



► TIPS TO DEVELOP A HEALTHY APPETITE....2

Cognitive *focus*

ADDRESSING THE NEEDS OF INDIVIDUAL CLIENTS AND PLANTING THE SEEDS FOR A SECURE FUTURE.

Centre for Cognitive Therapy

The Centre for Cognitive Therapy is dedicated to helping clients secure sustainable psychological well being. The current issue addresses the important issue of managing our food intake and appetite.

The Psychology of Appetite: Chemistry or Willpower?



Seventy percent of people who go on calorie restrictive diets lose weight. Ninety-five to 98 percent of those who lose weight, gain it all back and usually more. Weight loss programs put the blame on dieters for failing to comply and successfully make the necessary life style changes. As a result there are a lot of dieters who feel like failures. New research indicates why compliance to restrictive diets is next to impossible. Basic research into the neuro-chemistry of food intake and appetite regulation explains the problem.

Our appetite is regulated by 2 separate mechanisms, both found deep in the centre of the brain in a structure called the hypothalamus. The first system regulates hunger and cravings. One of the most potent chemicals in this system is neuropeptide Y (NPY) which dictates cravings for carbohydrates and is produced by cells in the paraventricular (PVN) nucleus of the hypothalamus. NPY literally turns on our craving for carbohydrate rich foods. NPY production is triggered by burning energy thereby creating an appetite for

energy available in carbohydrates.

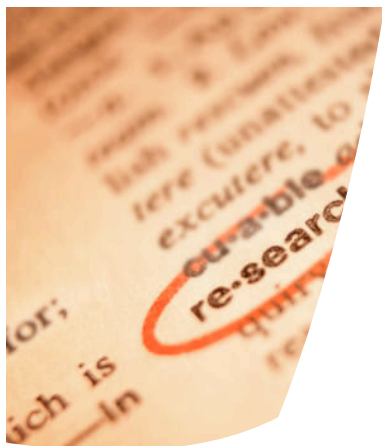
Another potent chemical in regulating hunger and cravings, also produced in the paraventricular nucleus of the hypothalamus, is galanin. Galanin activates our desire for fatty foods. As the body begins to burn fat, galanin is produced; we crave and eat more fat. This is nature's way of helping us balance our energy stores. Galanin production is stimulated by the hormones cortisol (stress) and estrogen (beginning at puberty in females).

Both NPY and galanin are highly connected to our daily cycle. Within our 24 hour cycle, our appetite is turned off during the sleep phase.



WEIGHT MANAGEMENT

While obesity has been linked to numerous health risks, it is not clear that body weight itself is the culprit. A high waist to hip ratio (over 1.0) is a more important predictor. It is also surprising that only small reductions in weight lead to maximal health benefits. Dr. Stephen Blair of the University of South Carolina reports that neither body weight nor percentage of body fat predicts health risks when aerobic capacity (VO₂ max) is taken into account. Any attempt at improving health among the obese must include improved fitness. Weight management must focus on fitness improvement which reduces waist to hip ratio, improves muscle mass and tone and increases aerobic capacity, not diets.



Getting the most from our research analysis

Research has identified that the reason diets inevitably fail is tied to our biological appetite.

When we awaken in the morning, our metabolic activity rises sharply and after the overnight fast, our body requires energy. It is at this time that carbohydrates are required. If not, NPY is likely to become over-active and lead to uncontrollable cravings later in the day (binge eating). In addition, restriction of fat intake can lead to over-activity of galanin in the late afternoon and evening, resulting in cravings for foods also high in fat. Dr. Sarah Leibowitz of Rockefeller University believes that complex carbohydrates at regular times in the morning

will reduce the cravings and over-eating that inevitably follows restrictive dieting.

Galanin and NPY act like the gas pedal of a car, making our food intake go. Restriction puts the gas pedal to the floor. A second major system acts to put the brake on food intake and is controlled in the ventral-medial nucleus of the hypothalamus (VMH) by the transmitter serotonin. Restriction causes this system to become sluggish. After dieting, cravings are stimulated, the intake for carbohydrates and fats begins; there is no brake and the dieter eats out of control. Restrictive diets are doomed to fail, not because dieters aren't compliant, but because neuro-chemical mechanisms set in place by the diet, doom this attempt at weight management to fail.

Dr. Arthur Blouin

Calorie reduced diets are notoriously ineffective.
Carbohydrate and fat restriction leads to craving and binges.
Weight management requires helping to regulate appetite.

SMARTER THERAPY: A healthy Appetite



1. Avoid restrictive diets. Restrictive diets don't work. They set in motion mechanisms in the brain that lead to uncontrollable eating.
2. Eat balanced meals at regular times. Appetite is closely tied to our daily cycle.
3. Complex carbohydrates at breakfast. Carbs in the morning keep the cravings down and help the eating brake later in the day.



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