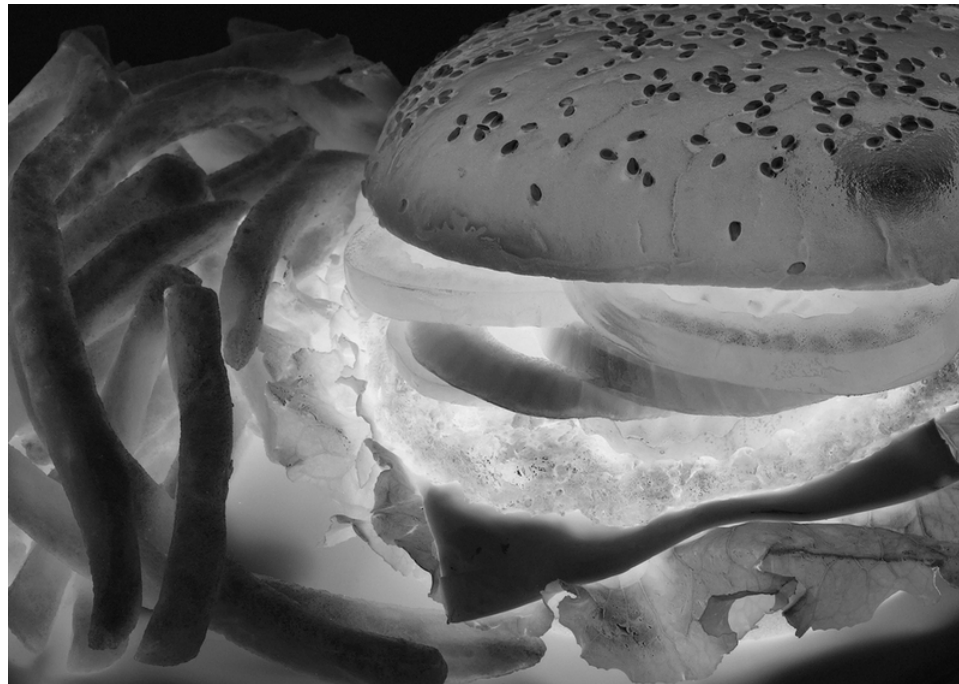


The Case of the Upset Stomach

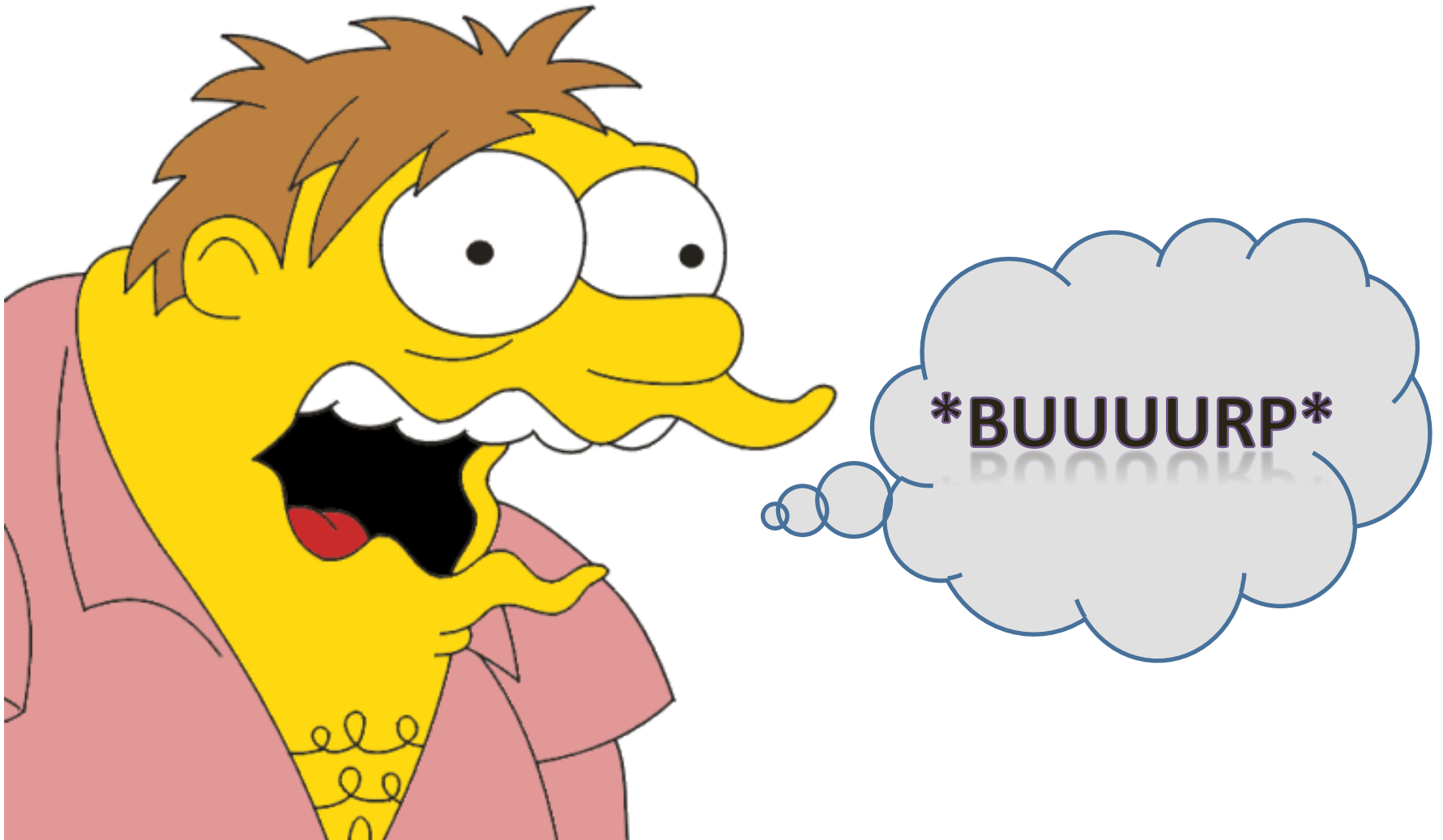


A Mystery only Quantified Self could solve!

June 2011
Madrid, Spain

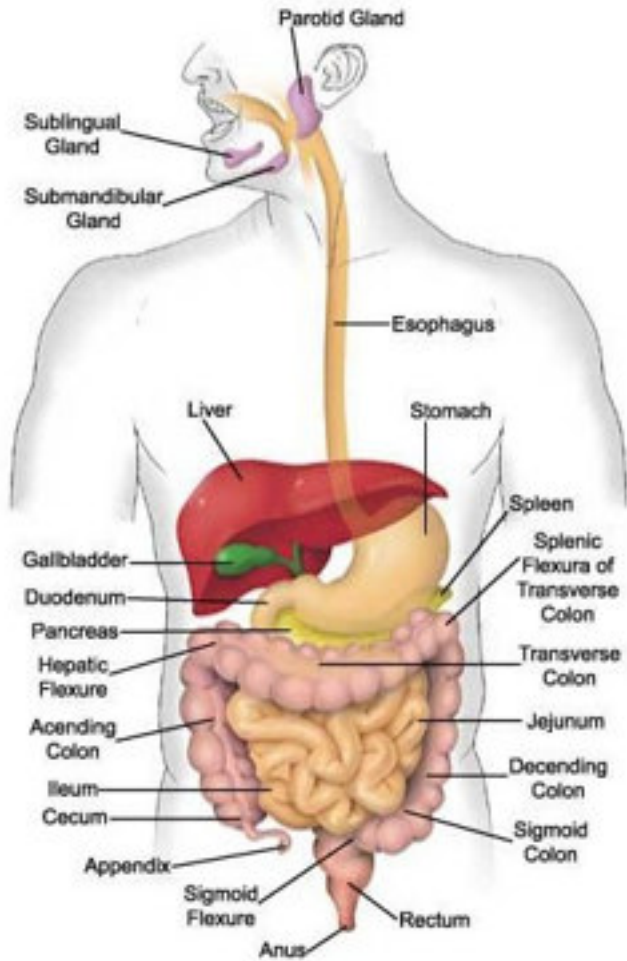


One month later....



