

Chapter 1:

Active-Passive: The Concept

When you gain weight or lose weight, you always go through two different phases: active phase and passive phase.



Figure 1.1

Assume that your weight is 200 pounds, and you want to lose 60 pounds total to reach a goal of 140 pounds. You are trying a diet and exercise program to achieve your goal. Unfortunately, in reality you would never experience a sixty pounds weight drop. Going from 200 pounds to 140 pounds will never happen.

Instead, you are very likely experiencing the following scenario:

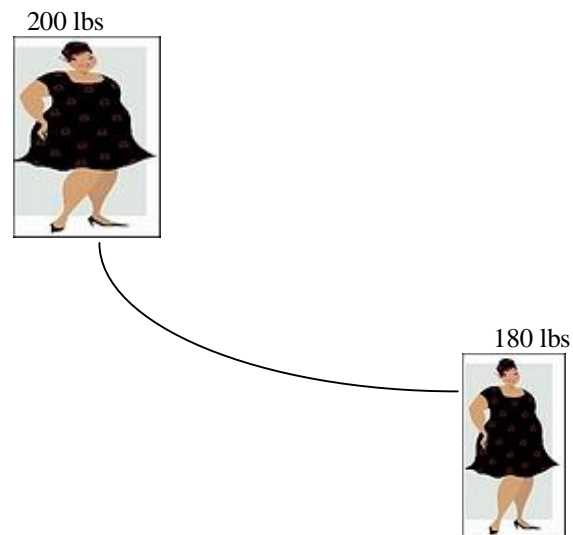


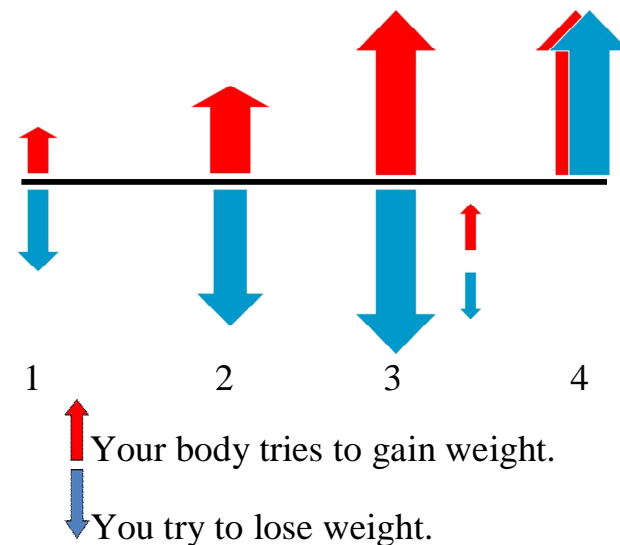
Figure 1.2

Initially, you are losing weight quickly. After a month or so, you still lose weight but at a slower rate than before. After two months, you hardly lose any weight. You probably lose some inches at best. Undoubtedly, you are reaching a plateau, a point where you cannot lose any more weight no matter how hard you try. After ten to twelve weeks, once you reach that plateau, you are stuck!

Initially, when you are losing weight, you are in the active phase of weight loss. When you are stuck, you are in the passive phase.

When you are stuck, you are stuck!

In some diet programs, you may lose a few pounds then you will not lose any more weight. In some others, you may lose a good portion of weight, and then eventually you will reach a plateau. Even with the most effective diet programs, you may lose a lot weight, but very soon you will also get stuck. Usually, when you lose around 10 percents of your weight, you always reach a plateau (*Chaput 2007*)¹. For example, if your weight is 180 pounds, usually you cannot get past the 160 pound mark. You always get stuck at 160 pounds no matter what you try, despite the fact that you still have at least another 20 pounds more to lose. After all, when you are stuck, you are stuck. That is a fact. This is a natural response of our bodies. Why?



1. When you lose 5 lbs, your body tries to gain back those 5 lbs.
2. When you lose 10 lbs, your body tries harder to gain back those 10 lbs.
3. When you lose 20 lbs (or 10% of your weight)... you try to lose weight but your body tries to gain weight. You reach a plateau.
4. If you can't keep up, your body will gain back all the weight eventually.

