

Food for Thought: The Problem of Anorexia Nervosa and Bulimia

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Introduction

Eating disorders have become a prevalent problem and a therapeutic challenge. Now, as never before, young people, especially young women, are "dying to be beautiful." *Anorexia nervosa* is the diagnosis attached to the eating disorder in which patients refuse to eat. Anorexia has a mortality rate of 4 — 25% (Neuman and Halvorson, 1983). *Bulimia*, established as a separate eating disorder in 1980, involves episodes of binge-ing on enormous quantities of food followed by purging, exercising, or compensatory fasting.

Two modalities, psychotherapy and Orthomolecular medicine, utilized in the treatment of eating disorders will be examined. The conventional therapeutic mode, which is psychotherapy, is so unsuccessful in the rehabilitation of the anorexic or bulimic patient that even classical psychoanalysts are looking for alternatives. Psychoanalytic explanations that do not benefit the patient have no basis in fact. In view of the failure of psychotherapy to benefit patients with eating disorders, I consider the Orthomolecular mode the correct alternative for this enigmatic malady. Interviews and review of the literature have convinced me that all physicians who treat adolescent girls, including pediatricians, gynecologists, family practitioners, and psychiatrists, should become aware of underlying biochemical abnormalities in these patients. The increasing incidence of eating disorders and their relatively high mortality rates make it necessary for the medical community to consider the Orthomolecular approach.

Psychoanalytic theory

In the jargon of psychoanalysts, "The future anorexic has unresolved problems in the oral incorporation stage, which impede separation-individuation." Alan Goodsitt, M.D. (1978), paraphrasing this assessment

made by his colleague, Dr. Selvini-Palzzoli, states that although the explanation makes theoretical sense, it is not supported by the facts. He claims that "adolescent anorexics perceive their bodies to be the last vestige of their infantile archaic grandiosity...they focus (on their need to be in total control of) their bodies. Their bodies must be perfect and unchanging, and they must be in total control." Goodsitt further states that anorexics have a symbiotic character disorder, that they are arrested at the developmental levels of symbiosis and separation-individuation. It is small wonder that "(f)ew psychoanalysts and even fewer group analysts have successfully worked with anorexics..." (Hall, 1978). Hall interprets the origin of the disease in accordance with conventional psychoanalytic theory. She states that the child is responding to a mother who is "...typically overprotective, rigid, and insensitive..." According to Hall, the adolescent's body becomes a battleground over control: "The anorexic starves her body to keep it under control and to prevent it from swelling and overwhelming her precarious sense of self."

Both anorexia and bulimia are thought to stem from sex-role or parent-child conflicts (Neuman and Halvorson, 1983). In this view, the adolescent's mother has "fused" with the girl psychologically. The girl and her mother exist in a symbiotic relationship. This relationship denies the adolescent the ability to develop an autonomous, separate, adult personality. A key word used by psychotherapists is "enmeshment." The girl grows up feeling needy and unentitled. Hilde Bruch, M.D., who has been active in the field since the early 1940's, states that anorexics "fail to experience their bodies as being their own, but look upon them as...being the possessions of their parents. This split between body and self is a basic issue and yields only slowly to therapeutic efforts" (Bruch, 1978). In actual fact, psychoanalysts eventually

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treat these patients by forcing an increase in their caloric intake and hospitalizing them if necessary. Psychotherapists are correct in the view that force feeding without an understanding of what caused the problem cannot cure the patient. Food intake in the hospital is approximately 3000 calories a day, usually without attention to the possibility of biochemical disturbances.

To their credit, many if not most psychoanalysts agree "that classical psychoanalytic techniques are to be avoided" (Strober and Yager, 1978). They concede the need to restore body weight and forego their classical techniques. However psychoanalysts fail to recognize in their writings that the delicate hormonal balance is disrupted during puberty, and that the adolescent's immune system may be impaired as a result. They refer to the numerous physical and psychological changes that occur in puberty, but not to the basic changes in biochemistry.

