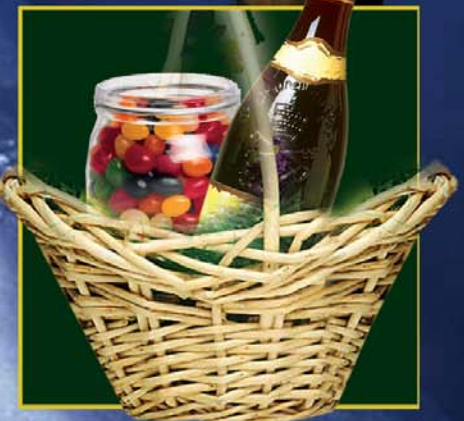


# Going FORWARD



Winter 5763  
2002-2003

**F**riends **W**ith **D**iabetes



*Growing  
Together . . .  
Keeping  
Ahead . . .*



Friends With Diabetes  
ריעים מתוקים

## Inside ...

---

### § 2 DROP US A FRIENDLY LINE

### § 3 FOREWORD

### § 4 FACING FORWARD — WHAT'S NEW AT FWD?

### § 7 YOM TOV GUIDE

Chanukah — Carbs in Homemade Recipes

Tu B'Shevat — Effective Carb Factors

Glycemic Index • Esrog/Citron Compote

Purim — Alcohol and Diabetes • Exercise on Purim

Carbs in wine • Mishloach Manos Nosh

### § 25 IN CONTROL

Frostbits

Rise and Shine • Breakfast Smarts

Low Carb Dieting

Food Scale Guide

Friend to Friend

### § 46 SPECIAL FOR PARENTS

### § 48 HALACHA TIDBITS

### § 49 SHORT AND SWEET

### § 52 SWEET SUCCESS

Friends With Diabetes • Rabbi Hirsch Meisels

31 Herrick Ave. • Spring Valley, NY 10977 • (845) 352-7532 • Fax (845) 573-9276

RabbiMeisels@FriendsWithDiabetes.org

F.W.D. is under the rabbinical supervision of Rabbi M. M. Weismandl shlit"a of Nitra – Monsey.  
Endorsed by many other leading Rabbonim.

The information in this newsletter is meant to be used in conjunction with, and under the guidance of, your health care professional. It is NOT meant to diagnose or treat medical conditions, nor as advice or prescriptions. It is provided for educational purposes only. In the event that you use the information without your doctor's approval, you are prescribing for yourself, which is your constitutional right, but F.W.D. and the authors of this newsletter assume no responsibility. We strongly advise that you inform your doctor of any changes you wish to make.

Please consult your physician for medical questions, and your Rav (Rabbi) for halachic (Jewish law) decisions.

Likewise FWD does not take responsibility on the kashrus of the products advertised.

D R O P U S A F R I E N D L Y L I N E

**Dear Rabbi Meisels;**

Mere words of thank you do not come close to the depth of gratitude that we feel towards you and your wife for the most wonderful and incredible Shabbos possible! The weeks of hard work and preparation that went into this big event produced a Shabbos that will be in the memories of all boys who participated forever. Thank you from the bottom of my heart.

**B.R.**



**To the FWD staff;**

"Thank you" is just two words, but there is a lot of thought behind it.

Your publications are more than great. Keep up your phenomenal work! We are looking ForWarD to your future events and news reports!

**Family U.**



**Dear Rabbi Meisels;**

Although I was in the midst of my Pesach cleaning, I stopped as soon as your beautiful publication arrived. Despite living with diabetes for fifteen years, I had many questions about the upcoming Pesach. Your publication had it all! ... I was amazed to read so many things I had never known before. Your publications, and everything else this wonderful organization does, are literally the fulfillment of a dream for the Yiddishe diabetic community!

Thank you!

**C.H.**



**Dear Rabbi and Mrs. Meisels;**

"I would like to thank you for the wonderful Shabbaton that FWD arranged. I had a most enjoyable time and still keep in touch with many of the new friends I made. We are all holding our breaths in anticipation of your next smashing event!"

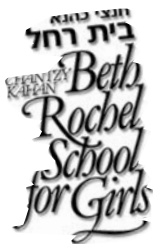
**Y.K.G.**

**Dear Going Forward Editors;**

"Your publications are out of this world! They contain so much useful information, that I save each issue for future reference. Time and again, they have proven to be an unequalled help!"

**D.E.**

בס"ד



שלויט אַ דער רבי מייזלס

Dear Rabbi Meisels, Please allow me to share my enthusiasm for FWD with all your readers.

Although hardly familiar with the problems you are addressing daily, nevertheless common sense tells me that anyone with a condition of that order will feel both isolated and stigmatized. Neither of those feelings are very pleasant...

Enter Rabbi & Reb. Meisels, and suddenly everything changes. You now belong to a growing, active, exclusive club. You are invited to social and educational events in a warm, informal atmosphere. You regularly receive attractive, professionally presented magazine in three languages, packed with articles, letters, halachos, stories, tips, charts, news and events.

It's not long till you ask yourself, "One minute, what isolation? What stigma?"

On the contrary, you have just made meaningful friendships with others coping with situations similar to your own. You compare notes and share experiences, you chat and laugh together. Quite unexpectedly you have endless resources available and all the latest developments at your fingertips.

You now look forward to phone calls, letters, simchas, a rich social life with a unique spiritual, Chassidic flavor.

My own involvement is very limited but, even so, significant. Family Meisels love to arrange a special Shabbos event for their clients who they see as their extended family. On two occasions I had the pleasure to address groups of girls at a Shabbos meal. These were really intelligent, accomplished, heimishe young ladies, keen to soak in every idea one would share with them. It was really stimulating to present Torah insights to these delightful groups, relating, where possible, to their predicament. Their reactions and responses showed maturity and realism and I must say I was impressed. The participants invariably walk away from such weekends as changed people with a far brighter view of the future. They enjoy every activity, the davening, the meals, the Torah thoughts, the practical advice, the games, the singing. To sum up, it's little short of a miraculous revival. All credit goes to the Meisels!

Wishing you every possible Hatzlochoh.

*Rabbi Pinchos Jung*

Rabbi Pinchos Jung

Dean, Bais Rochel High School for Girls, Monsey, NY

145 Saddle River Road • P.O.B. 302 • Monsey, New York 10952 • 845-352-5000

W I N T E R ' 0 2 - ' 0 3 • א ם ד ע ת ג ר ן ן

## בעזהש"ת

A foreword is usually a beginning, an introduction and opening to the pages that follow. But this letter, in a sense, represents an ending. With the publication of this issue, FWD has completed the cycle of the Jewish calendar. Our beautifully printed articles and guidelines on all Jewish yomim tovim and fast days attest to the years of research, review, consultation, and immeasurable effort that were invested toward this project. B'syata dishmaya, we have reached its conclusion. Endings are cause for reflection. I recall my own childhood, when it was common knowledge that sugar was an absolutely forbidden food for diabetics. Potatoes and sugar-free cake (sweetened by any glucose with a name other than sugar, and full of carbohydrate-laden flour) were okay, of course. I was genuinely puzzled by my sky-high A1cs.

A new world unfolded for me when I learned about counting carbohydrates for good glycemic control. I also noticed the glaring need for education and resources tailored to the lifestyle of the Jewish community. One man told me he injected fifteen units of insulin prior to each Shabbos meal, and he then consumed whatever foods he wanted. When I pointed out the dangerous inaccuracies that result from such dosing, he answered despondently, "You're right! But what can I do? Is it possible to figure the carb contents of a Shabbos meal?"

It was then that I decided to do something about the desperate situation. After much research and calculation, our first Shabbos guide was born. Later, a parent asked for a clear and authoritative guide for the intricacies involved in fasting on Yom Kippur. Although originally typed in Yiddish and distributed to a handful of friends, public demand necessitated their translation to English and more widespread distribution.

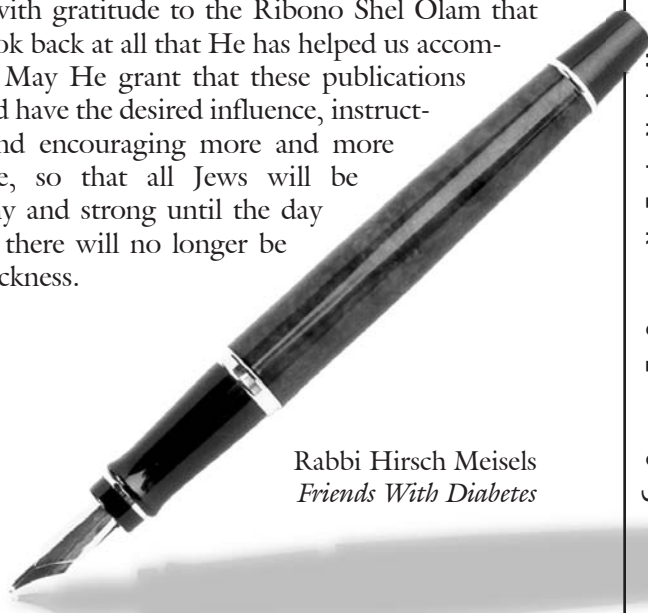
The articles were filling an acute and dire need within

the Jewish diabetic community. They were reaching areas all around the globe, and also aiding rabbanim and doctors in better advising Jewish people with diabetes. Eventually, with the support and guidance of halachic and medical professionals, and seeking to quench a thirsty public, we undertook to clarify all the unique issues related to each event on the Jewish calendar.

The hand-outs changed gradually to stapled booklets and we finally merited releasing a beautiful, easy-to-read publication for Tishrei 5762. The literally hundreds of hours of accumulated work continued to reap benefits. Our Pesach edition was another leap ahead in professionalism, and the invaluable content aided thousands of Jewish families worldwide. The grateful feedback is still pushing us ForWarD.

This guidebook, too, is a compilation of new articles and tidbits, and others that have been extensively edited, revised, and improved.