Figure 1.3

There are a lot of reasons or theories explaining this phenomenon; however, I only want to mention two reasons. First of all, our bodies tend to be in a homeostasis state (*Jequier 2002*)². In another words, our bodies want keep everything the same or within a very narrow range. For example, our bodies keep the sugar level, the electrolyte level, and the temperature at a constant range. Naturally, our bodies try to maintain the weight within the same range like that of a thermostat. If your weight is set at 180 pounds, your body has the tendency to keep it at 180 pounds. When you eat a little more, you may gain a few pounds. But then you will naturally drop back down to 180 pounds. When you lose a few pounds by dieting, eventually your body will bounce it right back up to 180 pounds. Any time you are actively trying to deviate your weight away from the set mark of 180 pounds, your body naturally corrects itself.

As an illustration from the *figure 1.3*, let's assume you lose 5 pounds. Your body hates it and tries to gain back those 5 pounds. When you lose 10 pounds, your body hates it even more. It tries even harder to gain back those 10 pounds by making you hungry and craving for foods with high

calories. So when you lose around 20 pounds or 10 percents of your weight, your body won't allow you to lose any more weight. At this point, while you are trying to lose weight, your body is trying to gain back the weight. You are getting very stuck!

The second reason why once you reach a plateau you will not lose any more weight is because your body is going through internal rearrangements or changes. For example, say you want to gain 100 pounds to become a sumo wrestler. You actively try to eat as much as you can. Initially you will gain weight quickly. However, when you gain about 20-25 pounds, your body reaches a plateau. During that passive phase of plateau, your body undergoes some changes to support the heavier mass. Your skin will stretch. Your body will build up more supporting tissue to carry more fat. Your bones will be deposited with more calcium to be bigger and thicker. Once your body goes through all of those internal rearrangements and changes, it will then allow you to gain more weight. Otherwise, it will be collapsed by the heavier weight.

When you lose weight and reach a plateau phase, your body also goes through reverse internal rearrangements and changes. Your body starts to reabsorb the excess fat supporting tissues. Your skin is tightening and toning up. You will not lose any more weight during that passive phase until your body completes the internal rearrangement process. It takes at least two to three months for the whole process to be completed, depending on the individual.

Our body resists any changes.

As you can see, our body resists any changes because it just wants to be in a homeostasis state. Our body weight is well regulated (*Corbett 1986*)³. So when you lose weight and get stuck, two things will happen. First of all, you cannot lose any more weight no matter how hard you try. Secondly, your body naturally tries to gain back that weight. To repeat, when you lose 20 pounds and get stuck at a weight of 160 pounds, before your body undergoes through any internal changes, it tries its best to gain back that 20 pounds. So if you are not careful, you will naturally gain back all the weight that you have lost.

Our body constantly adapts.

Our body resists any change. That is a fact. However, once our body faces a challenge, it will adapt. That is another fact.

This can be seen in the case when you relocate from Hawaii to Alaska. At first, you really hate it because your body cannot get use to the freezing weather. Subsequently after a few seasons, your body adapts and you will not feel so cold any more.

As I have said before, once you reach the passive phase and get stuck at a certain weight; initially, it is very difficult to maintain that weight. Your mind craves for foods and sweets. Your body simultaneously converts any extra calories into fat. It is very difficult to maintain that weight at first. Fortunately, it will get easier and easier to maintain that weight as time goes by. After a while, you do not have to try so hard to maintain your weight. If you are able to maintain the same weight for the duration of two to three months, your body will adapt to maintain that weight (*Weigle 1988*)⁴. Your weight thermostat is shifted to the new set point.

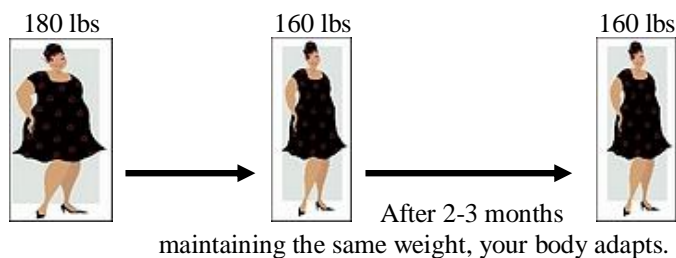


Figure 1.4

As an illustration, say you lose 20 pounds and get stuck at a weight of 160 pounds, if you are able to maintain the weight of 160 pounds for at least two to three months, your weight will be shifted to a new range of 160 pounds. After your body goes through some internal rearrangements and changes; eventually, your weight will be stabilized at 160 pounds. Now you can even eat more or less. Your body will come right back to a weight of 160 pounds, not the original 180 pounds. At this very moment if you want to lose another 20 pounds to reach your goal, your body will certainly allow you to lose some more weight.

