Tues 2/7/2017 **10.5 miles**
I walked and ran 10.5 miles on slightly hilly roads averaging about 11:50/mile.
During the workout I walked 21 times with each walk about 0.15 miles long.

Thur 2/9/2017 **10 miles**
I ran on slightly hilly roads. It was windy and about 37 degrees. I wore 2 sweat
shirts and sweat pants.
I ran 8 miles in 1:14:40 or 9:20/mile.
Splits: 10:07, 9:46, 9:44, 9:43, 9:00, 8:51, 8:57, 8:32
I felt a lot better after about 4 miles.
rested 3 minutes
I walked and ran 2 miles averaging about 12:00/mile. I walked about 0.16 miles at
the beginning of each ½ mile.

Tues 2/14/2017 **10 miles**
I ran 9 miles on hilly roads in 1:29:59. I kept most miles very close to 10 minutes.
I warmed down with a mile walk and run in 11:53. I walked 2 x 0.16 miles during
the mile.

Tues 2/21/2017 **16.5 miles**
I ran 3 x 5 miles on a slightly hilly course with no rest between the 3 loops. The
total ascent along the 5 miles is 252 feet (measured using Google Earth) or about
760 feet for the 15 miles. I drank a little water on this cool day and ate 2 gels.
Time for 15 miles: 2:34:12 or 10:17/mile
Times for each 5 miles:
54:53 or 10:58/mile
53:10 or 10:38/mile
46:09 or 9:13/mile
Splits for the last 5 miles: 10:42, 9:35, 9:16, 8:31, 8:04.
I warmed down by walking and running 1.5 miles at about 12:00/mile.

Tues 3/21/2017 **10.5 miles**
I ran 2 x 5 mile loop. The loop is a slightly hilly course with a total ascent of 256
feet (as measured with Google Earth) spread out over the 5 miles. I ran the 10
miles in 1:31:01 or 9:06/mile. The last mile was in 7:55.
The first five miles averaged 9:27/mile and the second five averaged 8:45/mile.
I rested 6 minutes and jogged ½ mile.

Sat 3/25/2017 **15 miles**
I walked and ran 15 miles on hilly roads at an average pace of 12:00/mile. I walked about 0.18 miles at the beginning of each half mile. The total ascent was about 850 feet. I drank 7 ounces of water at 5 miles and again at 10 miles. I also ate a gel at 10 miles.

Mon 5/15/2017 **10.5 miles**
I ran 10 miles on the high school track and averaged 9:26/mile.
I ran wide on the curves so every 4 laps equaled 1 mile.
The first 5 miles averaged 9:57/mile.
Miles 6 through 8 averaged 9:11/mile. I ran these 3 miles with John Ziegler.
Miles 9 and 10 were in 8:42 and 8:17.
I warmed down with a ½ mile jog.

Sat 5/20/2017 **11 miles**
On the Ernst Trail:
I ran 1 mile and then I rested a few minutes.
Then I ran and walked 10 miles with Jim Fitch and averaged 12:30/mile. We walked about as much as we ran.

Sat 6/3/2017 **10.5 miles**
I ran a slightly hilly 5 mile loop twice with a 2 minute rest between the two loops. The first mile on the loop is mainly uphill, miles 2, 3 and 4 are rolling, and the last mile is mainly down. I averaged 9:40/mile the first time I ran the loop and 8:52/mile the second time.
First 5 mile splits: 10:03, 9:41, 9:39, 9:30, 9:30
Second 5 mile splits: 9:37, 9:23, 8:56, 8:22, 8:04
I warmed down with a ½ mile jog.
In the afternoon Mary Jane and I kayaked for 2 hours down French Creek. It was great exercise and we both had fun.

Sun 7/09/2017 **11 miles**
I warmed up with 1.4 miles before I ran the Trail Blazer 15K on the Ernst Trail in Meadville. My GPS said the course was 9.36 miles, my time was 1:16:12 and I averaged
8:08/mile. Mile Splits: 8:05, 8:05, 7:57, 8:11, 8:03, 8:22, 8:22, 8:19, 8:04, and 2:44 for the last 0.36 miles which corresponds to a pace of 7:38/mile. I warmed down with a ¼ mile jog.