It is with gratitude to the Ribono Shel Olam that we look back at all that He has helped us accomplish. May He grant that these publications indeed have the desired influence, instructing and encouraging more and more people, so that all Jews will be healthy and strong until the day when there will no longer be any sickness.



Rabbi Hirsch Meisels  
*Friends With Diabetes*

*With thanks to the Ribono Shel Olam for being with us all along, we would like to express our feelings of gratitude to those individuals who helped us in Going ForWarD:*

- *To all the corporate manufacturers who advertised in this issue, and aided us in financing this massive undertaking.*
- *To the medical professionals who gave of their precious time, to preview this entire book, and shared their comments and compliments.*
- *To all those, wealthy and potentially wealthy, who gave donations to FWD.*
- *To all our members who shared their feelings, helpful tips and articles which are interspersed throughout this issue.*
- *Last but not least: a family who has devoted their selves, time, effort, house, and computer to enable this book! (respecting their wish we kept their name confidential)*

*May Hashem grant all of them much Hatzlacha in every way!*

*R.H.M.-FWD*

# AVAILABLE...

Think back: Have you missed a Going ForWarD?

## TISHREI 5762

(Yiddish and English)

- Fasting on Yom Kippur
- How to Deal with your Shabbos Meal
- Teshuvos from Rabbonim about checking BGs on Shabbos
- The Unused Insulin Rule for the Square Wave Bolus
- & much, much more....

## PESACH (Yiddish and English)

- A thorough guide to the Kazaisim Matzah, Four Cups, and many Pesach tips, plus;
  - Exercise
  - Glycemic Load
  - Halacha Tidbits and more.

## TISHREI 5763 (English)

- Carb values for foods commonly eaten on Rosh Hashanah
- Yom Kippur: all your questions answered

## FILES TO DOWNLOAD:

### SUMMER TIPS (Yiddish)

- Exercise during summer
- Avoiding dehydration
- Storing diabetes supplies in summer

### DIABETES & SHABBOS

• We have written a comprehensive 5-page Hebrew article of frequently asked questions about diabetes on Shabbos. This can be presented to a Rav who does not possess medical knowledge, to help him understand the concept of diabetes, so that he should be able to give psokim on this topic. Feel free to contact us for a copy.

### GUIDE FOR TEACHERS

(Yiddish)

• As the Cheder year began, we received an overwhelming number of requests to educate the melamid/teachers. In response we have translated a page from the CWD website to Yiddish.

**ALL OUR BOOKS ARE AVAILABLE TO DOWNLOAD FROM OUR WEBSITE**

A lot has been happening at Friends With Diabetes over the spring & summer! Following are some highlights:

# What's New at F.W.D.?

## ► Tammuz 5762/June 2002:

Word of FWD's phenomenal activities reached as far away as Eretz Yisroel, where Mrs. Lefkowitz, a wonderful diabetic woman, had been working for some time to encourage and bolster Jews affected by diabetes. With FWD's support, direction, and advice, this energetic woman coordinated the first meeting in Eretz Yisroel. Fifteen families participated in the instructive support group and each participant gained tremendously. The informal gathering pulsated with warm friendship, educational tidbits and practical tips. In the works now is a schedule of upcoming meetings, and also the release of Hebrew translations of some of FWD's publications.

## ► Iyar 5762/May 2002:

FWD reached a milestone when its third super-successful boys' Shabbos took place in the spring. For this Shabbos, teenaged boys from all over New York and surrounding states converged in Monsey, NY. The top-notch program included masterful halachic orations alternated with inspirational, encouraging words. There was plenty of mingling with diabetic adults who were wonderful role models for these young boys. A highlight of the Shabbos was the powerful speech delivered by Rabbi Weismandl, in which he stated clearly that diabetes is nothing to

be ashamed of and nothing to hide. He praised all those in attendance who had chosen not to be ashamed of diabetes, but rather to come join this extraordinary gathering which would have a positive influence on the rest of their lives. The participants left on an emotional "high", feeling almost lucky to have diabetes, and looking forward to the next FWD event!

## ► Iyar 5762/April 2002:

A successful local support group for parents of young, newly diagnosed children was held by Friends With Diabetes. A most inspiring and encouraging speech was delivered by Avi Shulman, a renowned speaker/ writer. He pointed out that teaching a child to cope and overcome a challenge, gives him/her the courage to overcome not only this challenge, but also any hurdle in life that might come up. In this perspective, we can view diabetes as a gift from Hashem that can strengthen us, teach us, and make us into better people.

The parents left with pages full of notes to help them remember the useful advice they had learned on dealing with extra activity during summer, storing insulin in the heat, and so much more. Perhaps most important of all, they left with the wonderful feeling that they have supportive Friends With Diabetes.

# www.FriendsWithDiabetes.org

Our new and improved website is now up and running! Check out some of these fabulous features:

- FWD publications & many other useful articles available to download (in PDF format)
- Links to many other wonderful websites
- List of recommended books, plus you can even buy these books from Amazon.com with just one easy click! A margin of the profits of any books sold through our website will go to FWD.
- Links to our email discussion lists
- Link to a site that will accept your credit card for donations to FWD.

W I N T E R ' 0 2 - ' 0 3

# The SECRET is out: FWD Boys' Shabbos a Smashing Success!

*Printed in the Yated*

It's no secret... Keeping a secret is hard! Although living with diabetes means leading a normal, sometimes even above-average life, many children with diabetes long for someone who can share and understand their condition. Knowing that their peers cannot relate to this unique aspect of their lives, youngsters sometimes feel self-conscious and "different", imagining that they are the only ones in the world checking blood sugars and counting carbohydrates.

That's why the Friends With Diabetes boys' Shabbos at the beginning of May was such a grand success. The participants, teenaged boys from all over New York and surrounding states, converged in Monsey, NY, for an exciting and uplifting program of speakers and activities. But perhaps even more important than the invaluable inspiration and education they absorbed, was the priceless feeling of empathy and friendship that served as a bond between them. The day-to-day details of dealing with diabetes were discussed openly and informally throughout the Shabbos. The delicious feeling of being understood warmed the boys.

FWD places a strong emphasis on protecting the privacy and confidentiality of its members. At the same time, while carefully bearing these wishes in mind, it aims to provide opportunity

for interaction and support among the diabetics themselves. In addition to mingling and delighting with diabetic boys their own age, those in attendance gained immensely from meeting adults with diabetes. These positive role models reinforced the belief that diabetes would not deprive anyone of building a beautiful family and succeeding in life.

There was much more to be gained from that Shabbos. One of the major goals of FWD is to educate its members on incorporating good diabetes practices with a Yiddishe lifestyle. This was achieved by speeches, explanation and clear demonstrations. Rabbi Holtzer of Monsey, NY, treated the boys to a masterful halachic oration. Also featured at the Shabbos was renowned educator, Rabbi Yaakov Horowitz.

A highlight of the Shabbos was the powerful speech delivered by Rabbi Weismandl, in which he stated clearly that diabetes is nothing to be ashamed of and nothing to hide. He pointed out that secrecy, which can ch"v lead to

neglect in diabetes control, is actually the only thing a person need be embarrassed of. For some children, keeping diabetes a secret may be harder than dealing with the condition itself! The Rabbi also praised all those in attendance who had chosen not to be ashamed of diabetes, but rather to come join this inspirational gathering that would have a positive influence on the rest of their lives.

This Shabbos is only a part of FWD's ongoing effort to educate, unite, and support youngsters with diabetes, literally from throughout the world! FWD hosts these inspirational and successful Shabbosim on a steady, ongoing basis, for both girls and boys separately. Many of the participants have vouched that a Shabbos with Friends With Diabetes has completely changed their perspective, their entire life. It's good to know, at least, that these children now have one less secret to keep.

FWD is continuing to fill a vital need in the Jewish community. Our future plans iy"h, also include a support group for women dealing with type 2 diabetes. If you are interested in joining, or know someone who may benefit, don't hesitate to pass along the secret!

**"IT'S MATHEMATICALLY IMPOSSIBLE BUT TRUE:  
When you're feeling small, you'll feel bigger  
after giving some of yourself away!"**

# The Meisels Speak Out

*(Printed in the Yated)*

I recently received a wonderful, frum magazine in the mail, entitled "Going ForWarD: Friends with Diabetes." The magazine is written and produced by Rabbi Hirsh Meisels, the dedicated director of "Rayim Mesukim; Friends with Diabetes," a non-profit support group for people with diabetes.

The magazine was professional, eye-catching, and chockfull of informative and timely articles. It dealt with managing one's diet during the Yomim Tovim, special halachos regarding

Pesach, and general 'chizuk' articles for people belonging to this special group. Rabbi Meisels also organizes Shabbatons and get-togethers for children with diabetes, arranging for informative workshops and inspiring guest speakers.

I truly admire Rabbi and Mrs. Meisels, who invest so much time and koach into this special mission, making the world sweeter for diabetics. May the Ribbono Shel Olam give them the strength to continue helping so many.

**Whoops... We slipped!**  
PLEASE NOTE: We invested maximum effort to insure the accuracy of all calculations in our Pesach issue, both halachic and carb-related. However, we apologize for overlooking one important sentence. As stated, one need only eat a k'zayis of matzo in order to wash and bench. However, we neglected to add that one would need to eat a k'beitzah (almost double the amount of a k'zayis) in order to make the bracha of al ntilas yodayim after washing.

