



DIABETICSUPPLYRESCUE

Recycle. Save a life. 

GATSE: The Great American Test Strip Experiment

As a companion to this document, I have two that explain the Great American Test Strip Experiment. If you don't have a copy of them, ask for them, read them, then come back here.

[For this job request, I have appended these documents to the end of this one]

The purpose of this section is to describe how I expect the GATSE pages to work.

First, I have already reserved the domain names GATSE.com and TestStripExperiment.com.

The only people who will be able to take part in the experiment are club members. The only boxes we will use will be ones that come from our inventory so that there is an inventory number associated with them.

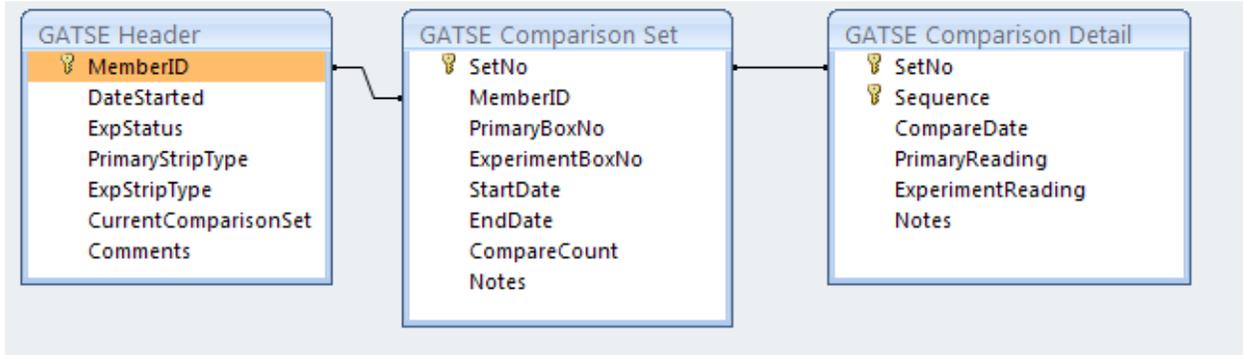
For each box we sell, we will send an expired box for free. The member will be asked to test simultaneously from both the good box and the expired box and record both readings. Five tests per free box will be required. The only way to get the next free box is to complete the five tests and record the results in our web page.

The data for the experiment will reside as tables in the same MySQL database as the inventory system. The database will reside on the web site's host. Access will be available through an ODBC connection.

In some ways, the computer nerd part of me wants to develop this project, but there are two things that stop me. First, I could throw it together quickly if I were programming in Visual Basic 6, but my programming skills are stuck in 20 year old technology. I don't have the desire, nor the time, to learn how to program web pages. Second, as boss of this organization, I need to learn to outsource project such as these.

Tables

I have defined these tables in an Access 2007 database. I can provide more details when it is appropriate. These tables will live in the MySQL database.



Sign up

Members will be able to sign up for this program on the web site. The sign-up page in the members only area will explain the program and ask for this information:

- + What kind of meter do you use for your testing?
 - This will be a drop down list of popular meters ([GATSE Header]![PrimaryStripType])
- + What kind of meter will you use for the experiment?
 - It will be difficult to use the same meter for both the regular test and the experiment test. Many diabetics have more than one meter available to them. If they don't we have meters we can give them.
 - Again, a drop down list ([GATSE Header]![ExpStripType])
- + We may have a question that asks whether they have a secondary meter and whether they need us to send them one. In this case, we will choose the meter and test strip type.
- + We will ask them to check a box that says they have read a boatload of disclaimers and how the experiment works.

When the page is completed, the member will go to a confirmation page, and we will get an e-mail with the pertinent information to send out the free expired box, and a meter, if necessary. We will create the GATSE Header record and GATSE Comparison Set record in the Inventory system.



