

בריאות כהלכה מתוק לחכי

A NOTE FROM
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בס"ד

כ"א אדר, תשס"ב

I am very pleased to convey my recognition of the exceptionally fine work of Rabbi Meisels, shlit"א in his publication for diabetics regarding the shiurim needed to perform the mitzvohs on Pesach. Rabbi Meisels put a tremendous amount of effort into this production, and that effort is visible in the finished product. His shiurim, in my opinion, are quite accurate, and may be relied on with confidence. May he merit continued success in being mezakeh the rabim and spreading kvod shomayim.

בברכת התורה
ידידו ישראל פינחס באדנער

Pesach
YOM TOV GUIDE

Pesach

Be prepared!

The following list of important issues will help you plan what to discuss with your doctor and which changes to make in insulin regimen to accommodate the irregular schedule of Yom Tov. Those on insulin pump therapy will have it much easier, since a pump allows for true flexibility with all different schedules. Even those who are still on injections, but are following flexible insulin therapy (FIT), will have an easier time accommodating changes in schedule. However, those who are still on a rigid insulin regimen will need to clearly discuss with their doctor all changes in eating and sleeping, and decide on necessary insulin changes.

1) On the Seder night, take your long acting insulin at the SAME TIME you would take it on a usual day.

2) On an average day, many people will administer an injection to cover both dinner and snack. Since the Seder will be eaten later than a normal dinner, and only a lighter meal will be served at the usual dinnertime, one will need to take extra insulin at the Seder. There will also be a need to reduce the insulin administered at the regular dinnertime. Discuss with your health professional the exact amount of insulin to reduce at the usual dinnertime, and amount needed to cover the Seder meal.

An example:

Tziporah, age 7, usually eats dinner at 6:00 pm. She takes 3 units of Humalog together with 1 unit of Regular insulin. (The H covers her dinner, and the R covers her bedtime snack.) She eats 60 grams of carb at dinnertime. She also has a snack of 30 grams of carb at 9:00 pm.

After discussing with her doctor the changes that will occur during the first night of Pesach, she was advised to eat a snack of 30 grams instead of her usual dinner of 60 grams. She would only take 1½ units of Humalog, half her usual amount, and no R.

Before eating matzah at the Seder she was instructed to take 3 units of insulin to cover about 75 grams of carb.

(Remember, this is only an example to show you how things CAN be changed around. With the guidance of your doctor everything can and will be worked out.)

3) Those who will drink a high alcohol wine for the four cups should be careful to avoid hypoglycemia, as alcohol inhibits the liver from producing glucose. (This is explained in greater detail in our Purim article.) Discuss a reduction in long acting insulin or basal rate with your doctor.

4) The short acting insulin (administered before eating) should only be taken at the time of washing for the Matzah, and not at the beginning of the Seder. For practical reasons one might consider covering the carbs of the second cup along with the insulin taken for the matzah. This will not be an option if one is consuming a large amount of carbs for the second cup.

5) Matzah may be digested (and converted to glucose) at a slower rate than challah. Also, the matzah may be eaten over a long period of time during the Seder. Those on an insulin pump can do a "bolus-'n-bite", which means bolusing separately for each time matzah is eaten. A pumper can also combine a normal and a square wave bolus. Those on multiple injections should discuss with their doctor how to cover all the matzah by combining Regular insulin and Humalog. This combination would also be beneficial for those using grape juice for the third and/or the fourth cup, since Humalog given before the matzah may be used up by then.

6) Some pediatric diabetologists recommend administering Humalog *after* a meal is eaten when dealing with young children who are picky eaters. This way, the child would get an insulin dose more precisely matched to the amount of carbs actually eaten. This tip can be applied during the Seder when children are tired, and may eat very little.

7) Make sure to check your blood sugars

Reminder: Please remember that any change in regimen should be discussed with your doctor or health professional.

before going to sleep; there may be unexpected results. If the BG is high and you plan to supplement with extra insulin, make sure you have taken any previous insulin into account. This rule applies if it is less than 3.5 to 4 hours since the last time Humalog was administered, or if it is less than 5 to 6 hours after you took Regular insulin. Please keep in mind that additional bedtime insulin doses should be calculated with great caution, and follow-up BG tests should be performed overnight to ensure that hypoglycemia doesn't occur.

[The unused insulin rule should also be applied when correcting high BGs before Motzi Matzah.]

8) In the event that Erev Pesach (the eve of Pesach) falls on Shabbos, those who eat challah will eat much less than usual during the night and morning meals. Since the challah would then be eaten earlier than usual, most people would eat a light lunch, or skip lunch entirely. There may be a need to adjust insulin. (This is especially vital for those who are covering lunch with a morning shot of long acting insulin.)

You can use the chart on this page to discuss all the details with your doctor:

An example:

Yankel usually eats 45 grams of carb for dinner at about 6 p.m., and covers it with 3 units of Humalog. (He uses a ratio of 1:15, one unit of insulin per 15 grams of carb.) Whenever he eats a bedtime snack, Yankel administers an additional injection of Humalog, using a ratio of 1:20.

Yankel plans his Seder night carefully and diligently. He plans

to eat matzah according to the amounts detailed in this newsletter, and to mix light grape juice with 25% water. Since Yankel is on multiple injections of Humalog and Lente, he has the flexibility of eating the way he wants, but he will need extra shots to cover the necessary changes.

Yankel and his father roughly estimated the timing of the Seder, and came up with the following:

9:00 First cup = 4.2 g. carb

10:30 Second cup = 4.2 g. carb

10:30-12:00 Matzah = 22 g. carb
Korech = 13 g. carb

Meal = 15 g. carb (The only carbs he will eat will be a 3 oz. slice of potato kugel.)

