

# **Landmines & Zombies**

**Taking on Chronic Fatigue**









2001 (final year)  
Afghanistan











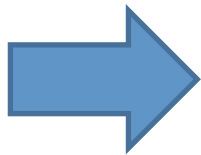


6 yrs





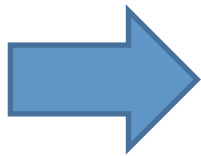
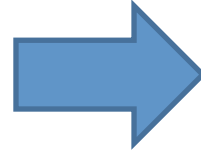
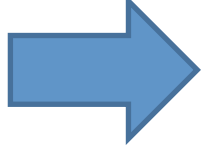
Testing  
Faecal Profiling  
Hair tests  
Blood tests  
Saliva  
cortisone  
testing



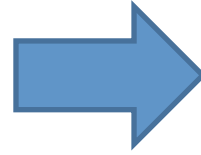
Amino acid  
Supplements  
Ornithorne  
Tyrosine  
Ubiquinol  
Glutamine

Other/Vitamins  
Vit E  
Fish Oil  
Vit C  
Biotin  
Bile Acid

Antifungal  
medications  
Nilstat  
Ampicillin  
Difflican  
ECC  
Amphotercin



Enzymes  
Lumbrokinase      Probiotics      Creon

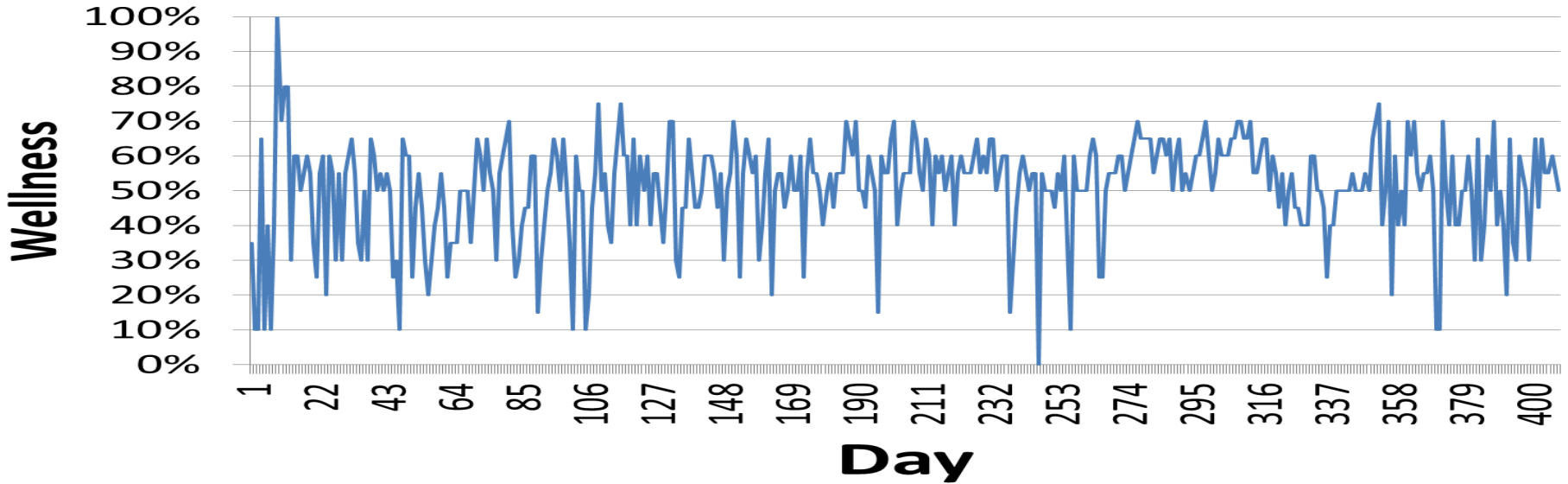


Mineral  
Supplements  
Iron  
Cal-Mag  
Molybdenum  
Zinc

Diets  
Low  
starch  
No starch  
Low carb  
Dairy free  
No red meat  
Sugar free