An alternative to psychoanalytic theories about the origin of eating disorders is the following description of a socially imposed adolescent phenomenon, dieting. Since estrogens pad the adolescent girl's body during puberty, the social values in our culture induce the girl to diet. A compulsive type of girl, a perfectionist and high achiever, may start to play a game with the calorie counter. If she can lose five pounds a week eating 900 calories daily, she may try to lose ten pounds by eating 300 calories a day. If she is involved with certain types of activities, especially gymnastics and ballet, her initial weight loss will be praised by her coach or teacher. The anorexic cycle begins.

Bulimia, like anorexia, often begins with a diet. Since most people cannot voluntarily remain on a starvation diet, the girl may consider purging an easy way "to have her cake and eat it, too." In this way, binge/purge behavior leads to the biochemical upset, which must be corrected before other therapy, such as behavior modification techniques, can work. Moreover, allergies or similar disorders can lead to variants of bulimia with consequences such as depression or delusions.

The Orthomolecular approach

The Orthomolecular approach is holistic, not mechanistic. In this view, the inner and outer environments contribute to each individual's well being. The biomedical model based on mechanistic hypotheses is not generally successful in the treatment of eating disorders because it is based on the theory of "one-cause, one-effect, one-treatment." The traditional physician may focus on one consequence of starvation or electrolyte imbalance. The internal organization of the human body, including the brain, is too complex for a simplistic theory. Moreover, most medical schools provide inadequate training in the fields of nutrition and bio-ecology, which are needed for a holistic therapeutic approach. The pioneers in the field of Orthomolecular therapy have pointed out that medical education has closed the minds of many doctors to probing inquiry into a patient's entire way of life. Carlton Fredericks, Ph.D., states that doctors are "allergic to new ideas in medicine" (1978). It is difficult to propose a change in medical education that has been in effect since 1910 (Capra 1983). Patients may have to take the initiative and look for doctors trained in Orthomolecular or holistic medicine. Since eating disorders tend to resist the conventional modes of treatment, finding an Orthomolecular physician may be the patient's only hope for a normal life.

Bernard Rimland, Ph.D. who proved the fallacy of psychoanalytic theories about autism, a disease formerly attributed to impaired maternal nurturing, states that anorexia also has little to do with parent-child relationships. He has advanced the theory that because of a metabolic problem, the appetite diminishes markedly². The patient must somehow account for this phenomenon, and so explains that her unwillingness to eat is based on her need to lose "excess weight." Rimland compares this rationalization to the reasons given by a subject who is acting on a post-hypnotic suggestion (e.g., "Take off your sweater when I say the word 'desk'"). If the subject is asked why he has removed his sweater, he will give a plausible reason such as, "It is getting warm in here." The same type of behavior can be induced in split-brain patients who are asked to explain the reason for illogical activities induced by right-brain experiences. Since the right hemisphere in most people is nonverbal, the explanation must be made by using

the left hemisphere. The messages the right hemisphere receives can initiate an action, such as removing a sweater. The patient, like the subject acting on post-hypnotic suggestion attempts to explain the action logically (Restak 1984).

As the anorexic patient becomes thinner, she grows more and more obsessed with food, which is a typical effect of starvation (Garner et al. 1978). She may buy gourmet cookbooks and spend hours preparing meals for the family. She herself may eat a tiny portion of one specific food a day. Appetite, defined as the desire to eat, is suppressed, but hunger is not. Her family may appear blind to her bizarre behavior. The unconscious conspiracy that denies the evidence before everyone's eyes, namely that a family member is starving, would seem to confirm psychoanalytic theory that the eating disorder is a parent-child or sex-role problem. Possibly, the "memory" of the girl's previously normal body is retained by other family members. On the other hand, few parents are perfect. Since Orbach (1986) implicates even "perfect" parents in the formation of psychological problems in their children, psychological influences are certain to be involved in eating disorders. However, if the therapist perceives that the eating disorder is based solely or primarily on an abnormal family situation, the actual biochemical predisposition will be overlooked. A "cure" based on psychotherapy is therefore likely to lead to symptom switching, while control based on attention to the biochemical predisposition can lead to more lasting changes in behavior.

