



Starting Program
Weight = 260 lbs



40 Days In Program
Weight = 215 lbs

Aligning Personal Outlook To Enable A Healthy Lifestyle



100 Days Into The Program
Weight = 180 lbs

In 2006, the Kennecott Utah Copper Corporation instituted a program to evaluate all employees on an annualized basis to determine their “fitness for duty”. During these evaluations, employees are asked to participate in a variety of activities to gauge their fitness levels, flexibilities, and vital health statistics (i.e. height, weight, body mass index, blood pressure, cholesterol level, etc.).

I have participated in two such evaluations – one in 2006 and the other in 2007. After both evaluations, a company physician reviewed the results with me. In a polite but factual manner, he told me the following:

- I am overweight.
- I have high cholesterol and should consider executing countermeasures (i.e. diet, exercise, and medicine) to combat it.
- My pulse rate and blood pressure are high. These are symptoms of poor nutrition, lack of exercise, and being overweight.

I responded to this feedback by rationalizing. I convinced myself that this poor state of health was the result of work related stresses. I did not exercise because I lacked the time – after all, I work over 60 hours per week. I consume high calorie, fat laden food out of convenience. This provides an additional 30 minutes each day to address work related issues. And on top of all this, I am the victim of circumstances. I come from a family with a history of high blood pressure and obesity. What did the experts expect of me? They should give me a break !!! Ample stress exists in my life without them doling out more.

I refused to look into the mirror and honestly assess the situation. I avoided hopping on the bathroom scales, because I did not want to reinforce the bad news. I even hid my exercise equipment in a corner of the garage – out of site, out of mind.

My first 40 years of life were filled with good health, abundant physical activities, and a willingness to try new things. In my mid-forties I started a string of jobs that were filled with travel, stringent time lines, and long work days. While performing these jobs, I developed a number of bad behaviors – eating fast food, failing to exercise, reducing total sleep hours, and avoiding doctors. The consequences of these behaviors manifested themselves as poor test results in the **Fit For Duty** examination mentioned above.

As an engineer and statistician, I frequently say, “*What gets measured gets done.*” Unfortunately, it took me a long time to adapt this way of thinking into my personal life.

The measurement system that shook senses into me was not a doctor’s warnings. Nor was it impassioned pleas from my daughter. Instead, it was a series of photographs taken during a family vacation in the summer of 2007. In every photo I appeared fat, uncomfortable, and extremely hot. I finally admitted that I needed to do something.

I earn my livelihood by solving problems and improving operational performance. I thought, “*Why not apply the tools of the trade to this personal problem?*” I went to work and defined a “business case”. In other words, I defined the overarching problem that needed to be addressed. The business case became:

Personal health statistics indicate that I am obese and at risk of heart disease, diabetes, and other health related problems.

Effective problem solvers drill into the Business Case to identify the critical few factors that have the greatest influence upon the undesirable situation. This is frequently called applying the Pareto Principle or 80 / 20 Rule.

I drilled into the problem with a tool called a Current Reality Tree. This tool allows the problem solver to ask “Why?” in a systematic manner until root cause is uncovered. Successive answers are connected with arrows to create a visual pattern. The pattern is analyzed by isolating “hubs”. Hubs pinpoint the areas where the critical few factors interact. Figure 1 shows the Current Reality Tree that was created for this problem. It highlights the fact that I am my own worst enemy. My values and priorities do not align with the behaviors needed for healthy living.