MARCH - APRIL '02 • 15

# Take the guesswork out of managing your diabetes



## **IR 1000 Insulin Pump**

- download capable\* • fewer button presses • 0.05 U/hr basal rate
- basal rate increments in 0.05 U/hr • menu driven • tamper resistant keypad feature
- waterproof – with no additional casing • quick occlusion detection \*software coming soon

## **ezSet™**

- ezSet Inserter™
- ez & quick disconnect
- 2 cannula lengths
- 4 tubing lengths
- ezFlexTape™ in 2 colors

## **Education & Support**

- customized education - before, during and after the sale
- 24/7 phone support staffed by healthcare professionals
- Pump Pal program
- complete processing of insurance and supply orders by our Patient Administration Department



## **ezManager™**

Diabetes management in  
the palm of your hand

- counts carbs
- computes insulin dosages
- logs meals, glucose, insulin and activity


To learn more call 1-877-YES-PUMP (937-7867) or visit us on the web at [www.animascorp.com](http://www.animascorp.com)

**Animas** Bringing new life to insulin therapy



# בריאות כהלכה

תכין מטבח - חנוכה  
פירותיך מתוקין - ט"ו בשבט  
איש לרעהו - פורים

 One point about the components of this issue: There is a popular anecdote of a little boy who returned from cheder one day, displaying unusual respect and honor toward his parents. After a week of this exemplary behavior, he returned to his former, less-than-respectful self. When his mother questioned him, he explained, "Mommy, last week was Parshas Yisro (when we read the Ten Commandments, including the command to reverence and honor father and mother). This week is no longer Parshas Yisro, so I can stop making an effort to respect my parents!"

The reader will note that this guide discusses various methods and aids for good blood sugar control, applied under a specific holiday. For example, carb factors are stressed in relation to Tu B'Shevat, and we explore the carb contents of homemade recipes in relation to Chanukah. This format has been kept, as the articles are specifically relevant during those times, but please remember that these techniques are meant to be used all year round! Let's not act like the cute five-year-old in the story above.

RHM

*Chanuka / Tu B'shevat / Purim*  
**YOM TOV GUIDE**





# Chanukah Recipes

## Calculating Carbs for Homemade Recipes

*Now you can bake your favorite cake... and eat it too!*

Many of us are fairly successful and confident with carb counting, as long as we are eating foods that have nutrition information labels. However, when dealing with a homemade recipe, it is easy to get discouraged. At FWD, we have received countless desperate phone calls from diabetics or their parents who were wondering just how many grams of carbs were hiding in one Chanukah potato latke, a slice of cake, or a bowl of vegetable soup.

Yes, people with diabetes CAN eat all these things, and there IS a way to figure out how many carbs they contain. The following article will guide you in calculating the carb contents of any homemade recipe.

### *Essential Tools*

Items you will need in order to calculate the carbohydrate content of any recipe are:

**A good book of carbohydrate values** – Your book should include the carbohydrate contents of basic ingredients like flour and potatoes, in several different increments. An example of such a book is “Food Values of Portions Commonly Used”. Smaller, handier references include “The Protein Power Gram Counter”, and the heimishe book, “Kosher Calories”. (Sorry, this book is already out of print.) You may even benefit from the USDA database on the Web. Remember that it is always advantageous to have access to as many gram counters as possible; you never know when each one will come to use.

**Kitchen gram scale** – This should be able to weigh several pounds at a time. (For a recipe such as apple pie, it would be easier if you could weigh all the apples at once.) See our full article about food scales in this issue.

**Calculator** – You might also want to have paper and a pencil handy.

**Measuring cups and spoons** – Make sure you have a complete set of measuring spoons and measuring cups for both dry and liquid ingredients.

### *The Basic Procedure*

Calculating the carbohydrate content of a recipe involves five simple steps. (It is a good idea to write down all the details of your calculation so that if you alter the recipe, you won't have to refigure the carbohydrate grams for all the ingredients, just for the ones you change.)

1. Using food labels or carbohydrate-counting books, find out the carbohydrate grams in each ingredient.
2. Add the carbohydrate grams to determine the total carbohydrate for the recipe.
3. Divide the recipe into the number of servings you prefer, and write on the recipe “Yields X amount of servings,” for future reference.
4. Divide the total carbohydrate grams in the recipe by the number of servings you decided on. You now know the amount of carbs per serving. For example, if the total carbs from the recipe is 400 grams and it yields 40 servings, you will have 10 grams of carb per serving.  $[400/40=10.]$
5. Write on the recipe the number of carbohydrate grams per serving.

Divide every recipe according to the serving size you will actually use. For example, some recipes, especially liquids, are divided most easily into one-cup servings. In that case, you would divide the total grams of carbohydrate in the recipe by the number of cups it yields. This will tell you how many grams of carbohydrate there are per cup. (See our soup example below.)

The recipes used in the following examples are tried-and-true. You can really follow our step-by-step directions and make them yourself. Bon Appetit!

### *An Example:*

This Chanukah recipe, handed down through the generations, contains no nutritional information. However, we can easily figure its carb content using the steps detailed above.



## Potato Latkes

- 4 potatoes
- 2 eggs
- 1 Tbsp. oil
- pinch salt



### How to figure the amount of carbohydrates in this recipe:

- ❖ Using a gram counter, you will discover that a small potato without skin contains 18.3 grams of carbs (after fiber is subtracted). We therefore calculate  $18.3 \times 4$ , to arrive at 71.5

grams of carb for the potatoes used in this recipe. Eggs are listed at 0.6 grams of carb, which we multiply by 2. The total carb content of the eggs is 1.2 grams of carb.

- ❖ We will add the amount of carbs in the potatoes (71.5 g.) with the amount of carbohydrates in the eggs (1.2g). We now know that the complete recipe contains about 72.7 grams of carb.
- ❖ This recipe makes approximately 7 latkes. We will jot down a number 7 on the recipe so that we remember the number for future reference.

- ❖ Next, we divide 71.5 (the amount of carbs in the recipe) by 7 (the amount of servings this recipe makes). We can conclude that each serving, or one latke, of this recipe contains 10.2 grams of carb.
- ❖ Write down 10.2 on the recipe so that you don't have to recalculate its carb content next Chanukah.

### The Carb Factor for Latkes

(Based on the previous example)

1. Weigh the entire batch of latkes. Your result will be 477 g.
2. Divide the total number of carbs in the recipe [72.7 g] by the weight [477 g] to get the amount of carbohydrate in one gram. Your calculation:  $72.7 / 477 = 0.15$ . The effective carb factor for potato latkes is 0.15.

## Vegetable Soup (submitted by Mrs. T.)

The numbers next to the ingredients represent each item's carb content.

2 lb split peas (cooked with a drop of baking soda) = 316

Blend in food processor:

2 lg onions = 20.4

6 cloves garlic = 5.6

2 big squash (zucchini) = 10.9

4 celery sticks = 5

5 carrots = 25.7

1 lg red pepper = 7.3

1 lg green pepper 7.6

Cook all ingredients in a 12 qt. pot.

amounts of carbs found in some vegetable ingredients (such as celery). Remember that ultimately, any carb amount we calculate is only an educated estimate. The more accurate we can get, the better off our blood sugars will be. Also, even

small

amounts of carbs eventually add up to make large amounts of carbohydrates!

### How to figure the amount of carbohydrates in this recipe:

- ❖ We have already done the first step, which is researching the amount of carbs in each ingredient of the recipe.

Note: You may be wondering why it is important to count even the tiny

- ❖ Adding together all the carb amounts, we discover that the entire recipe contains 398.5 grams of carb.

- ❖ Since we are dealing with a liquid, our aim is to find out how many cups the recipe can fill. (Although soups are often labeled with serving sizes of half a cup,

this is an impractical suggestion for most of us!) We will then divide the total carbs in the recipe by the amount of cups it fills.

The most practical way to decide how many cups of soup this recipe makes is by estimation. After cooking, the pot of soup appears to be more than  $\frac{3}{4}$  full, so we will approximate that it currently fills 10 quarts. Knowing that one quart equals four cups, we figure that the recipe yielded 40 cups of soup.

- ❖ We now divide the total amount of carbs in the recipe (398.5) by 40. Each cup of soup contains about 10 grams of carbohydrates. (Again, you may want to jot this number down on the recipe so that you can refer to it at a later date.)

Hint: For convenience, simply serve the soup with a soup ladle and you will automatically be serving half a cup of soup!

Remember also to mix the soup prior to serving, in order to distribute the vegetables (and the carbs) evenly throughout the broth.

## THE RULE OF FIFTY!

Even if you're a beginner at carb counting and you're not yet up to using the advanced ECF (effective carb factor) method, you can still make good use of this simple and convenient tip: If you want to eat any soft baked good, like bread, rolls, cake, etc., simply weigh your portion. Half of the weight is the amount of carb in your serving. For example, if you would like to eat a doughnut weighing 30 g (1 oz.) you would count 15 g of carb.

Halve the weight, Have your carb!

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



# An Advanced Method

In some cases, there are drawbacks to the technique we just detailed. When figuring carbs based on a preset serving size, we sometimes lack accuracy and flexibility. We will know the carb content of a very specific serving size of the recipe, but what happens when we want to vary that serving size?

There is a more advanced method to use, in which the recipe's carbohydrate factor is calculated. If you know the food's carb factor, you will be able to figure the amount of carbs in any serving size of the food. (For more details on Effective Carb Factors, see the Tu B'Shevat section of this issue.)

1. Calculate the amount of carbohydrates for each of the recipe's ingredients.
2. Add all these numbers together to determine the total amount of

carbs in the recipe.

3. Divide the total number of carbohydrates in the recipe by the weight of the finished food. Now you know this recipe's carb factor, or what percentage of the food is made up of carbohydrates. [This is the general rule you need to know in order to find the carb factor for any item: "Divide the total carb by the total weight". For example: The label on a small bag of potato chips reads, "weight- 21 grams, carbohydrates- 12 grams". So we would divide 12 by 21. The carb factor for the potato chips is .57.]

## *Yom Tov Cake (submitted by Mrs. T.)*

- |               |                     |
|---------------|---------------------|
| 12 Eggs       | 1.5 cup coconut     |
| 1 cup sugar   | 1 tsp baking powder |
| 1/2 cup oil   | 1/4 cup water       |
| 1.5 cup flour | Desired flavor      |

Bake in 9x13 pan at 350° for 1 hour.

