. Bolus or shortacting insulin (Apidra, Humalog, NovoLog) should be taken as usual before supper on the night before the fast. I always aim to use some basal insulin (Lantus, Levemir or NPH) during the fast (regardless if the basal insulin is taken at night or in the morning). I reduce the dose to one-third to one-half of the usual dose (based on the A1C) for Yom Kippur and Tisha B'Av. For the daytime-only fasts, I reduce the dose to about 80% of the usual basal insulin dose. The better con-

Table 3 COMBINATION DRUGS: consider each drug separately

| / | | | |
|-------------|---------------------|--|--|
| NAME | Combination | | |
| Duetact | glimepiride+Actos | | |
| Avandamet | Avandia+metformin | | |
| Actoplusmet | Actos+metformin | | |
| Avandaryl | Avandia+glimepiride | | |
| Janumet | Januvia+metformin | | |
| Metaglip | Glipizide+metformin | | |
| Glucovance | Glyburide+metformin | | |
| | | | |

(continued on pg. 13)

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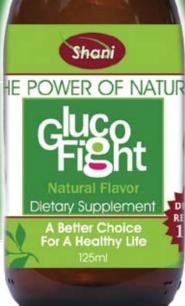
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trolled the blood glucose levels are preceding the fast, the less basal insulin I recommend. I also reduce the dose of evening basal insulin if the patient normally has a bedtime snack, inasmuch as the snack will not be taken the night of Yom Kippur or the Tisha B'Av. After the fast, bolus or short-acting insulin should be taken prior to eating. Because many people will actually eat less than their usual amount at this meal, a slightly reduced dose may be indicated if this is the case; on the other hand I would NOT increase the dose to compensate for a larger meal so as to avoid overcompensating and causing the sugar to drop too low.

When in doubt about how much insulin to recommend, I err on the side of a lower dose. A high blood glucose level can be subsequently corrected without "breaking" the fast by having the patient take additional small doses of short-acting insulin.

The combination insulins (70/30, 80/20, 75/25, 50/50, Mix) pose a slightly more difficult adjustment. I generally reduce the dose to one-half to one-third of the usual dose, depending on the A1C. Ideally, the patients would take just the intermediate component of the combination insulin on the morning of the fast day. This approach, however, would entail buying additional insulin. Therefore, I tend to under-treat rather than over-treat these patients.

Patients with an insulin pump should not administer a bolus

of their insulin once the fast has begun (unless the blood glucose level exceeds 250 mg/dL). They should decrease the basal rate by about 10% beginning in the early morning (earlier if they normally take a bedtime snack) and increase the frequency of blood glucose testing, especially the first time they fast using the pump. They may need further reductions as the fast day progresses. [Editor's comment: for a detailed plan for adjusting insulin for those on a pump see article "magic numbers: the Yom Kippur basal calculator" in this booklet.1

DEALING WITH A LOW BLOOD SUGAR ON THE FAST DAY

The rules regarding eating and drinking on Yom Kippur differ from the other Jewish fast days. Accordingly, on Yom Kippur if patients have symptoms of a low blood sugar, or document a blood glucose level of less than 60 mg/dL, I advise them to take one of the commercially available glucose tablets or winkies (rather than real food or drink) and to retest the blood glucose in 15-30 minutes. If the blood sugar remains low for a 1-hour period, the fast should be discontinued and food eaten. My threshold for recommending that the fast be terminated is inversely proportional to the age and general health of the patient. On the other Jewish fast days, because Jewish law views any oral intake as terminating the fast, I advise

patients simply to break the fast if symptoms occur or the blood glucose level decreases below 60 mg/ dL.

CHECKING BLOOD GLUCOSE ON YOM KIPPUR

Yom Kippur differs from the other fast days also in that there is a prohibition against drawing blood and using electrical devices (such as blood glucose meters), unless necessary to preserve the sanctity of life. Therefore, when any possibility of a low blood sugar exists, the blood sugar should be checked, and as often as the patient feels necessary. The following should therefore be viewed as general guidelines only.

Patients taking no diabetes medications are not at risk for developing a low blood sugar and therefore need not check their blood glucose level during the entire 25-hour fasting period. Patients taking antihyperglycemic (blood sugar lowering) drugs (excluding insulin) who are known to have good a low blood sugar awareness, meaning they always feel when the sugar is either low or dropping rapidly, and have adjusted their diabetes medicines as described previously, also need not check their blood sugar level, unless they begin to have symptoms (some of the symptoms usually associated with low blood sugar, such as rapid heartbeat, could represent dehydration and low blood pressure, and the blood glucose should therefore be checked). Elderly patients or those with documented low blood sugar unawareness should check their blood glucose level upon arising on the morning of the fast and then every 4 to 6 hours (sooner if glucose values decline below 70 mg/dL), unless their only medications are those that do not cause a low blood sugar (as discussed previously).

I recommend that all type 2 patients taking insulin test their blood glucose level upon arising on the morning of the fast and then every 4 to 6 hours (sooner if glucose values are below 70 mg/ dL or the patient has symptoms suggesting low blood sugar). I advise supplemental rapid-acting insulin analogues (Humaloglispro, Novolog-aspart, or Apidraalulisine: NOT regular insulin) for blood glucose levels greater than 250 mg/dL; I try to aim for a blood glucose value in the range of 110 to 140 mg/dL.

WRITTEN RECOMMENDATIONS

On the basis of my experience, I recommend that the physician or patient write down the recommendations that are made. In these written recommendations, I include the following information: (1) changes in medication before, during, and after the fast, (2) frequency of blood sugar testing, and (3) "what if" planning for terminating the fast if the blood

glucose level declines below a specific value or the patient has symptoms of low blood sugar. Besides improving the likelihood that the patient understands and will follow the plan, the written recommendations become a part of the patient's medical records. I will generally follow-up with the patient at the next office visit to learn how the patient fared on the fast day and note these comments for use at subsequent fasts.

