

Law and Science: Too Fat to Work?

Margaret E. Ciccolella, EdD, JD; J. Mark Van Ness, PhD; Courtney Jensen, PhD,
Department of Health and Exercise Science, University of the Pacific, Stockton, CA

ABSTRACT

Ciccolella ME, Van Ness M, Jensen C. Law and Science: Too Fat to Work. **JEMonline** 2022;7(1):1-9. This article will review cases in which a plaintiff was suspended, fired, or not hired because of excessive body weight, adiposity, or fat mass. Three issues will be discussed from legal and physiological perspectives: (1) excessive weight or fat as a disability; (2) whether the disability is self-induced or has an underlying physiological causation; and (3) Bona Fide Occupational Qualifications (BFOQ) for jobs relevant to weight. These issues conflate law and science and are directly applicable to the exercise physiologist who is asked to resolve the competing interests of the employer and employee in a legal matter in a case where the employee is told that s/he is too fat to work.

INTRODUCTION

Admonitions associated with excessive weight (due to fat) and adiposity have a long history that is culturally and religiously rooted. Some of this is based upon the assignment of blame, that is, whether obesity is self-induced and associated with a lack of discipline or whether there is an underlying medical causation. For example, Biblical blame against fatness can be found in scripture: “[P]ut a knife to your throat if you are given to appetite...be not among drunkards or among gluttonous eaters ... for the drunkard and the glutton will come to poverty, and slumber will clothe them with rags” (1).

Literature and the media are rife with historical and continuing evidence of cultural norms that blame the obese for their condition and imply character flaws such as laziness and vulgarity: From Shakespeare’s “fat rogue” Falstaff (Henry IV, Part I, 1597) to more recent literature such as Butter or Big Ray, fatness is associated with slothfulness and laziness. Films such as Fatso (1980), the Nutty Professor (1996), Shallow Hal (2001), and Norbit (2007) portray discrimination and ridicule against the main character. Sitcoms on television

(Fat Monica in Friends and Betty in Ugly Betty) offer negative stereotypes of obesity. Such norms have profound implications for whether an overweight employee should obtain or maintain employment in a job.

The belief that “body weight” is merely a matter of self-control and self-discipline has consequences in the workplace. These consequences are played out in adverse actions against those who are viewed as too fat to perform a job. When this occurs and a lawsuit is filed, the central questions are whether an overweight employee is a victim of unfair discrimination or whether there is a legitimate basis to: (1) choose employees who are a proper weight based on job requirements; and/or (2) offer accommodations to those who are overweight because of reasons beyond their control.

Employees who are overweight receive little protection by the law. Most employees are “at will” meaning that the employee or employer can terminate for any reason at all. Federal and state laws exist to protect employees in a “protected class” such as race, sex, age, religion, and natural origin. But these laws provide little protection against weight and/or fat discrimination in the workplace. Federal statutes such as the Americans with Disability Act (ADA) and the Rehabilitation Act have created definitions of “disability” and “handicap” that can be applied to the overweight employee. Weight alone will not suffice, and a plaintiff typically must also prove a medical causation. Some state statutes parallel the federally based ADA and Rehabilitation Act.

Despite the general rule, at the state and local levels there are some examples of laws that specifically protect the obese employee. Michigan is the only state that explicitly legislates employment related protection based on height and weight. Cities such as San Francisco, CA and Binghamton, NY have passed laws prohibiting weight discrimination (2). However, there remains a paucity of legislation on this issue and these examples represent a minority viewpoint.

Most plaintiffs who sue their employer for weight discrimination base their case on physical disability as defined in the ADA, the Rehabilitation Act, or state laws with definitions derived from the ADA. Meeting the definition of physical disability is critical to a plaintiff’s success in court. The court then focuses upon causation by requiring the plaintiff to produce evidence that the condition is “medically determinable”. Even when these two conditions are met, the defendant employer often rebuts with arguments that bona fide occupational qualifications (BFOQ) prevent the obese or overweight employee from doing a job.

The issue of body mass and employability is an intersection of science and culture. Law is rooted in history, cultural, and religion while science relies upon objective and provable fact. This clash complicates the legal resolution of workplace discrimination for those viewed as too fat to work.

WEIGHT AS A DISABILITY

"Physical disability" is in part defined as a physical handicap that substantially limits one or more major life activities. A physical handicap is a loss of function that is physiologically based and commonly includes, "Any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: neurological, musculoskeletal, special sense organs, respiratory, including speech organs,

cardiovascular, reproductive, digestive, genitourinary, hemic and lymphatic, skin and endocrine." The ability to work is uniformly accepted as a major life activity. Therefore, weight may qualify as a protected physical disability within the meaning of law if medical evidence demonstrates that it results from a physiological condition affecting one or more of the basic body systems that limit the ability to work (3,4).

This does not end the legal discussion. Where there is disability, there is an obligation for the employers to make reasonable accommodations so that individuals with physical disabilities can work. A reasonable accommodation is "a modification or adjustment to the workplace that enables the employee to perform the essential functions of the job held or desired." (5). However, there are limits to what an employer must do. For example, while the ADA considers the circumstances, it does not impose undue financial and/or administrative burdens (3).