Data Entry

When the member logs into the site, there will be a prominent button that points them to the GATSE page. If they are not signed up for GATSE, they will arrive at a page that asks if they want us to send them a free, expired box of test strips. If they are already signed up, they will see a page similar to this:

Member ID 1234
Member Name Jay Koch

Current Comparison Set ID 210
Compare Set Start Date 7/5/2010
Comparisons Recorded 2

	Date	Normal Test	Experiment
Meter Type		One Touch Ultra	Accu-Check Aviva
Box Inventory Number		3218	3109
Expiration Date		Mar-2011	Apr-2010

Comparison 1	7/5/2010	117	119
Comparison 2	7/6/2010	128	124
Comparison 3			
Comparison 4			
Comparison 5			

In this compare set, the member has already entered two comparisons on previous days. On this day, he can enter up to three more comparisons.

Maybe we will allow him to enter only on the third line. After he hits submit, then the fourth line will be available. We should also allow him to edit or delete the two previous comparisons.

After the fifth comparison, this set will be complete and can't be changed (although we'll give him one more chance to change before it's permanent). We'll ask if he wants us to send another test box with the next box he orders. If he says yes, we'll send another expired box when he orders another one.

For each member, there will only be one comparison set active. We will only send another free box upon a completed set and they buy another box from us.

Programmatically, this web page will know who is logged in and pull from the database the GATSE Header, Comparison Set, and Comparison Detail records. When the member enters a new comparison, a



DIABETICSUPPLYRESCUE

Recycle. Save a life. 

new Detail record is added and the CompareCount field of the Comparison Set is updated. We'll return to this page if there are less than five comparisons done and go to another if the set is complete and verified.

After we have collected a certain amount of data (10 sets? 100? 1,000?) we'll publish the results on-line, but until we see how the data comes out, I don't know how these pages will look.



DIABETIC SUPPLY RESCUE

Recycle. Save a life. 

Diabetic Supply Rescue's

The Great American Test Strip Experiment

How do we know when diabetic test strips go bad? Do they suddenly become ineffective the day of their expiration? Or do they have a useful life after the expiration date? Do we throw away thousands of boxes of test strips that are otherwise good just because the date stamped on the box is past?

How can we find out?

We all have made sandwiches out of bread that is past the “official” expiration date because we can tell whether or not it has gone stale. We can also tell if milk is still OK past the expiration date by a quick sniff from the top of the jug. When I look in my medicine cabinet, I see bottles of aspirin and antibiotic ointments that are past the expiration date, and I use these products because I know that the shelf life is actually longer than what is printed on the label.

Or is it? How do I know if that aspirin still works? If I take a couple of aspirin tablets and my headache goes away how do I know if it was because of the aspirin? Would my headache have gone away anyway? Is there a placebo effect?

The interesting thing about test strips is that by putting them in a glucometer and testing a drop of blood, we can get a measurement, a number, that can tell us how good the strips are. There is no placebo effect.

I have “heard” that diabetic test strips are still effective for measuring blood glucose levels for months or years after the expiration dates. But, no one will tell me for sure. In my business of buying and selling diabetic test strips, I run across hundreds of boxes of strips that I don't take because according to the date on the box, those strips are “expired.” If these strips are actually still effective more measuring blood sugar levels, maybe we should not throw them away.

I want to find out what is really true, so I am looking for participants in the Great American Test Strip Experiment. Together we can collect the data to find out whether we are wasting millions of test strips each year. If you are already testing your blood sugar regularly, you can help.

Here's the strategy. Whenever I ship an order of test strips, I will include another box that is past its expiration date for free. Then, I will ask the buyer to compare the reliability of the old strips to the new ones, and then send the data back to us. After we have compared thousands of boxes of strips we will have an idea how well expired strips really work.



DIABETICSUPPLYRESCUE

Recycle. Save a life. 

Here's how the experiment will work. At the same time that someone tests his blood sugar with a newer test strip, he will also test with a strip from the expired box. This can usually be done with the same drop of blood and doesn't even require another prick of the finger. The tester will record the glucometer reading from both tests. We will ask that each person compares five test strips from each box. When the five tests are done, they will return the results to us. They will be able to either log into a web site or mail us the results.

We will publish the results as we get them. Maybe we will learn that the expiration dates are real and should be respected. Maybe we will find out that strips are good for six months after they expiration dates. Or a year. Who knows?

But won't it be fun to find out?

If you want to take part in the Great American Test Strip Experiment, go to <http://DiabeticSupplyRescue.com>.



DIABETICSUPPLYRESCUE

Recycle. Save a life. 