Sun 7/16/2017 **14.2 miles**
I ran the Presque Isle Half Marathon
I warmed up with a mile at various paces. My GPS recorded the race distance as
13.21 miles, my time as 47:58 and my average pace as 8:10/mile.
Splits: 8:08, 8:20, 8:19, 8:18, 8:13, 8:07, 8:09, 8:11, 8:10, 8:07,8:15, 8:07,7:59 and
the last 0.21 miles in 1:35 which corresponds to a pace of 7:29/mi. The even pace
running allowed me to have a good finish.

Tues 8/8/2017 **10.25 miles**
I ran ½ mile to the Allegheny Wise Center and rested a few minutes.
Then I ran 1.5 miles on a treadmill at various paces and averaged 9:30/mile with
some parts as fast as 7:30/mile. Then I rested about 7 minutes.
I ran 10 x ½ mile with a ¼ mile jog before each run and a ¼ mile jog after the last
run. The ¼ mile jogs were all about 3 minutes.
The first 7 ½ miles were all in 4:00.
The 8th, 9th and 10th ½ miles were in 3:57, 3:54 and 3:45.
My pulse before I started running each ½ mile increased from 115 up to about 128
bpm.
My pulse at the end of each ½ mile increased from 145 up to 164 bpm.
I warmed down with a ½ mile jog home.

Tues 8/15/2017 **18 miles**
I ran 3 times a 6 mile slightly hilly course with a 40 second stop at my house at the
end of 6 miles and again at the end of 12 miles. The miles splits were:
1st 6 miles: 10:16, 9:38, 9:51, 9:46, 9:33, 9:15 Average = 9:43
2nd 6 miles: 10:11, 9:52, 9:27, 9:19, 9:07, 8:55 Average = 9:28
3rd 6 miles: 10:00, 9:50, 9:54, 10:07, 9:55, 9:27 Average = 9:52
The temperature at the end of the run was 80 degrees which was a good deal hotter
than I thought it was going to be. As a result I did not drink as much as I should
have. This made the last 4 miles somewhat difficult. Before running I weighed
127.5 pounds and after I weighed 124 pounds, losing 3.5 pounds. I know from
experience that I can lose about 2 pounds during a long run without any problems.
So today I should have had about an additional 1.5 pounds (24 ounces) of liquid to
make up the deficit. I had 6 ounces of kefir and milk with my breakfast cereal, and
36 ounces of Gatorade and 24 ounces of water, totaling 66 ounces before and
during the run. These 66 ounces plus the 24 ounces I should have drunk yields 90
ounces (or 5 ounces/mile) as the minimum required to efficiently run 18 miles on a
hot day. If in a marathon the water stops are every 3 miles then on a hot day I
should be drinking about 2 full sized cups of liquid at every stop. On a cool day I

know that I only need about 3 ounces per mile. In this case I would need about 9 ounces (about one full sized cup) at every 3 mile water stop.

What about calories? A formula that works for me is calories=300(hours-1.3), where "calories" is the number of calories I will need to consume before and during the run and "hours" is the amount of time I think I will be running. I found the number 300 in the formula from experience. I weigh roughly 130 pounds. For someone weighing 50% more than me I think the number might be 50% larger or 450. The 1.3 corresponds to 1 hour and 18 min. Notice the formula indicates I can run for 1 hour and 18 minutes and calories required will be zero. I have written the formula in this way because I know I can get up in the morning and not eat. As long as I drink enough water I can run for a little over an hour using just the energy stored in my body. This is about right for me. It might not be okay for everyone.