Abnormal hormone levels, such as elevated levels of vasopressin (Hooper 1983), a memory-enhancing hormone, have been implicated in anorexia. This hormone may produce the hypnotic problem postulated by Rimland. The patient may "see" herself as being fat when she looks in the mirror, even when she is emaciated. Cortisol levels are sometimes elevated in anorexia (Parsons and Sapse 1985). Endorphin levels are elevated by fasting and exercise; the patient may become addicted to her endogenous opiates.

Bulimia, more than anorexia, is a form of addictive behavior. Food is the bulimic's "fix." Withdrawal symptoms appear when a patient has not eaten food to which she is allergic and addicted. Bulimic patients ingest

large quantities of carbohydrates, which are highly allergenic foods, and in their quest for a "magical solution" to the problem of eating without gaining weight (Neuman and Halvorson 1983), may induce vomiting. If the addicting food is not purged, other abnormal behaviors may follow. The bulimic patient, unlike the anorexic, may acknowledge that she has an eating problem. She can abstain from the bingeing behavior, but like the alcoholic, she cannot "fall off the wagon." One piece of "forbidden food" can start a new binge.

Bingeing not followed by induced vomiting in these patients may involve some other abnormal behavior, such as depression, fasting, or excessive exercise. B., a recovered bulimic described how she would "sleep off the effects of her sugar fix. A glucose tolerance test revealed the extent of erratic blood-sugar levels, including a high reading of 237. These abnormalities of metabolism and the eating disorder producing them were caused by allergic addictions controlled by avoiding the implicated foods.

Histories of patients with allergy-induced eating disorders are uncommon in medical literature. Allergist Marshall Mandell, M.D., cites the case of Helen, a patient allergic to wheat and yeast. Her reaction to the offending food alleviated the unpleasant withdrawal symptoms, which were muscular weakness, depression, mental confusion, nervousness, headache, fatigue, and abdominal pain.

As a result of her food addiction, she binged on baked goods for breakfast. Her binge states were followed by major depression. She was admitted to mental hospitals three times for depression that could not be managed by drugs. During her third admission, she was administered electroconvulsive therapy, which was unsuccessful. Mandell tested and treated her for food allergies. Her compulsive, addictive eating behavior and her depression were cured by controlling her food allergy. He was able to reproduce her symptoms through provocative allergy testing in which the suspected allergen is introduced. Depression is a common factor in eating disorders, and suicide is a grave risk, especially in anorexia (Kron 1978).

Specific foods and environmental chemical exposures are the most easily demonstrated causes of mental and

behavioral problems, including anorexia or bulimia. Orthomolecular physicians look at the body and its environment as a whole, so that it can be treated within the integrity of the system. Theron Randolph, M.D., deals with the concept of food addiction, which he defines as a craving for a specific food that leads to a specific abnormal symptom, such as headache, anxiety, or depression, all present in both anorexia and bulimia.

The validity of Orthomolecular theory is confirmed by the physician's ability to reproduce the symptom in the patient by exposing her to the offending substance. This type of proof is not possible for psychoanalytic theories of mental illness. If the underlying problem is an allergy, the allergist is able to alleviate the symptom through a neutralizing process, such as intravenous doses of vitamin C or ingestion of alkaline salts.

Orthomolecular physicians do not limit their investigations to allergic reactions. Nutritional supplementation is basic. Megavitamin therapy was introduced in the early 1950s. Abram Hoffer, M.D., Ph.D. and Humphry Osmond, M.D. initiated "what seem to have been the first double-blind studies in psychiatry" in 1952 (Osmond 1971). They demonstrated the efficacy of megadoses of niacin and niacinamide in the treatment of serious mental disorders. Rimland (1985) suggests that a zinc or other nutritional deficiency may cause anorexia. When zinc is supplemented, patients regain appetite and put on weight. All nutrients are likely to be deficient, including vitamin C, reducing the body's resistance against allergens and infective agents. Truss and Crook implicate *Candida albicans* in the development of behavioral disorders. Fredericks considers erratic blood sugar levels to be a cause of behavior disorders.