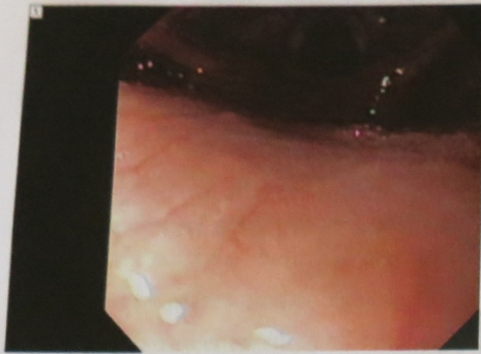


Doctors...

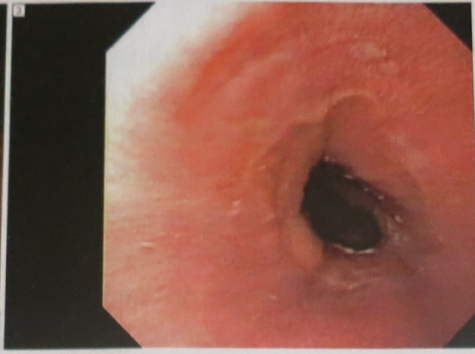


Started Tracking...

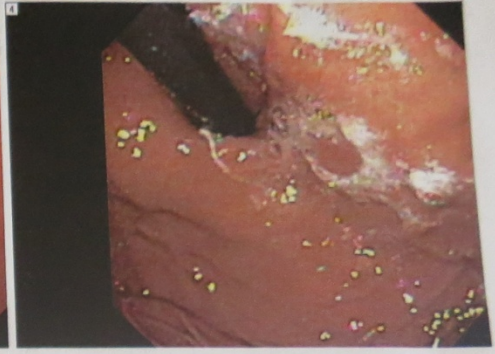
	A	B	C	D	E	F	G	H	I
1	day	breakfast	snack	lunch	snack	dinner	extras	burping severity	comments
2	9/11/2011	smoothie	cereal w/almond milk	buffalo wings, potato skin, diet coke, soup (blackbean) salad (caesar)	ice cream with cinnamon	quinoa black bean	ice cream with cinnamon	0	no burping
3	9/12/2011	smoothie w/ protein powder	blueberries, lara bar	birdnest	indian sweets	quinoa salad	3 beers	0	felt fine all day
4	9/13/2011	egg & strawberries, coffee	Blueberries	Rice chicken black beans diet coke		Millet salad. Moochi ice cream. Chocolate almonds		8	started burping on way into work and on way home for over an hour, and pretty much all night long
5	9/14/2011	smoothie, green coffee	almonds/raisins	quinoa/black bean gluten free burrito	one piece of chocolate, luna snack size	mama testa, beans, chips, tacos (pork, chicken), rice		5	burping all morning, is it left over from last night?, elimination problems but burping subsided throughout day
6	9/15/2011	oatmeal, green coffee, gnawing in stomach, so ate a luna snack size at 8:45am	strawberries	I&I's mini chicken plate, diet coke	one piece of chocolate, luna snack size	amys gluten free burrito	1 beer	0	no burping
7	9/16/2011	smoothie (protein powder), green coffee, 2 brown rice cakes	blueberries, mango, not hungry till 11:45, great!	greek, 3 falafel, hummos, baba ghanoush, one triangle of pita, salad, diet coke	luna snack size	soy chorizo chili fries, sweet potato tots, stuffed cabbage	wine, 4 beers	6	gas (not burping) in middle of day. dont know if related to food eaten today or just in general
8	9/17/2011	oatmeal, green coffee before workout		quinoa salad	kettle corn	sushi deli	2 beers, one soju	0	no burping
9	9/18/2011	oatmeal, green coffee.		quinoa salad, some chips while hiking	snickers ice cream bar	rolled tacos el zarape		0	no burping really
10	9/19/2011	oatmeal, green coffee	strawberries (1 qt)	curry chicken (not that great) rice, salad	luna snack size	quinoa salad	moochi, ice cream	0	no burping
11	9/20/2011	smoothie, egg, green coffee	blueberries, 2 rice cakes	2 fish tacos, diet coke	luna snack size, licorice	frozen bistro meal (350)	2 beers, tater tots	0	no burping really
12	9/21/2011	smoothie, egg, green coffee	mango, almonds, raisins	turkey sandwich jimbos	reeses cup, snickers, smarties, chocolate	quinoa at kates, nectarine	some cookie	7	excessive burping in the evening, after mango (cupake bite? cookies) burped until bed
13	9/22/2011	oatmeal, green coffee	2 oranges, 1 hard boiled egg	frozen bistro meal	reeses cup, m&ms, 2 rice cakes, chocolate	ahi salad, scallops, ice cream	3 beers	0	no burping, yay
	9/23/2011	oatmeal, green coffee	mango, 1 hard boiled egg	pho	swedish fish, whoppers, calcium drops,	amys dinner, chocolate bar, mochi	3 beers	0	no burping in the am, super tired in the afternoon, super, super tired