### *How to figure the amount of carbohydrate in this recipe, using the carb factor:*

- ❖ Using books and package labels, find the carb contents of all the ingredients:

- 12 Eggs = 7.2
- 1 cup sugar = 192
- 1/2 cup oil = 0
- 1.5 cup flour = 128
- 1.5 cup coconut (4.5 oz, 7g carb/oz.) = 31.5
- 1 tsp baking powder = 1.1
- 1/4 cup water = 0
- 1 tsp Almond extract (opt.) = 3

**NOTE:** This recipe is lower in carbohydrates than most cake recipes, because the coconut

*(which contains less carbs than flour) adds to its bulk and takes the place of additional flour.*

- ❖ Adding all these numbers together, we find that the recipe contains a total of 362.8 g. of carb.
- ❖ The finished cake weighs 1,040 grams. We will divide the recipe's carb contents, 362.8 g., by this weight, and find that the carb factor of the cake is 0.35. We now know

that 35% of the cake's weight is made up of carbohydrates.

- ❖ You can now cut any size slice of this cake, weigh it, and multiply its weight by 0.35 to determine the precise amount of carbs in the slice.

Of course, you may always choose to use the simpler method of figuring carbs according to a preset portion size. In this case, the cake yields about 32 slices, so each slice would contain approximately 11.3 grams of carbohydrate.

*The idea for this article originated from the Insulin Pumpers website. The first time we calculated the carbs in a recipe was when making potato latkes on Chanukah. We still use the same calculations to figure the carbs in potato latkes and potato kugel!*

## **ENRICH YOUR KNOWLEDGE!**

*Before you eat your **CHOCOLATE CHANUKAH GELT**, make sure you've got your carb calculations right. A bag consisting of 2 large & 3 small coins has 6g of carbs!*



# FreeStyle TRACKER™ Diabetes Management System

A Comprehensive Diabetes Management System in  
the Palm of Your Hand

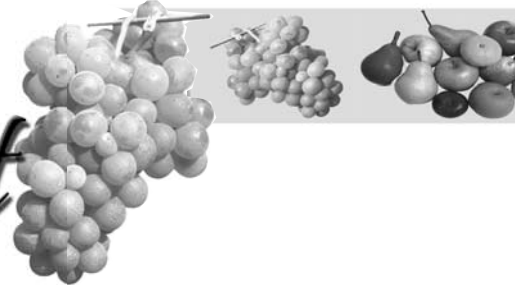


Combination PDA & plug-in Blood Glucose Meter — all in one solution

- Test your glucose virtually painlessly on or off your fingers — uses the world's smallest blood sample size
- Automatically record your glucose results into the system's electronic logbook
- Track, store, and review all of your diabetes-related activities — insulin dosages, food intake, exercise, etc.
- Analyze and improve your diabetes decisions with flexible displays and references (graphs, charts, tables)
- Easily access a 2,500 item Food List with serving sizes and carbohydrate values
- Conveniently enter your personal diabetes management plan and helpful reminders



# Tu B'Shevat



## Effective Carb Factors

Many of us are already familiar with the standard techniques of carb counting, which usually entail researching the carb contents of a food using nutrition labels and carb counting books. The following method, although somewhat more complicated, is much more versatile and precise. It is particularly useful on Tu B'Shevat, when many people eat odd portions of a large variety of fruits, whose carb contents can only be accurately determined by using the Effective Carb Factor method (ECF).

Why make such a big deal about this one day, Tu B'Shevat? In reality, the ECF can and should be used all year round, not just on Tu B'Shevat. Many people have discovered the benefits of this method; they appreciate its accuracy and the fact that they can now partake of a greater variety of foods without suffering unpredictable high blood sugars afterwards. It is in fact almost impossible to know the exact carb count for a piece of cake or kugel without using a scale and the ECF method.

The truth is that it pays to learn about ECF even if it would help us maintain better control just for this one day! Until this technique was employed, many people experienced the uncomfortable and potentially dangerous consequences of high blood sugars on Tu B'Shevat. Others chose not to partake of the fruit, and instead watched in uncomfortable silence as their family members enjoyed the fruit feast. It is our goal at FWD to incorporate a high quality of life with high quality diabetes control.

So what are effective carb factors? Let's start with an introduction.

### What are Carbs?

Many foods, such as fruits, vegetables, breads and cereals, and even nuts, seeds and dairy products, contain carbohydrate—some just a little, others, quite a lot. For any such food the standard gram-counting books will specify a total number of carbohydrate grams contained in a specific portion. For instance, a medium baked potato would contain about 32 grams of total carbohydrate.

The total carbohydrate content of a food is the sum of all types of carbohydrate it contains—the sugars, the

starches, and the fiber. But all carbohydrates are not created equal. The body can quickly absorb the sugars in a food, and it's easy to see that drinking a 12 oz. Cola (containing 35 to 50 grams of plain old sugar) would very quickly raise your blood sugar. But simple sugars aren't the only culprits; starches are nothing more than long chains of sugars linked together. It's the business of the digestive system to quickly break those links and reduce complex carbohydrates (such as starches) into simple sugar molecules for absorption. [You can demonstrate the speed with which digestive enzymes can accomplish this task yourself. Simply take a saltine cracker, bite off a corner, and hold it in your mouth for 15 to 20 seconds to give the enzymes in your saliva (the first ones in the digestive process) a chance to work their magic. Before you know it, the salty cracker begins to taste a little bit sweet. Your digestive process has already begun to turn the wheat starch in the cracker into glucose.] This means that both the sugar content and the starch content of any food can quickly raise blood sugar and insulin levels.

There is a common misconception that people with diabetes have to control the amount of "sugar" they eat. According to what was just explained, however, it is not the sugar, but the total carbohydrate in a food that counts. 18 sugar cubes require the same amount of insulin as a standard (3 ounce) slice of challah; both contain 45 grams of effective carbohydrates. Once in the body, a starch has the same affect as a simple sugar.

### Effective Carbs

The "effective carbs" in a food are all the sugars it contains — both simple and complex — that will cause a rise in blood sugars and a need for insulin. But what about the fiber content? Fiber, like starches, is nothing more than a long chain of sugar molecules hooked together. So fiber is a carbohydrate too, but with a beautiful twist: human digestive enzymes can't break the links between the sugars. Since the human intestine is designed to normally absorb single simple sugars, these large complex fiber molecules pass on unchanged into the colon, where friendly resident bacteria work on them and turn them into fatty acids to nourish the intestinal lining cells. In other words, fiber has no effect on our blood sugar or our insulin control





and as such doesn't count against us. It's not an effective carbohydrate.

You can easily find the ECC of any packaged food that has a nutritional label by taking the total carbohydrate count of the portion listed and subtracting from it the number of grams of fiber contained in that portion. For example: a slice of whole wheat bread will often list 14 grams of total carbohydrate in a single slice, but that slice will also contain 2 grams of fiber. Therefore, the ECC would be 14 grams - 2grams = 12 grams of effective or available carbohydrate. In your gram counting scheme, you'd only account for the 12 usable grams in your meal.

*(Adapted from the book "Protein Power Lifeplan gram Counter" by Dr. Michael R. Eades M.D.)*

Many nutritionists teach their patients to subtract fiber only if a food contains at least 5 grams or more. However, we have deducted even smaller amounts of fiber for the sake of greater accuracy. Also, it is always preferable to err by dosing too little insulin, as opposed to taking too much insulin.

## Effective Carb Factors

The CARB FACTOR is the percentage of carbohydrates in a particular food. For instance, the carb factor for apples is 0.13. This tells you that 13% of an apple's weight is carbohydrate. Effective carb factors means that we only count the carbohydrate that will cause a rise in blood sugars, so fiber is not included in the total carbohydrate factor.



To determine the number of effective carbohydrates contained in a serving of fruit, simply weigh the fruit and multiply this number by its effective carb factor. Let us go through a step-by-step calculation of a few different fruits.

- Faigy would like to start with 10 grapes. According to her digital gram scale, the grapes weigh 37 grams. The effective carb factor for grapes is 0.16. She now multiplies its weight (37 grams) by the ECF (0.16) to get the total carbohydrates:  $37 \times 0.16 = 5.9$ . Faigy now knows she will be ingesting 5.9 grams of effective carbohydrate along with the grapes.
- Now she wants to add pieces of apple and pear. Since these two fruits share an ECF of 0.13, Faigy weighs them all at once. Her scale notifies her that the slices weigh 94 grams. Faigy multiplies the weight of the fruits (94 grams) by 0.13, as follows:  $94 \times 0.13 = 12.2$  grams of carbohydrate.
- Now she would like to add four pieces of tangerine. They weigh a total of 21 grams. The ECF for tangerines is 0.09. Faigy multiplies the weight of the tangerine (21 grams) by 0.09, its effective carb factor:  $21 \times 0.09 = 1.9$  grams of carbohydrate.

Finally, Faigy adds up all the carbohydrates: 5.9 from the grapes, 12.2 from the apple and pear, and 1.9 from the tangerine = 20 grams of effective carbohydrate.

Faigy's insulin-to-carb ratio (amount of insulin used to cover a certain amount of carbs) is 1 unit of insulin for every 10 grams of carbohydrates. (Remember that this ratio differs for each individual.) She will therefore administer 2 units of insulin to cover the 20 grams of carb.

## Do Keep In Mind...

Those individuals who are on a rigid insulin regimen would need to calculate how much fruit would fit into their individual plan. But the ECF method would be equally beneficial for them.

Fruits that have the same carb factor, such as apples and pears (which are both 13% carb- as noted in the above example) or oranges, peaches, tanger-

ines, and honeydew (which all have an ECF of 0.09) can be weighed together. You can also combine fruits that have almost the same ECF, and average their effective carb contents. For example, kiwi (11) nectarine (10) and plum (12) would have an average ECF of 0.11.