12:00 Afikomen = 16 g. carb

12:30 Third cup = 4.2 g. Carb

1:00 Fourth cup = 7.7 g. carb

Yankel's doctor advised him as follows:

On erev pesach, at the usual dinnertime, he should eat a light snack consisting of 15 g. of carb. Instead of taking his usual 3 units of Humalog, the snack should be covered with only 1 unit of insulin.

At the Seder, few carbs will be consumed until Motzi Matzah. He therefore need not cover the first cup or the small amount of potatoes he will be eating for karpas.

Before Motzi Matzah, he should check his BG and correct with extra insulin if needed. He should then administer 3 units of Humalog, figuring 4.2 g. for the second cup (which he already drank); 22+13 g. for the matzahs (based on the calculations later on in this issue); and 15 g. for the kugel. This adds up to a total of 54 grams of carbohydrates, which would require close to 3 units of insulin according to his insulin-to-carb ratio (1:20).

He should also administer 1.5 units of Regular insulin at the same time. This would cover the 16 g. carb he will consume for afikomen, and the 11.9 g. carb of the grape juice he will drink (4.2 g. for the third cup + 7.7 g. for the fourth), adding up to a total of 27.9 g. of carb. (He preferred mixing Regular insulin with the Humalog, to administering an extra shot before the afikomen.)

[Yankel's total carb intake at the Seder will be about 80 grams.]

He will recheck before going to bed (at 2:00) and use the unused insulin rule to make sure his numbers are in the middle.



To prepare your pump for Yom Tov see page 13

USE THIS CHART TO DISCUSS ALL THE DETAILS WITH YOUR DOCTOR:

	AMT. OF CARBS	TIME	DOSE/TYPE OF INSULIN
Evening Snack			
First Cup			
Second Cup			
Motzi Matzah			
Korach			
The Meal			
Afikomen			
Third Cup			
Fourth Cup			

The K'zaisim (minimum required amount) for Matzah:

It is necessary for us to know how much matzah constitutes a k'zayis on Pesach, so that we can perform the following mitzvohs: Motzi Matzah, Korech, Afikomen, Bentching.

Introduction:

We have spent many long days on researching the correct shiur of a k'zayis. The work was particularly difficult because all the Shiurim are originally given in volume and we had to convert the amounts to weight, so that they could be used practically. (The only way the original measurements could be used is by crushing the Matzah and measuring its volume.) The weight measurements are especially useful, as we will need to know the matzah's weight anyways in order to calculate the amount of carbs it has (more on that later). This explains why we state the weight amounts in grams, and not in ounces; we count carbs in terms of grams.

Acquiring the shiur in measurements of weight wasn't an easy job, as we found different opinions regarding the formula for convert-

ing cc (a measure of volume) to grams (the measure by weight). We therefore used the most stringent shiur, taken from the sefer "Middos Vshiuri Torah", which the author figured himself using special tools. Although certain factors, such as the wetness of the matzah, might influence its weight (If a matzah is baked for a few seconds more, it will weigh less.) the formula we used covers that margin too. When you follow our shiurim, you might eat more than needed, rather than less.

[Other sources that were used for the Shiurim are "Piskei Tshuvos" from Rabbi Simchah Benzion Rabinovitz shlit"a, "The laws of Pesach" from Rabbi Blumenkrantz shlit"a, "Seder H'oroch", and "Halachas of K'Zayis" from Rabbi Yisroel Pinchos Bodner shlit"a. Rabbi Bodner also shared his vast knowledge with us over the phone.]

In addition to the precise shiur by weight, we have included each shiur in comparison to a whole matzah (i.e. third matzah, quarter matzah, etc.). You may notice that it is almost impossible to be exact using this method of measurement, but we've included it to give you an approximate idea of the size and shape of the portion under discussion.

Machine matzahs are generally uniform in size and thickness. Therefore, one shiur can be given which will be good for all machine matzahs. However, handmade matzahs, commonly referred to as shmurah matzahs, can vary significantly in weight, size and thickness. For this reason, it is impossible to assign a precise shiur as a standard k'zayis for all hand matzahs.

One can, however, get a close approximation of the shiur needed, by weighing the matzahs. Typically, thin matzahs weigh 51 grams; medium-sized matzahs weigh 58 grams; and thick matzahs weigh 72 grams. [Usually, one would get nine thin matzahs to a pound, seven and a half medium matzahs to a pound, and six thick matzahs to a pound.]

The carb amounts we've used were supplied by the Manischewitz matzah manufacturing company.

Serving size: 1 Matzah (32 gr.)

Total carbohydrate: 27 grams

Dietary Fiber: 1 gram

Based on the above information, matzah has a carb factor of 81%, or 0.81. (For instructions on using carb factors, refer to our Tu B'shevat article.) According to the matzah bakeries, the nutrition facts would be the same for



shmurah matzah and for machine matzah. Although the amount of wetness in hand matzahs can vary, there is no way to have a more exact figure.

Some matzah bakeries claim that their matzahs have more bran than others, which increases fiber content and reduces the effective carb content. However, we have not been able to get any nutritional data on that. (If you do use these matzahs, it may be advised to underestimate their carb content slightly.)

[Note: In previous articles, we stated that matzah has a carb factor of 70%. This was based on the nutrition facts of chametz'dige matzah. The carb factor for pesach matzah is 81%.]

To Keep in Mind:

In the Poskim, we find that people who are sick (cholah) can use the smaller shiurim. A diabetic is not a sick person, but if one controls his/her carbohydrate intake due to a health reason such as diabetes, especially if his/her preferred option of treatment is a reduced carbohydrate diet, he/she would be permitted to use the smaller shiurim. (Of course, discuss this with your Rav who understands diabetes.)