The BFOQ necessary to do a job is a defense against both medical causation and the obligation to reasonably accommodate a disability. The heart of the issue is whether the plaintiff can perform essential duties of a job. This is especially important when public safety is at risk (e.g., paramedics, ambulance drivers, or firefighters). Once the plaintiff establishes a prima facie case of discrimination, then it is up to the defendant employer to provide a nondiscriminatory reason for its employment decision (6,7).

CASE LAW EXAMPLES

The Blame Game: Medical Causation is Necessary to Prove Weight Discrimination

In *Cassista v. Community Foods, Inc.* (8), the Plaintiff was 5'4" and weighed 305 pounds, corresponding to a body mass index (BMI) of 52.3 kg·m⁻². While interviewing at Community Foods, the Plaintiff reported having no physical limitations that would interfere with her ability to do the job. The Plaintiff sued for disability discrimination when she was not hired. The Supreme Court of California held "that weight may qualify as a protected 'handicap' or a 'disability'" within the meaning of the applicable state statute, "if medical evidence demonstrates that it results from a physiological condition affecting one or more of the basic bodily systems and limits a major life activity" (p. 1052). Relying on federal antidiscrimination law for guidance, the Court concluded that "an individual who asserts disability discrimination on the basis of his or her weight must adduce evidence of a physiological, systemic basis for the condition" (pp. 1063-1065). The Plaintiff failed to produce medical evidence of causation and her case was dismissed.

In *Cornell v. Berkeley Tennis club*, a severely obese woman with a BMI over 50 was fired from the Berkeley Tennis Club after having worked there for over 15 years (9). She began working part-time for the Club in 1997 as a lifeguard and pool manager who eventually became a day manager. In 2012, a new general manager sought to improve the image of the club, and implemented new uniform requirements. The largest size would not fit Cornell. She was subsequently fired. She then sued the Club and alleged that she was terminated because of her obesity and that the Club failed to provide a reasonable accommodation. Unlike *Cassista*, Cornell offered evidence of medical causation that the Club then was required to rebut. The Club presented no evidence that Cornell's obesity lacked a physiological cause and, therefore, failed to defeat Cornell's claim that her weight was a disability.

In *Tudyman v. United Airlines*, a male applicant for a position as a flight attendant was rejected because he exceeded the airline's body weight guidelines (10). He sued, claiming that he had been denied employment based on a handicap under the Rehabilitation Act. His weight was apparently the result of extensive body building, resulting in a low percentage of body fat and a high percentage of muscle (*Id.* at p. 741). The court granted summary judgment for the airline, observing that the applicant's condition was not the result of a physiological disorder affecting one or more of the body's systems, "e.g., the result of a glandular problem", but rather was "self-imposed and voluntary" (*Id.* at p. 746). Accordingly, he failed to meet the definition of a handicapped individual under the federal statute. While not explicit, as it was in the Cornell case, the issue of body image was implied.

BFOQ as a Basis to Rebut Discrimination

In *Hegwer v. the Board of Civil Service Commissioner of Los Angeles*, BFOQs necessary to a job provide a basis to rebut a claim of employment discrimination based upon excessive weight. In this case, a paramedic was suspended for failure to maintain required levels of fitness and body weight. The paramedic accused her employer, the Los Angeles City Fire Department, of handicap discrimination under California statutory law (11). She claimed to suffer from a thyroid condition that contributed to her obesity. The court acknowledged that a person "is considered handicapped under California law if he or she suffers from a physiological disorder affecting the endocrine system", which includes the thyroid. However, the court concluded that the Department's standards were based upon bona fide occupational qualifications that included strength, agility, and endurance as well as associated risks of job-related injury, heart disease, stroke, and high blood pressure. The court found these qualifications were based upon statistical studies and not stereotyped generalizations, and upheld the Department's disciplinary action (pp. 1024-1025).

In *McMillen v. the Civil Service Commission of Los Angeles*, an ambulance driver for the City Fire Department was disciplined for failing to meet the body weight standards of the Department (12). Unlike *Hegwer* (11), the Plaintiff did not allege that his failure to maintain body weight standards was caused by any physiological disorder. On appeal, he contended that there was no just cause for discipline because there was no evidence his weight interfered with his ability to perform his duties. The Department argued that its weight standards were appropriate for paramedics because studies showed that "excess fat could adversely affect their agility and ability to lift and climb, may cause fatigue in cases of acute obesity, or increase the risk of metabolic disease and back injury". The Court held that these were legitimate bona fide occupational qualifications and affirmed the disciplinary action.

In all of these cases, the testimony of an exercise physiologist could have been profoundly influential on the outcome of the dispute. Exercise physiologists are uniquely qualified to offer testimony regarding the physiology of obesity and its implications for the ability to do a particular job. When reasonable accommodations are at issue, the exercise physiologist also has expertise on whether interventions for obesity are likely to succeed. In summary, the often-silenced science of obesity is highly relevant to the law of obesity.

THE SCIENCE OF OBESITY

Self-Induced or Underlying Physiological Causes?