I ran for approximately 3 hours today. So calories = 300(3-1.3) = 510 calories. How many calories did I actually eat? Breakfast → 200 calories, Gatorade → 200 calories, 2 energy gels → 200 calories for a total of 600 calories. So I was fine with the caloric intake because it exceeded the calculated 510 calories. It is interesting to note the number of calories goes up fairly quickly as the time for the run increases. If I run for 4 hours my formula yields 810 calories and for 10 hours it yields 2610 calories. I always calculate the number of calories required for me to run for long times and carefully plan how I will meet the requirement.

Tues 8/29/2017 **20.5 miles - a training run for the marathon**
I ran 3 times a 6 mile slightly hilly course with a 45 second stop at my house at the end of 6 miles and again at the end of 12 miles. Then I added on 2 miles to make the run 2 miles longer than what I ran on Tues 8/15/2017. The miles splits were:
1st 6 miles: 10:35, 9:59, 9:57, 9:58, 9:47, 9:30 Average = 9:57
2nd 6 miles: 10:37, 9:57, 9:57, 9:53, 9:45, 8:29 Average = 9:56
3rd 6 miles: 10:27, 9:41, 9:33, 9:15, 8:57, 8:50 Average = 9:27
The last 2 miles: 8:59, 9:18
The temperature at the end of the run was 74 degrees. Today I had less fluids than I had for the 18 miler 2 weeks ago. Today I had 54 ounces, 2 weeks ago I had 66 ounces. Today I lost about 3 pounds while running which is less than 2 weeks ago because it was cooler today. But I did feel the effects of slight dehydration in the last 2 miles. I should have had at least an additional 16 ounces of fluid during the run today or a total of 54+16 = 70 ounces or 3.5 ounces per mile. With 16 additional ounces I would have lost about 2 pounds which I know from experience does not affect my running. I walked and jogged ¼ miles to warm down.

Sun 9/10/2017 **26.5 miles**
I ran the Erie Marathon. It was cool at the start and got up to about 62 degrees by the end of the run. I had plenty of liquids and calories. During a marathon I usually take 3 or 4 Salt Sticks (saltstick.com) but forgot to bring them. At the end of the run I was dizzy. The dizziness went away after I ate a small bag of potato chips with water.
1st half time: 2:03:15
2nd half time: 2:05:18
Chip time: 4:08:33 or 9:29/mi

Sat 9/23/2017 **21miles**
I ran and walked 20 miles with Jim Fitch. We divided the run/walk into three slightly hilly loops each separated by a few minutes rest. The loops were 6 miles, 6 miles and 8 miles long. We started at 5:30 AM and it was cool for the first 12 miles. We had sufficient amounts of liquids and calories. The average paces for the loops were 12:51/mile, 12:45/mile and 12:26/mile. About 2 hours later I walked 1 mile on a hilly loop with Mary Jane.

Mon 10/2/2017 **12.4 miles**
I ran 8 miles and averaged 8:46/mile. The first mile was in 9:06 and the last in 8:17. Then I walked 0.4 miles. Later on in the day I walked twice for a total of about 4 miles.

Sun Oct 15, 2017 **26.2 miles**
I ran the Amsterdam Marathon. It was warm and very humid for the last 10 miles and I had to drink a lot. I think I was over trained for this run because I ran a good deal faster 5 weeks ago in the Erie Marathon. On the other hand, it was a very nice experience. There were about 16,000 runners in the marathon. I had 10 family members and friends out on the course and at the end cheering for me. Time: 4:26:12

Mon March 5, 2018 **10.75 miles**
I warmed up with a 0.75 mile jog. Then I ran 10 miles in 1:37:04, averaging 9:42/mile. The first 5 miles I averaged 9:56/mile and the second 5 miles 9:28/mile.

Mon March 5, 2018 **10.75 miles**
I ran on level walking and bike paths in Amsterdam. I warmed up with a 0.75 mile jog. Then I ran 10 miles in 1:37:04, averaging 9:42/mile. The first 5 miles I averaged 9:56/mile and the second 5 miles 9:28/mile.

Thur April 5, 2018 **10.25 miles**
I ran 10 miles on a treadmill in the Wise Center and averaged 9:56/mile.
The approximate mile splits were: 3 x (10:15, 10:00, 9:45) and the last mile was in
9:17. My pulse was 153 bpm at the end of the run. Warmed down: ¼ mile jog.