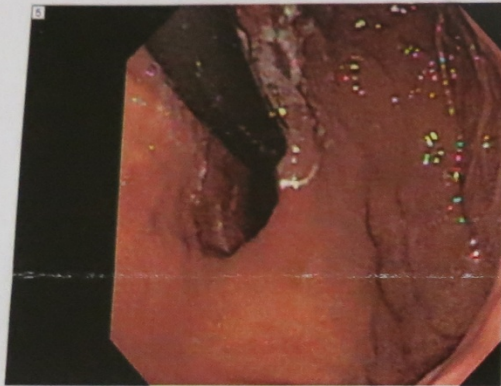
1
cricopharyngeus



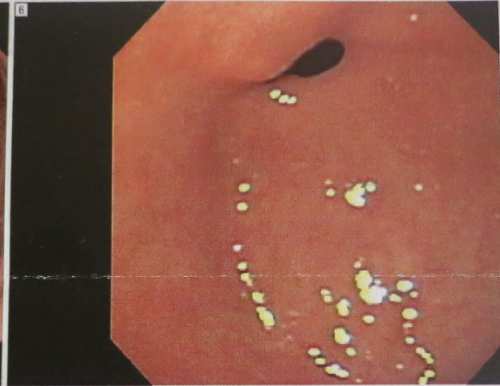
2
normal-esophagus



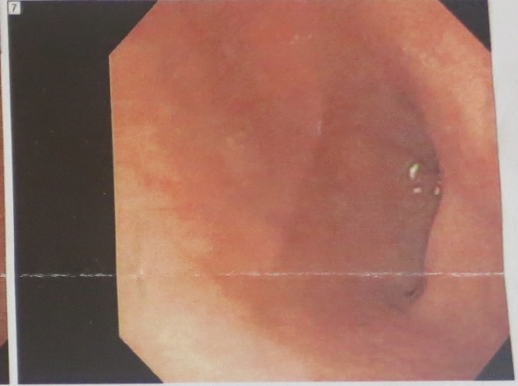
3
hiatal hernia-stomach



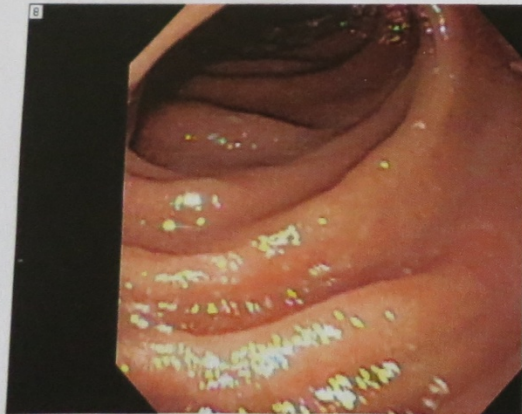
4
hiatal hernia-stomach



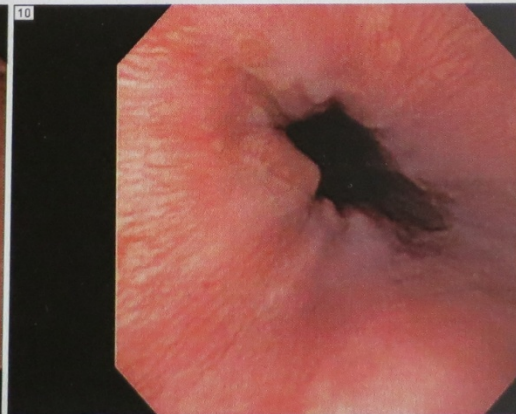
5
otherwise normal stomach-stomach



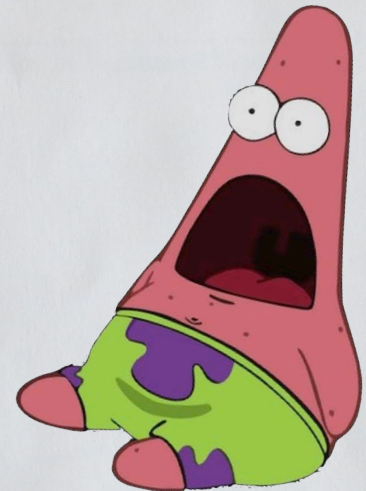
6
normal-duodenum



7
normal-duodenum



8
normal-esophagus



The internet provided many theories...

Hypochloridia??

Candida?

Gluten Allergy++?

Cancer????

Parasites?

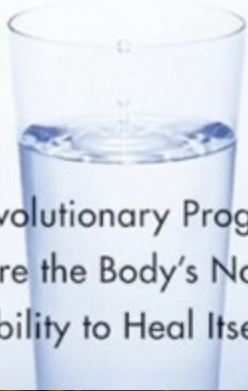
Crohn's Disease?

Acid Reflux?

H.Pylori??

CLEAN

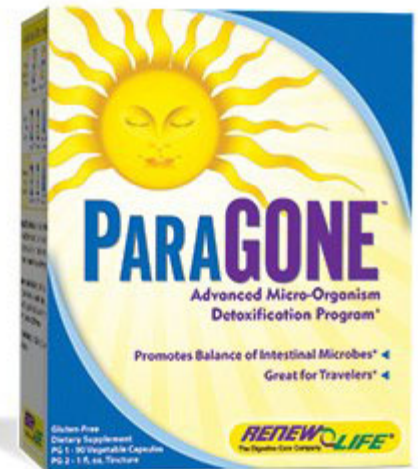
REMOVE • RESTORE • REJUVENATE



The Revolutionary Program to
Restore the Body's Natural
Ability to Heal Itself



ALE



From September 2011 to March 2012: Tracked 147 days of meals and attacks over 7 months

47 "Good" days
Attack 0-2

32%

55 "Meh" days
Attack 3-6

37%

45 "Terrible" days
Attack 7+

31%

Measured Individual Foods using excel formulas

				bad days symptom >= 7			days with this where symptom was good		
21									
	individual foods	total times	percent	bad days had	percent	over/under	good days had		over/under
22		had							
23	cheese	31	17%	15	33%	16%	5	13%	-5%
24	milk	23	13%	13	29%	16%	2	5%	-8%
25	coffee	39	21%	15	33%	12%	12	30%	9%
26	nachos	6	3%	4	0%	0%	0	0%	-3%
27	prilosec			2			3	8%	-40%
28	coke			6			4	10%	0%
29	chips			6			3	8%	-3%
30	fries			4					-6%
31	chipotle	8	4%	3					-2%
32	cream	21	12%	6					1%
33	yogurt					2%			-9%
34	plantation					0%			-4%
35	mango					-1%			-2%
36	soy					-1%			0%
37	wine					-1%			-5%
38	clean shake	49	27%	10	22%	-5%			16%
39	beer	30	16%	5	11%	-5%			19%
40	bean	18	10%	2	4%	-5%			3%
41	chocolate	44	24%	8	18%	-6%			8%
42	almond	79	43%	16	36%	-8%			7%
43	oatmeal	84	46%	16	36%	-11%			-1%
44	almond butter	55	30%	8	18%	-12%	14	35%	5%



Categorized Diet by Broad Categories



General Categories	Days Eaten	percent	bad days had	percent	Bad over/under		Good days had	percent	Good over/under
Dairy	111	61%	36	80%	19%		16	40%	-21%
coffee	23	13%	13	29%	16%		1	3%	-10%
gluten	54	30%	20	44%	15%		11	28%	-2%
fried foods	46	25%	15	33%	8%		6	15%	-10%
soda	21	12%	7	16%	4%		4	10%	-2%
beans	66	36%	16	36%	-1%		16	40%	4%
wine	22	12%	5	11%	-1%		3	8%	-5%
beer	30	16%	5	11%	-5%		14	35%	19%
chocolate	45	25%	8	18%	-7%		13	33%	8%

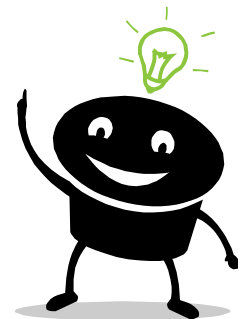




What is my data telling me?