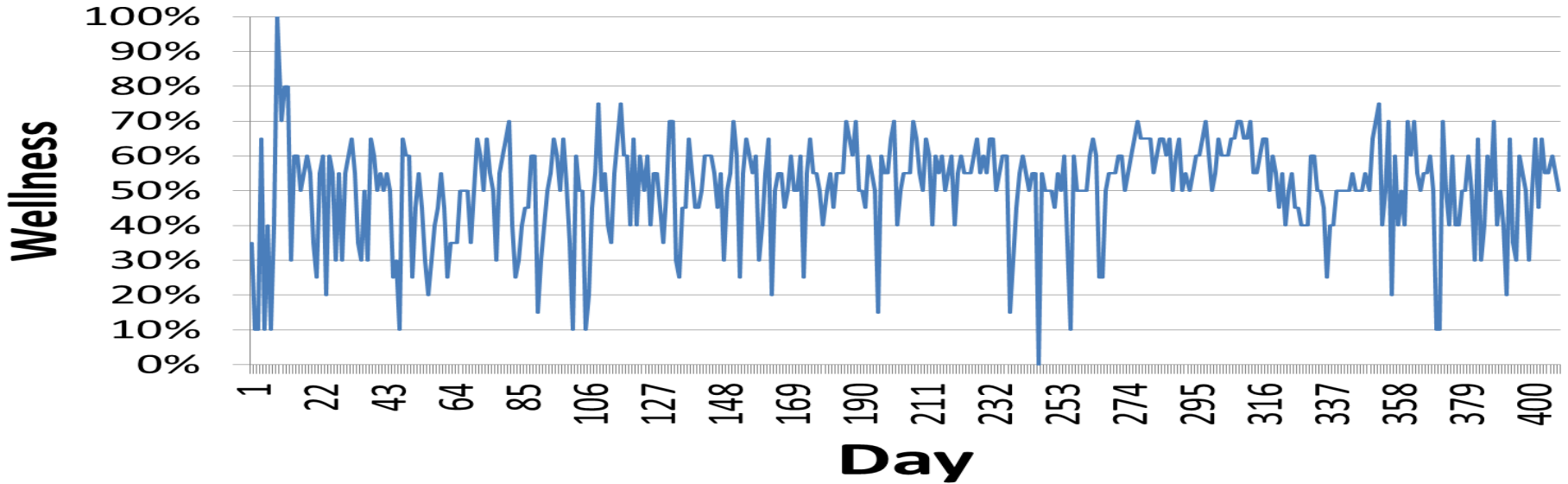


# Wellness



Date	Wellness	Notes	Diet	Medications
8/09/10	0.35		start this column here: total diet: asparagus, celery, red cpsicum, spinach, almonds, meat, herbal teas, eggs for brekky. Exceptions noted	starting taking: 6 parex, 4 nilstat, 4 amphotercin 10mg lozenge, probioplex, hydrozole
9/09/10	0.1		"	"
10/09/10	0.1	had a glass of wine	"	"
11/09/10	0.65	had coffee and a shot of whisky at night	"	"
12/09/10	0.1		"	"
13/09/10	0.4	glass of wine at night	"	"
14/09/10	0.1	glass of wine at night (my bday!) also didn't have lunch. No meat today, only fish (salmon) for dinner.	"	"
15/09/10	0.4	1/2 glass of wine, switched from beef/chicken to fish as only meat. Also had first Difflican tonight.	removed all meat other than fish from above diet	same plus difflican today
16/09/10	1	felt 99% normal ! 1/2 glass wine at night	"	back to same minus difflican