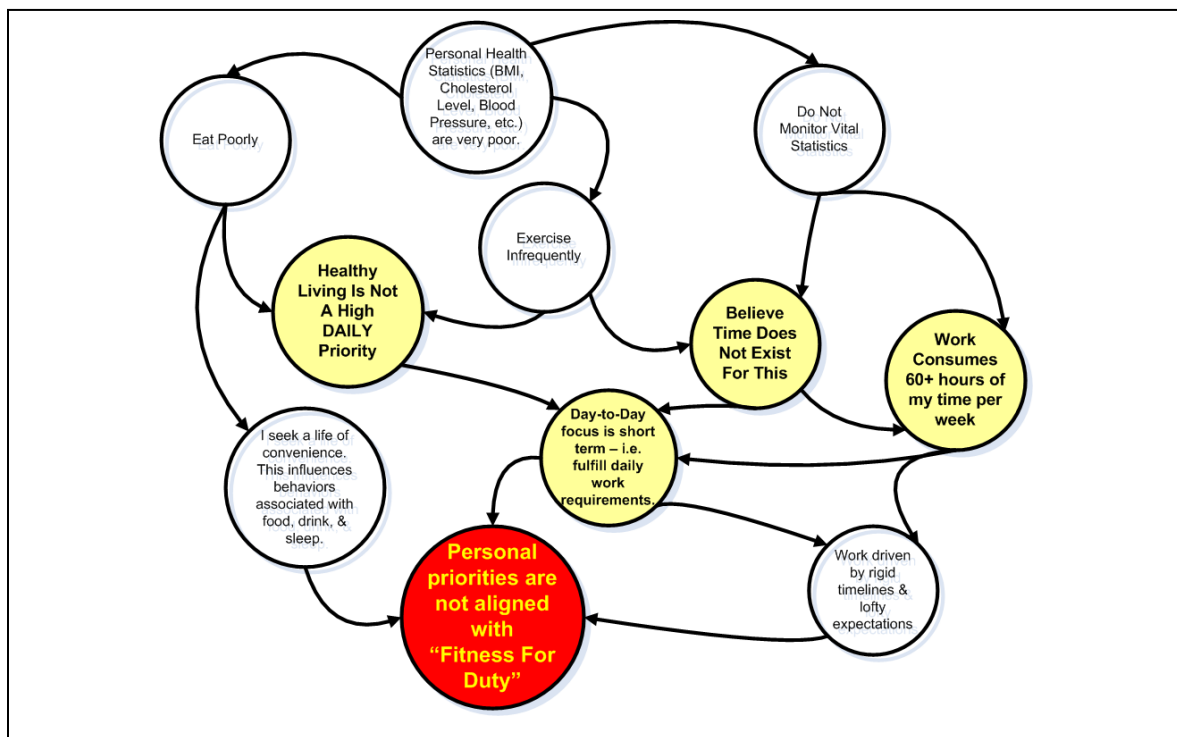


Figure 1: Current Tree Used To Explore The Business Case

With the root cause of the problem isolated, I used the Current Reality Tree to identify the key factors that needed to be addressed. According to the diagram, I needed to change my entire lifestyle and to make diet and exercise a significant focus.

I was now ready to write a problem statement and an objective statement. The problem statement identifies the key process variables upon which work efforts will be focused. The objective statement declares the date and deliverables associated with the work effort.

The problem statement is reprinted on the next page.

My personal priorities regarding work and its associated deliverables are not aligned with the following: 1) my families expectations; 2) my employer's expectations; and 3) requirements for a healthy lifestyle.

The objective statement is shown below.

I will adopt a healthier lifestyle by focusing significant attention upon diet and exercise. This will enable my vital health statistics (i.e. BMI , Cholesterol Level, Blood Pressure, and Heart Rate) to move into the recommended limits as advocated by my doctor.

To start the journey towards the goal, I asked, “*What sort of program will allow me to change my lifestyle in the necessary ways?*” Since I did not have the answer, I generated a set of requirements for comparison against future proposed solutions. These requirements are listed below:

- high probability of success;
- medically supervised program;
- scientifically sound diet;
- easy to implement regime;
- minimizes overall cost;
- maximize sustainable results;
- attain target weight in ≤ 6 months;
- avoid programs with “gadgets” and / or surgical intervention.

I then benchmarked / brainstormed four potential solutions. They were:

1. Develop my own program with the aid of books or magazines
2. Join a commercial support group (e.g. Weight Watchers)
3. Join a peer support group
4. Enroll in a physician managed weight loss program.

I placed the requirements and potential solutions into a decision matrix and performed an analysis. The decision matrix is shown in Table 1. The outcome of the analysis is shown in Figure II. This analysis identified the physician based option as best for me.

Decision Matrix											
Project: <u>Balance Personal Expectations To Obtain A Healthier Life Style</u>											
Date: #####											
		1	2	3	4	5	6	7	8	9	10
	Requirements	High Probability Of Success	Progress Medically Supervised	Diet Fulfills Body Needs	Program Easy To Implement	Minimize Overall Expense	Achieve Sustainable Results	Reach 180 lbs in ≤ 6 months	Avoid "gadgets" and surgical intervention		
	Weighting	10	7	10	8	3	10	5	9		
Alternatives		Association Table									
Develop Own Program		2	2	4	10	10	3	1	10		
Join A Commercial Support Group (e.g. Weight Watchers)		8	5	10	9	5	8	10	8		
Join Peer Support Group		2	5	8	8	8	5	3	8		
Enroll In Physician Based System		10	10	10	8	5	10	10	9		