When calculating fruits with carb factors less than 0.10, don't forget the zero after the decimal. For example, incorrectly figuring olives with an ECF of 0.3 instead of 0.03 would make a big difference with the end total of carbs.

*Please note:* The carb factor we are discussing is not to be confused with the percent daily values found on all nutrition labels. However, in some cases, the nutrition label on a food item can be helpful towards determining the item's carb factor. This is when the nutrition facts are not based on serving size, but on 100-gram or 100-ml portions (as most Israeli foods are labeled). For example, if a food label states that a 100-gram portion of the product contains 55 grams of carbohydrates, then 0.55 is the carb factor for that food. Another example: An Israeli brand of soda states that it contains 12 grams of carbohydrates per 100 ml. However, the can contains 360 ml of soda. So, one would have to multiply 360 by the carb factor of 0.12. There are 43.2 grams of carb in a can of this soda.

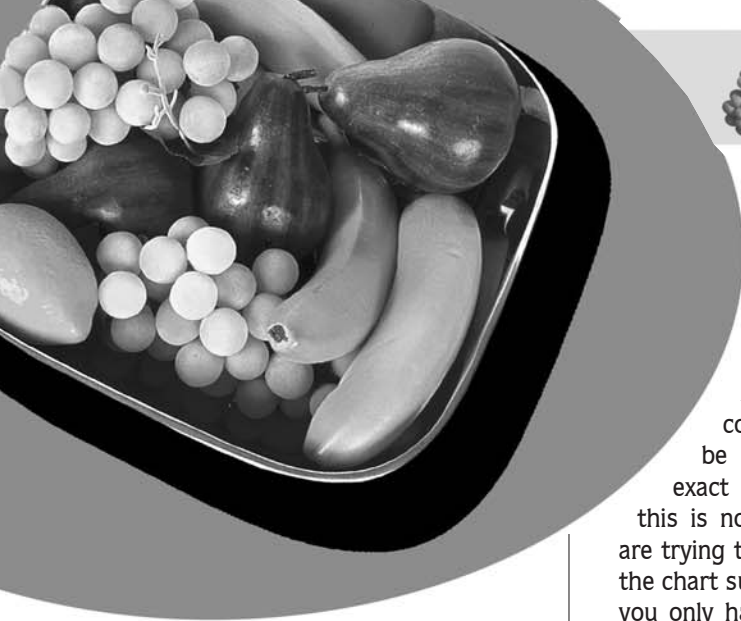
Just be careful with the decimal points when converting whole numbers to percentages!

## Carb Factor Lists:

FWD has a database on file containing the ECFs of 6,000 foods.

A complete list of over 300 carb factors for various foods is available in any of these books from John Walsh: "Pumping Insulin", "Stop the Rollercoaster", and "The Pocket Pancreas". However, keep in mind that these books do not list the effective carb factors of the food items. (We spent a considerable amount of time and labor subtracting fiber from these values and converting them to 'Effective' Carb Factors.)

*See our web site for more resources and valuable aids for carb factors.*



## Tu B'Shevat Tips

### Preparation for the fruit feast:

- One of the most important and obvious factors for succeeding in good glycemic control, especially when covering something like fruit, is starting out with a good blood sugar number. If your blood sugar is elevated before the feast, treat accordingly and/or go out for a brisk walk. An energetic stroll, especially in cold weather, goes a long way toward lowering blood sugars and is excellent when implemented in addition to a small amount of insulin. [THIS IS IMPORTANT FOR ALL TYPES OF DIABETICS].
- When eating large amounts of fruit which might spike your after meal blood glucose, it would be wise to allow some time before eating for the insulin to start working. If using Regular, one should wait at least (but not too much more than) 30 minutes. Wait a short while after administering Humalog or Novolog, making sure not to exceed 15 minutes for Humalog and 5-10 minutes for Novolog.
- Since short acting insulin should preferably be administered *before* the meal, how can one know how much insulin to take before s/he even weighed the fruits and calculated their carb amounts? We would advise as follows: At the beginning of the feast, approximate how many carbohydrates you will be consuming and cover with insulin accordingly. While eating, keep track of the precise amounts of carbs you consume. At the end of the feast, if you have eaten more carbs than were

covered for, supplement with additional insulin. Although the ideal way of covering for the fruits would be to weigh and figure the exact carb amounts in advance, this is not always practical and we are trying to be realistic. (You can use the chart supplied in this issue so that you only have to fill in the weight of your fruit portion while eating and you can do the carb calculations after the feast.)

- When Tu B'Shevat falls on Shabbos, everything can be weighed & prepared before Shabbos. (It will occur in the years 5763, '64, '67, and '70- or 2003, '04, '07, and '10 on the English calendar). Or, you can use an accurate, non-digital scale on Shabbos.

### Balancing the fruits with other foods:

- If the fruits are eaten at mealtime, use them to replace some or all of the other carbs that would have normally been eaten, to help avoid an overload of carbohydrates. [Although a Type 1 diabetic on flexible insulin therapy (multiple daily injections or an insulin pump) would have the option to give more insulin and eat more, overloading on carbs is never ideal.] However, if they are eaten as a separate meal, you will need to cover for them with additional insulin.
- It is advisable to eat the protein of the meal before the fruits. Fats and protein will slow the digestion and the absorption of the carbs in the fruits.
- It would also be wise to eat the fatty fruits first. Example: avocados, olives, & nuts. (Remember that according to halacha also, the olives must be eaten first, because they are closest to the word "eret" in the verse describing the fruits of Eretz Yisroel.)

### Smart fruit choices:

- In general, try to stick to slower acting fruits. (See the GI list below.) If you do choose the faster acting fruits, make sure to eat them together with some slower fruits. (Together, the various choices will cause a "medium speed" BG rise.) Also eat the slower ones first so your digestive system will attack those first, and the fast acting fruits will be delayed.
- Remember that the riper the fruit, the faster it will raise blood glucose (higher GI).
- Dried fruits coated with sugar should be avoided by all means (except when treating a low blood sugar).
- Avoid canned fruit in heavy syrup. Fruit canned in its own juice or with no sugar added can be used, but pay attention to the nutrition facts on the label.
- Keep in mind that the fruits which have higher carb factors are very condensed with sugars. Eat less of these. On the other hand, the fruits which have lower carb factors are better choices.
- Fruit peels are healthy, containing many vitamins and nutrients. They also have fiber, which helps slow the glucose rise.
- Remember the general rule: Any food which is more processed, cooked, or cut into smaller pieces will contain a greater amount of carbs than its unprocessed or raw counterpart. This is because cooking, shredding, or grounding a food reduces its volume, so that the carbohydrates become more condensed. Also, since they are already somewhat processed, the body has an easier time breaking them down and they raise blood sugars faster. (They have a higher GI.)

The **Glycemic Index** measures how fast the carbohydrate of a particular food is converted to glucose and enters the bloodstream. The lower the number on



# Instructions for using the Tu B'Shevat Chart:

1) Find the fruit you want to eat and weigh your portion size.


2) Record this weight in the blank box next to the fruit. (This column is titled "weight".) For practical reasons, we recommend doing just these two steps as you eat your meal. Soon after the feast is over, you can go on doing the steps that follow to figure precisely how much insulin to administer for the fruits you just ate.


3) Using a calculator (or your good old brain!), multiply the weight of your serving by the fruit's ECF, and write the results in the column with the "equal sign". For even greater convenience, we supplied the last column, entitled "scale". Here, you will find the food code numbers for any of the fruits which can be found in the Soehnle diet computer scale database. (If you have manually entered additional fruits into the database, you can record their code numbers in this last column. Or, if you followed our instructions for entering all possible ECFs into the scale, from 0.1 to 0.99, then you don't have to record the food codes at all! See our full article in this issue.) If the fruit is in the scale's database, there is no need to do any math. Simply weigh the fruit, press the appropriate food code number, and record the amount of carbs shown in the "equals sign" column in the chart.

4) For the final total of the amount of carbohydrates consumed in your meal, add up all numbers you entered in the column with the "equals sign".

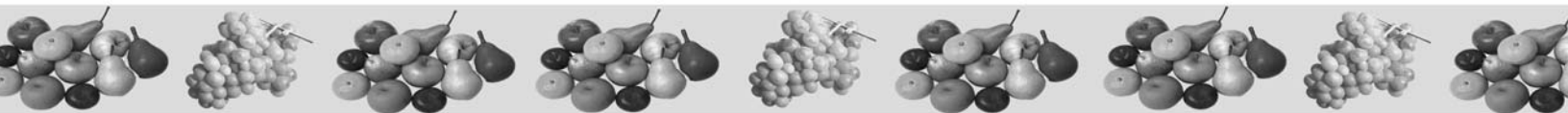
**B**efore I was familiar with effective carb factors, I would sometimes become exasperated with the vague carb amounts offered in standard carb counting books. For example, according to the gram counter book I was using, a 4" by 8" wedge of watermelon contains 35 g. of carbs. My question always was, what about the third dimension of my slice? Can that be ANY size I choose, and the wedge will still contain 35 grams of carbohydrates?

