

LEE KENNEDY

HEALTH REPORT

Introduction

My weight and health parameters have been recorded, with varying levels of diligence, since about 2006.

I take no health related medications, relying entirely on diet and exercise to maintain health.

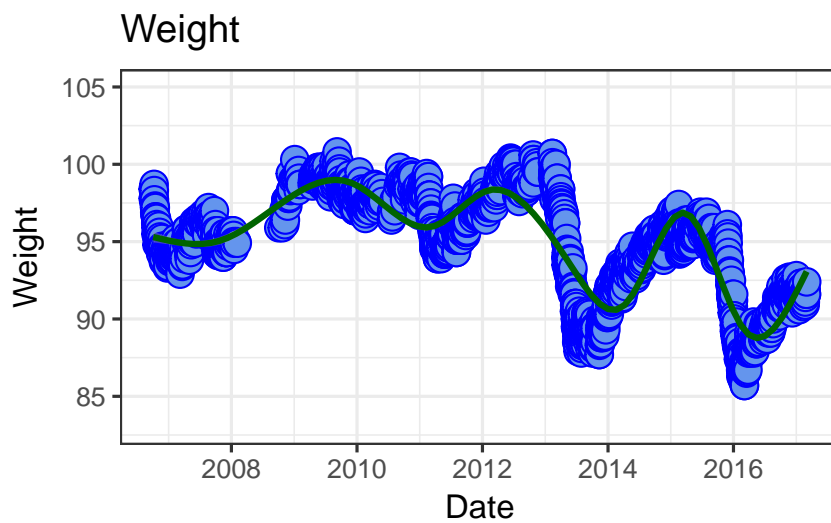
There are two goals of this report:

1. To chronicle my health, prompted recently by participation the the DTS Biggest Loser Challenge;
2. To practice R Markdown.

Weight

My weight has fluctuated over the years, with a major reduction in 2013, which was a prelude to the Great Jill fiasco. It then climbed slowly over the next two years before participating in the DTS Biggest Loser Challenge.

```
## `geom_smooth()` using method = 'gam'
```



Looking more closely at that challenge and its impact on my weight, we see that, having peaked (or troughed) in early March there is a trend upwards. After my birthday¹ effort must be put into reversing this trend:

¹ March 29th

Yearly Boxplot Snapshot

The yearly change is readily seen in a progressive boxplot:

Weight since DTS Greatest Loser Challenger

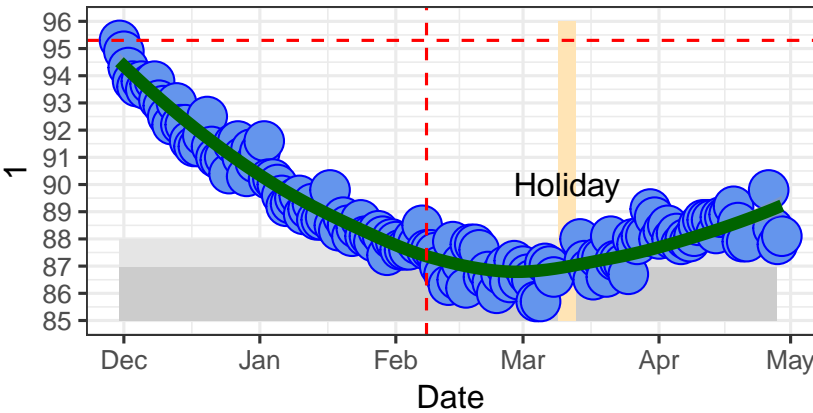
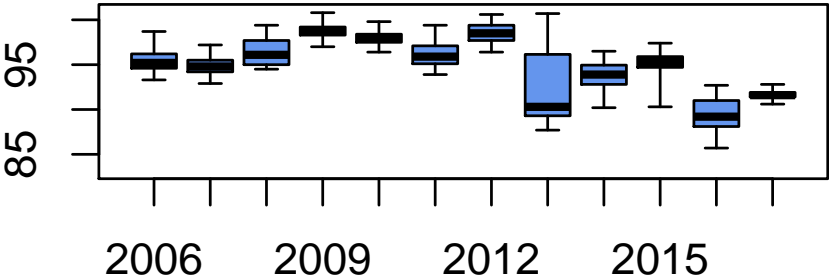


Figure 1: In this chart, the verticle dotted red line indicates the end of the DTS Biggest Loser Challenge. The horizontal dotted red line represents the weight at the start of the challenge.

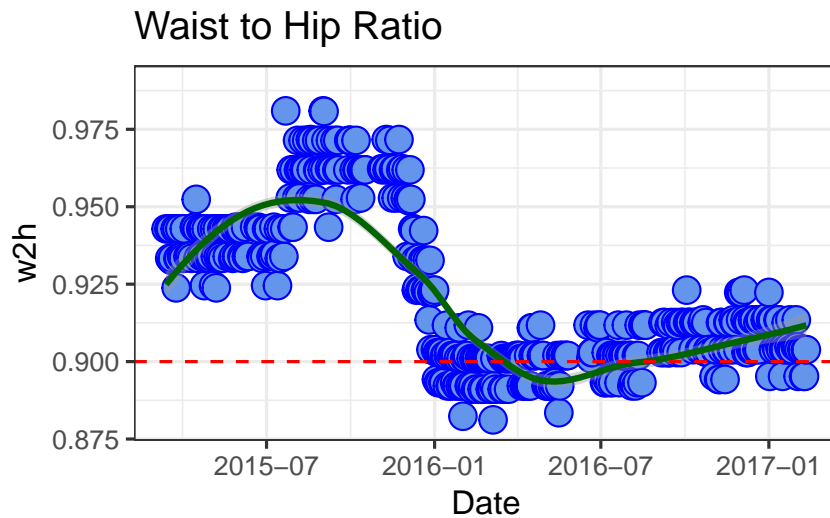


`\begin{figure}`
`\caption[The current year is in green]{The current year is in green.`
The dark line, the median, represents the 50% line, half the year's data is below that line, half above it. Where it lies in the box indicates the general movement over that year. `\end{figure}`

