

# **Balancing Leptin - the Hunger Hormone**

## **Frequently Asked Questions**

### **What is leptin?**

Leptin is a hormone produced by the fat cells. Leptin is essential for survival, guiding the proper response to starvation. Problems with leptin are a major cause of the obesity epidemic. Leptin tells the brain when you need to eat to get energy.

### **How do leptin problems cause obesity?**

The brain must sense the correct level of leptin for it to know how much fat should be in storage. The brain calculates how fast metabolism can go, based on the accurate sense of how much leptin is in the body. When the brain fails to sense the leptin hormone correctly, it thinks that more fat is required, even though we have enough, and fat begins to accumulate and the metabolism slows down.

### **What is the cause of leptin problems?**

Eating too much, eating too late in the evening or at night, snacking between meals, lack of exercise, and stress.

### **Will this stop me yo-yo dieting?**

Leptin is the cause of yo-yo dieting. Leptin is designed to replace the body's store of fat after a period of deprivation. In earlier times, this was necessary for survival. In modern days, this is the genetic response to a low-calorie diet. The only way to avoid having this problem is to eat in such a way as to not upset leptin balance.

### **Do overweight people have too much or too little leptin?**

They have too much leptin in their blood and not enough leptin entering their brain. This imbalance is called leptin resistance. It means that fat cells are overproducing leptin, but the brain does not recognize it, and thinks that the leptin levels are still low. This creates the desire to eat.

### **Does leptin cause other problems?**

Yes. When leptin malfunctions, other major health problems are created. These include insulin resistance, high blood pressure, high cholesterol, metabolic syndrome X, diabetes, heart disease, thyroid problems, fibromyalgia, reproductive problems, sex hormone imbalances, increased risk for cancer, and increased risk for memory loss and Alzheimer's disease. Leptin plays a primary role in all these problems, and appears frequently to be the main cause of them.

### **How can leptin cause so many problems?**

There are three main ways leptin causes problems, according to Byron Richards, CCN, author of *Mastering Leptin - The Leptin Diet: Solving Obesity and Preventing Disease*: Leptin problems enforce starvation metabolism and slow metabolic rate, resulting in adverse consequences in using energy everywhere in the body, which affects everything in an adverse way.

Low leptin in the brain exposes brain cells to excessive damage, resulting specifically in damage to NMDA receptors. This increases the risk for Parkinson's disease. It also provokes an inflammatory chain of events in the brain leading to the accumulation of plaques that cause Alzheimer's disease. Extra pounds of fat give off excess inflammatory signals that cause all diseases of aging.

**Why hasn't my doctor told me about leptin?**

This hormone wasn't discovered until 1994, and up until recently, the critical information about how leptin works has been confined to complex scientific journals. This information has been used primarily in an effort to develop leptin drugs, which do not work for a variety of reasons. Your doctor may not yet know about leptin. *Mastering Leptin* is the first book to clearly explain the subject to the public.