PREGNANCY

In pregnant women with diabetes, whether gestational or preexisting, the diabetes is controlled by either diet, glyburide, or insulin. For those with diet-controlled diabetes, there appears to be no difference during fasting than for nondiabetic pregnant women; fasting should, if anything, improve their diabetes control without an increased risk of a low blood sugar. Therefore, a pregnant diet-controlled woman with diabetes can fast on Yom Kippur (only), in the case where the ray and the doctor agree for her to do so [see Rabbi Meisels comment in the beginning of the article].

If the pregnant woman is on glyburide, it should not be taken after breakfast the day prior to Yom Kippur. A pregnant woman receiving insulin is an exception to the general considerations already outlined; in such patients, we try to avoid any days of hyperglycemia because of the potential harmful effects on the fetus. Accordingly, I do advise a pregnant woman with either gestational or preexisting diabetes who is receiving insulin therapy not to fast.

CONCLUSION

It has been my experience that the overwhelming majority of patients with diabetes can, from the perspective of blood glucose control, safely fast on Yom Kippur or one of the other fast days. In the absence of any previously published guidelines, I have outlined my approach to adjusting the currently available hypoglycemic agents, with the main objective being to avoid a low blood sugar. I have described several concepts that should help clinicians advise patients when new hypoglycemic agents become available. Finally, I would recommend that patients discuss with their clinicians prior to a fast day how to adjust their medications. This discussion would prevent the patient from relying solely on personal judgment and possibly taking too much medication, with the resultant development of a low blood sugar. At the same time, if the clinician tells the patient NOT to fast on a particular fast day, the patient should make sure that such a recommendation is made based on his individual situation, rather than reflecting an attitude of the doctor to prohibit fasting in all patients with diabetes.

No portion of this article may be reprinted without written permission from Dr. Martin Grajower. Questions and comments can be sent to Dr. Grajower at grajower@msn.com or 3736 Henry Hudson Parkway, Bronx, NY 10463.

YOM TOV DELIGHTS

FOR THE WHOLE FAMILY

Rosh Hashanah is always a time for reflection and new beginnings. Sweet foods such as honey, carrots, apples and dried fruits are served, expressing the wish for a happy, sweet year ahead. However, for those who are carb-challenged, this can pose a problem.

It is always difficult to resist the special dishes associated with the holidays. When planning your menu, lighten it up by preparing more vegetable-based dishes. And when it comes to poultry, experts agree that it makes very little difference whether you remove the skin from chicken before or after cooking. Just be sure to remove it before it ends up on your fork and in your mouth!

Here are some delicious, hearthealthy recipes from "Norene's Healthy Kitchen" by Norene Gilletz (Whitecap Books \$29.95 US), available at booksellers, Judaica shops and online. These recipes are diabetes and weight-loss friendly and can be enjoyed by the whole family. For additional recipes and information, visit www.gourmania.com. Have a sweet and healthy New Year!

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FAUX-TATO KUGEL

This kugel should be called "the great pretender!" It's a wonderful way to cut back on calories and carbohydrates.

large cauliflower, cut into florets (about 8 cups)

1 Tbsp olive oil

1 medium onion, cut into chunks

2 large eggs

1tsp salt

1/4 tsp freshly ground black pepper

1/4 cup matzo meal (whole wheat or regular)

- Pour 1 inch of water into a large saucepan. Place the cauliflower florets in a steamer basket and transfer the basket to the saucepan, making sure the florets don't touch the water. Cover the pan and bring to a boil. Reduce heat to low and steam until tender, about 12 to 15 minutes, Drain well and pat dry with paper towels. Let cool
- Preheat the oven to 375 degrees F. 2. Pour the oil into a 7- \times 11-inch glass baking dish. Place the dish in the oven and heat until the oil is piping hot, about 5 minutes.
- In a food processor fitted with the steel blade, process onion for about 10 seconds or until minced. Scrape down the sides of the bowl before

- adding the cauliflower, eggs, salt, pepper, and matzo meal; process until mixed, about 10 to 15 seconds. Carefully add half the hot oil to the cauliflower mixture and mix well.
- Pour the mixture into the prepared baking dish and spread evenly. Sprinkle a little additional oil on top. Bake, uncovered, for 45 to 55 minutes or until nicely browned.

Yield:

8 servings. Keeps for up to 2 to 3 days in the refrigerator; reheats well. Freezes well for up to 2 months (see Chef's Secrets).

Chef's Secrets

Frozen Assets: If you want to make this in advance and freeze it, bake it in a disposable foil pan. When cool, wrap tightly and freeze. When needed, reheat the frozen kugel, uncovered, in a preheated 375 degrees F oven for 20 to 25 minutes or until piping hot. Don't defrost it first or it will be too soft. If the kugel begins to brown too much while baking, cover it loosely with foil

Nutrition Facts Serving Size=1/8 recipe Calories 93 Carbohydrate 8.9q Fiber 2.8g Fat 5.1q **Saturated Fat** 0.9q 4g Protein 53mg Cholesterol 323mg Sodium **Potassium** 181mg Iron 1mg Calcium 26mg

STUFFED CHICKEN BREASTS

Elegant and luscious, this wonderful low-carb dish can be prepared in advance. It's easy to make half the recipe for a small family or double the recipe for a crowd.

Spinach and Mushroom Stuffing (below)

8 skinless, boneless single chicken breasts Salt and freshly ground black pepper

1/4 cup orange juice (preferably fresh)

4 tsp olive oil

1tsp honey

½ tsp tsp dried basil or

1 Tbsp chopped fresh Paprika

- Prepare the stuffing as directed. Rinse the chicken well and pat dry with paper towels. Trim the excess fat. Butterfly the chicken breasts by cutting, horizontally, through the middle of each breast, leaving it hinged on one side, so that it opens flat like a book. Season both sides with salt and pepper to taste. Spread about 3 to 4 Tbsp filling on one side, then fold the other side over to cover the filling. Repeat with the remaining chicken breasts and filling.
- Place the stuffed chicken breasts in a single layer in a 9- × 13-inch baking dish sprayed with cooking spray.
- Combine the orange juice, olive oil, honey, and basil in a measuring cup; mix well.