The Zohar Hakodosh states that matzah is "Meichlah D'asvasah" (a food that heals). People mistakenly assume that eating matzah can't cause harm because it is a healing food. However, we know that an overdose of medication may be very harmful, and the same is true with matzah. It will heal when consumed according to the correct dosage, but not when overdosed.

The Nodah B'Yehudah, who originated the most stringent shiurim, states that in the case where his new, larger shiur would result in a leniency, the smaller shiur should be used.

It is also well known that although the Brisker Rav zt"l was very stringent in all halachic matters, he was unusually lenient about the halachos of fasting on Yom Kippur. He explained that by being lenient with a mitzvah due to health reasons, he was indeed being stringent with the mitzvah of "vchai bahem" (and you shall live in them). The same could be

true here: if one would act stringent and use larger shiurim at the risk of neglecting his personal health, it would be considered a leniency in the all-important mitzvah of "v'chai bahem". Even the Nodah B'Yehudah did not approve use of the bigger shiurim where it would result in a leniency, as would be the case here.

It is also remarkable to note that the Chazan Ish, who is famous for advocating the largest shiurim, actually used a small shiur (17 grams of matzah) for himself.

The Various Shiurim:

There are differing opinions about the correct measurement of a k'zayis. The Shulchan Aruch rules that a k'zayis is half of an egg, while the Rambam holds that the proper measurement is a third of an egg. There is further debate on exactly what amount constitutes the halachic measurement of an egg. The Chazon Ish held that an egg is 100 cc. Most follow this opinion once a year, for the first k'zayis of matzah on Pesach. The opinion of the Grach Naah is that an egg measure 57.6 cc, and the sefer "Halachos of K'zayis" uses the measurement of 55 cc for an egg.

We can sum up these opinions into three separate shiurim, all of which will be used in this article. They are:

- 1) A k'zayis is half of an egg, or 50 cc. [Chazon Ish zt"l]
- 2) A k'zayis is half of an egg, or 28.8 cc. [Grach Naah]
- 3) A k'zayis is a third of an egg (with the egg measuring 55 cc), or 18.3 cc. [Rambam]

[We have then converted these shiurim to amounts in weight by using the formula of 100:55 meaning that 100 cc equals 55 weight grams.]

Please note that there are smaller shiurim that we have not included in this article. If one needs to restrict carbs even further, the issue should be discussed with a Rav (and you can also give us a call for some more ideas).

Which one of the Shiurim should be used?

Motzi Matzah:

The mitzvah to eat a k'zayis of matzah on the first night of Pesach is a d'oraysa (Torah commandment). Therefore, we are required to use a shiur that conforms to even the most stringent methods of calculating a k'zayis, so as to be sure of fulfilling the mitzvah. The first shiur mentioned above, that of the Chazon Ish, is the most stringent, and therefore the preferred measurement for motzi matzah on the first night of Pesach.

This shiur (27.5 grams) contains 22.3 grams of carbohydrate. (27.5x0.81 = 22.3)

Use the following guidelines:

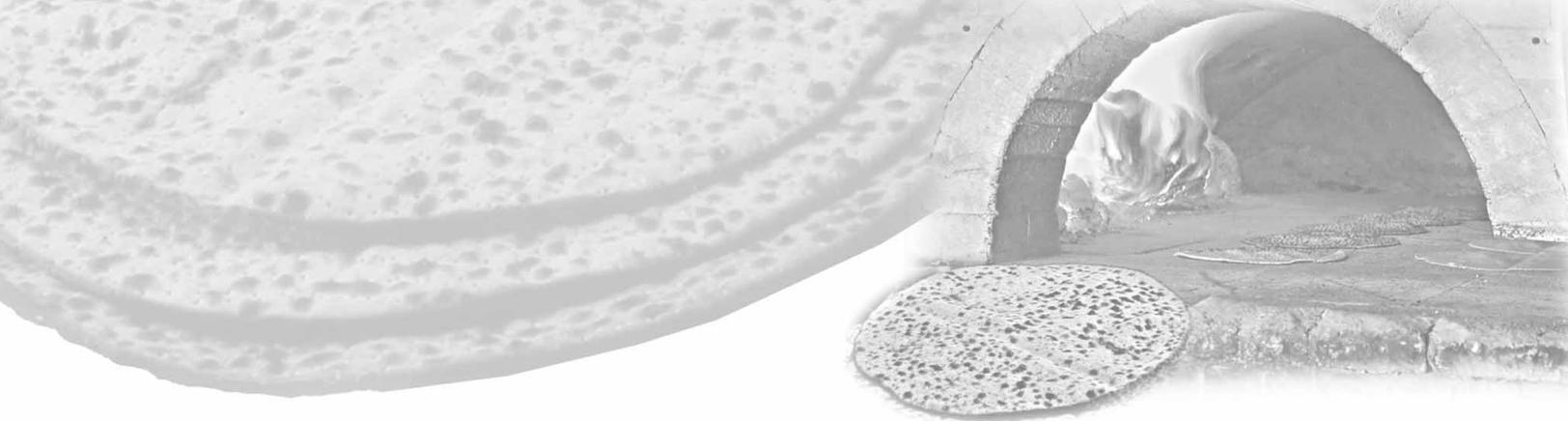
Table 1

*The largest shiur: (50 cc)
27.5 grams of matzah (22.3 grams carbohydrate)*

IF ONE HAS...	HE SHOULD USE...
 54% THIN MATZAH	Slightly more than one half of a matzah
 47% MEDIUM MATZAH	Slightly less than a half of a matzah
 38% THICK MATZAH	More than one third of a matzah
 86% MACHINE MATZAH	Almost a whole matzah

The Shulchan Aruch states that initially (if it is not too difficult) one should eat two k'zaysim; one k'zayis from the top matzah of the ka'arah, and one k'zayis from the broken middle matzah. The poskim rule that this largest shiur (27.5 g.) is technically twice as large as the smallest shiur of k'zayis (10 g.). Therefore, by taking half of this shiur from the top matzah and half of this shiur from the middle matzah, one will satisfy the Shulchan Aruch's requirement of taking two k'zaysim. (Although the two pieces would only add up to one k'zayis of the largest shiur, it would be two k'zaysim of the smallest shiur, and that is sufficient.) For more opinions on this issue refer to "Piskei Tshuvohs", page 262.

