

The term refeed is used often these days, especially for those who use flexible dieting methods and techniques. The term refeed refers to a day or days in which there is an increase in total daily carbohydrate intake during a diet or caloric deficit period.

There are various reasons to using refeed days. Some of these include, positive hormonal and mental benefits.

## Hormones

Part of the cytokine family, is the hormone Leptin.

Leptin controls regulation of hunger, food intake and energy expenditure. This is synthesized by adipose tissue, with a small contribution coming from the skeletal muscles and brain. It is controlled mostly by the amount and size of our bodies fat cells. When Leptin levels fall, the greater cravings become. In addition, if your metabolism is slowing down, you'll experience hunger pangs, which is a sign of a slowing metabolism. If you are in a caloric deficit for an extended period, your body begins to slow its metabolic functions in order to "make due" with the amount fuel that it is receiving. This can lead to little or no to fat loss!

In order to keep leptin levels up, to avoid hunger, and ensure metabolism doesn't slow down – using periodic spokes of carbohydrate intakes is a great way for leptin to increase. Some people choose to do "cheat days" which, inevitably, can cause issues with disordered eating patterns as well as consuming excess calories from protein and fats too. For a successful refeed, leptin is most responsive to glucose. So, when doing a refeed, using sources of carbohydrates will ensure there is rise in leptin levels rather than if you have had a surplus of calories from fats or protein.



The amount one should refeed is dependant on a few things. This includes how long you have been dieting, how intense the diet is and current levels of body fat. For those at a lower body fat, refeeds can be more frequent. Similarly, if a diet Is extreme, the more intense the refeed should be. This is to do with how low leptin levels are. If the levels are low, the more calories above maintenance you will need to bring them back up.

This can mean that a refeed can be 20-50% more than the required maintenance for two days! In some cases, you may increase weight or body fat after the day of refeed however, if you are diligent and are straight back to your diet the next day, your metabolism will be on fire and it should jump start the fat loss process. In addition to the changes in leptin levels, adding in a refeed day helps with the psychological factors and restraints that dieting can have on our mental health.

Another benefit to refeed days in that it has a positive effect on our hormonal profiles. During dieting phases, males can experience a decrease in testosterone level. This can cause issues with maintain muscle mass. By increasing leptin levels, there is an increase in liver glycogen which will increase testosterone, growth hormone and t<sub>3</sub> – while reducing cortisol levels!

Females need to take extra precaution with leptin levels, as reduction or ceasing of reproduction hormones can occur if levels get low enough. Some examples of this is the stoppage of a menstrual cycle. When implementing a refeed day, it is essential to stick with your normal workout routine. It is also recommended to track your intake, to help reduce binges and allow for a mental awareness of what foods you are consuming.