Drizzle the mixture over the chicken breasts. Sprinkle with paprika and marinate for at least 1/2 hour. (If desired, the chicken can be prepared up to this point and refrigerated up to 24 hours, basting once or twice. Remove the chicken from the refrigerator about 30 minutes before cooking.)

4. Preheat the oven to 375 degrees F. Roast the chicken, uncovered and basting occasionally, for 30 to 35 minutes. Juices should run clear when the chicken is pierced with a fork.

Yield:

8 servings. Recipe doubles or triples easily. Keeps for up to 2 days in the refrigerator; reheats well. Freezes well for up to 2 months.

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Chef's Secrets

- Mushroom and Sun-Dried Tomato Stuffing: Instead of red pepper, substitute with sundried tomatoes. Omit the spinach, orange rind, and juice; substitute 1 tsp dried thyme for the basil.
- Broccoli Stuffing: Instead of spinach, substitute with 1 1/2 cups chopped broccoli.

| Serving Size=1/8 recipe | | | |
|-------------------------|-------|--|--|
| Calories | 208 | | |
| Carbohydrate | 6.5g | | |
| Fiber | 1.7g | | |
| Fat | 7.3g | | |
| Saturated Fat | 1.59 | | |
| Protein | 28g | | |
| Cholesterol | 73mg | | |
| Sodium | 88mg | | |
| Potassium | 397mg | | |
| Iron | 2mg | | |
| Calcium | 60mg | | |

SPINACH AND MUSHROOM STUFFING This versatile mixture is packed with phytonutrients, vitamins, and flavor. It makes a super stuffing for boneless chicken breasts, meat loaf, butterflied turkey breast, or salmon fillet. Leftovers make a terrific omelet filling.

1 Tbsp olive oil

1 large or 2 medium onions, chopped

1/2 **cup** seeded and chopped red pepper

2½ cups coarsely chopped mushrooms

2 to 3 cloves garlic (about 2 tsp minced)

1 pkg (10 oz/300 g) frozen chopped spinach, thawed, and squeezed dry or 2 cups packed fresh baby spinach 1tsp grated orange rind

1 Tbsp orange juice (preferably fresh)

3 Tbsp fresh chopped basil or 1 tsp dried

- In a large nonstick skillet, heat the oil on medium heat. Add the onions and sauté for 4 to 5 minutes or until tender. Stir in the red pepper, mushrooms, and garlic; sauté for 5 minutes longer, stirring occasionally. If the mixture begins to stick, add a little water.
- 2. Stir in the spinach and cook for about 2 to 3 minutes or until most of the moisture

has disappeared. Remove from heat and add the orange rind, juice, basil, salt, and pepper. Let the mixture cool before using.

Yield:

8 servings. (3 to 4 Tbsp per serving). Stuffing can be made up to a day in advance and refrigerated.

Nutrition Facts

| Serving Size=1/8 recipe | | |
|-------------------------|-------|--|
| Calories | 39 | |
| Carbohydrate | 4.8g | |
| Fiber | 1.6g | |
| Fat | 5.1g | |
| Saturated Fat | 0.3g | |
| Protein | 2g | |
| Cholesterol | 0mg | |
| Sodium | 24mg | |
| Potassium | 177mg | |
| Iron | 1mg | |
| Calcium | 43mg | |
| | | |

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7 4 4 - 2 6 5 4

Magic Numbers The Yom Kippur Exclusively for insulin pumpers who have permission to fast on Yom Kippur

aving experienced ten Yom Kippurs on the insulin pump, my fasting preparations are somewhat predictable. I begin by digging out my records of last year's fast (Yes, I keep them faithfully!) which indicate the exact basal rate reductions implemented, alongside my resulting blood sugars. After analyzing them carefully, I start working on a new basal profile, incorporating any lessons learned from the previous year's effort. My fasting basal rates generally resemble my regular rates at the beginning of the fast, but then they gradually decrease, as the day wears on and my body's store of glycogen is slowly depleted. So I sit for a while, making endless calculations, writing and erasing numbers in quick succession, and finally, settling on an altered basal rate which, I hope, will result in a problem-free fast day.

That's the mechanical routine.

But there's a well-practiced emotional component to this annual exercise. Each year anew, I am flooded with anxiety and reluctance, as I approach the monumental assignment of calculating my fasting basal rates. Every year, I push off the task as long as I can; only tackling it at the last possible moment with a prayer on my lips. The enormity of my decision weighs heavily on me, and I am quite put off by the mathematical aspect as well. I am surely not the only pumper who dreads manipulating all those numbers and wishes there was an easier way to do it.

And now there is!

FWD's basal calculator is a Microsoft Excel spreadsheet, programmed and individualized by you, that flawlessly performs the math equations to calculate your fasting basal rates. You record your regular basal rates and the amount by which to reduce them for Yom Kippur, and... presto! The basal calculator will present your Yom Kippur basal rates! In fact, this special calculator comes preprogrammed with a standardized formula for basal rate reduction.

Basal Calculator

"[Last year,] I set my fasting basals using the formula provided by FWD's basal calculator, and I want to thank you very much for this wonderful tool. I had my easiest fast ever! In the past, I reduced all my basal rates by 20% across the board, but I always ended up going too low. This year, I needed to treat a low right at the beginning of the fast, but after that, I was amazed at how stable my numbers remained throughout the day."