For example, if one uses thin matzahs, he would need a bit more than one half



of a matzah for the largest shiur. He should break off a quarter of the top matzah and another piece that size from the middle matzah. By taking from both matzahs, he has fulfilled his midirabonon requirement to take a k'zayis from each matzah. By eating a total of a half matzah he has fulfilled the Torah requirement of eating a k'zayis matzah.

Some poskim specifically caution that one should not eat more matzah than required for Motzi Matzah, because it is preferred to swallow the whole k'zayis at once. Also, if one overeats by Motzi Matzah, then his eating of the afikomen would constitute an achilah gasah (over-stuffing).

Korech:

The mitzvah to eat korech (a k'zayis of marror sandwiched between a k'zayis of the bottom matzah) is midirabonon. We may, therefore, use the second, more lenient shiur of 16 grams.

This shiur (16 grams) contains 13 grams of carbohydrate. ($16 \times 0.81 = 13$)

Use the following guidelines:

Table 2

*The middle shiur: (28.8 cc)
16 grams of matzah (13 grams carbohydrate)*

IF ONE HAS...	HE SHOULD USE...
 31% THIN MATZAH	Slightly less than a third of one matzah
 28% MEDIUM MATZAH	Slightly more than a quarter of a matzah
 22% THICK MATZAH	Slightly more than one fifth of a matzah
 50% MACHINE MATZAH	One half of a matzah

If one has difficulty with eating matzah, he may use the third, smaller shiur of 10 grams.

This shiur (10 grams) contains 8 grams of carbohydrate. ($10 \times 0.81 = 8$)

Use the following guidelines:

Table 3

*The smallest shiur: (18.3 cc)
10 grams of matzah (8 grams carbohydrate)*

IF ONE HAS...	HE SHOULD USE...
 20% THIN MATZAH	One fifth of a matzah
 17% MEDIUM MATZAH	One sixth of a matzah
 14% THICK MATZAH	One seventh of a matzah
 31% MACHINE MATZAH	Slightly less than a third of a matzah

Afikomen:

The mitzvah to eat afikomen is midirabonon. The poskim state that preferably, it is better to eat two k'zaysim of matzah for afikomen (one k'zayis to commemorate the korban Pesach and one k'zayis to commemorate the matzah eaten with it). For these two k'zaysim, it is sufficient to use the smallest shiur of 10 grams, or a total of 20 grams of matzah.

This shiur (10 g. x 2 = 20 g.) contains 16 grams of carbohydrate. ($20 \times 0.81 = 16$)

Use the following guidelines:

Table 4

*Two K'zaysim of the smaller shiur: (36.6 cc)
20 grams of matzah (16 grams carbohydrate)*

IF ONE HAS...	HE SHOULD USE...
 39% THIN MATZAH	Two fifths of a matzah
 34% MEDIUM MATZAH	Slightly more than a third of a matzah
 28% THICK MATZAH	Slightly less than a quarter of a matzah
 63% MACHINE MATZAH	Slightly less than two thirds of a matzah

If it is difficult to eat two k'zaysim, one can fulfill the mitzvah by eating one k'zayis of the middle shiur, or 16 grams of matzah. (This is the preferred shiur for korech and for bentching. See table 2 above.)

If even this is difficult (e.g. he is ill), one may eat one k'zayis of the smallest shiur of 10 grams. (The same as the smaller shiur for korech. See table 3 above.)

Some Poskim note that one should add 2-3 grams to every shiur to compensate for the little matzah that is left between the teeth.

Bentching:

The shiur needed for bentching is 16 grams of matzah. (The same as the preferred shiur for korech. See table 2 on previous page.)

This amount would be used throughout Pesach whenever one washes and bentches.



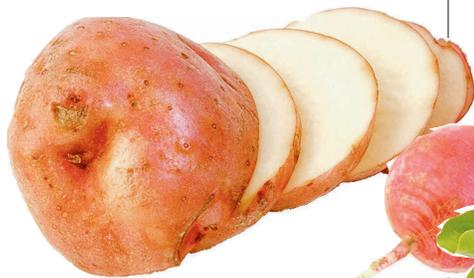
Please note:

This article is meant only as a reference, and not to give any Psak Halacha. All issues should be discussed with your Rav or Posek.

Pesach Tips

The Karpas:

Those who use potatoes for karpas can cover it by taking a drop of extra insulin before kiddush. (This applies mainly to pumpers, as those on injections should probably take their first shot before motzi matzah, and they should not bother covering the karpas.) Bear in mind that one is supposed to eat less than a kezayis of



karpas.

One kezayis of karpas is 1oz. of potatoes (1/8 of a cup), which contains about 3 grams of carbs. [Only those with pumps, which deliver by a tenth of a unit, will be able to handle this correctly.]

Matzah is Lower on the Glycemic Index:

Where is there a reference in the Torah to the fact that Matzah has a lower glycemic index than bread?