Anorexic patients, with their impaired immune systems, may be suffering from any or all of the above-mentioned disorders. Starvation leads directly to nutritional deficits that affect the brain. Levels of all nutrients may be abnormally low. When the diet produces deficiencies of certain vitamins and minerals, the mind misperceives visual images (Meiers 1973). Strict adherence to the consumption of only a single acceptable, low-calorie ("good") food, such as mushrooms, bean-sprouts, or pickles, leads to an allergic-

addictive response to that food. The "good" food is likely to provide a good host environment for *Candida albicans*.

The bulimic patient, on the other hand, binges on carbohydrates. She may be absorbing only sugar, altering sugar metabolism and creating hyper- or hypoglycemia. Elevations of brain serotonin levels produced by carbohydrate binges temporarily counter anxiety. The bulimic patient may become allergic (addicted) to the foods, especially carbohydrates. *Candida albicans*, which feeds on carbohydrates, ruins the immune system and perpetuates the bulimic problem.

In the Orthomolecular treatment of the patient, food allergies and abnormal blood sugar levels are taken into consideration, as they are not in the psychoanalytic ideology. Orbach (1986) mentions the biochemical approach and even the very obvious effects of the starvation syndrome only to dismiss them. She dutifully enumerates the physical consequences of starvation: abnormalities of blood, skin, temperature, blood pressure, circulation, and the possibility of cardiac arrest. However, she does not consider a "stable low weight" to be a medical danger and ignores the delusions and misperceptions that arise as a direct result of this abnormal physical condition. Regarding biochemical problems, she states:

Imbalances in brain bio-chemistry have led some researchers to administer psychotropic drugs...While undoubtedly some patients will benefit from intervention at a bio-chemical level, for many others they are not simply a false hope but reduce the complex of psycho-social problems bound up in the distressing symptoms — the meaning of the anorexia — to a bio-chemical puzzle. Looked at this way, treatment has little chance of addressing the profound psychological issue...

Orbach defends her view by stating that "A bio-medical theory cannot successfully account for the rise in anorexia, the incidence of episodic bulimia and the Western cultural obsession with thinness." However, absent an abundance of food, a cultural obsession with thinness is unlikely. Moreover, we are having more problems with allergies than past generations because, according to Levin and Zellerbach (1983):

The average citizen of the 1980s is

biochemically and genetically different from the average citizen of the 1950s. We are so different, in fact, that ordinary medical tests and training are geared to treat people who no longer exist. A large portion of this difference is caused by the massive pollution of our entire food chain that affects all human cells. The psychoanalytic approach ignores these differences and feeds the vulnerable patient ideas about the origin of her problem that very likely had little or nothing to do with it, except, perhaps, to establish anorexia (as opposed to bulimia, obesity, alcoholism or drug abuse) as the symptom. In the psychoanalytic view, the anorexic woman is perceived as feeling so needy, so unentitled, and so much at the mercy of raging passions that she limits the amount of space that she takes up in this world. It is hypothesized either that hers is a problem of control (that she is in conflict with her controlling parents), or that she has failed to separate from her mother (because her relationship to mother and food was disturbed during infancy), and that she is therefore afraid to "grow up." The psychotherapist sees herself in compassionate alliance with her client's attempt to conquer her fear of food and physical/emotional maturation.

The view from the other side, that of the young woman with anorexia, may be quite different. The anorexic patient, A., states that she began to diet at the age of 15 because her ballet teacher told her that she was "getting too fat." She weighed approximately 100 pounds and was 5 feet tall. As she lost increasingly more weight, she succumbed to the delusion that her body was large. Her medical history had included long-term prophylactic therapy with antibiotics. At a medical checkup, when she was 16 years old and weighed 65 pounds, her physician honed in on the loss of her period and referred her to a gynecologist. The loss of weight, hair, eyelashes, and other signs of starvation were ignored. The gynecologist prescribed prednisone, making matters worse. A.'s history, which suggested the possibility of an overwhelming yeast infection in addition to the starvation syndrome, was overlooked by two otherwise competent physicians.