Table 1: Decision Matrix

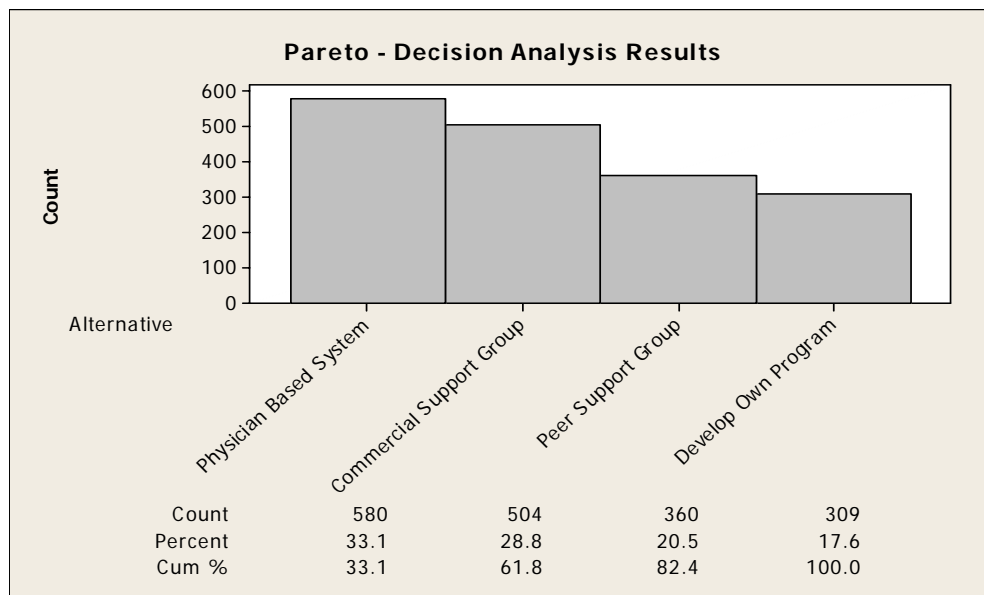


Figure II: Results of the Decision Analysis

With the preliminaries out of the way, it was time to define and execute a plan. I selected the Bariatric VLCD Program administered by Dr. Derek Muse of the Highland Family Practice. I enrolled in the program on 26 July 2007, and started a diet of high protein

beverages and occasional protein bars on 9 August 2007. During the first month of participation, I lost 27 pounds. After experiencing this success, I felt comfortable moving to the “next phase”. I decided to consume one “normal” meal per day. I purchased a digital scale that reports calories, protein, and carbohydrates content of foods. From that point forward, I continued to consume meal replacement beverages for breakfast and lunch. However, I used the scale to remain within the targeted calorie range while eating a “normal” evening meal with my family. Figure III shows a control chart of calories consumed during the first 100 days of dieting. Figure IV records the weight loss that I experienced.

