Discover the Incredible Use of Honey in Hibernation Diet

The recent revolutionary Hibernation Diet created by a British pharmacist and a nutrition expert caught my attention by making a powerful connection between poor sleep and obesity. It advocates incorporating mild resistance exercise and a healthy, balanced, and wholesome diet void of highly refined, processed foods such as white bread, pizza, burgers, chocolates, beer and sugar, and suggests taking a generous spoonful or two of honey at night, either as a warm drink, a smoothie or straight from the jar. This fascinating honey hibernation diet promises to help us sleep and lose weight at the same time by using our biology and working with our bodies, rather than against them – “recovery biology”. A new approach to fat metabolism, it requires no straining from aerobics exercise, no wearing out on a treadmill and no pounding it out in the gym. Sounds too easy, too miraculous or too far-fetched to be believable?

Natural honey when taken prior to bed is believed to be able to fuel the liver, speed up fat-burning metabolism, ease stress hormones and help us get a better night’s sleep. This oldest natural sweetener also contains a wide variety of vitamins, including vitamins B6, B1, B2 and B5, and minerals such as calcium, copper, iron, magnesium, manganese, phosphorous, potassium, sodium and zinc, anti-oxidants and amino acids, the building blocks of proteins.

What I learnt about the Hibernation Diet is that honey provides a fuelling mechanism for the body at night, keeping blood sugar levels balanced and letting your recovery hormones get on with burning fat stores. This proposition that honey reduces blood glucose level was published in the Journal of Medicinal Food in April 2004. However, to most people, it seems to defy common sense since honey comprises two sugars, namely glucose and fructose in a 1:1 ratio. Moreover, eating late at night is often discouraged by many people who believe that during bedtime, metabolic rate is low and the body cannot burn calories and would easily put on weight. Being a honey enthusiast, I naturally wanted to know more about how the hibernation diet works scientifically for the good of the body.

I read that when sugars are absorbed from the gut into the blood they are first absorbed by the liver, which is the only organ in the human body with the fructose enzyme to process this sugar. In the liver the fructose is converted into glucose, stored as liver glycogen or human starch, and released only if and when blood glucose falls.

Fructose also triggers the glucose enzyme in the liver allowing the liver to take in as much glucose as it requires. This has been referred to as the Fructose Paradox. In other words, fructose lowers the Glycemic Index of glucose; fructose enters the liver and opens the gate for glucose entry preventing a rapid rise in blood glucose. This natural blood glucose regulator found in fruits, vegetables and honey, regulate blood glucose levels and stabilize blood glucose to maintain a regular supply of glucose to the brain.

Some simple questions that the hibernation diet expert asks to check if the liver has fuelled up well for the night:

- Do you wake regularly during the night?
- Do you have night sweats?
- Do you experience acid reflux during the night?
- Do you get up to go to the bathroom during the night?
- Do you feel nauseous in the early morning?
- Do you wake up exhausted?
- Do you have a dry throat in the morning?
- Do you get night cramps?
- Do you feel weak in the early morning?
If "yes" is the answer for any of these questions, it could mean that instead of burning fat and repairing muscles, your body has produced a stream of stress hormones while you've slept.

The hibernation diet also goes on to explain how fructose in honey fuels the brain which is the most energy demanding organ, burning up to 20 times the fuel of any other cell in the body. We become exhausted after having to concentrate for a lengthy period. That's why we often hear that mental exhaustion is worse than physical exhaustion. The brain needs glucose to survive, however glucose occupies a large amount of storage space and there is no room in the brain. And the liver is the only organ that can both store and release glucose into the circulation. This is why looking after your liver glycogen amount by ensuring that the liver and the brain are well provided for both in the day and at night is so critical. Any fall in blood glucose is detrimental for the brain. The adrenal glands to be activated and the adrenal hormones if overproduced can lead to conditions such as heart disease, osteoporosis, obesity, diabetes, poor immune function, depression and other distressing health problems.

What I find inspiring to read is that we burn an amazing 70% fat during rest, 35% during low level exercise, 20% during moderate exercise, and a low 10% during intense exercise. During sleep we should burn fats. However, if the liver is not fuelled prior to bed, we release stress hormones from the adrenal glands which raise our heart rate and blood pressure. These hormones instead of burning fat, degrade muscle and bone. The liver must deliver 10 grams of glucose every hour – 6.5 to the brain, 3.5 to the kidneys and red blood cells. As the liver capacity is only 75 grams, most people go to bed with a depleted liver, activating the adrenal glands and do not recover. And if you do not recover you do not burn fats. The hibernation diet essentially aims to encourage people to reap the benefit of your body's own natural recovery system and optimize their recovery biology or fat burning biology, as explicitly termed by the author who believed that this diet is not only to a healthy weight but unlocking energy resources you never know you had. So, if you interested to have a more in-depth account of this honey diet, check out the book "The Hibernation Diet" in which you will find details of the suggested diet plans for breakfast, lunch and dinner, and the different types of resistance exercises described in clear steps.