A.'s abnormal weight loss was also less apparent to her family than it should have been, partly because she was covering her body with layers of clothing to keep warm. It was another

six months before A. herself acknowledged her illness. Her skin ached, her heart "hurt," and her tongue turned black. Not being suicidal, she realized that she would have to force herself to eat. Up to that time, she had not yet received any proper medical or psychological help. Gradually, she grew out of children's sizes, into preteen clothing. The following year, she graduated from high school and went to college. Dorm food upset her. She started eating cans of yeast-based soups and mushrooms in her room. She felt dizzy and found it difficult to concentrate on her studies. By summer vacation, she looked bloated, and smelled vaguely of freshly baked bread. A therapeutic trial with nystatin and a yeast-free diet were implemented by Henry Turkel, M.D., an Orthomolecular physician. When nystatin provided incomplete relief, Dr. Turkel prescribed Nizoral® for one month. Rapid improvement followed as her weight normalized, with loss of edema. Her eyelashes grew back, her hair grew thicker, her skin was less dry. The circulation in her hands and feet improved. During the past four years since treatment, her general health has returned to normal without any further evidence of candidiasis or anorexia, and without other drug therapy or psychotherapy.

Depression that results from eating disorders, especially bulimia, can sometimes be treated effectively with antidepressants or MAOIs (Walsh et al. 1982). Certain antidepressants "alter the levels of neurotransmitters such as serotonin and epinephrine, which play a central role in governing eating behavior (*American Pharmacy* 1985). It is significant that patients treated with MAOIs are placed on diets that promote stable blood sugar-levels and a yeast-free environment (Walsh et al. 1982). Since both the anorexic and the bulimic women discussed herein were healed without antidepressants or similar drugs, other patients may be benefiting as much from the diet as the medicine.

Orthomolecular therapy does not offer clear-cut solutions. A patient may be subjected to the extensive allergy testing when the problem is candidiasis. She may be placed on a hypoglycemic diet when the problem is a hormonal imbalance. During the difficult period of medical investigation, insight therapy, which overlaps with psychotherapy,

provides patients with a basis for dealing with their abnormal behaviors. There are differences between insight therapy as used by Orthomolecular physicians and by psychoanalysts, however. For example, during the psychoanalytic encounter, the client may be informed that she has been unable to separate from her overprotective mother. Even if such theories are true in some cases, they will usually fail the test of reality. If the client demurs, she is "resisting" the analyst. Insight therapy provided by holistic physicians or psychologists, on the other hand, is aimed at teaching patients the effect of starving or bingeing on their minds and bodies. Hope is provided that a cause will be discovered and that the behavior will be controlled.

Conclusion

Theories underlying treatment modalities have a basis in reality if they work. Psychotherapy is ineffective in the treatment of eating disorders, as even practicing psychoanalysts concur. Orbach mentions the problem of symptom switching, such as from "alcoholism to bulimia, from anorexia to heroin addiction and from eating problems to phobic responses" (1986). These switches can hardly be called progress. Orthomolecular modalities alleviate symptoms by helping to normalize the patient's internal environment. Moreover, the physician can often discover the diagnosis by provoking the symptom through exposure to the offending substance. A combination of therapies may be required to treat the patient. Eating disorders that are caused by specific allergies or allergic addictions can be controlled by means of substance (food or environmental agents) withdrawal or neutralization programs. Yeast infections can be treated with nystatin and a yeast-free diet. Nutritional deficiency or dependency states can be treated with megavitamin therapy. Behavior modification occurs quite naturally once the offending allergen, yeast infection, abnormal glucose level, or other chemical cause is removed and/or the deficient nutrient is supplemented.

The goal of Orthomolecular treatment is to eliminate the suspected cause of the disorder, to promote good physical and mental health. The examples cited demonstrate that Orthomolecular

therapy, which is the most effective treatment for young women with eating disorders, should be implemented by physicians involved with these patients.

Notes

1. Because most individuals with anorexia or bulimia are females, the feminine gender is used throughout. The recovered anorexic (A.) and recovered bulimic (B.) women were interviewed 13 March 1986.
2. Rimland, Bernard: Personal correspondence 14 Jan. 1986. Telephone interview 5 March 1986.

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