# Wellness



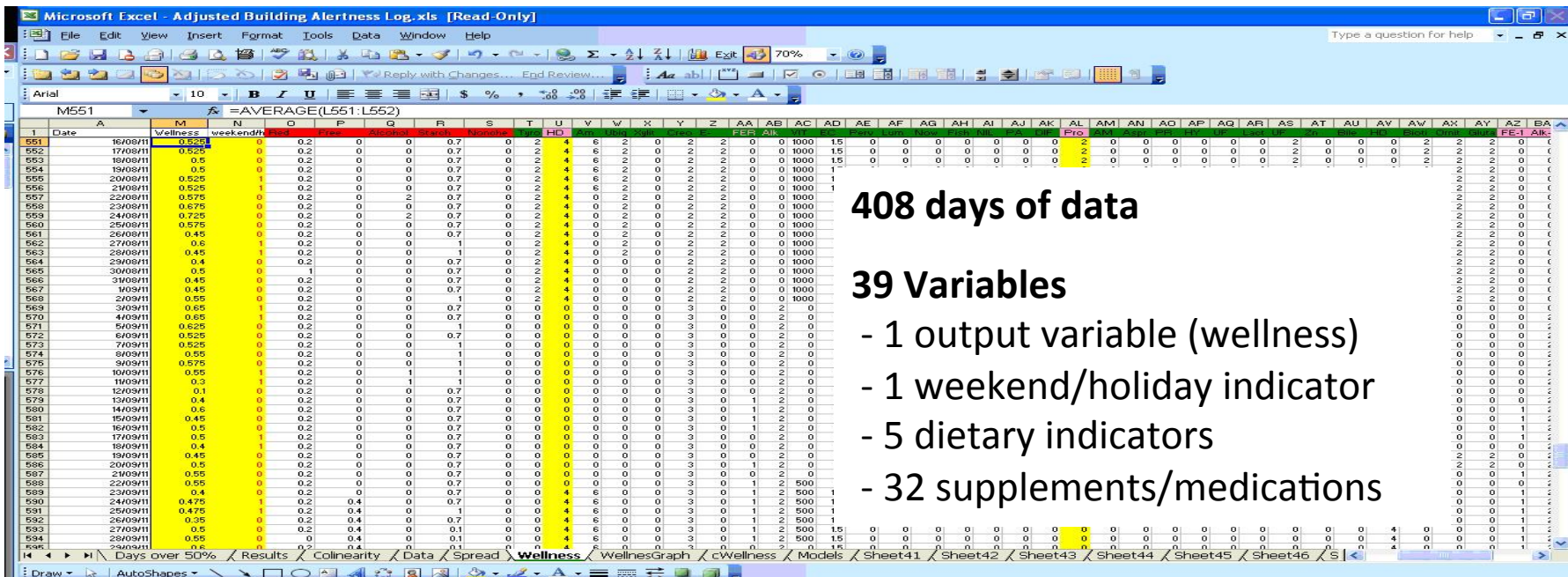
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