WINNING BY LOSING

When ML returned to Durham to re-start the rice diet in 2011, he represented a story of success and failure.

ML came under Dr. Kempner's care and undertook the rice diet in 1986. He was 24 years old. Aside from a very elevated Body Mass Index (BMI) of 46.8, he thought his health was fine (BMI values over 30 define obesity; values over 40 indicate extreme obesity). However, Dr. Kempner was not happy with his blood pressure of 148/92, or his fasting blood sugar of 109 mg/dL (normal blood pressure is 120/80 or less, and normal fasting blood sugar is less than 100 mg/dL). Still, ML did very well in 1986, losing to a BMI 28.3 over six months in Durham. That seemed like success.

Then, he went home and slowly lost his way. He gained weight and lost weight, but over the years the gains outweighed the losses. By 2003, ML had begun medication for high blood pressure; by 2009, he was taking two different medications for diabetes. That seemed like failure.

By 2011, there was no doubt. ML was then 49 years old, and his BMI had risen to 66.6. His blood pressure was 196/120 despite being on four blood pressure medications. His fasting blood sugar was 295 mg/dL despite taking metformin (Glucophage), sitagliptin (Januvia), and twice-daily injections of exenatide (Byetta). Very high blood sugars were confirmed when his Hemoglobin A1c returned at 10.4 (HbA1c reflects a person's average blood sugar over the preceding 120 days. HbA1c values over 6.5 are diagnostic of diabetes; a value of 10.4 meant ML's blood sugar day in and day out over the preceding 4 months was over 250 mg/dL.

OBESITY IS <u>NOT</u> THE PROBLEM

Conventional medical wisdom would say that ML needed more medications, or perhaps experimental surgery like kidney denervation, to lower his blood pressure. His very high blood sugars meant it was time to begin insulin injections. ML wanted to avoid all of these steps, and remembered the good results he had experienced 25 years earlier, and the good results he had seen in other rice-diet patients. He returned to Durham and began a journey that now extends over three years. This time ML plans to stay on the path for a lifetime.

Most medical authorities think that obesity is the cause of a number of health problems like diabetes; hypertension; heart disease; liver, breast, uterine and maybe other cancers. In truth, obesity represents the body's never-completely-successful attempt to save us from ourselves. The true culprit that leads to these many diseases is lifestyle: we eat too much, we exercise too little, and the imbalance leads to disease. Obesity is a *consequence* of unbalanced lifestyle, and excess body weight indicates lifestyle imbalance and the fact that diseases are lurking even before those diseases become apparent. At the RHHP, we use obesity to indicate whether

patients are following a healthy lifestyle or not. The surprising thing about this way of looking at the world is that getting lifestyle into balance means that the metabolic disasters that accompany obesity improve long before obesity itself has gone.

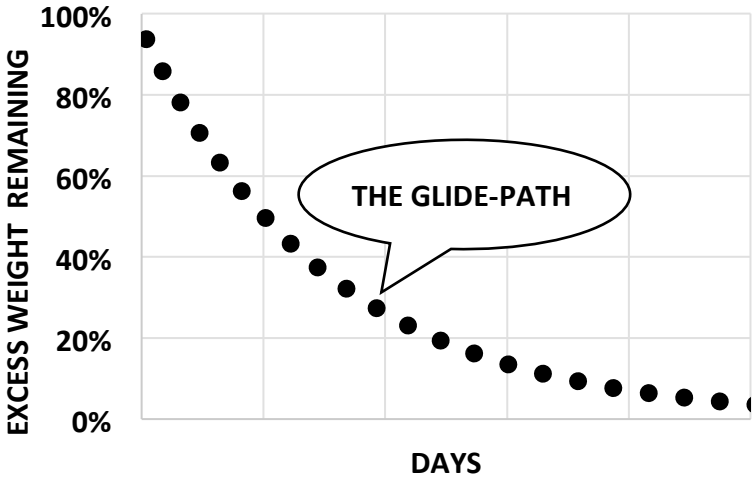
WHAT IS A HEALTHY WEIGHT?

A number of studies show that risk of developing a lifestyle-related disease (Type 2 diabetes; coronary artery disease) increases when people's BMI exceeds 23. This is less than the usually accepted range of BMI which calls values up to 25 "normal." We tell RHHP patients that the goal weight for optimal health corresponds to a BMI of 23. You can calculate your own goal weight by multiplying your height in inches by your height in inches (that is, squaring your height) and dividing the resulting number by 30.5 [height x height/30.5]. When you subtract your goal weight from your actual weight you determine your excess weight.

THE GLIDE-PATH TO HEALTH

The Rice House Healthcare Program uses the loss of excess weight over time to describe what we call the Glide-Path to health. When patients begin to eat appropriate amounts of the right kinds of food, and to exercise gently *every day* (walking or swimming or bicycling are just fine) their excess weight comes down and health and the blood tests that indicate health improve.