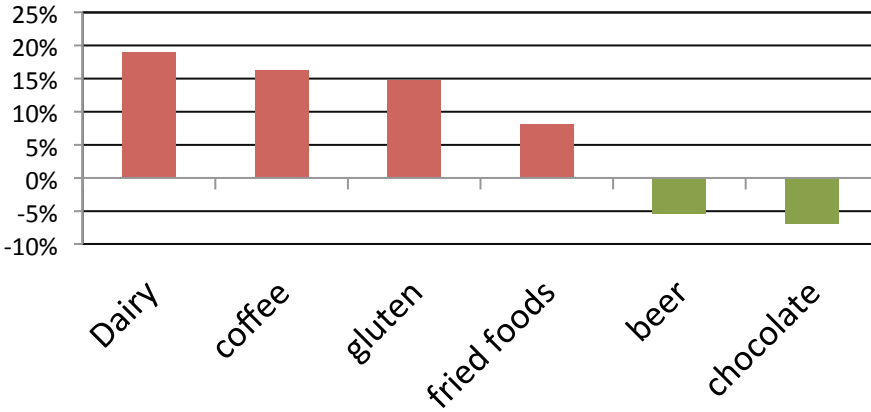
General Categories	Days Eaten	bad percent	days had	percent	bad over/under
Dairy	111	61%	36	80%	19%
soda	21	12%	7	16%	-4%
beans	66	36%	16	36%	-1%
wine	22	12%	5	11%	-1%
beer	30	16%	5	11%	-5%
chocolate	45	25%	8	18%	-7%

Dairy over-represented on bad days by 19% !!

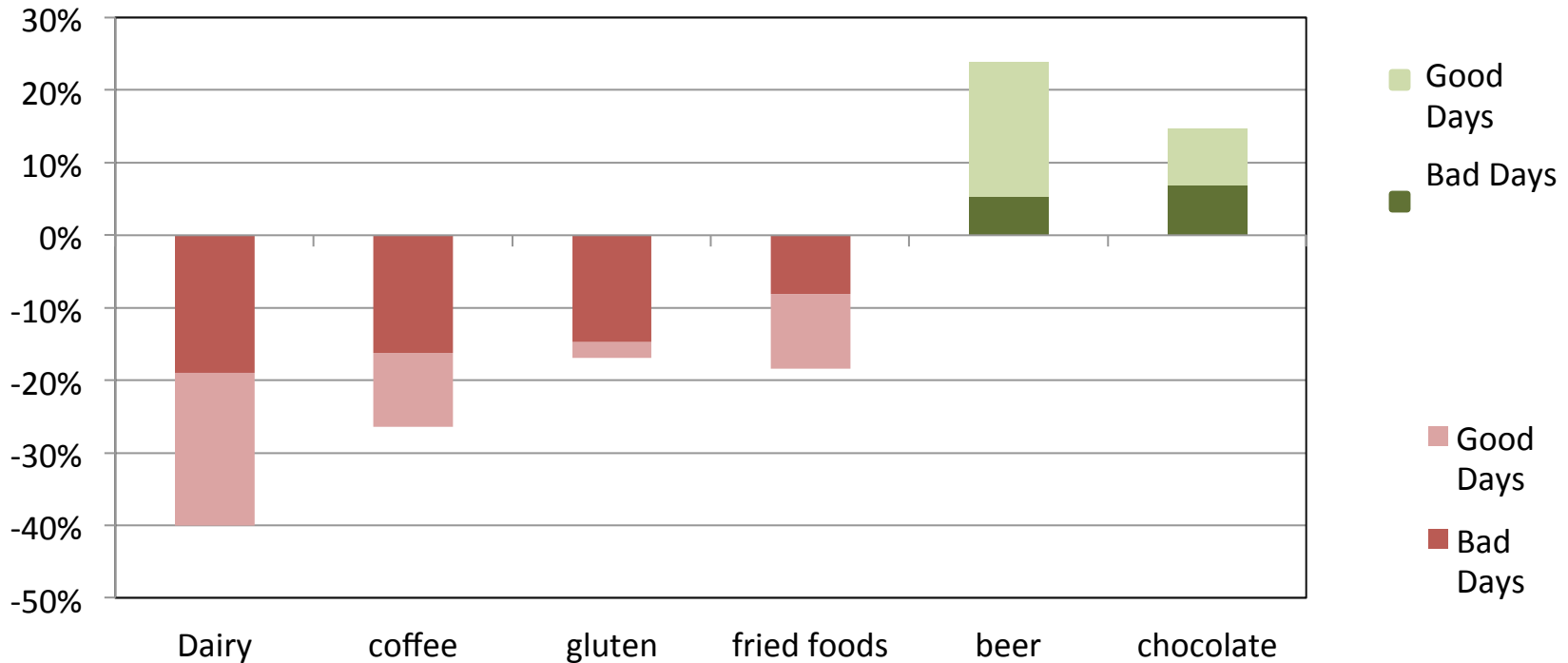
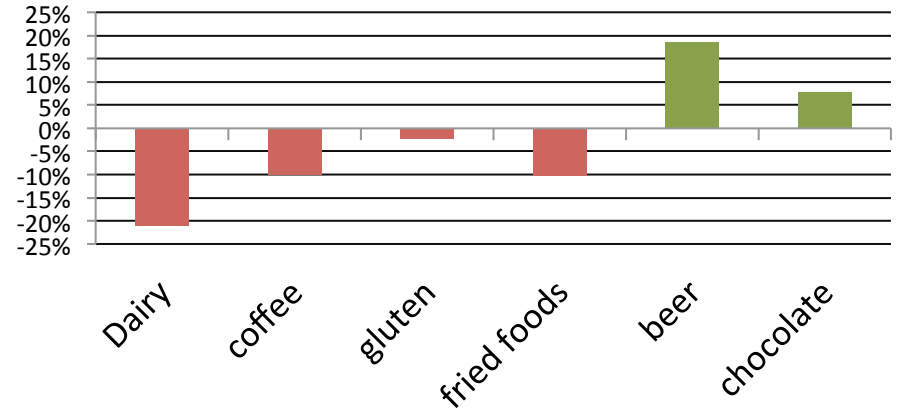


The good, the bad, the ugly

Bad Day Correlation



Good Day Correlation



After diet adjustments to reduce dairy (especially cheese)