Answer: The אבודרהם בשם ראשונים says that one of the reasons that we have a mitzvah to eat Matzah is because the Mitzriyim (Egyptians) gave the Jewish people Matzah to eat. They did this because Matzah supplies energy for a longer period of time, and one who eats it feels satisfied with less.

That's what we say in the Haggadah, הא לחמא עניא די אכלו אבהתנא בארעא דמצרים (This is the poor bread that our parents ate in Egypt). Matzah is what our forefathers were actually fed by the Egyptians.

This is exactly what the concept of the Glycemic index teaches us. If a food is lower on the index, it gives you energy for a longer period of time. The food will remain in the small intestines longer, and it will make you feel fuller.

There is nothing new under the sun!

Tip for Marror (bitter herbs):

Extra Romaine Lettuce can be used to make a delicious salad



throughout P e s a c h . Just toss the lettuce with lemon juice a n d pickles, a n d enjoy!

Medications (for Type 2):

As of today, all oral diabetes medications are Kosher L'Pesach, according to Rabbi Blumenkrantz.

Treating Hypoglycemia on Pesach:

Please be aware that "winkies" are kitniyos (corn derivatives, which are not eaten on Pesach by those of Ashkenazic descent), as are most glucose products, because they contain corn syrup. Some brands might also contain actual CHOMETZ. However, there is usually a surplus of grape juice around on Pesach, so treating a low should not be a problem. Sugar in a plastic bag can be carried out of the house.

Using the scale on Pesach:

Your scale was (hopefully) used all year round with chometz, so be very careful to clean it out well before Pesach. It would also be advisable to put it into a clear plastic bag, and to weigh everything on a plate. If you used the metal plate with your scale all year, ask your Rav if it should be koshered for Pesach.

Yom Tov Tips for Pumpers:

1) Please make sure you have a non-expired bottle of long acting insulin available. If the pump should malfunction during 3 days of Yom Tov (ch"v), you may need the long acting insulin (and see our pump tips later in this issue).

2) To prevent an error caused by static electricity (which is common at this time of the year), make sure to wear the leather case over the pump, and put a piece of softener sheet (such as Bounce) in the case.

3) If you are not sure how long you have had your batteries in, change them, just to be safe.

4) When Yom Tov is three days in a row make sure to change your pump set and fill your reservoir or cartridge as close to Yom Tov as possible, so you'll have adequate insulin for the three-day Yom Tov. A D-Tron cartridge contains over 300 units of insulin, which should be more than enough. The MiniMed 508 also allows for 300 units of insulin by removing the reservoir converter. (If you are missing the key to remove this piece, there is still enough time to get one by calling the company). This should allow for an ample amount of insulin, and should eliminate the need to change the pump reservoir during Yom Tov. Note: The new MM Paradigm pump only holds 176 units.

Those who find it necessary to change their set every other day, should discuss with their Rav what to do on Yom Tov. (Switching to injections for the rest of Yom Tov might involve more prohibitions than just one set change.)



The Four Cups



SHIUR (Quantity):

The shiur for the four cups is a reviyis. Rabbi Weismandl shlit" a wrote to us that one should use a cup that holds the amount of the largest shiur of 5.1 oz. (150 ml), but he need only to drink according to the smallest shiur of 2.9 oz. (86 ml). Since one is only required to drink roiv reviyis (the greater part of the reviyis), the total amount consumed would be 1.5 oz. (45 ml).

[There are small measuring cups available, which measure up to 60 ml in 5 ml increments. These may come in very handy.]

Grape juice is high in carbs, and a very fast acting sugar (high on the glycemic index). Being stringent by using large shiurim and drinking the entire cup would result in unpredictable blood sugars. We have therefore researched the exact shiurim needed to fulfill the mitzvah of the four cups. If wine would be preferred, one may use the larger shiurim and consume the entire cup. (Refer to the section "Type of Wine".) Please note: Most Seder cups hold far more than the largest shiur. Make sure to buy a cup that is not too big.

For the last cup: If one wants to make a brachah acharonah (blessing after eating or drinking), one has to drink an entire reviyis of 2.9 oz. (86 ml) of wine. Otherwise, one should not make the brachah acharonah.

MIXING WINE & WATER

The topic of adding water to wine or grape juice is a complicated one. We have read that in the case of a wine that has no water or concentrate added by the manufacturer, one could add 60% water. However, many rabbanim have told us that one can never add more than 49% water, as one has to make sure that the taste of the wine remains. (Depending on their taste and strength, individual wines would differ in this respect.) We contacted Rabbi Yosef Moshe Greenwald (the Rav of Tzelim), who gives the hashgacha on the Kedem wines, and Mr. Michael Herzog of Kedem. By combining their halachic and professional backgrounds, they came up with the following guideline: a wine with a strong flavor can be mixed with 1/3 water,

while all others can be mixed with only 1/4 water.

The following list was discussed with Mr. Herzog:

- Sauvignon
- Burgundy Royal
- Chablis
- Sauterne
- Classic Red
- Kedem Estates
- Matuk

can have 1/3 water added.

All Cream wines can only be mixed with 1/4 water.

The dark grape juice can be mixed with 1/3 water, while the light can only be mixed with 1/4 water.

If you will be using a wine that is not specified above, please discuss it with a Rav.

There is an easy way to prepare the mixture of wine and water, without bothering to measure in middle of the Seder. For wines that can be mixed with 1/3 water, simply pour two cups of wine into an empty bottle, and then add one cup of water. For those wines to which one can add only 1/4 water, pour three cups of wine into the bottle, and add one cup of water. (The size of the cup you use for this activity does not matter. Just make sure that you use the same cup for the water and the wine.)

If one follows these guidelines correctly, he will consume just 5.0 - 5.6 oz. of wine (or grape juice) throughout the entire Seder.