Yerachmiel C.

| K | Α | В | C | D |
|----|------------|---------|-------------|----------|
| 1 | Do not use | without | reading the | pplied i |
| 2 | Hour | Current | Reduction % | Special |
| 3 | 12:00 AM | 0.9 | 10 | 0.8 |
| 4 | 12:30 | 0.9 | 10 | 0.8 |
| 5 | 1:00 | 0.9 | 10 | 0.8 |
| 6 | 1:30 | 0.9 | 10 | 0.8 |
| 7 | 2:00 | 1.25 | 10 | 1.1 |
| 10 | 2:30 | 1.25 | 10 | 1.1 |
| 9 | 3:00 | 1.6 | 10 | 1.425 |
| 10 | 3:30 | 1.6 | 10 | 1.425 |
| 11 | 4:00 | 1.6 | 10 | 1.425 |
| 12 | 4:30 | 1.6 | 10 | 1.425 |
| 13 | 5:00 | 1.6 | 10 | 1.425 |
| 14 | 5:30 | 1.6 | 10 | 1.425 |
| 15 | 6:00 | 1.6 | 10 | 1.425 |
| 16 | 6:30 | 1.6 | 10 | 1.425 |
| 17 | | | | |
| 18 | 7:00 | 1.6 | 20 | 1.275 |
| 19 | 7:30 | 1.6 | 20 | 1.275 |
| 20 | 8:00 | 1.6 | 20 | 1.275 |

The basal calculator is available from Friends With Diabetes only by email, upon request.

Here's how it works:

In Column B, record your regular basal rates, making sure to enter a basal rate for each hour on the table.

Column C is where you insert the percentage by which you want to reduce each basal rate. Figure this one out using your own previous experiences, a good dose of common sense, and your doctor's expert advice. Remember that individual needs do vary, according to the amount of glycogen stored in the body.

Column D displays the final results: your new fasting basal profile.

The spreadsheet comes preprogrammed with specific reductions that generally work for many people. It is set to reduce basal rates only slightly overnight (when we assume our insulin needs are still as usual, but we'd rather wake up with a somewhat elevated blood sugar level), and then, basals are gradually lowered in 10% increments throughout the ensuing daytime hours. Although this logical formula has been used successfully, DO NOT assume that the preprogrammed values will be suitable; figure out, together with your doctor, what will work best for you.

Okay, we'll admit it! The basal calculator is not the simplest solution for every-body. People who use a single flat basal rate throughout the year, OR those who will be lowering their basals by the same amount over the entire fast day, can simply perform the math mentally and program a temporary basal rate. But, for the rest of us, this nifty calculator can be a real help.



which you can simply leave, if it is appropriate for you.

When it comes to fasting, insulin pumpers are at a unique advantage. Unlike those who take multiple daily injections, the insulin infused by pump is of only one type (rapid-acting) and unambiguously divided between basal and bolus. This makes it much easier to deduct uniform amounts from our regular dosages throughout the fast day. In fact, doctors generally prescribe insulin reductions in terms of percentages (Your doctor might suggest, for example, "This Yom Kippur, reduce your basal rates by 25%, and then later by 45 %.") and this type of instruction is most easily implemented on the insulin pump. And now, using our basal calculator, figuring your Yom Kippur insulin dosages could hardly be easier.

Considerations at the beginning and end of the fast

Because Yom Kippur lasts longer than twenty-four hours, pump users will find that there is a window of about two hours at the onset of the fast during which the fasting basal rate cannot be used. If, for example, Yom Kippur begins at 6:10 p.m. and ends at 7:36p.m., then the fasting basal rate will be inadequate from 6:10, when the ta'anis begins, until 7:36 that night (During those hours, the programmed insulin amount is extremely low).

The problem is easily solved by retaining the regular basal profile until 7:36, and only then, switching to the special fasting profile. However, if you are not certain you'll remember to make this all-important change, then don't risk it. Rather, start using the fasting profile as soon as Yom Kippur begins, and program a temporary basal rate, equal to your regular basal rate at that hour of the evening, to last until 7:36.

After the fast day is over, most people struggle with high blood sugars as they eat their first meal. For this reason, you may want to revert to your regular basal profile even before the fast is over, if your blood sugars are not low.

FWD takes no responsibility for any negative results incurred due to the use of the described formula or its stated applications. All information is presented only in a suggestive and illustrative manner, and should not be incorporated without a doctor's prior consent.

YOUR OWN YOM KIPPUR VOICES

- I've always managed to fast without serious incident, B"H. I do this by being extremely cautious, keeping my blood sugars above 110 mg/dl, and treating anything under 100 mg/dl as full-fledged hypoglycemia. (In my fasting experience, once I hit 100 mg/dl, my sugars tend to plunge rapidly.) I also make sure to drink a lot before the fast, and test my sugars often- at least every two hours- throughout the fast day. ■
- I tackle the fast day by implementing a lower basal rate and checking my blood sugars very frequently. When my numbers start dropping, I program a temporary basal rate of 0.0 units until my sugars rise again. However, if they dip below 70 mg/dl, then I break the fast and eat something. I think that, in order to fast, an individual must have experience adjusting his own basal rates, and must be committed to treating blood sugars properly if they do go too low. ■

GERSHONEXTREMELY CAUTIOUS

YERACHMIEL
FASTING REQUIRES COMMITMENT

DOVID ARYEHA FRIGHTENING FASTING EXPERIENCE

vears ago. But that ended three Yom Kippur ago, when my blood sugars were in the 70-100 mg/dl range throughout the fast, yet I ended the day with a very frightening case of ketoacidosis. I've been told by a professional that the reason I went into DKA despite my low blood sugars, was because my liver did not have enough basal insulin. I've never fasted since.

Editor's note: Dovid Aryeh's experience was unusual, yet not unheard of. As we reported in a previous Yom Kippur mailing, there are some people with diabetes who do go into ketoacidosis when fasting, and those people cannot fast under any circumstances.

Over the past 10 years that I've been fasting with diabetes, I've never had any problems. I picked up an excellent trick from my diabetes educator for keeping blood sugars in a decent range after the fast. I use the dual bolus pump feature [ed: The dual bolus option, also referred to as the combo bolus later on, is available by various names on current insulin pumps] and divide my full meal bolus in two, taking half the amount immediately, and programming the other half to be administered slowly over the next hour. In addition, I never drink sweetened juices or eat carbohydrate-laden foods immediately after the fast, as they do not agree with my stomach.