From April 2012 until September 2012:
Tracked 94 Days of meals and attacks

48 "Good" days
Attack 0-2

51%

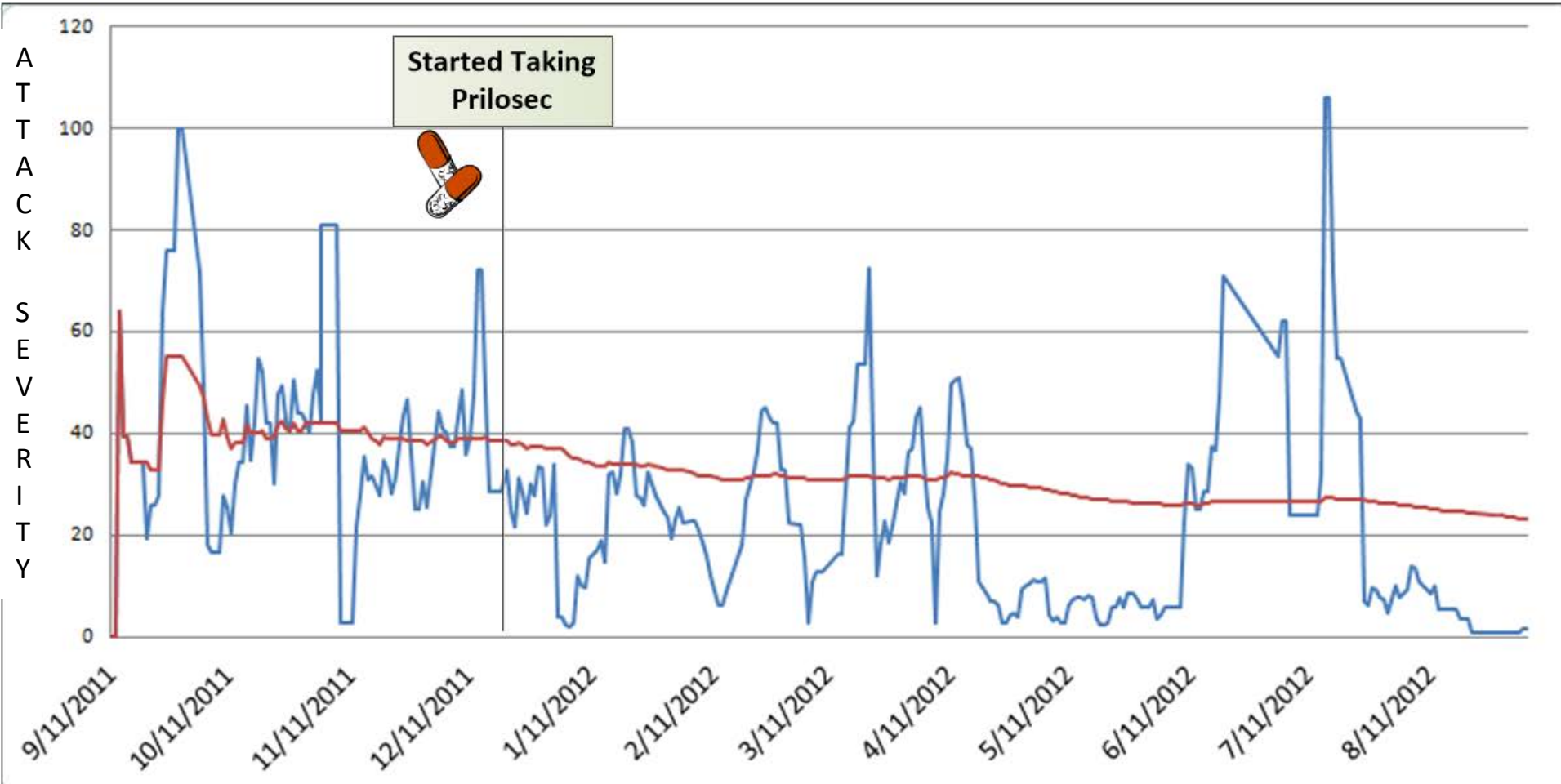
33 "Meh" days
Attack 3-6

35%

13
"Terrible"
days
14%

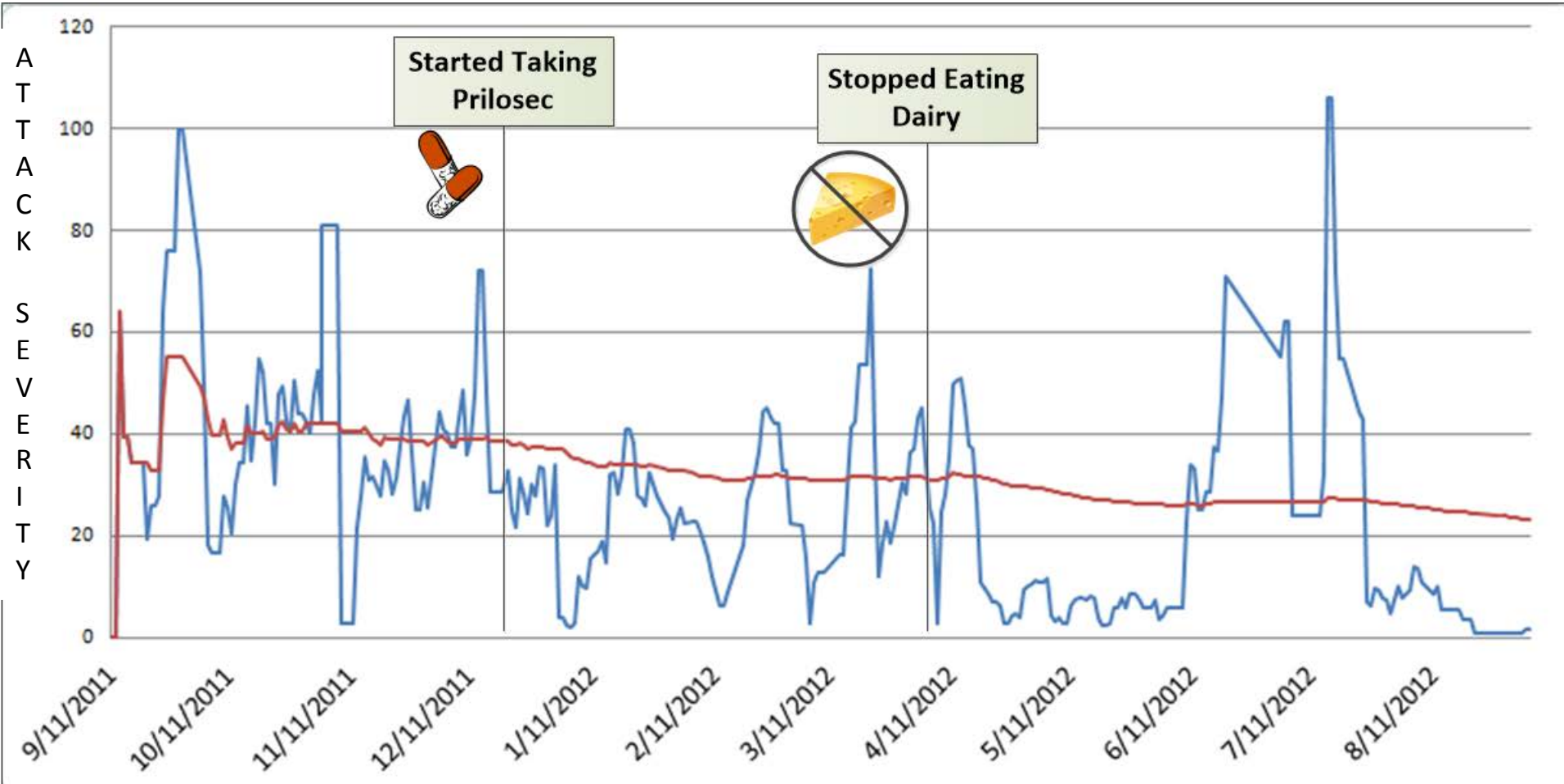
20% Improvement over 5 months!