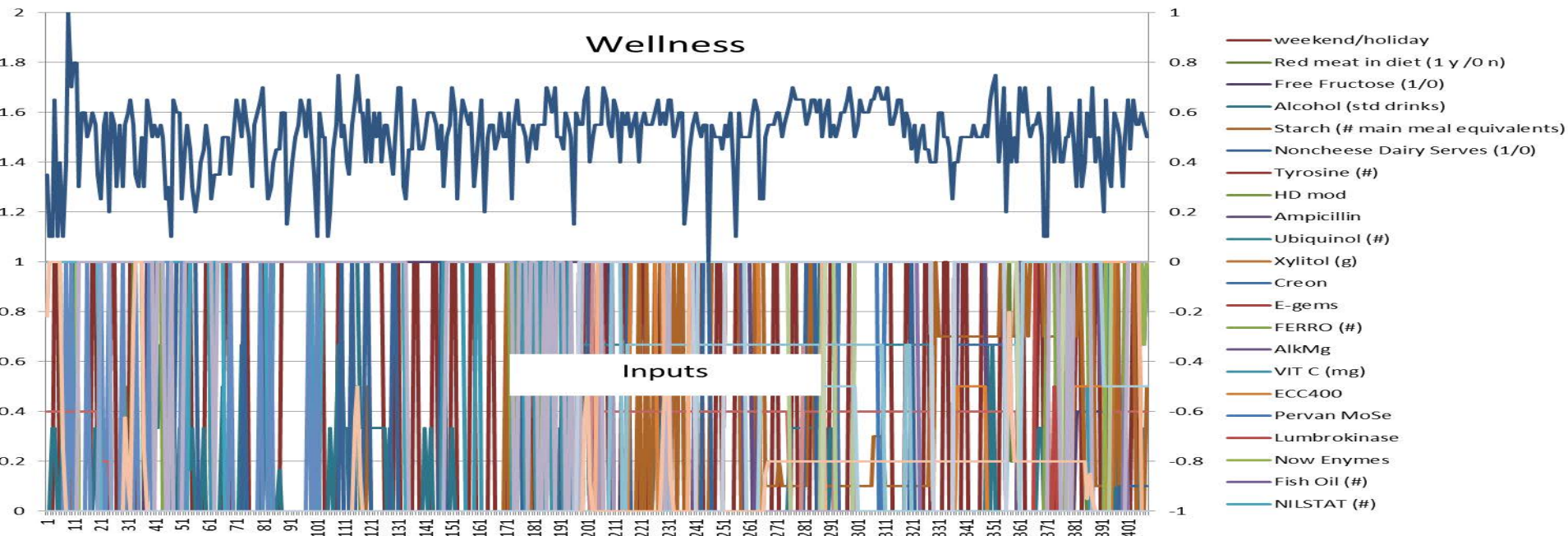
# Minefield Clearance Time Model