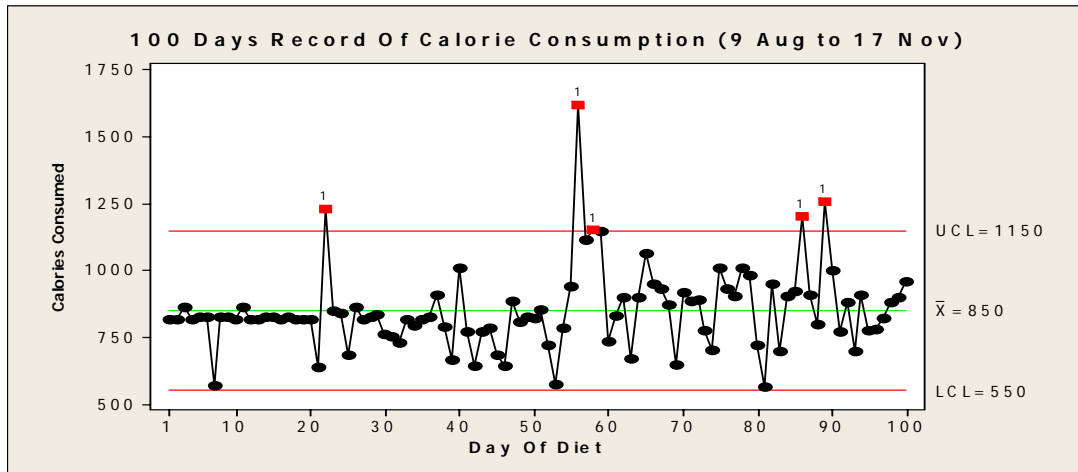


Figure III: Control Chart Of Daily Calories Consumed

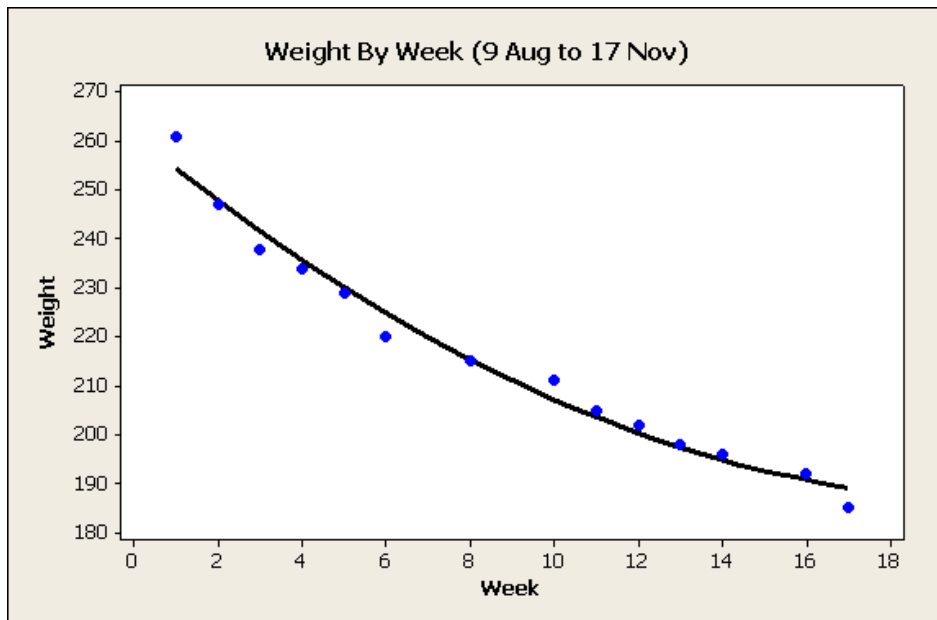


Figure IV: Weekly Weigh-in Results At The Doctor’s Office

In conjunction with the diet, I launched an exercise routine. The exercise routine focused upon three things.

1. Walking our dog a minimum of half a mile every morning.
2. Walking our dog a minimum of a half a mile every evening.
3. Exercising on a Nordic Track Ski Machine at least 3 times per week.

I have fulfilled items #1 and #2 listed with no difficulty. However, item #3 has been problematic. To date, I use the Nordic Track an average of 10 times per month.

I exercise on the Nordic Track with the aid of a heart rate monitor. My targeted pulse range is between 130 to 155 bpm.

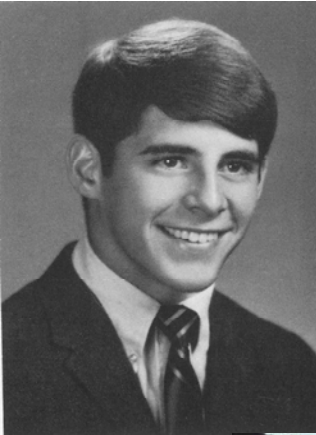
When I started exercising, an entire session lasted a mere 20 minutes. I used the pull cords intermittently – otherwise my heart rate would rapidly exceed the upper range of 155 bpm. I have been able to extend the workouts to 60 minutes. I now use the pull cords continuously and rarely cross the 155 bpm threshold. In addition to the anaerobic workout on the Nordic Track ski machine, I do sit-ups, stretches, push-ups, and weight curls.

I achieved my target weight of 180 pounds (i.e. 80 pounds of weight loss) after 100 days of dieting and exercising. I have now entered the “maintenance” mode. To ensure I sustain the gains, a “Control and Response Plan” was developed. The Control portion of the plan demands that I do the following everyday:

1. Weigh myself first thing in the morning to verify body mass is < 185 pounds.
2. Eat moderately. As long as body mass remains below 185 pounds, there is no need to count calories.
3. Eat a breakfast of fiber (bran muffin, cereal, etc.) and a meal replacement shake.
4. Eat a lunch that consists of half a sandwich OR a salad OR a meal replacement protein bar.
5. Eat the normal family supper in moderation.

If my body mass exceeds 185 pounds, the Response Plan will kick in. The Response Plan prescribes a regime of exercise and calorie counting until control (i.e. weight < 180 pounds) is re-established.

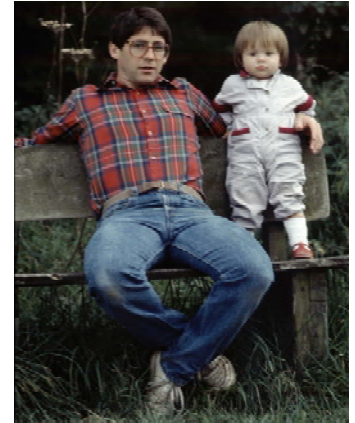
In closing, I would like to share a series of photos and table containing the summary statistics. These two items convey more meaning and significance of this endeavor more powerfully than words.



1969
150 lbs



1984
160 lbs



1985
160 lbs



1990
170 lbs



1995
175 lbs



1998
190 lbs



2005
240 lbs



2007
180 lbs

	Starting	Ending
Date	26 July 2007	18 December 2007
Weight	261 pounds	182 pounds
BMI	41%	27%
Total Cholesterol	255	103
Blood Pressure	128 / 96	120 / 76