BLOOD SUGARS TEND TO SPIKE
CONSIDERABLY ONCE FOOD IS
INGESTED AFTER THE FAST, AND
MUCH HAS BEEN SAID ABOUT
DEALING WITH THIS PHENOMENON. HERE'S WHAT YOU HAD TO
SAY ON THE MATTER:

I fasted successfully last year by staying home from Shul and checking my blood sugars every hour or two. I even managed normal blood glucose readings after the fast was over. But this year, I'd like to go to Shul, and I'm much more nervous about keeping adequate track of my numbers so that I can respond accordingly and make any necessary changes.

MIMI

FRAIDY

NERVOUS ABOUT CHECKING BGS IN SHUL

YITTY

AVROMI

My blood sugars always go up to about 250 mg/dl following the fast, and I gave up trying to prevent the rise. I simply administer insulin to bring down the number, and I'm generally okay afterwards.

■ I fasted for nine years while on multiple daily injections with Lantus, and last year I switched to the insulin pump. In all cases, I've found the fast day to be okay, but once it was over, my blood sugars spiked no matter what strategy I used. I've tried doubling my basals beginning one hour before the end of the fast, and then doubling my regular carb ratios... I even played around with the combo bolus to straighten out my blood sugars, but nothing has worked yet. My blood glucose always soars into the 300 mg/dl range, and nothing I've tried has made a difference. ■



R' Moshe, a stout middle-aged man, fingered the nifty glucose monitor his doctor sent him home with a few days ago. It had just given him a reading, confirming his suspicions that the "unsweetened" juice he just indulged in wasn't good for him.

"Don't you say, Fradel!" he exclaimed to his wife, who wasn't all that thrilled with the gadget. "What a smart little toy! Just imagine – it tells me in a second how my body responds to what I'm doing with it! The days we live in!"

"But Moshe, it's terrible!" she groaned, unnerved by his indefatigable optimism even in the face of the doctor's grim prognosis. "I told you all along you should watch your weight, and now you have to actually take a mini blood-test," she shuddered as she said it, "every time you eat!"

"Of course," he responded brightly, "but don't you see it's just great! If not for the monitor, we would be groping in the dark. Look, Fradel. The doctor told me to cut out eggs and butter, because it's bad for me. But my little monitor is smarter than that. See how my sugar levels jumped up just an hour after

drinking the juice? I think I should rather cut that out than the eggs!"

"But aren't eggs full of artery-clogging cholesterol?"

"Not anymore," R' Moshe joked. "There's plenty of controversy around this theory, and I've been reading up on it. But listen, I'm not going to play around with my health. This smart little monitor," he patted it affectionately, "will keep me right on track. I'm doing all the readings the doctor ordered: every morning, after breakfast, before and after lunch and dinner - the whole pack. I'm writing everything down carefully, and at the end of the day, I know exactly what my body feels like inside based on what I feed it with. No one can argue with my little monitor!"

"It's a shame we let your health regress to the point where you actually need this thing," she pointed disapprovingly to the gadget on the table.

"You're right," he nodded, "but look at the good side of it. Instead of depriving myself of all kinds of normal foods and eating all the wrong things out of ignorance, I'm kept right on track to stay healthy. With Hashem's help we'll reverse the entire situation. The doctor

said I'm not that bad – yet, anyways. If I'm careful, I'll be strong and healthy im yirtza Hashem to walk all our grandchildren to the chupah!"

R' Moshe sat in shul wearing his sparkling white kittel and covered with his tallis, his body trembling in awe of the

holy day. He fingered his machzor, turning the pages to tefillas zakai.

"Hashem, please help me fast this year as I always did," he prayed quietly. He remembered his doctor's

instructions, and mentally reviewed everything he had discussed with his Rav the day before. Forcing his mind to return its focus on doing tshuva, he suddenly found himself wishing he had a nifty little soul-monitor in his pocket.

Just suppose I could give myself a reading to check how my numbers are in the areas of limud haTorah and tzedaka, he thought wishfully. Oh, life would certainly be much simpler! I would know instantly whether I need to up my hours of Torah learning and chesed. And if I could monitor my speech with the prick of a finger and push of a button, I would instantly know how the "high-sugared" discussions I occasionally indulge in - despite the quiet warnings of my consci-

ence - affect my neshama. After seeing the numbers jump off the screen, would I still be speaking lashon hara?

And what about all those instances when we are truly confused, not sure if what we're doing is the ratzon Hashem or not? A soul-monitor would tell us right away if we're on

the right track, or if we need to make some changes.

R' Moshe sighed. No, soul-monitoring isn't all that simple. It is a constant battle between the yetzer tov and yetzer

hara, a never-ending conflict between one's base inclination and the soul's true yearning. So why didn't Hashem bestow us with a soul-monitor?

Because staying healthy spiritually isn't meant to be simple. It's the struggle that counts. If we would have all the right answers displayed on a screen, the game would be over...

On the other hand, watching our physical health is just one aspect of avodas Hashem, and thankfully, a nifty little monitor gives us the right answers.

The only thing spiritual health and watching sugar levels have in common, is that tshuva always helps...

It's the struggle that counts

שנאמר: כי כל הנפש אשר לא תעונה בעצם היום הזה ונכרתה. מאחר שענש הכתוב כרת למי שלא נתענה למדנו שמוזהרים אנו בו על אכילה ושתיה. וכל האוכל או השותה בו בשוגג חייב קורבן חטאת קבועה... ואין חייבים כרת או קורבן אלא על אכילה ושתיה בלבד אבל אם רחץ או סך או נעל מכין אותו מכת מרדות".