$$\ln \text{CLEARTIME} = \beta_0 + \beta_1 \cdot \ln \text{FRAGS} + \beta_2 \sqrt{\text{AREA}} + \beta_3 \cdot \text{ivUXO} + \beta_5 \cdot \ln(\text{AP} + 1) + u_i$$

Effect of statistically significant variables (Transformed model)					
R <sup>2</sup> =85.2%		Constant (lnTeamHours)	Fragment Slope (lnTeamHours/lnFragS)	Area slope (lnTeamHours/sqrtArea)	AP (lnTeamHours/lnAP)
Base figure		-1.71	0.531	0.00345	0.014
Additional effects	Land use	Grazing, Irrigation, Road Agricultural Residential		0.00076	
	Significant UXO	No Yes	0.15		
	Hard surface	No Yes		0.014	
	Vegetation	Bushes, Grass, None Prickly bushes Trees		0.00112	
Total		?	?	?	0.014



Wellness vs Standardised Inputs





# A Personal Wellness Model

$$WELLNESS = \beta_0 + \beta_1 f_1(x_1) + \beta_2 f_2(x_2) + \beta_3 f_3(x_3) \\ + \dots + \beta_n f_n(x_n)$$

Multiple Regression

Stepwise procedure to  
optimise variable form

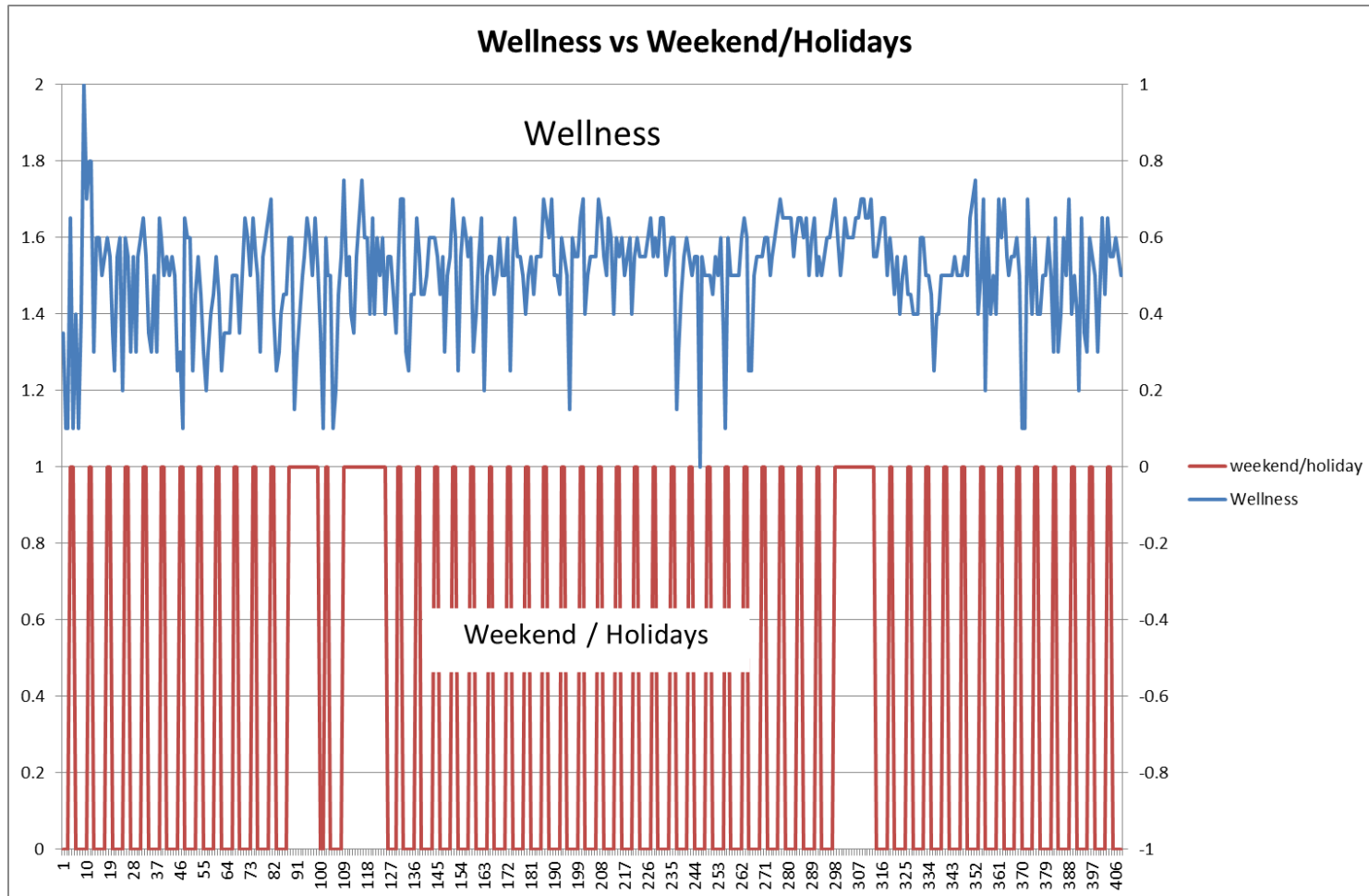
# Factor 1

Weekends/Holidays

Coefficient: **7.0%**

P-value: **0.0000006**

Optimal form: **100% on Day 0**

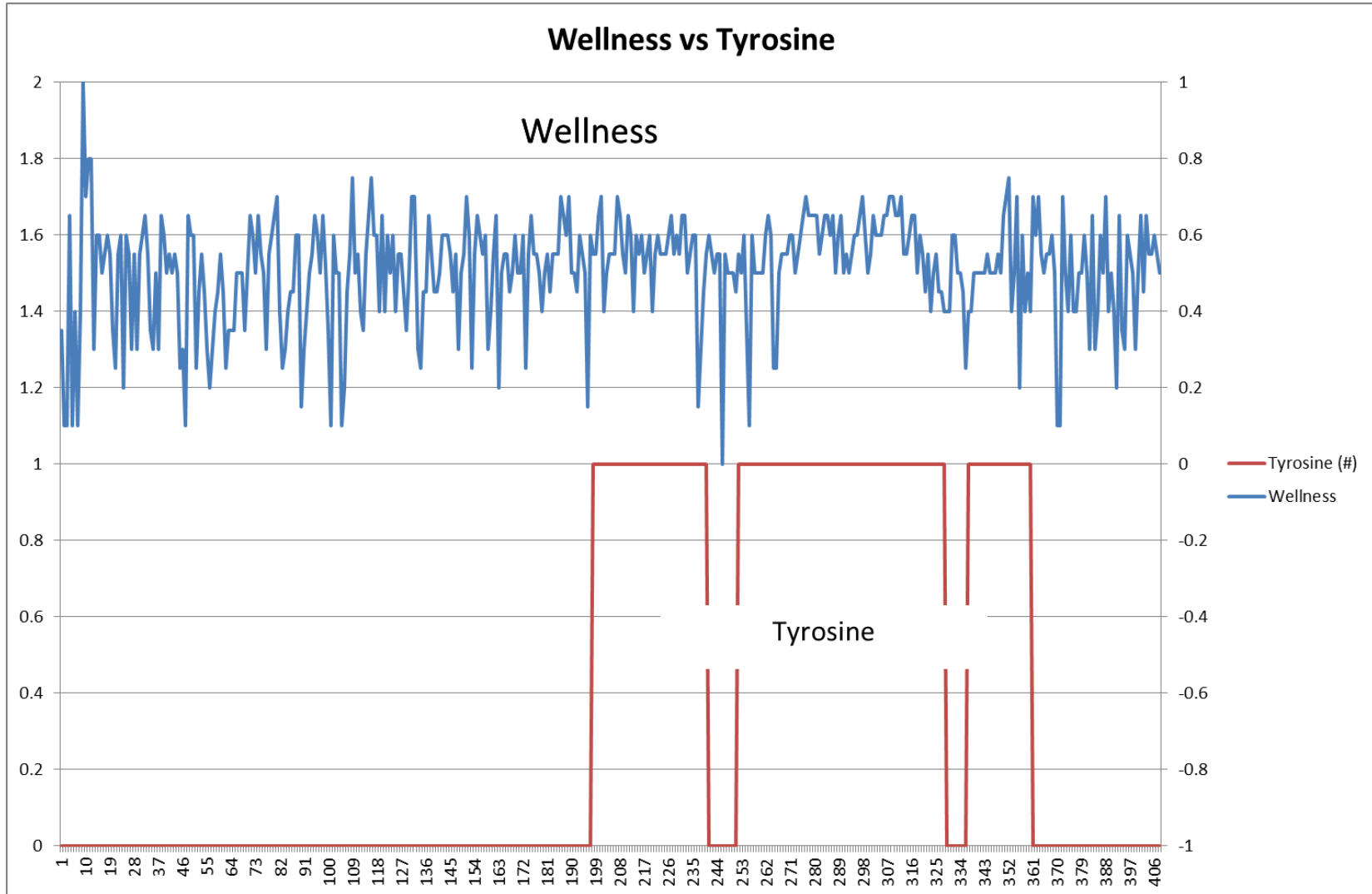




# Factor 2

## Tyrosine

Coefficient: **6.9% per 1000mg**  
P-value: **0.0000010**  
Optimal form: **100% on Day 0**