Attack Severity 2011-2012



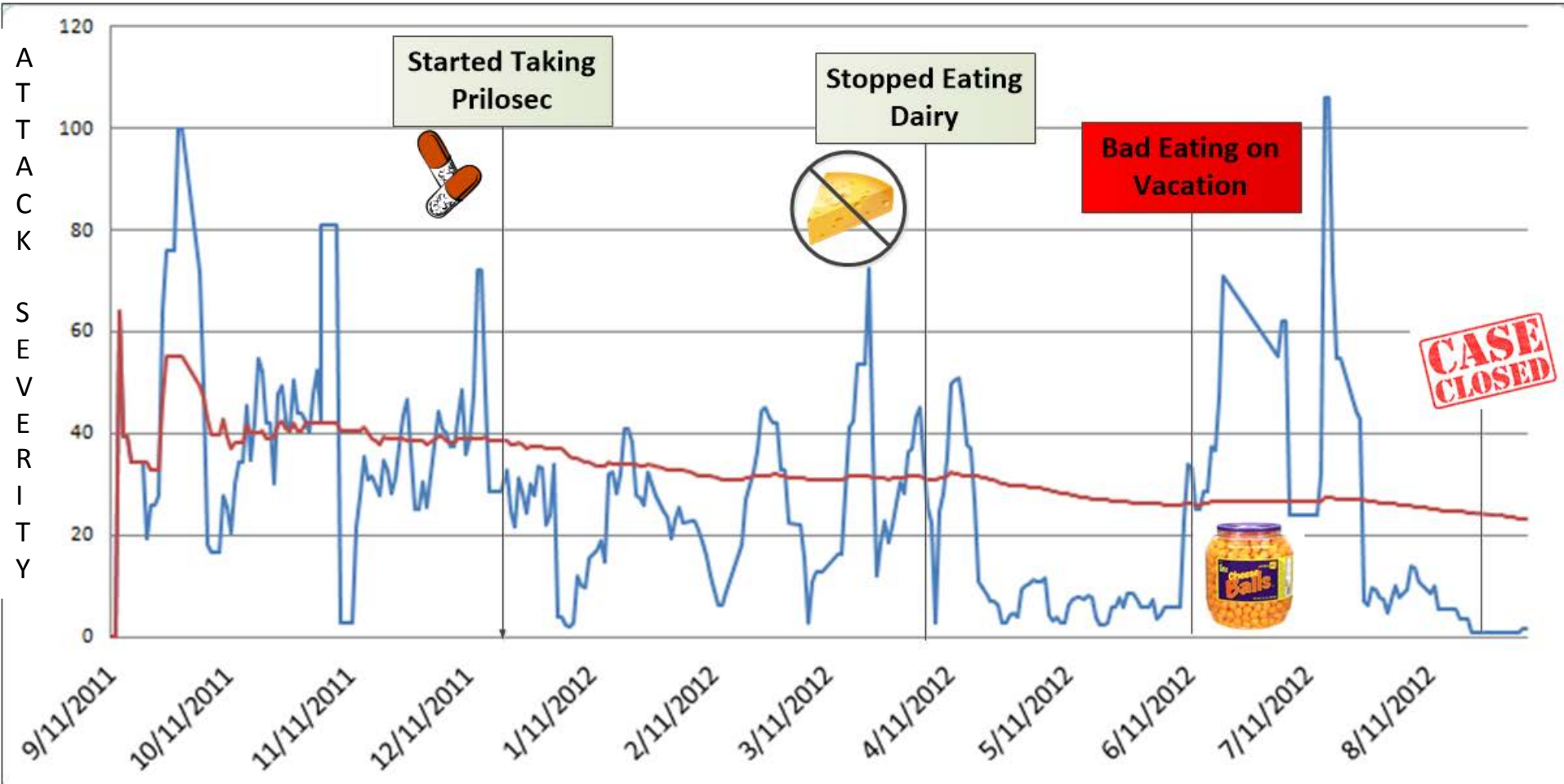
7 Day Average Attack Severity
Attack Severity = symptom severity*attack duration

Attack Severity 2011-2012



7 Day Average Attack Severity
Attack Severity = symptom severity*attack duration

Attack Severity 2011-2012



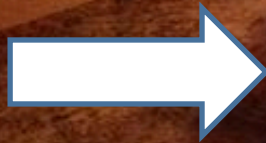
7 Day Average Attack Severity

Attack Severity = symptom severity*attack duration

So am I cured??