Unfortunately, the reserve is also true. Let's say for any reasons you gain 20 pounds. Initially it is relatively easy to lose those 20 pounds by a little extra diet and

exercise. However, if you don't lose those 10 extra pounds soon, after a few months, your body will also adapt to that new heavier weight. Subsequently, your weight thermostat will be shifted to 200 pounds, not the original 180 pounds.

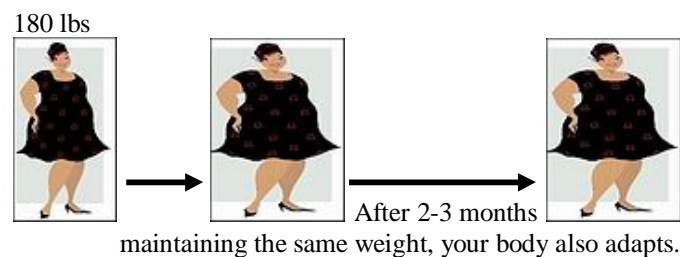


Figure 1.5

The process of weight gain or weight loss is like that of the steps of a stair.

To demonstrate this example, let's look at the *figure 1.6*. Assume that your weight is 200 pounds, and you want to lose a total of 60 pounds. It may appear that you may go through at least three rounds of active-passive phases before you reach your final goal. You may likely lose 20 pounds in each round. At first, you actively lose weight for 6-10 weeks. Subsequently, you get stuck passively for another 8-12 weeks.

During this passive phase, your weight is being stabilized and adapted. Once it is stabilized, you can actively lose more weight again. But then you eventually will be stuck after a short while. So the process of weight gain or weight loss is like that of the steps of a stair.

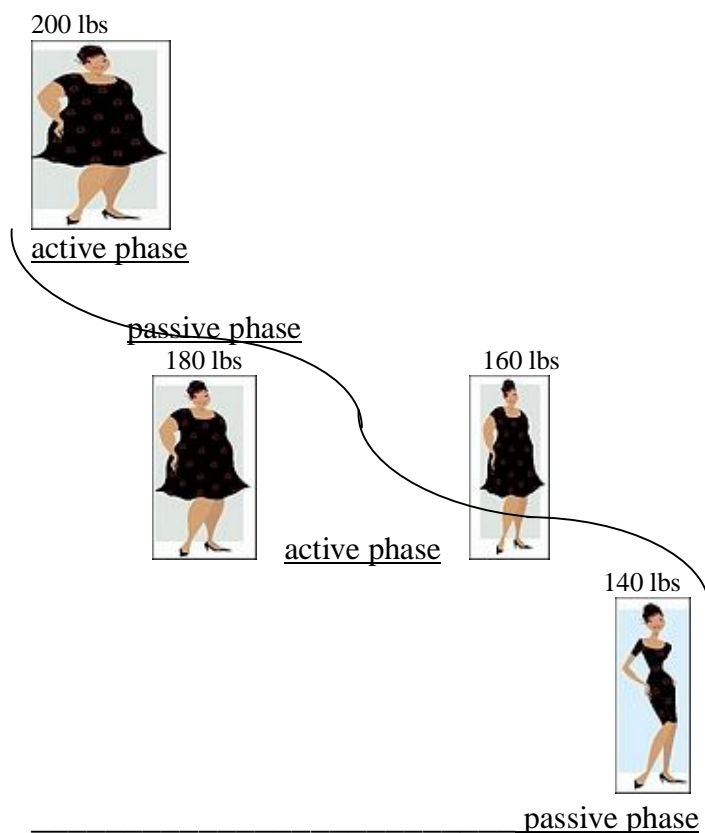


Figure 1.6

Your own experiences

Many of you had experienced a scenario like this. In the past, you had lost weight and had maintained that weight for sometimes. Your body had adapted to that weight. However, in the past, you also had gained weight somehow. And you also had maintained that weight for a month or two. Your body has also adapted to that weight. So whatever the weight you were, if you have maintained it for about three months, your body would adapt to that weight (Redman 2009)⁵.

The first mistake...

The first mistake most of you have made in the past was that when you got stuck, you just gave up. Naturally, you would gain back all of the weight you lost.

When you reached a plateau, you thought that you were done. You only did half way: the active phase. You did not pursue the passive phase to maintain the weight loss. Without the passive phase to stabilize weight, in a short time your body would naturally gain back all the weight.

As you can see, the passive phase is a very important phase. It is a resting period between the active phases. You have to give enough time (at least 2-3 months) for your body to adapt and to stabilize the new weight. There are no shortcuts or easier ways. You have to wait it out.