Diabetic Supply Rescue's

The Great American Test Strip Experiment – Business Strategy

While I do think it will be interesting to test expired strips and find out whether they really are any good after the expiration date, there is a business strategy for conducting the GATSE.

In my business, I run across lots of people with expired test strips. I am pretty sure that most of those test strips are really still good, but I don't buy them because I am worried about the liability of selling expired strips. Besides, eBay will not allow sale of expired strips.

I HATE to tell people that there is no use for those strips when I know they are probably good. The experiment will allow us to find a use for these expired strips.

If we run an experiment to determine the efficacy and reliability of expired strips we may be able to show that it is not dangerous to use expired strips. We may be able to change how the world perceives the expiration date on these boxes. It won't be "scientific" experiment with proper controls, but it may be enough to sway the idea of the public.

1. DSR will only GIVE away expired boxes and not sell them. I also expect that when I acquire them, I will not have to pay for them.
2. Every time I make an eBay sale, I will include a free box of expired test strips and an invitation to join the GATSE.
3. Here's the process that I would like to see go on in the customer's mind
 - a. I received a free box of 50 strips.
 - b. Using five successive tests, I see that these "expired" strips work just as well as the new ones.
 - c. Since I believe that these "expired" strips work, I will use the remaining 45 strips.
4. The math of this transaction for buyer
 - a. Retail price for strips: \$50 for 50 strips, or \$1 per test
 - b. Buy from DSR for \$20, or 40 cents per test.
 - c. Use up 5 strips from the expired box for the test, leaving 45 to use as real tests.
 - d. $50 + 45 = 95$. $\$20/95 = 21$ cents per test.
5. If the buyer makes this connection, he will see that the strips he bought are really cheap and will come back for more.
6. Motivation for customer to partake
 - a. Be part of a larger goal to find out how test strips really perform



DIABETICSUPPLYRESCUE

Recycle. Save a life. 

- b. If the box of expired strips looks good compared to a new one, the customer may feel like they got some useable strips for free.
7. After the first box, the only way to get another free expired box is to buy through our club.
 - a. Limit one free box per box purchased.
 - b. Club fee will be \$5 or \$10 per month.
 - c. You'll get 95 strips for the price of 50.
 - d. You will only get subsequent boxes if you partake in the experiment.
8. For DSR,
 - a. We'll collect data on efficacy of expired strips.
 - b. We'll find a home for strips that would otherwise be thrown away.
 - c. The only extra cost to us is an ounce of shipping cost.
 - d. We make money on the customer every month through club fees that is much more than the cost of shipping out the free box.
9. We will NEVER recommend that customers use the expired boxes.
 - a. "These boxes are provided for the experiment only."
 - b. "We recommend that you destroy the extra strips."
 - c. "If you use them, use them at your own risk."
10. If we have people test 100, or 1,000, or even 10,000 boxes, and it looks like that most of the time the expired strips are good, maybe we can eventually sell expired boxes. Or maybe we always sell new and expired boxes in tandem, ask them to test, and allow them to determine the reliability of the strips themselves.

The Great American Test Strip Experiment Data Entry Sheet

Buyer Number:

New Box strips

Brand/Type
Expiration Date
Inventory Number:

Expired Box

Brand/Type
Expiration Date
Inventory Number

				1 or 2
Test #	Date	New	Expired	meters?
1				
2				
3				
4				
5				

Instructions:

1. When you recieved your boxes of strips from DSR, you should have been supplied with a Buyer number and an inventory number. If you have them, enter them in the fields above. If you don't, that's OK.
2. When you test your blood sugar with one of the new strips, test at the same time with one of the expired strips. It's best if you could use the same drop of blood from the same finger prick.
3. With some types of strips this may be easier with two glucometers. If you used the same meter for both tests, put "1" in the "1 or 2 meters" box. Enter "2" if you used different meters.
4. After you have completed five comparisons, please return this information to us. Either print and mail this form, or submit the information on-line at <http://GreatAmericanTestStripExperiment.com>.
5. Do not use any of the expired strips alone to test your blood sugar. Use them only for this test and in conjunction with newer test strips.
6. Any personal information will not be released to any other party. We ask for your buyer number just so that we can tell who is participating. It is not required that you provide it to us.