Waist to Hip Ratio

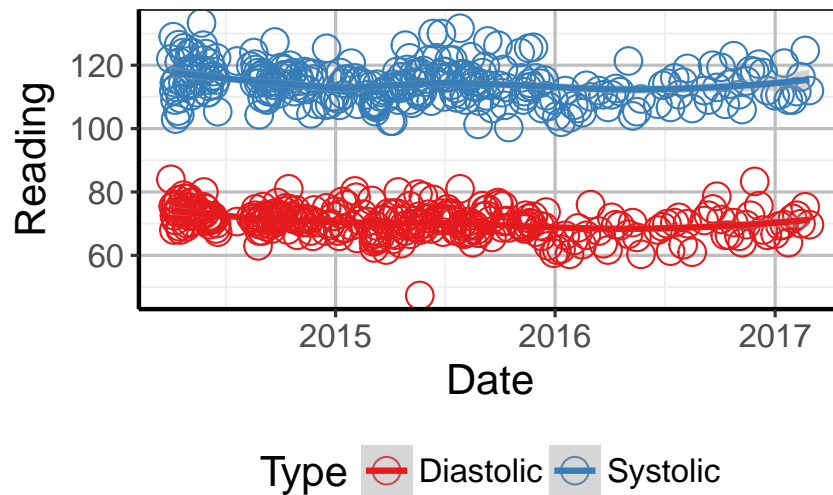
One of the metrics that is monitored is the 'waist to hip' ratio. The general guideline is that, for a man, it should be less than 0.9.

```
whr <- ggplot(weight4[1000:nrow(weight4),], aes(x = Date, y = w2h)) +  
  geom_point(shape = 21, fill = "cornflowerblue", colour = "blue", size = 4) +  
  geom_smooth(colour = "darkgreen") +  
  scale_y_continuous(limits = c(0.88,0.99)) +  
  ggtitle("Waist to Hip Ratio") +  
  geom_abline(slope=0, intercept=0.9, lty=2, col="red") +  
  theme_bw()  
plot(whr)  
  
## `geom_smooth()` using method = 'loess'  
  
## Warning: Removed 1 rows containing non-finite  
## values (stat_smooth).  
  
## Warning: Removed 1 rows containing missing values  
## (geom_point).
```



Blood Pressure

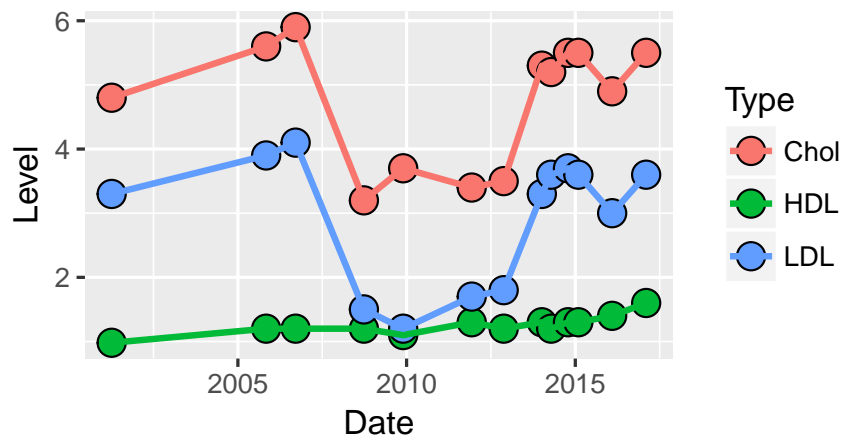
```
## `geom_smooth()` using method = 'loess'
```



Cholesterol

There was a period from 2008 - 2013 where I was convinced by my then doctor to take *Crestor*, a cholesterol lowering statin. In the end I decided I did not like the idea of taking a medication that altered the functioning of my liver. There is no denying that it worked, but at what cost? I am now using diet to control my cholesterol level.

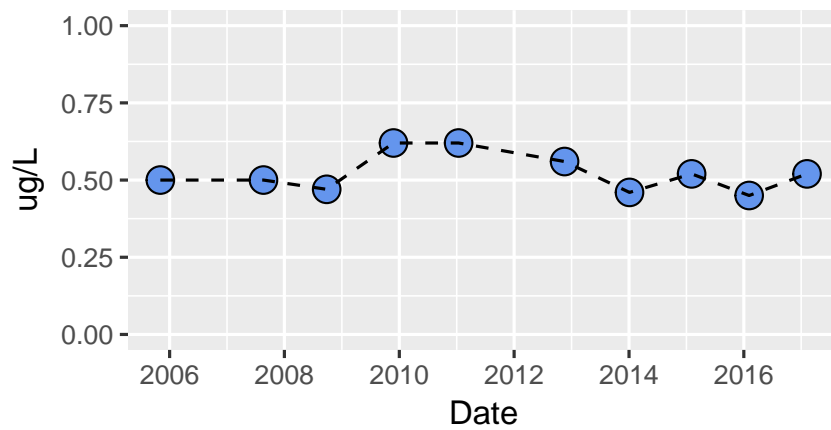
Cholesterol



Prostate Specific Antigen (PSA)

While opinions differs and it is considered not specific, this test is a possible marker for the possibility of prostate cancer. Median PSA levels for men over 60 is 1.2ug/L.

PSA



Bibliography