Another book stated that one serving size of watermelon is 1/6 of a melon. Exactly what size, I still want to know, is a watermelon supposed to be? As far as I've always noted, fruits do not grow with standard measurements. ~I.P



FRUIT	WT.	ECF	=	SCALE	FRUIT	WT.	ECF	=	SCALE
<b>FRUITS FROM THE SEVEN SPECIES</b> העץ, על העץ					<b>Tangerine</b>				
		.09		141	<b>OTHER FRUITS</b> האדמה, בורא נפשות				
Dates dried & pitted		.66		128	Banana		.21		125
Figs fresh (תאנה)		.16		130	Cantaloupe		.08		
~ Dried		.56			Honeydew		.09		158
Grapes (גפן)		.16		156	Papaya		.08		145
Pomegranate (רמון)		.17			Pineapple fresh		.11		117
Olives (זית שמן)		.03		144	Raspberries fresh		.05		134
Raisins		.76		152	Strawberries fresh		.05		129
<b>OTHER FRUITS</b> העץ, בורא נפשות					Watermelon		.07		155
Apple fresh		.13		119	<b>NUTS</b> העץ, האדמה, בורא נפשות				
~ Dried		.57			Almonds dry roasted		.11		110
Apricot fresh		.09		122	Oil roasted		.05		
~ Dried		.53			Brazil nuts		.08		112
Avocado California		.02		124	Cashews dry		.30		105
Florida		.04			~ Oil		.25		
Blackberries		.08		127	Coconut		.06		109
Blueberries		.11		133	Filberts dry		.11		
Carob		.45			~ Oil		.13		
Cherries fresh		.14		153	Macadamia dry		.05		
Grapefruit		.07		131	~ Oil		.04		
Kiwifruit		.11		138	Peanuts dry		.14		106
Mango		.15		142	~ Oil		.10		
Nectarine		.10			Pecans dry		.13		
Orange		.09		121	~ Oil		.10		
Peach fresh		.09		147	Pistachios dry		.17		113
Pear fresh		.13		126	Sunflower seeds dry		.13		115
Persimmon Japanese		.15			~ Oil		.08		
~ Native		.34			Walnuts black dried		.07		116
Plum fresh		.12		149	~ English/Persian dried		.14		
Prickly Pear - Cactus		.06			 Compiled by Rabbi Meisels © Friends With Diabetes				
Prunes dried		.56							
~ Dried cooked		.22							
Star Fruit		.05							





# The "Glycemic Index" list for fruits

this scale, the slower the action of the food. The numbers are percentages with respect to a reference food. They are given here with respect to glucose. In other words, on the scale glucose equals 100. (Another acceptable reference used in the United States is white bread.) Factors such as variety, cooking, and processing may affect a food's GI. In addition, the glucose response to a particular food may be somewhat individual. So it is probably a good idea to carefully watch your own blood glucose level after eating foods you have questions about and determine if they have high or low GI for you.

The glycemic index is of particular benefit to those with type 2 diabetes who are not taking insulin. They are still producing enough insulin to cover foods that will not cause an alarming spike in blood glucose. By making use of the GI, they can choose foods that will cause a slower rise in blood sugars and will be adequately covered by their natural insulin.

Even those with Type 1 diabetes can refer to the GI to make smarter food choices. Everyone will have a better insulin response to foods that cause a slower rise in blood sugars and allow time for the injected insulin to take affect. If you do eat a fast acting food, some medical authorities believe that it will have to be covered with some additional insulin. Based on our experience, a high-GI food would not require more insulin, but the insulin would have to be administered earlier, so that it would be available immediately to deal with the fast glucose rise. (Administering a greater amount of insulin would also minimize the blood sugar spike, but one would probably experience a low blood sugar later on.)

The GI value shows only how rapidly a particular carbohydrate turns into sugar. It doesn't tell you how much of that carbohydrate is in a serving of a

particular food.

There is a new extension to the glycemic index called the **Glycemic Load**. This is the glycemic index of a food times its carbohydrate content in grams. The GL is a somewhat more realistic and applicable value, and it makes certain foods appear much better or worse than was previously thought by looking just at the GI. *For a more in-depth article on the glycemic load, see our Pesach issue.*

The following charts list the glycemic index and glycemic load for some common fruits, in ascending order from slower to fastest acting. You may be amazed if you compare and contrast.

Note in particular the high GI and low GL of watermelon. Although watermelon is almost as fast acting as dried dates, it has one of the lowest carb factors of all fruit choices. This is why it has a much lower GL than the dried dates, because the GL takes into account the *amount* of carbs and not only their speed.

An ounce of watermelon with an Effective Carb Factor of .07 has a total of 2.0 grams of carbs. An ounce of raisins with a carb factor of .75 has a total of 21.4 grams of carbs. So even though both watermelon and raisins are very fast acting fruits, the watermelon is the choice that will give you a larger portion size for fewer carbs.

It is also interesting that cherries, despite their sweetness, are the slowest acting of all the fruits.

All fresh dates were originally rated to have a much higher GI than the ones listed (even higher than glucose!) but the lower glycemic index seems to be more accurate. This is probably because the dates used in original studies were steeped in glucose, or perhaps the fruit amounts were measured inaccurately.

**Note:** *The GI for fruits has varied from one study to another, sometimes by as many as 30 points! We used only the mean data.*

*The GI for Bananas can vary from 30 to 52, depending on the fruit's ripeness. (Obviously, the GL will reflect the changes.)*



## Sugar Free (Low Carb) Esrog Compote

3 Esrogim (Citron) = 32 g carb

1 Quince Apple = 12 g carb

1 Cup Splenda = 24 g carb

Plenty of water

This recipe yields 10 half cup servings, with 6.8 g of carb per serving.

The Diniver Rav in his sefer Bnei Yisoscher quotes that on Tu B'Shevat it is appropriate to pray for a nice Esrog for the upcoming Yom Tov Succos. Therefore, it is a custom to eat a dessert made from Esrog. But most recipes have almost more sugar than Esrog, so here is a sugar-free version of one of the many recipes.

### Directions:

R Keep the Esrogim refrigerated and soaked in water from Succos until cooking, to preserve freshness.

R Slice the Esrogim into thin slices, and remove all seeds.

R Cook the Esrog with plenty of water. After water boils, spill and change the water and cook it again. Repeat this procedure several times (about 6 times) to reduce its bitterness.

R Cut the quince apple into small pieces; now cook it together with the Esrogim with fresh water (enough to cover all fruits in the pot).

R Add splenda (sugar substitute) after cooking to reach the desirable taste.



# Winter

## Glycemic Index

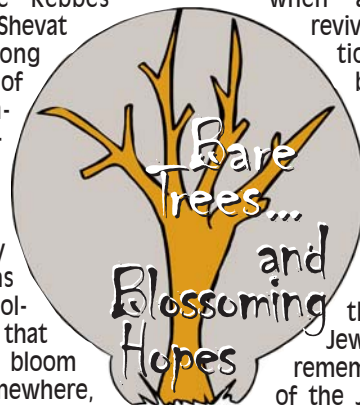
Fruit	
Cherries, raw	22
Grapefruit, raw	25
Apple, dried	29
Prunes, pitted	29
Apricots, dried	31
Apples, raw	38
Peach, canned in natural juice	38
Pears, raw	38
Plums, raw	39
Strawberries fresh, raw	40
Oranges, raw	42
Peaches, raw	42
Pear halves canned in natural juice	43
Dates, dried	43
Grapes, raw	46
Mango, raw	51
Banana, raw mean of 10 studies	52
Peach, canned in light syrup	52
Kiwi fruit, raw	53
Apricots, raw	57
Papaya/Paw Paw, raw	59
Pineapple, raw	59
Figs dried, tenderized	61
Apricots canned in light syrup	64
Raisins	64
Cantaloupe/Rockmelons, raw	65
Breadfruit, raw	68
Watermelon, raw	72

## Glycemic Load

Fruit	
Strawberries, fresh, raw	1
Cherries, raw	3
Grapefruit, raw	3
Peach, canned in natural juice	4
Pears, raw	4
Cantaloupe/Rockmelon, raw	4
Watermelon, raw	4
Apricots, raw	5
Oranges, raw	5
Peaches, raw	5
Pear halves canned in natural juice	5
Plums, raw	5
Apples, raw	6
Kiwi fruit, raw	6
Pineapple, raw	7
Grapes, raw	8
Mango, raw	8
Apricots, dried	9
Peach canned in light syrup	9
Apple, dried	10
Papaya/Paw Paw, raw	10
Prunes, pitted	10
Apricots canned in light syrup	12
Banana, raw mean of 10 studies	12
Figs dried, tenderized	16
Dates, dried	17
Breadfruit, raw	18
Raisins	28

It's the time of year when ragged brown branches appear listless, lifeless and limp. The vibrant green of summer is slowly replaced by a gray, angry sky and damp, shivering trees. Yet, Chassidische Rebbes teach us, as Tu B'Shevat approaches along with the peak of the winter season, life is beginning to stir within those somber branches. It is during these icy winter months that the tree is collecting the sap that will enable it to bloom once again. Somewhere, concealed from human vision, the dead-looking tree is beginning to undergo a physical revival which will ensure that it will once again explode with vitality, come spring. So too is a person, "like the tree of the field". There are times

when a situation seems bleak and hopeless as the dead of winter. But just look at those trees! During the very harshest times of tribulation, when suffering is most severe, that is precisely when a glimmer of revival and redemption is growing beneath the surface. In these days of so much trial and distress, on both personal and national levels throughout the Jewish world, let us remember: The nature of the Jewish people is like that of the tree, which in the days of winter receives new life! May we merit to thrive even during the winter and to speedily encounter the "Spring" of our nation, בביאת גואל צדק בא, א



## TYPE TWOS CAN DO IT 2!

A diabetic who controls glycemic action with insulin may have more leeway in choosing the amounts and kinds of fruit s/he wants to eat, since insulin allows for faster coverage of glucose than oral medications or just exercise. Those with Type 2 diabetes (non-insulin dependent) who do not take insulin should definitely stick to the carb limits set by their medical team, (using the carb factors to attain more exact portion control, and not just approximating), and stick to the slower acting fruits (see the Glycemic Index For Fruits). A quick walk before or after the feast would be very beneficial.

## You mean... I can really Eat all that Fruit?!

Yes, we do mean that.

When people hear diabetes, they still think you need to eliminate sugar and sweets and be on a strict "diabetic diet." Today that's simply not true! The American Diabetes Association recommends that you eat sugar and sweets in moderation and to work them into your food choices based on your individual needs and desires. That's because all carbohydrate, whether from bread, an apple, or pastry, raises blood glucose to about the same level in about the same amount of time.