Sat April 14,2018 **18 miles**
I ran a slightly hilly 6 mile loop 3 times with a 1 minute rest after the 1st and 2nd
loops,
The average paces for the 3 loops were: 10:26, 10:26 and 9:47.
45 minutes before running I had a 300 calorie breakfast and 8 ounces to drink.
During the 2nd and 3rd loops I drank 40 ounces of Gatorade (260 calories) and 2
Salt Sticks.

Mon May 14, 2018 **20 miles**
I ran 4 x 5 miles with a 2 minute rest between each loop to eat and talk to Mary
Jane etc. I think having run a fast 5 miles yesterday made today's effort equivalent
to more than a 20 mile effort after tapering. The 5 mile course I used today is
somewhat hilly. The workout lasted about 3.75 hours.
Average pace for each 5 miles: 11:18, 11:18, 11:00, 9:54
Average pace for the 20 miles of running: 10:53
I ate about 450 calories for breakfast about 40 minutes before running and drank
48 ounces of Gatorade (320 calories) while running. The total of 770 calories is
what I need for a 3.75 hour workout.
This will be my last long run before the Green Jewel 50K in 19 days.

Sat June 2, 2018 **31.5 miles**
I ran the Green Jewel 50K from point to point on a paved path in the Cleveland
Metroparks on a cool day. The course was somewhat hilly. I ran 5:54:36 which
had the highest grade percentage among the men. Three woman had times with
higher grade percentages. Mary Jane drove the course on a park road to meet me
at the aid stations and give me food and support.

The next page contains the details about my nourishment for the Green Jewel 50K,
the planned approximate schedule for times I would be reaching each aid station
and what Mary Jane would be giving me at the stations.

Green Jewel 50K   June 2, 2018
Calories needed for 5.7 hours = 300*(5.7-1.3) = 1320 C
Breakfast
        cereal with water = 150 C
        Cliff Bar = 250 C
During the run
        5 gels = 500 C
        Gatorade mixed with some water = 80 ounces → 430 C

Total = 150+250+500+430=1330 C This is enough.

Electrolyte = 5 Salt Sticks

Fluids
After the first aid station I will need about 5 ounces per mile or approximately 5 x 25 = 125 ounces.
From water I will have 45 ounces.
From Gatorade I will have 4*20 = 80 ounces

Total fluids = 45 + 80 =125 ounces or 5 ounces/mi.

AS1 means Aid Station 1

	Difference (mi)	Miles	RaceTime	ClockTime	Food`
Start		0	0	7:00 AM	Nothing
AS1 Stuhr Woods Picnic Area	6.5	6.5	1:12	8:12 AM	water (32 oz bottle and 20 Oz bottle to carry)*
AS2 The Chalet	5.4	11.9	2:11	9:11 AM	27 Oz bottle of water and 20 Oz bottle of Gatorade**
AS3 Wallace Lake	4.1	16	2:56	9:56 AM	22 Oz bottle of water and 20 Oz bottle of Gatorade
AS4 Rocky River Nature Center	4	20	3:40	10:40 AM	17 Oz bottle of water and 20 Oz bottle of Gatorade
AS5 Lorain Overpass	6.1	26.1	4:47	11:47 AM	12 Oz bottle of water and 20 Oz bottle of Gatorade
Finish	5	31.1	5:42	12:42 AM	

*I will drink about 5 Oz from the 32 Oz bottle and carry the 20 Oz bottle of water.
** I will drink about 5 Oz from the 27 Oz bottle of water and carry the 20 Oz bottle of Gatorade.

I am carrying 5 gels and 5 salt sticks

Sun July 15, 2018 **14.5 miles**
I ran the Presque Isle Half Marathon in Erie PA and came in 206/1067. My GPS measured the course at 13.21 miles with a time of 1:50:47. It was a hot, humid day. I drank a lot at every water stop and ate a gel at 5 miles and another at 10 miles.
Splits: 8:17, 8:15, 8:16, 8:17, 8:16, 8:23, 8:21, 8:17, 8:37, 8:28, 8:16, 8:24, 8:34
The last 0.21 mile was at 8:06/mile pace.

