

Healing Metabolism: A Naturopathic Medicine Perspective on Achieving Weight Loss and Long-Term Balance



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Introduction

Any clinician who works with patients struggling to lose weight or to maintain weight loss has observed a common paradox: that, on the basis of how much our overweight or obese patients may tell us they are eating and exercising, we believe they *should* be losing weight, but they aren't. In fact, in this process of expending more energy than they consume, sometimes our patients actually *gain* weight. Unfortunately, clinicians may conclude—mainly out of frustration—that these patients are not being completely truthful (either with us or themselves) or that all they need is more willpower. This article introduces a framework that a naturopathic doctor (ND) may use to treat overweight or obese patients who are in this predicament.

In general, NDs consider that the equation *calories in < calories out = weight loss* is an oversimplification for some patients. In addition to the relation between caloric intake and activity, several other factors contribute to a patient's overall health and, therefore, to his or her actual ability to lose weight in a sustainable and healthy way. These factors include:

- Psychological stress levels
- Exercise history

- Dietary history
- Hormone balance
- Quality and amount of sleep
- Toxic chemical exposure (for example, alcohol, tobacco, processed foods, caffeine, and pharmaceutical drugs)

All of these factors are considered to influence metabolism either directly or indirectly, because metabolism is thought to be affected by lifestyle and hormone balance and not just by heredity and caloric intake. A similar perspective has become popularized by endocrinologist Diana Schwarzbein, MD.¹ Dr Schwarzbein has written several excellent, patient-oriented books on the topic of what she calls metabolic damage and healing in overweight and obese patients. In her words, a healthy metabolism has the appropriate balance between anabolic and catabolic reactions. From a naturopathic medicine perspective, the foundation for successful, healthy weight loss and maintenance is through healing the metabolism by balancing these two processes.

How Does Metabolism Become Damaged?

In the intake for an overweight or obese patient, the ND will explore, among other things, the

patient's past and current stress levels, eating habits, and exercise habits. When patients who cannot lose weight or are still gaining weight claim that they now eat very little, eat a healthy diet, or were thin or underweight when younger, we look for certain patterns. In such patients, we would expect to see a significant history of one or more of the following:

- Very-low-fat or low-fat, high-carbohydrate diets
- Low-protein diets
- "Yo-yo" dieting
- Chronic undereating
- Fasting
- Excessive cardiovascular exercise
- Traumatic or prolonged psychological stress.

Notably, six of the seven items on this list are things people commonly do to lose weight, but clinical experience suggests that these strategies are potentially harmful for some patients. When done chronically or excessively, these pursuits may contribute to metabolic damage, that is, to a metabolism in which anabolic processes cannot keep pace with catabolic reactions.

At first impression, a person would be expected to lose weight as long as his or her metabolism uses up more chemicals and energy

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than it is replacing. In fact, this weight loss may occur initially but continues for only a short period and results not from loss of fat but from breakdown of cell structures, organ tissue, bone, and muscle. In this process, the body uses up vital functional and structural proteins and fats—which are not being replaced with good nutrition—*just to stay alive*. Eventually, the individual reaches a plateau, where the body is exhausted and unable to respond. At this point, eating even less and exercising more intensely can have a seemingly paradoxical effect and result in gaining more weight back than was lost. In reality, this situation is not as paradoxical as it may at first appear. The body evolved very well to adapt to deprivation but not to excess, and so it tends to default toward conservation. *Calories in < calories out should equal weight loss*, but an individual's metabolic balance may be a kind of *factor X* in this equation.

Healing the Damaged Metabolism: The Big Picture

In her books, Dr Schwarzbein puts forward a revolutionary perspective that is shared by naturopathic medicine but which I have not seen expressed as elegantly anywhere else, and that is: It is first necessary to be healthy in order to lose weight and not that losing weight makes for health. Healing the metabolism must happen before weight loss—or, more accurately, fat loss—can occur. Accordingly, depending on how out of balance a patient is judged to be, an ND might advise eating frequently to balance blood glucose levels, and performing resistance training (for example, weight training) to build muscle tissue before engaging in cardiovascular exercise. The rationale behind this recom-

mendation is that cardiovascular exercise can be a depleting (catabolic) activity, whereas weight training is an anabolic activity. These recommendations would be placed within an overall, long-term plan that emphasizes

- A balanced, whole-foods diet designed to decrease or prevent insulin resistance, improve insulin sensitivity, and spare muscle tissue
- Nutrient supplementation prescribed to replace micronutrient deficiencies and to help the body rebuild vital functional and structural proteins and fats
- Getting enough sleep: most growth hormone, a key anabolic hormone, is released during sleep and is critical for repairing the body's tissue
- Stress management, which might explore issues such as self-image, emotional connections with food, and state of mind when eating

The ND will also treat the patient's comorbid conditions. When the body cannot regenerate as quickly as it degenerates, certain degenerative diseases (eg, coronary artery disease and type II diabetes) can develop. Naturopathic medicine contends that these diseases are largely the consequence of detrimental lifestyle habits and are actually avoidable.