דין חולה לגבי יום כיפור

בספר שמירת שבת כהלכתה פרק ל"ט כתוב:
"כשם שמותר ואף מצווה היא לחלל את השבת
להצלת חיי אדם בכל מקרה שקיימת סכנה או ספק
סכנה, כך גם מותר ואף מצווה היא על חולה כזה
שיש בו סכנה וספק סכנה לאכול ביום הכיפורים,
לכן מצווה לחלל עליו את היום כדי להציל את
חייו. ואפילו אם אין סכנה לחולה ברגע זה אבל
ייתכן שיסתכן אם לא יאכל, גם אז מותר ומצווה
לאכול... בכל מקרה שמאכילים את החולה ביום
הכיפורים צריך לשקול אם די לו באכילה או שתיה
נכן יש לשקל אם הוא צריך לאכול ולהשקותו כרגיל
לו בשתייה בלבד."

יש להדגיש כי בחולה שאין בו סכנה מצווה עליו לצום ולהימנע מאיסור כרת, ואם הוא צריך לקחת תרופות מותר לו לבלוע אותן אבל אסור לו לשתות מים כדי להקל על הבליעה.

דין חולה הסוכרת

כפי שעלינו לבחון כל חולה באיזו מידה הצום יכול להזיק לו כך הדבר גם לגבי חולה הסוכרת. את חולי הסוכרת ניתן לחלק למספר קבוצות: חולים מאוזנים וחולים לא מאוזנים, חולי סוכרת מטופלים בדיאטה בלבד, בתרופות דרך הפה ובזריקות אינסולין. חולים שאינם מאוזנים וצמים, עשויים להסתכן כפי שראינו ברשימת הסיכונים לעיל. לעמותם חולים סוכרת מאוזנים יוכלו לצום כפי שנפרט בהמשך.

בכלל, חולה מאוזן הינו חולה שרמת 7.5 הנובעות נמוכה מ7.5 ואינו סובל מבעיות פעילות הנובעות מסיבוכי הסוכרת. התיבשות טבעית שיכולה לפגוע בתפקוד של הכליות. כל חולה שרמת הקריאטינין בדם היא מעל 1.5 מ"גא, צום משתייה עלול לגרום לסכנה לכליה ויכול להיגרם מכך סיכון של כל הגוף, ולכן חולי סוכרת עם פגיעה כלייתית גם אם חייבים בצום מאכילה, חייבים לשתות.

בעבר היה מקובל כי כל חולה סוכרת המטופל באינסולין הוא בגדר חולה שיש בו סכנה ולכן אסור עליו לצום. אך כיום ישנם אינסולינים חדשים כדוגמת לנטוס אשר מספקים את הצריכה הבזאלית של האינסולין לגוף ומאזנים את רמת הסוכר בצום, ולכן החולה הסוכרתי יוצא מגדר "חולה שיש בו סכנה" לגדר "חולה שאין בו סכנה" ואז יש עליו לצום ביום הכפורים.

באיזה מידה חולה שמקבל אינסולין אחר, לא לנטוס, (מאחר והוא לא עונה לקריטריונים שקבל סל הבריאות למתן לנטוס) חלה עליו החובה לעבור לטיפול בלנטוס לקראת יום כיפור ע"מ שיוכל לצום? (ההוצאה הכספית הצפויה למעבר ללנטוס ולאיזון תחת טיפול זה שהוא גם טוב יותר ופיזיולוגי יותר מטיפול באינסולינים הקלאסיים הוא בשנת 2007 כ- 450 ש"ח)

שאלה זו הפניתי לרב אפרתי שליט"א אשר העלה אותה בפני הרב אליישיב שליט"א אשר פסק כי יש חובה על האדם להוציא מכספו ע"מ להימנע מאיסור כרת.

לנוחות הקוראים בטבלה שלפניכם מתומצתות ההנחיות הרפואיות לחולי הסוכרת:

הערות:

- ההנחיות מתייחסות לחולי סוכרת מאוזנים (המוגלובין A1C פחות מ ⁻ 7.5%) שאינם סובלים מאי ספיקה כלייתית (קריאטינין קטן מ-1.5 מ"גא. חולים הסובלים מאי ספיקת כליות חייבים בשתייה בלבד ולא באכילה.
- ההנחיות מתייחסות לחולים שאין להם בעיות פעילות רפואיות לא מאוזנות אחרות כמו אי
 ספיקת לב או תעוקת חזה בלתי מאוזנת וכו'.
- אין ההנחיות מתייחסות לנשים סוכרתיות הרות
 או לאחר לידה
- על הצם להימנע מפעילות גופנית מאומצת ובלתי שגרתיתי.
- הנחיות אלו הן כלליות ובכל מקרה פרטי יש להיוועץ עם הרופא המטפל.

קובץ בית הלל - גליון כ״ט קונטרס רפואה והלכה [דף ע״ד - ע״ו מדפה״ס]

ד"ר יוסף קליינמן, מנהל החטיבה הפנימית בי"ח "ביקור חולים"

חולי סוכרת ביום הכיפורים

בקע:

ערכי הסוכר בדם משתנים באדם בריא בין צום לאוכל, וכך גם אצל חולה הסוכרת אך בערכים גבוהים יותר.

באדם הבריא, ערכי הסוכר בדם הם קבועים בתחום צר, הקרוב ל- 100 מג"ר 8, אחרי אוכל ערכי הסוכר עולים לזמן מה ואח"כ יורדים שוב לערכים הבסיסיים הקבועים. גם בחולה הסוכרתי ישנם ערכים בסיסיים קבועים אך הם גבוהים יותר מהערכים של הבריא, ולאחר האוכל רמת הסוכר עולע הרבה יותר והערכים נשארים גבוהים תקופה ארוכה יותר עד שהם ירודים שוב לערכיים המסיסיים של החולה.