**It is okay to have sugar and sweets - moderation is the key!**



To find the most complete lists of GI and GL visit Rick Menodosa's website at [www.mendosa.com/gilists.zip](http://www.mendosa.com/gilists.zip)



# Purim

## MISHLOACH MANOS

Sefer Nishmas Avraham states as follows [p. 339]:

*"I wonder whether one has fulfilled the mitzvah of sending gifts of food to a friend, if the friend is medically forbidden to eat that food — for example, a box of chocolates to a diabetic (when both the sender and the recipient are aware of the diagnosis). The Pischei Teshuvah writes that the main reason for the mitzvah is to give joy. It would appear that since the diabetic will have no joy in receiving the gift and, on the contrary, will possibly even be embittered by it, the sender will not have fulfilled the mitzvah."*

We would like to comment upon the above statement:

We strongly enforce that the most forbidden word in the language of a diabetic is the word "forbidden". Every food that Hashem created can be incorporated in a diabetic's meal plan, with proper education and foresight.

The specific food item used in the above ruling, chocolate, is not among the "bad foods" on a diabetic's list. It is usually combined with fat, which slows down absorption, and it is low on the Glycemic Index.

As has been noted, even some really fast-acting sweets, such as candies, which are not normally recommended for a diabetic, could be vital in the case of hypoglycemia. So, why shouldn't one fulfill the mitzvah of Mishloach Manos by giving a diabetic a gift that can save his life?

Based on these points, I feel more comfortable with the psak of Rav Zilberstien shlita, which affirms that one who gives sweet foods to a diabetic has fulfilled the mitzvah.

## EXERCISE ON PURIM

Many people do a lot of walking on Purim, giving Mishloach Manos or collecting money. Remember that exercise has a blood sugar lowering effect.

For long periods of exercise, such as a few hours of walking, a slow acting form of carbohydrate may be appropriate. Some people may find that half a blueberry muffin or a chocolate chip cookie every hour kept their blood sugar levels stable.

Dr. Bernstein recommends eating a slice of bread before leaving home. The bread will start to raise blood sugars in about 10 minutes, and will continue to do so for about 3 hours. The cookies and blueberry muffins contain mixtures of simple and complex sugars, so they start working rapidly but also continue to raise blood sugar for about 3 hours. He discourages the use of fruits, which can raise blood sugar less predictably.

Whatever your plans for covering exercise with carbohydrate, always carry glucose tablets (or Winkies) with you!

(Adapted from "Diabetes Solution" by Dr. R. Bernstein)



## For Those Who Go Around Collecting צדקה on Purim

- ⌘ Make sure to wear your medical ID necklace or bracelet.
- ⌘ Have enough Winkies in your pocket. Don't rely on the fact that there will be plenty of candy around.
- ⌘ Keep your meter, strips, and lancets in your pocket.
- ⌘ DON'T DRINK! If someone offers you a drink, accept the cup graciously, but DO NOT drink. This way, your host will be happy ... and you will be safe.
- ⌘ Don't smoke. Once you get used to it, it's very hard to stop.
- ⌘ If you dance, make sure to eat enough carbs to avoid a low.
- ⌘ Last, but not least: We hope you make a lot of money ... and keep FWD in mind!



# Drinking on Purim

## Diabetes and Alcohol: A Dangerous Combination

### THE HALACHIC VIEWPOINT

Before we begin describing exactly what happens when a person with diabetes drinks alcohol, let's explore the simple question: How much do we really have to drink to fulfill the mitzvah on Purim?

The Gemarah says that one is required to drink, "עד ולא ידע" — until he can no longer differentiate between 'cursed is Haman' and 'blessed is Mordechai'. Many people are under the mistaken assumption that the only way to fulfill this obligation is by imbibing in alcohol without limit. But tzadikim explain that it is quite to the contrary: If one reaches the state of "ad d'lo yodah" (meaning, if he becomes completely drunk), then he can no longer fulfill the mitzvah at all. As David Hamelech describes (Psalms: 104, 15), "V'yayin yisamach levav enosh" - Wine makes happy the heart of man. On Purim, we have a mitzvah to drink, feast, and be happy. However, the mitzvah can only be fulfilled properly as long as we remember the essence of Purim: that Haman is cursed and Mordechai is blessed. Once one has passed this state, no amount of drinking will be considered a mitzvah. Just as a person who is

drunk cannot pray, he cannot do the mitzvah of mishteh v'simcha, eating and drinking on Purim.

In a nutshell: The gemarah's reference to "ad d'lo yodah"- "until he can no longer differentiate"- is the MAXIMUM, and not the minimum requirement.

(Some seforim derive this from the word "ad" in the above phrase. They explain that the obligation is to drink 'until' one can no longer distinguish between the cursed and the blessed, but the actual condition must not be reached.)

It is also interesting to note that Rav Avigdor, one of the authors of Tosefus, states that the mitzvah on Purim is to observe someone else who is drunk, as this causes happiness and laughter. However, the individual who is drinking beyond reason is not fulfilling the mitzvah at all.

The smallest amount one may drink to fulfill the mitzvah is one revios of an alcoholic beverage, equivalent to approximately 3 to 5 ounces.

If you still want to fulfill the obligation of "ad d'lo yodah" in the literal sense, you can take a nap on Purim, as many tzadikim do [according to the p'sak of the Remah in 695:2].



### THE MEDICAL VIEWPOINT

Medical science remains inconclusive as to whether there are any benefits to be gained from drinking wine. (Seems that they get so drunk... they're starting to get confused!) However, even if one will argue that there are some advantages to moderate consumption of alcohol, there is no question that complete intoxication is foolish and dangerous.

## DON'T GO LOW!

*Follow these guidelines to avoid low blood sugar levels, if you do want to have some wine:*

- Never drink on an empty stomach. Plan to have your drink with a meal or after eating a snack. You need glucose from food, since your liver will stop producing it once you drink alcohol.
- Make sure you don't exceed a maximum of two drinks. One drink is defined as: 12 ounces of regular beer, 5 ounces of wine, or 1.5 ounces of 80-proof distilled spirits.
- Carefully check the alcohol level of what you are drinking. If you drink beer, don't forget to count 12 grams of carbohydrates per cup.
- Make sure at least one friend or trusted companion knows that you are a diabetic and is aware of what should be done in case of a hypoglycemic attack. This is extremely important, because hypoglycemia can resemble intoxication, and others may assume you are drunk. Your friend should know how to check your blood sugar and how to treat a low, bearing in mind that using Glucagon is not an option.
- A low blood sugar is the main concern. Check your blood sugar before you go to sleep and eat a bedtime snack (solid protein and some carbohydrate) in the evening after drinking. Do this even if the bedtime blood sugar level is high, to avoid a low blood sugar reaction while you sleep.
- The next morning, get up at the usual time, test your blood sugar, take insulin, eat breakfast, and then go back to bed if you feel ill. "Sleeping-in" can result in a bad reaction.
- NEVER drink and drive. Ask a friend who has not been drinking to drive, or call someone to come and get you.

### *Ta'anis Esther (Fast of Esther):*

*We would like to emphasize: Although we have published extensive guidelines concerning fasting on Yom Kippur, they are by no means meant to be used on other fast days!*

*Our Rabbinical advisors do not recommend that diabetics fast more than the required minimum.*



## How Your Body Metabolizes Alcohol

Alcohol moves very quickly into the blood without being broken down (metabolized) in your stomach. Your liver does most of the job of breaking down the alcohol once it's in your body, but it needs time. If you weigh 150 pounds, it will take about two hours to metabolize a drink.

If you drink alcohol faster than your liver can metabolize it, the excess alcohol moves through your bloodstream to other parts of your body. Brain cells are easy targets. [When someone acts up on Purim, this is why.]

## Risk of Excessively Low Blood Sugar

If you take insulin shots or oral diabetes pills, you risk low blood sugar when you drink alcohol. It all has to do with your liver.

Insulin and oral medications work continuously to clear glucose from your blood. Remember that the primary reason we take basal insulin or long acting insulin is because of the constant glucose output from the liver. If the liver will be busy cleaning out alcohol and it will not put out its usual amount of glucose, then there will be extra basal insulin circulating in the blood, which will cause a low blood sugar. Unless you eat, or your liver adds glucose to your blood, you could be heading for a low blood sugar level. Therefore, hypoglycemia becomes a risk for diabetics, particularly if you drink on an empty stomach or shortly after taking insulin or glucose-lowering oral medications.

There is another danger involved as well. When blood sugar levels start to drop, the liver normally

attempts to correct the situation by converting stored carbohydrate into glucose.

This glucose is sent out into the blood and helps avoid or slow down a low blood sugar reaction.

But when alcohol enters your system, the process is disturbed. Alcohol is a toxin, which means that your body treats it as if it were a poison, and the liver tries to clear it from the blood as quickly as possible. In fact, the liver won't put out glucose again until it has taken care of the alcohol. If your blood glucose level begins to fall and you are under the influence of alcohol, you can quickly wind up with very low blood sugar. This is why drinking as little as two ounces of alcohol (about 2 drinks) on an empty stomach can lead to extremely low blood sugar. And because it takes 2 hours for just one ounce of alcohol to metabolize and leave your system, the risk continues long after you've emptied your glass.

Since alcohol affects your body's ability to raise a low blood sugar level, you may need to treat a low BG more than once, if you have been drinking.

## Additional Dangers of Drinking on Purim

When you combine alcohol and exercise (which is usually the case on Purim), you increase the risk of extreme low blood sugars. This is because exercise naturally lowers blood sugar levels. Hours after you do exercise, your body is busy replacing the energy your muscles used up by clearing glucose from the blood and adding it to the muscles' store. For a person who has diabetes, combining alcohol AND exercise is clearly a deadly partnership.

Also, some of the signs of a low blood sugar reaction (such as confu-

sion and slurred speech) are similar to the effects of drinking too much. If someone with diabetes were to pass out CH"V due to low blood sugar, the alcohol in his breath might confuse spectators into believing that he was simply drunk. His sugars would continue to drop to hazardous levels.