**Gluten
Free!**

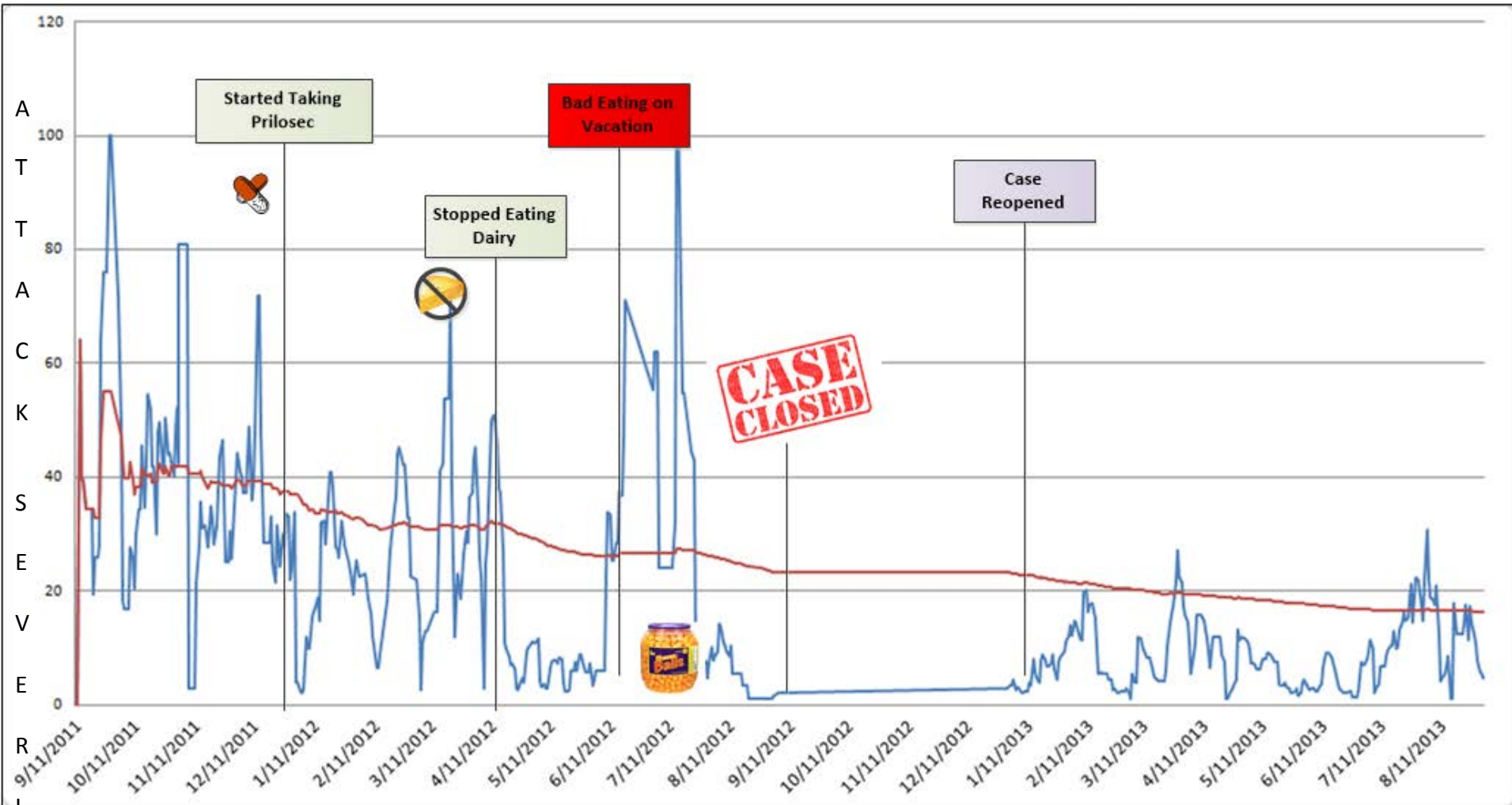


**Dairy
Free!**



Meringue Schaum Torte Birthday Cake Dec 2012

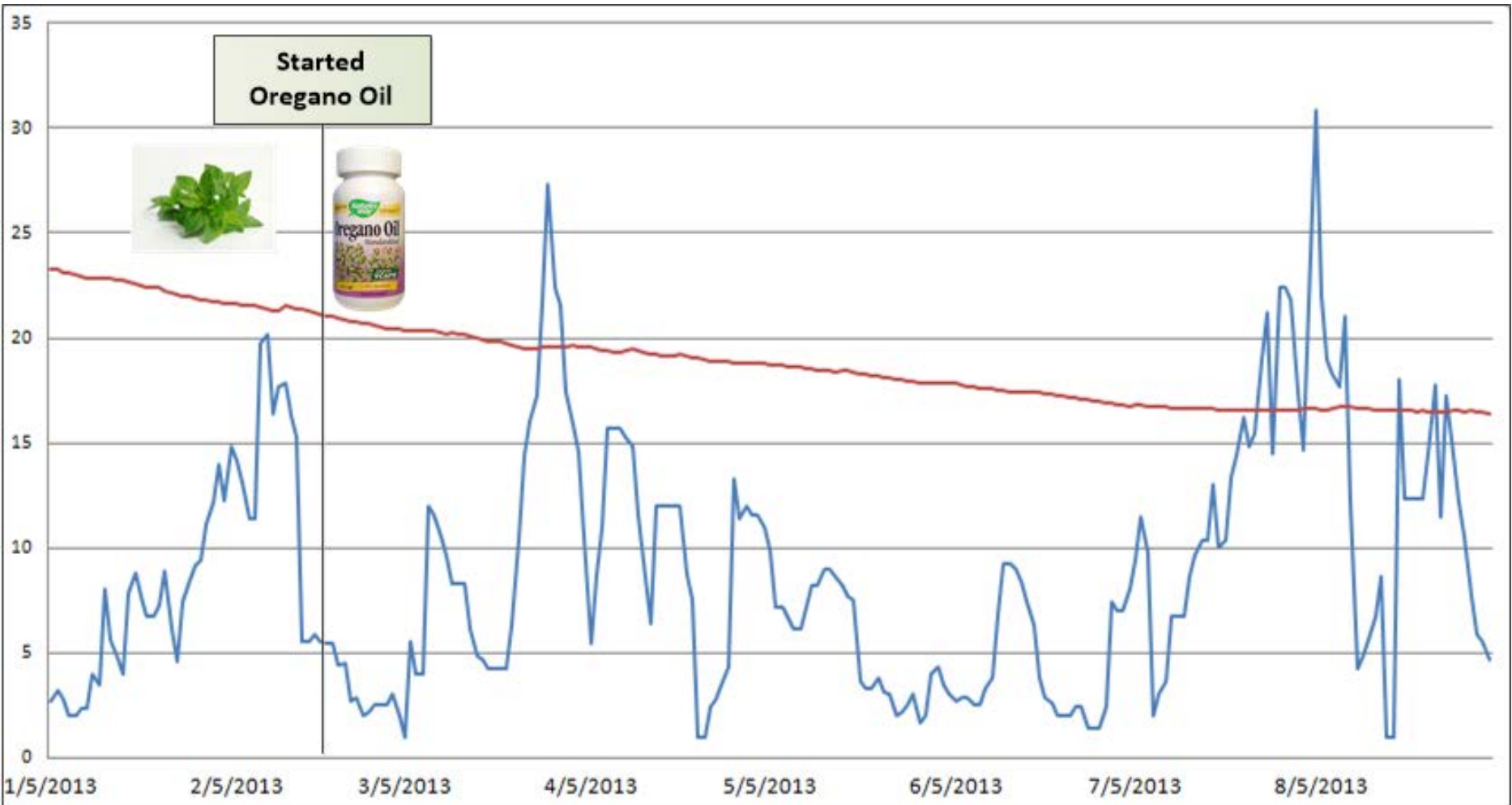
Case Reopened in 2013



7 Day Average Attack Severity

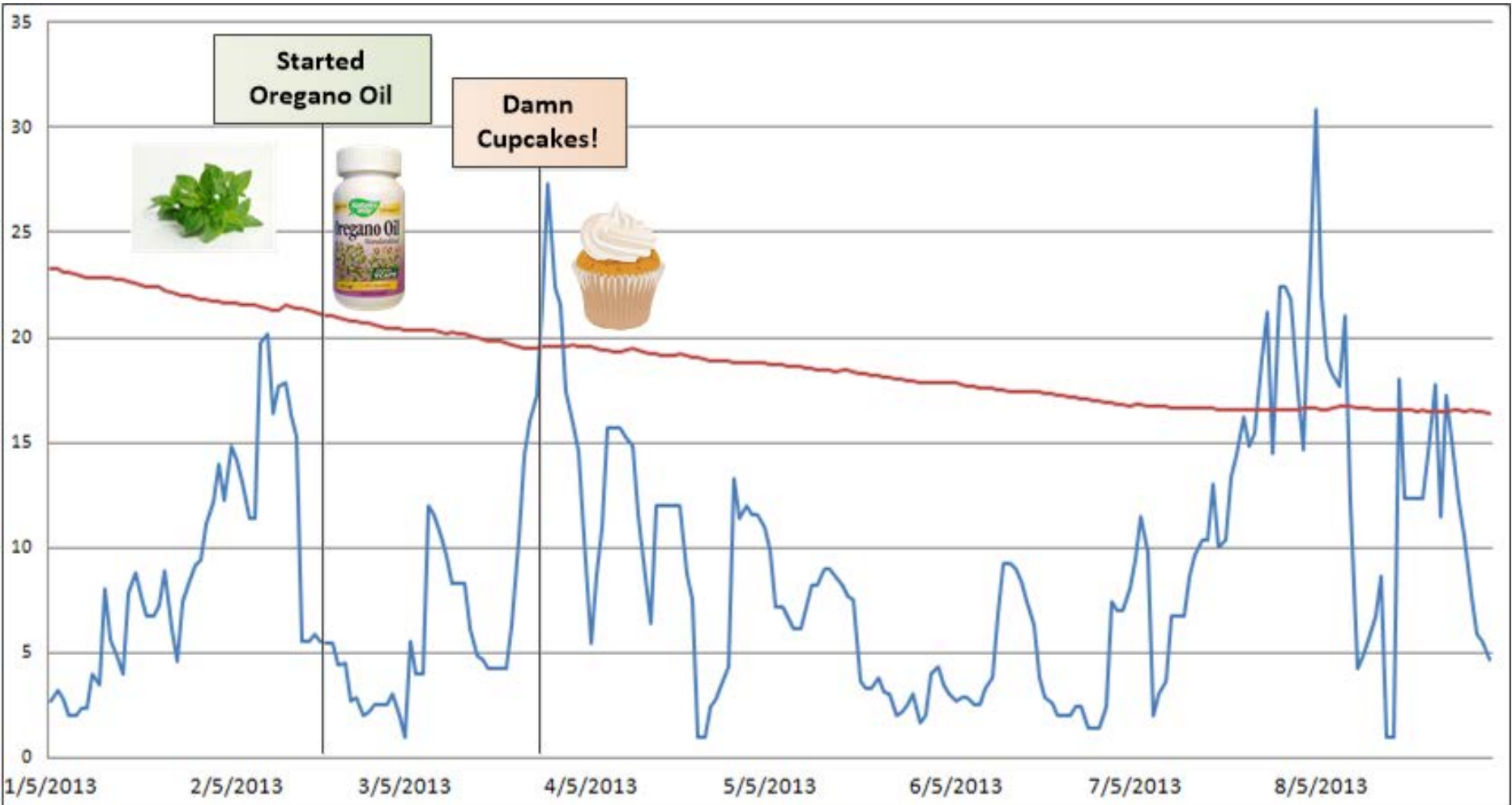
Attack Severity = symptom severity*attack duration