באופן פיזיולוגי בזמן אכילה, במקביל לעליה בערכי הסוכר, ישנה גם עליה בהפרשה של אינסולין מהלבלב, האינסולין מכניס את הסוכר לתאים ומאפשרת אגירה של הסוכר בתוך הכבד והשרירים בצורת חומר תשמורת הקרוי גליקוגן. לעומת זאת במצה של צום, רמת הסוכר יורדת בדם וכך גם יורדת רמת האינסוליו, במקביל עולים בדם הורמונים אחרים (גלוהגון וכתכולאמינים) המשפעלים את פירוק הגליהוגן, ואת היצור מחדש של סוכר על ידי תאי הגוף. באשר הגליהוגן נגמר (כפי שהורה לאחר צום של כמה שעות), הרמות הנמוכות של האינסוליו מאפשרות שחרור של חומצות שומן מתוך רקמת השומן. חומצות השומן מתחמצות ויוצרות גופי הטו (הטונים) אשר משמשים כדלה תחליפי לפעולת שריר הלב, שאר שרירי הגוף, הכבד, והכליה, ואילו הסוכר שבתור זרם הדם, נשאר לפעולת המוח וכרוריות הדם.

הרמה הבסיסית הזו של האינסולין הינה חיונית ביותר לשמירה על איזון הסוכר בתוך זרם הדם, והיא הנקראת גם הרמה הבסיסית או הבאזאלית, לעומת זאת בזמן אוכל חלה הפרשת האינסולין כתגובה לאכול הרויה גם הפרשה פראנדיאלית.

המאוזן העדין הזה בין הפרשה של האינסולין בזאלי ושל ההורמונים החארים לבין הפרשה פראנדיאלית, מופרע בחולי סוכרת. ולכו חלהם זהוהים למתו

תרופות המעוררות את הלבלב להפריש אינסולין או תרופות המשפרות את ההטמנה של הסוכר על ידי תאי הגוף וחולים אחרים זקוקים אף למתן אינסולין. האינסולינים קצרי הטווח ניתנים סביב ארוחות, והאינסולינים ארוכי הטווח מחקים את הייצור הבזאלי של האינסולין. עד לאחרונה האינסולינים ארוכי הטווח הקלאסים לא היו יעילים בחיקוי המצב הבזאלי רק ב-5 השנים האחרונות נכנסו לשימוש אינסולינים מהונדסים כדוגמת הלנטוס אשר מחקים בצורה פיזיולוגית את ייצור האינסולין הבזאלי.

הסיכון בצום ממושך

היפוגליקמיה - רמות גבוהות של אינסולין בדם יחד עם חוסר הפרשת הורמונים המעוררים את יצור הסוכר נלאחר שהגליקוגן שבכבד התפרק ונגמר) עלול לגרום לירידה ניכרת של הסוכר בדם ולגרום לפגיעה בתפקיד המוח.

היפרגליקמיה וחמצת עם ריבוי גופי קטו - בחולי סוכרת עם חוסר מוחלט של אינסולין, צום ממושך יגרום ליצור מתגבר של סוכר ושל גופי קטו בתוך זרם הדם, ללא בקרה (כי אין אינסולין שמאזן אותו ואז מופיעה חמצת של הדם נעשה חומצי, ותאי הגוף אינם יכולים לתפקד כראוי), זהו מצב מסכן חיים.

התייבשות ונטייה לקרישיות יותר - חוסר שתייה בזמן הצום, עלול לגרום להתייבשות, המצב נכון ביחוד באקלים חם ולח, באנשים העוסקים בפעילות גופנית מאומצת, וכן במצב של סוכרת לא מאוזנת הגורמת להשתנות יתר ואיבוד נוזלים. התייבשות עולולה להחמיר תפקוד של הכליה, ולגרום לעליה ניכרת בצמיגות הדם נעקב ייצור מוגבר של גורמי הרישה השכיח בחולי סוכרת).

מצוות התענית ביום הכיפורים

הרמב"ם בסדר זמנים הלכות שביתת עשור פרק א' סימן ד' כותב: "מצוות עשה... יש ביום הכיפורים והיא לשבות בו מאכילה ושתייה שנאמר תענו את נפשותיכם. מפי השמועה למדו עינוי שהוא לנפש זה הצום. וכל הצם בו קיים מצוות עשה. וכל האוכל ושותה בו ביטל מצוות עשה ועבר על לא תעשה ושותה בו ביטל מצוות עשה ועבר על לא תעשה

תשובה מהרה״ג ר׳ מנחם מאיר ווייסמאנדל שליט״א

אב"ד נייטרא מאנסי ונשיא המוסד

בעזהי"ת

בענין לצאת לרשה"ר בשבת עם מכשיר פאמ"פ לסובלים מחולי סוכרת התלוים באינסולין שרגילין לצאת בחול לאזן את דרגת הסוכר בתוך הדם;

המכשיר היא בצת הסטאנדארד להסובלים מסוכרת, חיים של הסובל יותר תקינים ויציבים, וצוד מצלות רבות יש צל מה שהי' צד צתה, צ"י זריקות כמה פצמים ביום והמפותחים יש מצלה גם שמפחית הצורך למדוד הדם צ"י הוצאות דם,

ובצת נבוא רק בקיצור, ונראה לדומות זה להא דםי' ש"א סב"ז: "יוצאין בביצת החרגול ובשן של שועל ובמסמר הצלוב" דבולהו ביון דיש בהם משום רפואה המותרת הרי הם בקמיצ של מומחה ודינם בתבשיט, וה"ה בנד"ד הרבה זמן שהוא בחוץ הרי נותן לו רפואה.