The following chart shows how much wine is consumed when diluted with 1/3 water. We have

MIXING WINE OR GRAPE JUICE WITH 1/3 WATER

	AMT. TO DRINK	AMT., AFTER DILUTION	*CARBS IN RED GRAPE JUICE
1st cup	1.5 oz. (45 ml)	1.0 oz. (30 ml)	4.6
2nd cup	1.5 oz. (45 ml)	1.0 oz. (30 ml)	4.6
3rd cup	1.5 oz. (45 ml)	1.0 oz. (30 ml)	4.6
4th cup	2.9 oz. (86 ml)	2 oz. (59 ml)	9.2
Total for all four cups		5 oz.	23 grams

also included a column that lists the amount of carbs consumed when red grape juice is used (as this can be mixed with 1/3 water).

"The carbs in the example are based on Kedem's Red Concord grape juice, which has 18.5 grams of carbs in a serving size of 4 oz. (In other words, there are 4.6 grams of carb per oz.)"

of carbs per 8 oz cup.] If the sour taste bothers you, try to add some artificial sweetener. Liquid sweeteners are available with certifications for Pesach, or you can use saccharin tablets, dissolved in water.

Keep in mind that wines with no added sugar may still be very high in carbs. Wine is made from grapes, and therefore may contain a lot of sugar.

Because the law does not require manufacturers to print nutrition facts on wine bottles, it is often hard to know exactly how many carbs a glass of wine contains. If you are trying to find a wine that is carb free, you can use a glucose meter to test a sample. (We tried it with a Glucometer Elite.) Test a sample of the wine just as you would test a drop of blood on your meter. If the wine you are testing is not completely low carb, your meter

will give you a HI reading. If it is a real dry, low-carb wine, the meter will read "LO". Any other numbers you get are only a reference, as numbers that would be considered high for blood sugars are not high for wine. For example, if the meter reads 225 the wine is still relatively low in carbs. (Remember that a cup of regular soda contains 4,500 mg/dl of sugar, so keep those numbers in proper perspective.)

Here are some examples of wines we tested for sugar/carb content on a glucose meter:

- **Chardonnay = 225**
- **Cabernet Sauvignon = 87 (a red wine)**
- **Sauvignon Blanc = 27 (a white wine)**

These are only examples. Remember to test the specific wines that you are planning to use.

IMPORTANT POINTS:

Because alcohol may drop your blood sugar, discuss with your doctor if you should take insulin to cover the carbs in the wine.

- There is more of a chance that wine will cause a low blood sugar on an empty stomach. If you do drink wine for the first cup, make sure to follow the shiurim detailed above. Or, use grape juice for the first cup.

- If you drink grape juice, please note: the carbohydrate contents of the different grape juices are not identical, and they may even vary from year to year. The carbs may range from 27 to 37 grams per cup. Please make sure to check the label.

- Type 2 diabetics should discuss with their doctors if it is better to drink wine rather than grape juice. Although the juice has a higher sugar content, many of the type 2 medications are not compatible with alcohol. It might therefore seem that grape juice would be preferable, but maybe we can assume that drinking just the required amounts

of wine for the two Seder nights will not cause any harm.



MIXING WINE OR GRAPE JUICE WITH 1/4 WATER

	AMT. TO DRINK	AMT., AFTER DILUTION	**CARBS IN GOLD GRAPE JUICE
1st cup	1.5 oz. (45 ml)	1.2 oz. (34 ml)	4.2
2nd cup	1.5 oz. (45 ml)	1.2 oz. (34 ml)	4.2
3rd cup	1.5 oz. (45 ml)	1.2 oz. (34 ml)	4.2
4th cup	2.9 oz. (86 ml)	2.2 oz. (65 ml)	7.7
Total for all four cups		5.6 oz.	19.5 grams

"The chart uses Kedem's Gold grape juice (which can only be mixed with 1/4 water), which has 14 grams of carbs in a serving size of 4 oz. (In other words, there are 3.5 grams of carb per oz.)"

A tip to help you recognize how much 1.5 oz. is: Before Yom Tov, fill your Seder cup with water, and pour 1.5 oz. into a measuring cup. See how full your Seder cup looks, and train your eye to recognize it.

TYPE OF WINE:

The best option would be a dry wine, which has almost no carbs. [Most dry wines contain approximately 4 grams

The information presented here is not meant as a definitive halachic guide. As usual, each individual should ask his own Rav what to do.

✓ Pre-Pesach Checklist

Get the Right Advice

- Make an appointment with your doctor to discuss insulin changes for Erev Pesach and the Seder night. If you are a type 2 on medication, remember to ask your doctor whether you should drink wine for the four cups, or if grape juice is preferred.
- Discuss with your Rav (A copy of this newsletter would be an excellent reference.):
 - shiurim for matzah
 - shiurim for the four cups
 - amount of water that can be added to the wine or grape juice that you are planning to use for the four cups
- any other questions you have about Yom Tov concerning your individual regimen (i.e., how and when to change a pump set on Pesach, if necessary)

Keep in mind that Pesach is a particularly hectic time for a Rav or medical professional. Schedule an appointment way in advance, and don't make it too close to Yom Tov.

For the Four Cups

- Buy appropriate wine or grape juice.
- Mix the wine or grape juice you will be using for the four cups with the proper amount of water. Pour this mixture into an empty bottle before Pesach and label appropriately.
- Prepare the right sized cup for the Seder, if you will be drinking the entire or roiv of the cup. (This applies to those who will be drinking a low carb wine.)
- Use our tip mentioned previously to train your eye to recognize the amount you will be drinking for the four cups.