The Hormone Connection

Naturopathic medicine has a model for assessing and treating patients affected by chronic, complex conditions, such as obesity, metabolic syndrome, and type II diabetes. This model assesses the *function* of physiologic systems and addresses the interplay of various factors, including gastrointestinal health, endocrine health, and psychologic stress. Gas-

trointestinal health and adrenal function are believed to be fundamental to overall health. Imbalance in relative or absolute levels of any hormone is understood to disturb hormone function overall. For example, ND's consider Addison's disease and Cushing's syndrome as two extreme poles on a spectrum of possible and treatable adrenal gland dysfunction. Where a patient lies on this spectrum may be determined by history, physical examination, and hormone testing (for instance, cortisol, dehydroepiandrosterone, insulin, estradiol, progesterone, and testosterone).

Type II diabetes is diagnosed when fasting blood glucose levels are ≥ 126 mg/dL; however, we as clinicians realize that insulin resistance precedes type II diabetes and that blood glucose dysregulation precedes insulin resistance. In addition, because all hormones affect one another, chronic, prolonged stress (leading to hormonal adrenal gland dysregulation) is believed to contribute to obesity, as cortisol promotes insulin secretion, and an association exists between psychologic stress and insulin resistance. Depending on how well a patient is compensating physiologically, treatment may range from nutrient supplementation and use of botanical medicines to judicious use of bioidentical hormone therapy.

An understanding of a patient's stress level is therefore considered critical for developing a treatment program that permits healthy, long-term weight loss to occur. Stress influences sleep quality and duration, food choices, levels of insulin and glucose, and both the digestion and assimilation of food. The stress response can result in increased levels of cortisol, insulin, and triglycerides (via the mechanism of increased blood glucose and corresponding

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elevation in insulin levels); insulin resistance; decreased levels of growth hormone, thyroid hormone, and sex hormone; impaired gastrointestinal immunity; increased oxidative stress; inflammation; and sodium retention. After years of poor nutrition and detrimental lifestyle habits, a person can become insulin resistant, can have depleted adrenal glands (resulting in a maladaptive stress response), or both conditions. Patients who have tried many kinds of diets to no avail may fit somewhere on this continuum.

The Body-Mind Connection

The preceding sections show that naturopathic doctors approach obesity as a mind-body issue. This approach is based on the powerful effects of psychologic stress on weight-related biochemistry and physiology. Beyond those effects, however, is the understanding that what a person eats and the person's state of mind when eating provide information that is incorporated by the body. Food is information, not just in the way that the nutrients affect our cell membranes and DNA but also through the stories we tell ourselves when we eat. Perhaps we tell ourselves a story of blame ("This is a *bad* food, so I'm bad for eating it") or a story of guilt and shame ("I've failed again, so I might as well give up trying").

The goal of understanding the body-mind connection is to teach patients to become present to themselves—not in a way that incurs self-judgment but in a way that fosters self-awareness, self-acceptance, and the ability to change. None of these things are possible when the patient is not really there, when eating is an unconscious or punitive act or an act devoid of nourishment irrespective of the nutritional value of the food consumed. For the patient, becoming present may begin with the doctor's guidance around becoming aware of the circumstances in which food is eaten; for example, hurriedly while driving, or absentmindedly in front of the TV or computer. It may proceed to paying attention to and making note of the internal dialogue that arises around food choices or cravings. It may be accompanied by breathing/relaxation exercises or recommendations to learn a mindfulness meditation. Above all, this process must be conducted with patience, gentleness, and encouragement on the part of the clinician, in an alliance that models for the patient the kind of relationship they can have with themselves.

Conclusion

To approach weight loss in overweight or obese patients, naturopathic medicine uses a model that addresses gastrointestinal and endocrine health along with psychologic

stress levels. Especially with patients who have sincerely struggled for a long time to lose weight, the converging goal of all treatments is to bring patients into a state of metabolic balance. Treatments may include nutrient supplementation, botanical medicines, and judicious use of bioidentical hormone therapy within a long-term plan that focuses on dietary and exercise recommendations and provides guidance for becoming aware of stress and releasing it. It is possible that prolonged psychologic stress and years of detrimental lifestyle habits (such as very-low-fat diets) experienced by many of our patients contribute, in large part, to development of certain degenerative diseases, such as coronary artery disease and type II diabetes, which are essentially preventable and often reversible. The metabolism must be healed before weight loss can become fat loss and before sustainable health can become reality. This approach is the antithesis of the quick fix; but the success of the naturopathic approach is borne out by the experiences of many naturopathic doctors and other holistically oriented clinicians. ❖

Reference

1. Schwarzbein D. The Schwarzbein principle: the program: losing weight the healthy way: an easy, 5-step, no-nonsense approach. Deerfield Beach (FL): Health Communications; 2004.

Nutrition

It's useful to broaden the concept of nutrition to include what we put into our consciousness.

— Andrew Weil, MD, developer of and educator on principles of integrative medicine, author of books on healthy living