ובסב"ח: "מי שיש לו מבה בפיסת רגלו וקושר עליה מטבע להגין שלא 'נגף ברגלו, וגס הוא מרפא, מותר לצאת בו", ובמש"ב ס"ך ק"ח דאפילו אינו מרפא אלא שמועיל שלא 'נגוף בו הרגל ס"ל להאחרונים דמותר, ולא מחייבינן לי['] לישב בבית, ביון שאהו רפואתו מותרת דהו' תכשיט, וה" (בנד"ד,

ושם בם"ך צ"ז דחוט ומשיחה דלא חשיבי בפ"צ בטילים להסמרטוט, והב"נ הכל שמוצאין צמהם, והצינור בכלל, בטילים להם ואין להם חשיבות צצמי, (חוץ הכים החיצוני HOLSTER, CLIP)

ומהא דסי' ש"ג סעיף ב': "הבנות קטנות שנוקבים אזניהם כדי לתת בהם נזמים בשיגדלו, וכדי שלא יסתמו הנקבים נותנים בהם קסמים, מותר לצאת בהם". ולאו דוקא שכל רגע מועיל הקיסם, ורק במ"ש רש"י והובא בנו"ב, דאורחא בהכי, הכא נמי אורחא בהכי, וכיוצ"ב בתב בשש"ב פל"ד אות טו, והערה קי"א בשם הגרשז"א,

וכבר דנו האחרונים הרבה בענין לצאת במכשיר שמיצה לסוגי אינם שומצים שונים והרבה מהטצמים להיתר יש גם בנד"ד, והאינסולין היותר בתוך הבקבוק שאין צריך לכצת, פשוט שבטל, ואין להם חשיבות בפ"צ במו שלא מצינו שחייב למדוד את הקיסום בהאוץ!

וכאמור מהיות טוב שישאנה ע"י שנוי כאמור בתפירה בפנים בתוך הבגד

בכבוד וידידות

מנחם מאיר ווייםמאנדל

שמעי ותחי נפשכם-א רשימה פון אונזערע לקעציעס פונעם פארגאנגענעם יאר

- 16 = ווייטעמין די דער גרעסטער מאנגל און די סיבה פון מערערע מחלות.
 - 17 = מאגניזיום און קאלציום באלאנס
- 18 = סטודי וואס האט כלומר'שט איבערצייגט שעדליכהייט פון עטקינס דייעט
 - 19 בענעפיטן פון סעטשורעטעד פעטנס קאלעסטעראל = 1 אין מאכלים
 - 20 = שעדליכקייט פון טרענס פעטס, און פארשעלי היידראדזינעיטעד אוילן
 - אוועהאדא און 9 מאנא אנסעטארעיטעד פעטס, אמגא 10 = 21 פאטעסיום
 - 22 = שאלות ותשובות
 - 23 = פסח: אלקאהאל און צוקער פון וויינען שיעורים פון כזיתים מצה
 - 24 סטודי איבער אייער, פאלטש דורך און אדורך
 - באלאנסירן די פאלי אנסעטורעיטעד באלאנסירן די פאלי אנסעטורעיטעד 6 פעטס ■ רעדוצירן אמעגא
 - 3 בענעפיטן פון אמעגא = 26
 - 27 = אמעגא 3 און מערקערי אין פיש
 - 28 = זוהן שטראהלן, שעדליכע און נישט שעדליכע 29 – סטודי אין ארץ ישראל ווייזט אז נידריגע קארב דייעט
 - איז דאס בעסטע 20 = פאלטשקייט פון שרייבער וועגן טייפ 1 דייעביטיס
 - וויפיל פראטין מעג מען עסן = 31

- 1 = מעטאבאליק סינדראום וויכטיגקייט פון טשעקן צוקער
- טעסט חילוה פון די צוויי טייפס פון A1C טעסט = 2 דייעביטיס
- 3 = ריסק פעקטארס פאר טייפ 2 דייעביטיס שעדליכקייט פון היי-פרוקטאז-קארן-סיראפ ■ קאנטראלירן צוקער ביים אויספאסטן
- נאטורליכע היילונגן שווער צו פארלירן וואג מיט מייס = 4 וועלכע צייט טשעקן דעם צוקער, און וואס דארף עס זיין
 - דער שורש פון מ"ס בופיל אינסולין און רעזיסטענס = 5 טייפ 2 דייעביטיס, איבער וואג, בלוט דרוה, און הארץ
 - 6 = וויכטיגקייט פון עקסערסייז, און וויאזוי עס העלפט
 - ד = צוהער און האלעסטעראל נומבערס אין האנאדא און אייראפע ■ ריכטיגע צייט צו מאכן עקסערסייז
 - 8 = אינטערוויו מיט עקסערסייז סוחר
 - 9 = מילגרוים און הארץ דיזיס
- צוגרייטן צו א תענית וויאזוי אויסצופאסטן
 - דער איינציגער דייעט וואס היילט מ"ס אן מעדיצין = 11 נידריגע קארבאהיידרעיטס.
 - 21 = ציילן קארבאהיידרעיטס
 - 13 = פארלירן פאטעסיום וויינען אן צוהער
- לאטקעס ב גלייסימיק אינדעקס עפעקטיוו קארבס 14 שאגער אלקאהאלס
- 15 = ווער האט מעטאבאליה סינדראום? די וויכטיגהייט פון עסן גענוג פראטין

הערט אונזערע לעקציעס איבער "דייעביטיס און מעטאבאליה סינדראום" אויף דעם

טעלעפאן ליניע

212-444-1100 845-738-1100

דריקט עקסעטענטשאן 3 דערנאך 2, און קלויבט אויס וועלעכע לעקציע צו הערן. הערט און האט הנאה



MAZEL TOV TO...

Members and their wives upon the BIRTH OF THEIR BABY

Bov 530 745

Girl 236 582

MEMBERS AND THEIR HUSBANDS UPON THE BIRTH OF THEIR BABY

Boy 432 2379

Girl 669

Member and his kallah upon their **ENGAGEMENT**

114

Member and her chasan upon their ENGAGEMENT

63

Dr. Grajower on the birth of his GRANDSON







הרך קריפוה

קובץ דברי ידיעות מהלכות הדייעביטיס

והוא ליקוט תשובות להלכה מגדולי זמנינו בענינים הנוגעים לדייעביטיס

חוברת ז'

נלקט ע"י

צב"י הירש מייזליש

יו״ר אירגון ״ריעים מתוקים – פריינט מיט דייעביטיס״

בלאאמו״ר הרה״ג מהר״י שליט״א אב״ד אוהעל יצ״ו