2013



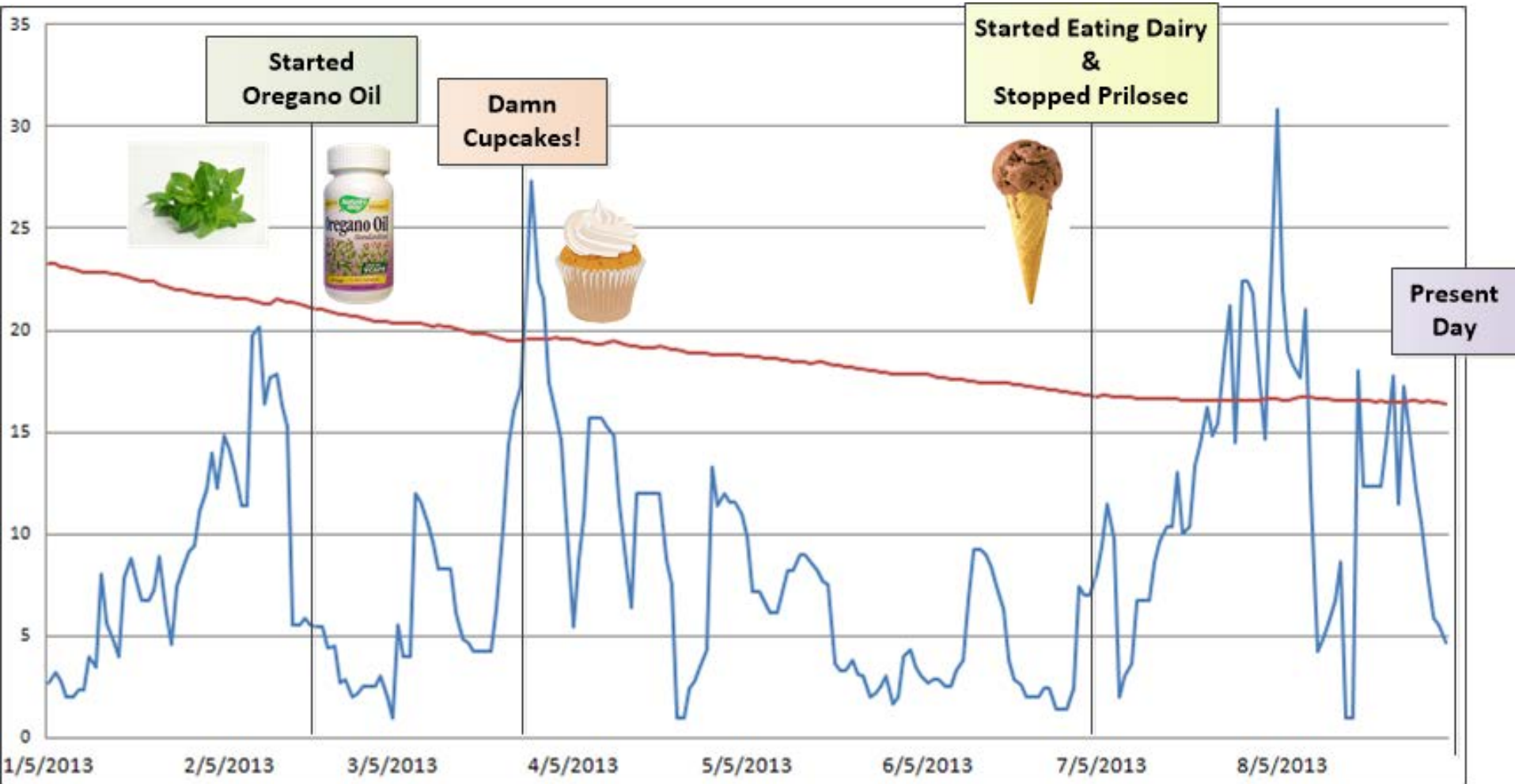
7 Day Average Attack Severity
Attack Severity = symptom severity*attack duration

2013



7 Day Average Attack Severity
Attack Severity = symptom severity*attack duration

2013



7 Day Average Attack Severity
Attack Severity = symptom severity*attack duration

Why was this such a hard case?

None of my correlations are 100%!



+



= ?



+



+



= ?



+



= ?

Track



all the things!

What else did I learn?

**Excel is great!
Fast data entry
No more no less than
what I needed**



The data is all MINE!

What else did I learn?

**Excel is great!
Fast data entry
No more no less than
what I needed**

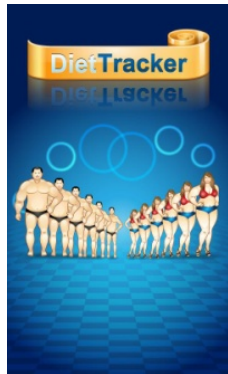
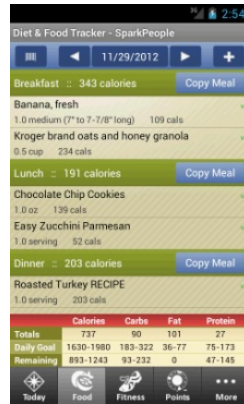


The data is all MINE!

But I really want to do more advanced correlations, and my formulas are already getting a little crazy!

```
=COUNTIFS(dairycol,"<>",data_merge!$C:$C,">=" & $G$3,data_merge!$C:$C,"<=" & $H$3)  
=COUNTIFS(dairycol,"<>",data_merge!$AF:$AF,">=" & $B$15,data_merge!$C:$C,">=" &  
$G$3,data_merge!$C:$C,"<=" & $H$3)
```

Where's the app for this?



“Good” days
Attack 0-2
100%



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facebook.com/suelue