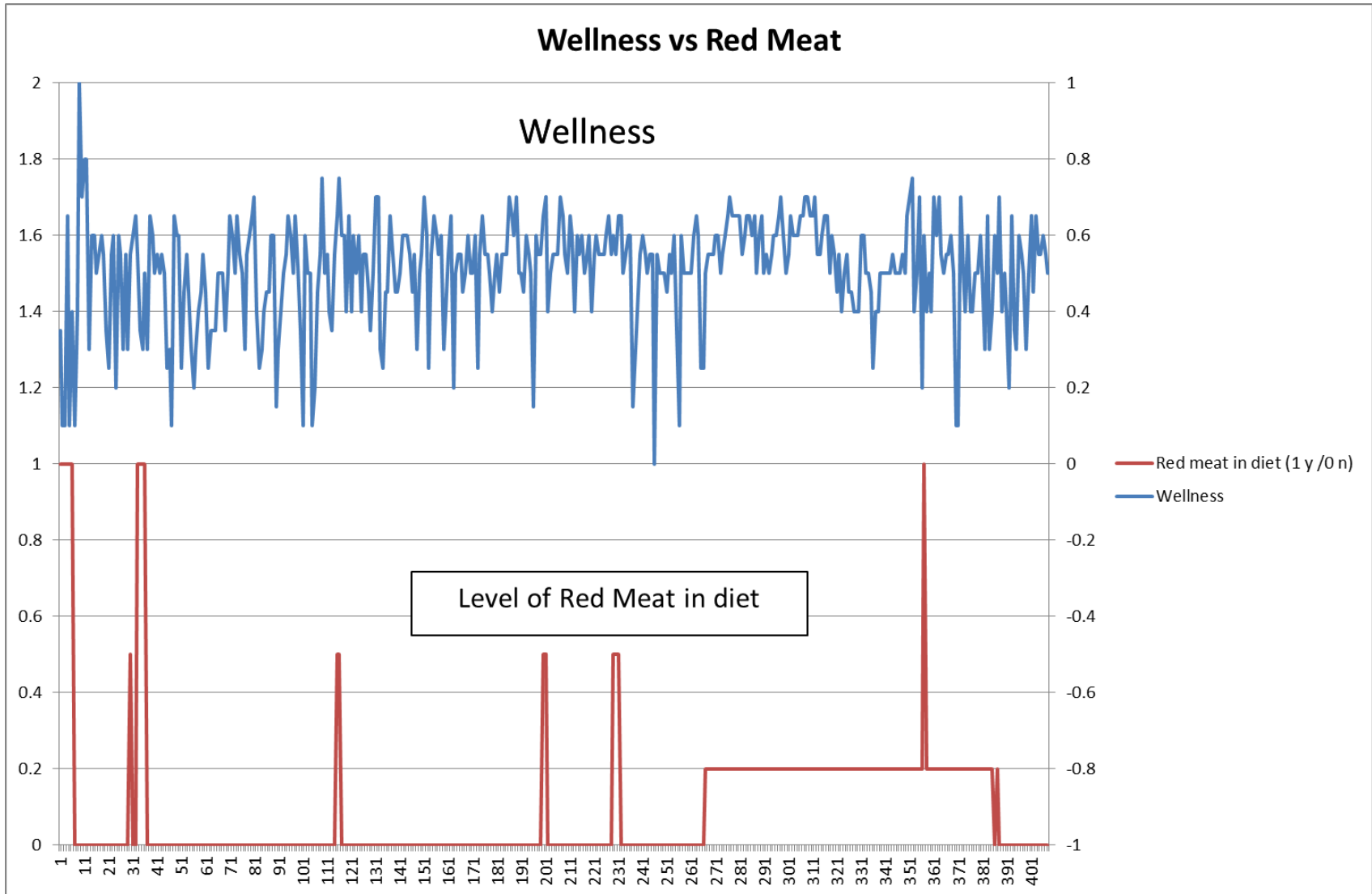
# Factor 3

## Red meat

Coefficient: **-5.9%**

P-value: **0.07**

Optimal form: **33% from Days 0, -1 and -2**

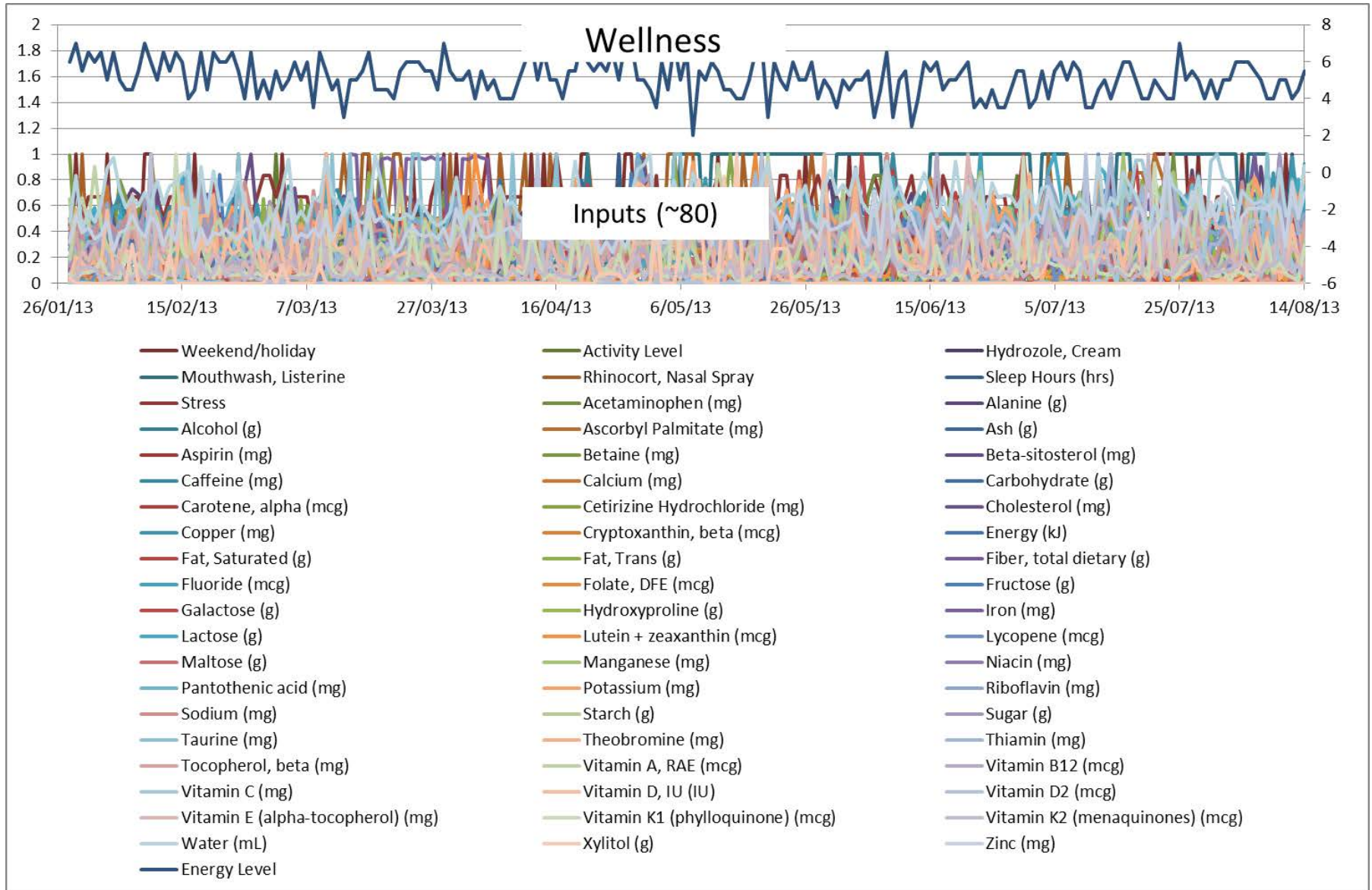




# Results Summary

Factor	Effect	Magnitude	Effect timescale	Level of Certainty
Holidays	Good	+7%	Same day	High (p=0.00)
Tyrosine	Good	+7%	Same day	High (p=0.00)
Red meat	Bad	-6%	Cumulative over ~3 days	Moderate (p=0.07)

I got a bit excited...





# What I learned



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## I thought

The medical profession was my only hope

## I learned

There are things I can do to help myself



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Chronic fatigue was too complicated to analyse

The data was too rough

## I learned

There are things I can do to help myself

That's what statistics are for!

Rough and regular is enough





# What I learned

Chris Bartley

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Perth, Western Australia

## I thought

The medical profession was my only hope

Chronic fatigue was too complicated to analyse

The data was too rough

It was 'only' subjective measurement

## I learned

There are things I can do to help myself

That's what statistics are for!

Rough and regular is enough

I **do** know my own body