Sat July 28, 2018 **16.3 miles**
Run: 2 x 5 miles and 1 x 6 miles on a slightly hilly loop
After each of the 5 mile loops I rested for 1:15 while I ate a gel and drank water. It was a relatively cool day and I only drank a total of 16 ounces. I should have had more than twice this but surprisingly I did not feel the effects of dehydration.
Paces on each of the loops: 9:25, 9:21, 9:00/mile
The last 2 miles were in 8:41 and 8:19.
Warm down: 0.3 mile jog

Sat Sept 1, 2018 **14.5 miles**
I ran the French Creek Half Marathon on the Ernst Trail in Meadville PA and came in 16/91. My GPS measured the course at 13.22 miles with a time of 1:50:49. It was a humid day. I drank at every water stop and ate a gel at 5 miles and another at 10 miles.
Splits: 8:26, 8:24, 8:27, 8:27, 8:23 8:20, 8:05, 8:34, 8:05, 8:32, 8:20, 8:26, 8:33
The last 0.22 miles were at 7:44/mile pace.

Mon Sept 3, 2018 **10 miles**
I ran and walked 10 miles on hilly roads mainly on Limber Rd and averaged 11:53/mile. I am practicing a walking and running routine for the 50 miler I am doing in about 6 weeks. I ran the first 2 miles averaging 10:48/mile and I ran and walked the next 8 miles averaging about 12:10/mile. It was a hot day. The temperature reached 88 degrees and the feels like temperature 94 degrees. I drank water twice but I should have had at least 20 -30 more ounces of fluids.

Sat Sept 8, 2018 **10.15 miles**
I ran and walked 10.15 miles on hilly roads mainly on Limber Rd and averaged 10:53/mile. I walked for 2 minutes at the beginning of miles 3, 5, 7 and 9. This is a routine I may use for the first 10 miles of the 50 miler in 5 weeks.

Mon Sept 17, 2018 **25 miles - A long run in preparation for the Can 50 Mile Run.**
I ran and walked 5 x 5 mile loop. The 5 mile loop is somewhat hilly. I stopped about 2 minutes between the loops while I ate gels and Salt Sticks, drank water and picked up more water to take with me.
The total time including the 8 minutes while I was stopped was 4:56:20.
The times and average paces for each of the 5 mile loops were: 55:53 (11:11/mile), 58:31 (11:42/mile), 59:32 (11:54/mile), 59:18 (11:52/mile), and 54:35 (10:55/mile)
I had 580 calories for breakfast and ate 6 gels for a total of 1180 calories.
　　The formula I use to calculate the number of required calories gives:
　　calories = 300*(H-1.3) = 300*3.7 = 1110, were H= 5 the number of hours I ran.
　　So I had enough calories.
I also had 3 Salt Sticks and drank 80 ounces of water.
　　That is 3.2 ounces per mile which apparently was okay because I only lost a pound while running. The temperature felt cool for half the run and rose to 71 degrees.

Sat Oct 13, 2018 50 miles
I ran and walked the hilly Canandaigua 50 mile. It was rather cool in the mid 40's, rainy and windy. Lots of time the wind was in our faces. I had about 2700 calories in my breakfast cereal, banana, energy bar, Gatorade and defizzed coke.   I wanted to run under 10 hours which is 12:00/mile. At 25 miles my average pace was 11:40/mile. I realized I could not hold that pace so I started walking a lot more and enjoying the run a lot more too. My final time was 10:52:39. The race director, Gil Robs and his crew were very friendly and the run was well organized with course marshals at major intersections and clear course markings everywhere else. There were lots of people at the 12 aid stations helping the runners and cheering us on. It was a great run on my 76th birthday.