Let's use some common sense: Rabbonim have ruled that we are allowed to check blood sugars on Shabbos, even though there are some Rabbinical prohibitions

*Why is it particularly risky for a person with diabetes to imbibe too much wine? Let's explore the subject a bit more deeply...*

involved, all because of the potential danger of a low blood glucose. If this is enough of a consideration to warrant the violation of Shabbos, how can we put ourselves into such a dangerous risk by getting drunk?

**WARNING: Glucagon shots are not affective in the case of severe low blood glucose caused by drinking.** This is because Glucagon works by prompting the liver to release more glucose into the blood, but alcohol stops this process. One would have to treat this type of reaction with a carbohydrate, such as oral glucose tablets (Winkies) or gels. If the patient loses consciousness, glucose would have to be injected into the bloodstream by a health care professional.

Note also that heavy drinking over time can permanently harm the liver; to the point where it can no longer make adequate amounts of glucose. When this happens, diabetes becomes much more dangerous and harder to control.

The instruction insert for Glucophage, a Type 2 medication, states as follows:

"Do not drink a lot of alcoholic drinks while taking Glucophage or Glucophage XR. This means you

should not binge drink for short periods, and you should not drink a lot of alcohol on a regular basis. Alcohol can increase the chance of getting lactic acidosis [ch"v]."

Many other medications carry simi-

lar warnings, so a Type 2 diabetic on any medication should also exercise extreme caution as far as drinking is concerned.

[Low blood sugar when drinking is less of a risk for those with type 2 diabetes who control their diabetes with meal planning and exercise alone.]

## WHEN ALCOHOL IS AN ESPECIALLY POOR CHOICE

Some people with diabetes should not drink alcohol. If you have nerve damage in your arms or legs, drinking can make it worse. Alcohol is toxic to nerves. Drinking can increase the pain, burning, tingling, numbness, and other symptoms associated with nerve damage. Some studies show that even regular light drinking (less than two drinks per week) can cause nerve damage. Heavy drinking may also make eye disease worse. If you have high blood pressure, you can lower it if you stop drinking alcohol.

Many people with type 2 diabetes have high levels of the fat called triglyceride in their blood. If you do, you should not drink alcohol. Alcohol affects how the liver clears fat from the blood.

Alcohol also spurs the liver to make more triglycerides. Even light drinking can raise triglyceride levels.



## Positive Parenting: SOME PURIM POINTERS

Purim is a joyous and delightful Yom Tov, eagerly anticipated by adults and children alike. However, as gaily-wrapped gifts of sugar-drenched nosh pile up on tables and countertops, parents of children with diabetes are presented with a challenge: How to minimize sugar intake and maximize BG control without robbing our children of their whimsical simchas Yom Tov?

Here are some tips for rising to the challenge and proving that Purim can be enjoyed and anticipated even without Pringles and Peppermint sticks.

- **Preparation is Paramount:** Before the usual whirlwind of happy activity begins, speak to your child! Explain to him/her why too much candy would be a poor choice. Point out to your child that s/he will not be deprived of a fair share of the Purim nosh. However, to avoid an overload of sweets, come up with an alternate plan together, or choose one of the following suggestions.
- **Privileged Character:** Establish a system with your child in which s/he can trade in Purim junks for small prizes, coins, or other sugar-free treats. This way, your child will feel important and special instead of miserable and deprived.
- **Pirates, Princess, Polar Bear:** Shift your perspective altogether. Instead of concentrating on the food this year, turn the Purim costume into a family project. Beginning at least a few days prior to the Yom Tov, let each child choose a costume, and then work together to make their dreams come true. Remember to take lots of pictures; the memories are Priceless!
- **Pick and Package with Pride:** As soon as Purim is over, collect most of the nosh. Pick those sweets such as winkies and save them for possible future low BG treatments. Then, together with the children, donate the spare goodies to any of the countless Jewish organizations who will really put the treats to good use. What a beautiful chinuch for the entire family!
- **Practice what you Preach:** While emphasizing to your child how unhealthy the excess sugar is for him/her and for all children in general, how about taking the ideas one step further? This Purim, send your Mishloach Manos with a healthy theme. For the kids, send crayons, stickers, novelty pencils, or small prizes instead of the usual junk. You'll become the most popular address on the block.

Have a Phenomenal Purim!

## ON A LIGHTER NOTE...



Can you find a reference in the Megillah to the fact that even in those days people disagreed about whether wine was beneficial to drink?

Answer: It says, "V'hashtiya kados ain oneis, la'asos kirtzon ish vaish"—At the party of Achashveirosh, no one was forced to drink wine, [and it was served only] as per the desire of each person. The midrash explains that the words "each person", refer to Mordechai and Haman. Nu, isn't it obvious? Mordechai already understood that it is not wise to drink too much wine.

There is nothing new under the sun!



# The Numbers the Label Won't Show you

## Analyzing the carb contents of wines

*In honor of Purim, we are reprinting the following interesting tidbits about the carb contents of wines. For more details, see our Pesach issue, in which we discuss this topic at length.*

In contrast with most foods and beverages, regulations in the U.S. and most other countries do not require wine producers to disclose ingredient or nutritional labeling on wine, and the industry has strongly resisted any legislative efforts to change that. Accordingly, there's no way (other than asking the winery, which is under no obligation to respond) to determine the exact nutritional analysis of a specific wine.

Wines are essentially made from carbohydrates, but the sugars are broken down during fermentation and converted to alcohol. Many wines are not completely fermented in order to maintain some sugar to add sweetness. In general, higher quality (and, unfortunately, higher priced) wines will have a lower sugar content as they are usually fermented dry (with little or no sugar). Cabernets and merlots in the \$15/bottle (and up) price range are probably your best bet. The best choices would be reds, as opposed to whites, as they usually have lower grams/liter sugar content.

As for the label, there unfortunately is not a completely reliable way to check the residual sugar in the wine. In general, a higher alcohol content (which is listed on every wine label by law) may indicate lower residual sugar, but this will vary widely by vintage and growing region. Many winer-

ies give more detailed info (including RS - residual sugar) about their wines on their websites.

Since this question comes up often, we have taken the liberty - using information from the U.S. Department of Agriculture and other public sources - of putting together a set of nutritional analyses based on typical wines. We think they'll give you a general idea of what to expect from any glass of red, white or dessert wines. Please note that specific bottles may vary. Even slightly sweet wines, for example, like White Zinfandel or many Rieslings, will carry more calories from sugar and more carbohydrates than the fully dry red and white wines listed. Wines stronger than usual in alcohol content,

<b>Dry Red Wine</b>
Serving Size 1/2 cup (4 oz.)
Calories 87
Total Carbohydrate 1.9g

<b>Dessert Wine</b>
Serving Size 1/2 cup (4 oz.)
Calories 173
Total Carbohydrate 13.3g

<b>Dry White Wine</b>
Serving Size 1/2 cup (4 oz.)
Calories 77
Total Carbohydrate 0.9g

like a Chardonnay or Zinfandel at 13.5 percent or more, will also contain a few more calories than the average examples shown. These charts are presented in the familiar U.S. nutritional-analysis format. We hope you'll find them interesting and useful.



For additional information, go to [www.wino.net](http://www.wino.net). Also, [www.wineloverspage.com](http://www.wineloverspage.com) has a nutritional analysis that breaks down some wines. For a list of the carb counts for many of the Kosher wines, refer to our Pesach issue.

## READER FEEDBACK HELPS US GO FORWARD...

**IN THE PESACH ISSUE, WE MENTIONED THAT ONE WOULD BE ABLE TO MEASURE THE CARB CONTENT OF A WINE USING A STANDARD GLUCOSE METER. ~ R.S. COMMENTED AS FOLLOWS:**

You can not measure wine directly with a BG meter and make any sense of it. There are sucrose and fructose sugars in the wine, and the meter is calibrated to read glucose.

However, if you know how much one gram of glucose raises your blood sugars, then you can use the following reverse formula: Drink a specific amount of wine (for example, 1/2 cup), and see how much your blood sugar is raised. You can now figure out how many carbs the wine contained.

For example: Suppose your blood sugars go up by 4 mg/dl for every gram of sugar that you ingest ( $X=4$ ), and the wine raised your BGs by 48 mg/dl ( $Y=48$ ). You would divide 48 by 4 ( $Z=Y/X$ ) to determine that the wine contained 12 grams of carb.

R.S.



**ROYAL WINE CORPORATION**



*brings you*  
*Award Winnning Wines*  
*from Around the World*

**KEDEM<sup>®</sup>**



**BARON HERZOG**

*Diabetics should consult with their doctor before  
consuming beverages containing alcohol.*







Indispensable to human health

# No more guesswork.

Introducing the **BD Ultra-Fine™ II** insulin syringe with half-unit-scale.

Now only **BD** offers 3/10 cc syringes with whole and half-unit-scales.

**NEW**

- **BD Ultra-Fine™ II Short Needle / Half-Unit-Scale**  
*For those who measure insulin in half-units*
- **BD Ultra-Fine™ II Short Needle**  
*For those who want an easy-to-read scale*



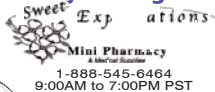
**WHERE TO BUY:**

Patients can ask their pharmacists to order **BD CATALOG # 328440**, or patients can order directly through:



1-888-344-3434

**FIFTY 50 PHARMACY**  
HELPING PHARMACISTS SERVE PATIENTS TO THE MAXIMUM  
1-800-S.H.O.P.5050



1-888-545-6464  
9:00AM to 7:00PM PST



www.diabeticexpress.com  
1-800-338-4656



1-800-433-1477

BD Consumer Healthcare  
1 Becton Drive  
Franklin Lakes, NJ 07417-1883  
1.888.BDCARES (232.2737)