For the Matzah

- Weigh, package, and label the exact k'zaysim you will be eating each time matzah is required at the Seder. (You can prepare the portions in clearly marked plastic storage bags, as some of our readers did.)
Alternatively, prepare your scale so that you can use it to weigh the matzah at the Seder table. (Only a non-electric scale can be used on Yom Tov.)

Miscellaneous

- Buy a Kosher for Pesach sweetener.
- Prepare small bags of sugar, or another quick-acting carbohydrate that is Kosher for Pesach, to carry around in case of hypoglycemia.
- Check that you have enough medication and supplies to last throughout the Yom Tov, as many Jewish pharmacies are closed on Chol Hamoed.
- For Pumpers: Make sure your reservoir, set, and batteries are changed as close to Yom Tov as possible, to avoid any problems.

*And don't forget to enjoy your Yom Tov!
A very happy and Kosher Pesach!*

Carb Contents of Wines & Grape Juice

The following is a list of grape juice and wines, and their carb contents.

The information is taken from the book "Kosher Calories", by T. Spear, with permission from Artscroll Mesorah Publications.

GRAPE JUICE (NON-ALCOHOLIC)

PRODUCT DESCRIPTION/ BRAND NAME	SERVING SIZE	CARB.
Concord Grape, Cocktail/ Ruby Kist	6 fl. Oz.	30.0
Concord Grape, Dark/ Kedem	4 fl. Oz.	16.0
Concord Grape, Light/ Kedem	4 fl. Oz.	16.0
Grape/ Horowitz Margareten	4 fl. Oz.	17.0
Grape/ Ruby Kist	6 fl. Oz.	30.0
Grape/ Schapiro's	4 fl. Oz.	16.0
Grape/ Tnuva	6 fl. Oz.	30.0
Mitzbarie Grape/ Kedem	4 fl. Oz.	19.47
Sparkling Catawba Grape/ Kedem	4 fl. Oz.	18.8
Sparkling Concord Grape/ Kedem	4 fl. Oz.	18.0

WINES

PRODUCT DESC./ B.N.	SERV. SZ.	CARB.	PRODUCT DESC./ B.N.	SERV. SZ.	CARB.
Adom Atic/ Carmel	3.5 fl. Oz.	2.57	Cream Red Concord/ Kedem	4 fl. Oz.	22.0
Avdat (Red)/ Carmel	3.5 fl. Oz.	2.57	Cream Red Concord/ Schapiro's	4 fl. Oz.	20.12
Avdat (White)/ Carmel	3.5 fl. Oz.	2.46	Cream White Concord/ Kedem	4 fl. Oz.	13.0
Bartenura Soave Barbero/ Kedem	4 fl. Oz.	2.88	Cream White Concord/ Schapiro's	4 fl. Oz.	11.44
Blackberry/ Schapiro's	4 fl. Oz.	20.12	Emerald Riesling/ Carmel	3.5 fl. Oz.	2.46
Burgundy/ Schapiro's	4 fl. Oz.	1.72	Emerald Riesling/ Monfort	4 fl. Oz.	2.80
Cabernet Sauvignon/ Carmel	3.5 fl. Oz.	2.57	French Colombard/ Carmel	3.5 fl. Oz.	2.46
Cabernet Sauvignon/ Monfort	4 fl. Oz.	2.92	French Colombard/ Monfort	4 fl. Oz.	2.81
Chablis/ Schapiro's	4 fl. Oz.	3.05	Hock/ Carmel	3.5 fl. Oz.	2.46
Chablis, N.Y. State, Prem. Royal/ Kedem	4 fl. Oz.	3.04	Hock/ Monfort	4 fl. Oz.	2.80
Chablis, Prem. American/ Schapiro's	4 fl. Oz.	3.52	Malaga/ Kedem	4 fl. Oz.	26.1
Chateau Mauras Schapiro's	4 fl. Oz.	2.76	Malaga/ Monfort	4 fl. Oz.	26.0
Chenin Blanc/ Carmel	3.5 fl. Oz.	2.46	Malaga/ Schapiro's	4 fl. Oz.	26.0
Chenin Blanc, American/ Kedem	4 fl. Oz.	2.80	Plum Royale, N.Y. State, Prem. Royal/ Kedem	4 fl. Oz.	21.66
Cherry/ Schapiro's	4 fl. Oz.	20.12	Riesling, N. Y. State/ Kedem	4 fl. Oz.	4.46
Cold Duck/ Kedem	4 fl. Oz.	4.7	Sangria/ Schapiro's	4 fl. Oz.	14.50
Concord Grape, Ex. Heavy/ Schapiro's	4 fl. Oz.	24.2	Sauvignon Blanc/ Carmel	3.5 fl. Oz.	2.46
Concord Grape, Nat. Swt./ Schapiro's	4 fl. Oz.	18.96	Sauvignon Blanc/ Monfort	4 fl. Oz.	2.82
Concord, Nat. Swt./ Schapiro's	4 fl. Oz.	13.10	Semillon/ Carmel	3.5 fl. Oz.	2.46
Cream Pink Concord/ Schapiro's	4 fl. Oz.	11.44	Zinfandel, American/ Kedem	4 fl. Oz.	3.12

PESACH RECIPES



A Recipe for a Happy Life

- | | |
|-----------------------|----------------------------------|
| 4 cups ahavas Yisroel | 2 spoons tenderness |
| 2 cups loyalty | 4 quarts emunah |
| 3 cups forgiveness | 1 barrel laughter |
| 1 cup friendship | 3 pints consideration for others |
| 1 large bunch smiles | |
| 5 spoons hope | |

Take ahavas Yisroel and loyalty, mix thoroughly with emunah. Blend with tenderness, kindness, and understanding. Add hope, friendship and abundant laughter. Top freely with smiles and consideration for others. Bake with bright sunshine. Serve daily in generous helpings. IT'S CARBOHYDRATE FREE!