Sat Oct 20, 2018 **31.5 miles**
I ran in the Erie Personal Endurance Classic. Runners are timed while running as many 1.05 mile loops as they want. I ran 30 loops for a total of 31.5 miles. My time and overall mile pace were 6:05:08 and 11:35/mile. I passed the 50K point in about 5:59 and reached my goal of running 50K in under 6 hour. I ate and drank plenty of calories. I drank about 90 ounces of Gatorade and defizzed Coke which is almost 3 ounces per mile. This may not have been quite enough even though the day was cool. The race director Jim Lang was very friendly and helpful. Mike Viera helped me keep track of the number of loops I had completed while I was running. Thank you Mike.

Sat April 13, 2019 **18 miles**
I ran 18 miles on slightly hilly to hilly roads. It was a nice day in the low 60's.
The run consisted of 3 x 5 miles and 1 x 3 miles. I stopped to drink Gatorade
after each of the 5 mile loops. Stops took about 1:20.
Average paces for each segment:
10:50/mile, 10:43/mile, 10:02/mile, 9:36/mile
I drank 30 ounces of Gatorade and ate a gel at the 12 mile mark.
I lost 2 pounds while running.

Sun April 28, 2019 **32.5 miles**
I ran the Buffalo Runners 6 Hour Distance Classic on a cool, breezy day. The
event was held on a 3.242 mile course which I ran 10 times in 6:07:01 with an
average pace of 11:20/mile. I averaged about 10:50/mile for the first half of
the run and 11:50 /mile for the second half. My distance at 6 hours was
31.77 miles, an age group course record. I picked up my pace for the last lap.
I enjoyed the run and the friendly runners, race officials and volunteers. Mary
Jane gave me great support as usual.

Sat June 29, 2019 **10 miles**
I ran 5 miles on slightly hilly roads, rested about 8 minutes while drinking
16 ounces of Gatorade and then ran the same 5 mile course again.
The first time I averaged 10:51 min/mile and the second time 9:51 min/mile.
1st time splits: 11:56, 10:59, 10:43, 10:28, 10:10
2nd time splits: 10:18, 10:08, 9:52, 9:43, 9:14

Sun July 14, 2019 **11.1 miles**
Warmup: I ran 1.8 miles at various paces.
Run: Trailblazer 15K in 1:22:23 on the Ernst Trail in Meadville PA.
Average pace: 8:50/mile
Mile splits: 8:57, 8:51, 8:47, 8:49, 8:41, 8:48, 9:07, 9:00, 8:48

Sun July 21, 2019 14.1 miles
Warmup: 1 mile at various paces
Run: I ran the Presque Isle Half Marathon in Erie PA on a hot humid day.
Results: Gun Time: 2:00:35, Average Pace: 9:12/mi, First in 75-79 age group,
290th out of 1000 finishers, 17th fastest age graded time.
Mile Splits:

8:53, 9:07, 8:59, 9:09, 9:05, 9:12, 9:16, 9:20, 9:19, 9:25, 9:08, 9:12, 9:29
Note: I drank enough water but I didn't drink much Gatorade during the run which I usually do. Also I usually eat a gel at the 10 mile mark but I did not today. With more Gatorade and the gel I don't think I would have faded in the last mile. I usually pick up the pace in the last mile.

Sat Aug 10, 2019 **10.6 miles**
I ran 10 miles around Tamarack Lake with Tim Dunn.
The first 1.5 miles goes up 324 feet. The course has a total ascent of about 525 feet. Our time was 1:35:10 and we averaged about 9:30/mile. After the first 1.5 miles uphill we averaged about 9:06/mile.
Warm down: After 20 minutes I jogged 0.6 miles.

Sat Oct 5, 2019 **16 miles**
I ran and walked 16 miles with Jim Fitch on somewhat hilly roads.
5 miles averaging 13:17/mile and rest about 4 minutes
5 miles averaging 12:58/mile and rest about 4 minutes
5.5 miles averaging 12:27/mile
After resting a few minutes I jogged ½ mile home.