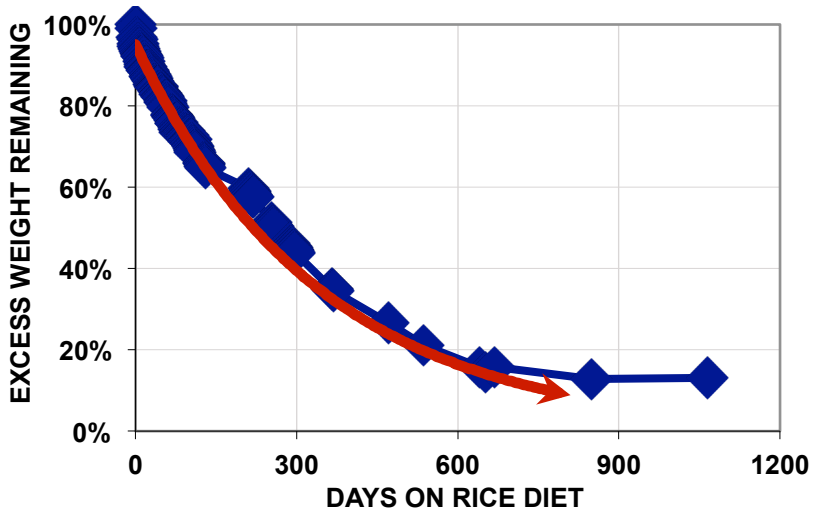
At the RHHP, we calculate excess weight values daily. Then, we plot them on a graph. The plot of those values over time generates a curve that we call the Glide-Path to Health:



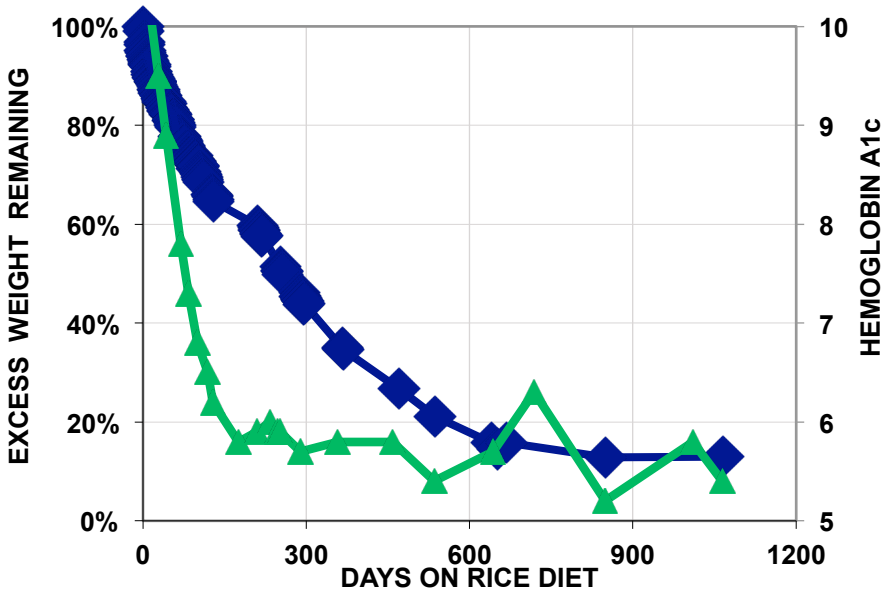
The really good news is that as soon as patients set foot on the Glide-Path, their metabolism improves, and stays improved as long as they stay on the path. Diabetes and high blood pressure may even disappear from view, but if the individual gets off the path, those diseases are likely to return, so it is important to work toward the goal weight. Eventually, a healthy lifestyle brings patients to their goal weight. But their health has gotten better long before.

A DRAMATIC EXAMPLE OF WHAT ONE CAN DO FOR ONESELF

Let's look at ML's Glide-Path. The figure shows ML's excess weight (blue diamonds) over the past 3 years. After ML had been on the rice diet for 60 days, we could calculate his Glide-Path and project it forward (red line) to predict the changes that should happen to ML's excess weight if he adhered to the lifestyle modification plan. As can be seen, the data from those first two months predict well what happened to ML (blue line) over the next 2½ years.



The remarkable thing is that ML's HbA1c (green line) returned to normal (under 6), and he had stopped *all* diabetic medications (*meaning* his diabetes has disappeared) while he was still obese, before he lost even half of his excess weight!



ML's blood sugars became normal even though his BMI was still in the severely overweight range (>45). But he was on the Glide-Path to Health! And being on the Path is almost as beneficial as arriving at the destination.

THE BOTTOM LINE

The lesson we take from stories like ML's is that we start to get healthy as soon as we set foot on the Glide-Path; we stay healthy as long as we remain on it. His blood pressure responded just as dramatically as his blood sugars! When he began the diet, his blood pressure was dangerously high -196/120- despite taking four blood pressure drugs. Three years later, he was on only two drugs, one of them at half his earlier dosage, and his most recent blood pressure reading was 124/88.

But one picture is worth a thousand words. Here is ML before re-starting the rice diet and again, two and a half years later:

ML's story is dramatic testimony to the visible benefits – and health benefits – of getting on and staying on the Glide-Path. Of winning by losing.