CUCUMBER SALAD

- | | |
|------------------------|--------------------------|
| 6 large cucumbers (30) | 3 tsp. salt |
| 2 onions (15) | ¾ cup lemon juice (11.4) |
| 2 carrots (8.8) | ¾ cup sugar (108) |

Thinly slice cucumbers, and add salt. Mix and marinate for an hour. Drain, squeeze and spill juice. Cut carrots into thin long strips. Cut onions into rounded slices. Add all ingredients. Mix well and chill a couple of hours before serving.

Total carbs: 173 grams, divided by the amount of servings.

PESACH LUKSHEN OR BLINTZES

- | | |
|----------------------------|-------------|
| 6 eggs (3.6) | ¼ cup oil |
| 3 tbsp. potato starch (24) | ½ tsp. salt |
| ½ cup water | |

Beat eggs well. Add all ingredients and mix together. In frying pan, pour batter to form thin omelet. Cool, and cut into thin long strips. Prepare in advance, and freeze in sealed plastic bags.

Total carbs: 27.6 grams, divided by the amount of servings.

MATZAH KNAIDLACH

- | | |
|------------------------|---------------------------------|
| 2 Tbsp. Oil | 1 tsp. Salt |
| 2 eggs (1.2) | 2 Tbsp. Water (or chicken soup) |
| ½ cup matzah meal (54) | |

Beat eggs. Combine all ingredients. Chill for half an hour. Form them into balls, drop into boiling water or chicken soup.

Total carbs: 55.2 grams, divided by the amount of servings (usually 8 knaidlach, each has 6.9g).

MAYONNAISE

- | | |
|---------------------|-------------------------------|
| 1 egg | 1 Tbsp. Sugar / or substitute |
| 2 tbsp. Lemon juice | ¼ cup oil |
| ¼ tsp. Salt | 1 cup oil (later) |

Put all ingredients into blender. Mix well. While blending, remove center piece from cover and pour 1 cup of oil while mixing. Use spatula if needed to scrape residue from blender bottle.

BORSCHT

- | | |
|----------------------------|-------------------------|
| 10 large beets (*7.6) | (48 if sugar is used) |
| 2 ½ quarts water | ½ cup lemon juice (7.6) |
| 1 ½ teasps. Salt | 2 eggs (1.2) |
| 4 tbsp. Sugar / substitute | |

Peel beets. Add water and salt. Bring to boil and cook over low flame for one hour. Add sugar and lemon juice. Taste to correct spices.

Beat the eggs in a bowl. Gradually add the soup, stirring constantly to prevent curdling. Serve warm with boiled potatoes in a soup plate, or refrigerate and serve as a drink.

Total carbs: 64.4 grams (when sugar is used), 8 g. of carb per cup, divided by the amount of servings.

* Since Beets, cooked, boiled, and drained have 7.6 g of carb per 2 beets, and raw beets have 11 g carb per 2 beets, we can conclude that after cooking the borscht contains 3.4 g of carb. Note: one might argue when cooking borscht, beets can be overcooked and therefore releasing more carbs into the soup. If so, the above figures may be underestimated.

MATZAH BREI

- | | |
|--------------|----------------------------|
| 2 eggs (1.2) | 2 tsp. grated onions (0.5) |
| ½ tsp. salt | 2 medium matzohs (94) |

Beat eggs, salt and onions. Hold matzohs under running water and drain. Crumble into eggs. Mix well. Heat oil in frying pan and pour in the mixture. Fry until lightly brown on both sides.

Total carbs: 95.7 grams, divided by the amount of servings.

Pesach Sweeteners

Most low carb sweeteners used all year round do not have a special Kosher L'Pesach certification. Some of them, i.e. Splenda, may contain actual chometz. However, **Sweet-N-Low is available for Pesach with a Bedatz hechsher.**

Check your local supermarket early enough because supplies are limited.

PESACH COOKING AND BAKING INGREDIENTS:

FOOD	AMOUNT	GRAMS OF CARBS	FOOD	AMOUNT	GRAMS OF CARBS
Baking Powder	One tsp.	1.2	Lemon juice	½ cup	7.6
	One tbsp.	3.6	Matzah Meal	One cup	109
Choc. Chips	One cup	105	Potato Flakes	One tbsp.	10
Cocoa	One tbsp.	2.8	Potato Starch	One tbsp.	8
	¼ cup	11.2		½ cup	64
Egg	One large	0.6	Sugar	One tsp.	4
Honey	½ cup	132		¼ cup	48

Are you looking for a
delicious cool drink on Pesach?

Now Available

“Diet” Soda Kosher for Pesach

by Be'er Mayim
at your local grocery store

Pesach Cookies and Cakes

These nutrition facts were taken from the following companies, but we would imagine that the same product from different companies would have similar carb contents.

PRODUCT	COMPANY	SERVING SIZE	CARBO-HYDRATES	EFFECTIVE CARB FACTOR
Chocolate loaf cake	Oberlanders	42 g	23 g	0.55
Sponge cake	Oberlanders	42 g	24 g	0.57
Apricot sandwich cookies	Hagadda	28 g	16 g	0.57
Raspberry sandwich cookies	Hagadda	28 g	15 g	0.54
Rainbow cake	Hagadda	28 g	11 g	0.39
Nut cookies	Hagadda	28 g	11 g	0.39
Nut Macaroons	Hagadda	33 g	16 g	0.48
Chocolate Macaroons	Hagadda	33 g	18 g	0.55
Leaf cookies	Hagadda	33 g	14 g	0.42
Brownie cake	Hagadda	38 g	20 g	0.53