Legal resolutions of being too fat to work require consideration of medical causation. Self-induced obesity is likely to be viewed differently from obesity resulting from an unavoidable biological cause. Therefore, the science of weight management is fundamentally relevant, and it warrants explication.

Body composition is the result of complicated interactions between genetic, biological, environmental, behavioral (e.g., nutritional), social, and psychological factors (13). Many, but not all, of these are controllable. This is fundamental to the issue of whether excessive weight is self-induced or caused by a medically determinable condition.

There are a number of factors that meaningfully contribute to body mass and composition that cannot be attributed to behavioral choices. For example, the thyroid is a significant contributor to basal energy expenditure, and changes in circulating thyroid hormones, even among individuals within the reference ranges, correspond to changes in body weight; this is true among both men and women (14). In caselaw, thyroid problems are commonly cited as a physiological cause of excessive weight outside of the control of an employee.

Regarding self-induced obesity, there is a multiplicity of factors that have been cited as contributing or causal factors. Important behavioral traits affecting body mass and composition are exercise, sleep, and nutrition. Regarding nutrition, total caloric intake is important (15), but other dietary factors are supported as well, including macronutrient composition. For example, the obesity rate across the total U.S. population, and across all individual age groups, can be accurately predicted by the intake of dietary sugar (16). A high-sugar meal induces an exaggerated insulin response. Acutely, insulin impairs the action of hormone-sensitive lipase, one of several enzymes necessary for mobilization of peripheral bodyfat. Chronically, insulin may impair fat mobilization via a decrease in the expression (and consequent concentration) of adipose triglyceride lipase expression, another crucial lipolytic enzyme (17).

Besides dietary composition, caloric expenditure and intake are causally linked to excess adiposity. This has implications for the development, maintenance, and treatment of obesity. Physical activity and regular exercise are central to weight management. Non-exercise activity thermogenesis (general physical activity) is emerging as one of the most important controllable determinants of adiposity (18). Similarly, the exercise-associated energy expenditure in obese subjects is not different from normal weight subjects, and is not responsible for differences in energy expenditure (19), which makes this an ideal avenue for intervention. Energy intake and energy expense are not independent of one another. There are numerous pathways through which they influence each other. One mechanism linking diet to exercise, involves the AMP-activated protein kinase (AMPK) enzyme, which is key regulator of acute and chronic carbohydrate metabolism. This enzyme is crucial in non-insulin dependent glucose uptake, and is activated during physical activity and exercise (20).

Lastly, sleep deprivation is commonly a voluntary behavior. It is associated with altered release of metabolic hormones, increased appetite, impaired glucose homeostasis, elevated body weight, and risk of diabetes (21-24).

Weight Loss Interventions

To determine whether obesity is a disability, one must also consider the efficacy of treatment interventions. Employees are often given access to treatment prior to termination, which upholds the assumption that excess weight is controllable. However, behavioral attempts to correct obesity are seldom effective. An extreme example of this is demonstrated by “The Biggest Loser” television contestants, who undergo rapid weight reduction. In fact, 14 competitors were evaluated at their 6-year follow-up, of which they regained an average of 41.0 kg. This change did not correspond well to their daily energy expenditure despite their mean physical activity being higher than it was at baseline. Their basal metabolism was lower (25). Even classical weight loss interventions lack effectiveness. Among more typical weight reduction strategies, approximately 80% of people who successfully reduce their body weight by 10% fail to maintain that loss a year later (26). After another year, approximately half of all weight lost was regained (27).

These difficulties can be partly explained by metabolic alterations resulting from the weight loss itself. Adipose cells function as endocrine organs, their behavior changes in the presence of caloric restriction and weight loss, and the consequent hypothalamic signaling promotes weight regain (28). In a sense, biological dysfunction that is characterized by uncooperative metabolism despite sufficient effort is induced by the effort to lose weight.

These difficulties are not necessarily consistent between individuals. For example, aging presents unique challenges to weight management and reduction. Well-established metabolic alterations accompany advancing age (29). However, there are also lesser-known morphological changes that compromise fat mobilization, including composition changes to the fat itself. Across the lifespan, from infancy to late elderly stages, brown adipocyte storage decreases and white adipocytes, which have less innervation and vascularization, predominate (30). Body mass and its composition are tightly regulated by variables we cannot control, and partly sensitive to behaviors we can.

Successful weight loss strategies do exist however. There are a number of reviews and registries that chronicle difficulties with weight loss. Among these are strategies that aid in successful weight loss. They include physical activity, increased fiber intake, decreased fat intake, and behavioral training associated with conscientious eating (31).

CONCLUSION

In the United States, the percentage of jobs in which moderate-intensity physical activity is a BFOQ fell from nearly 50% in the 1960s to approximately 20% by 2008 (32). According to the U.S. Bureau of Labor Statistics, in 2016, “heavy work” was required in approximately 13.7% of civilian jobs (33). Despite the trend for increased sedentary professions and decreased physical demands, the issue of being “too fat to work” remains prevalent in the workforce. Obese employees who are fired or disciplined often feel discrimination when their employers allege that they cannot perform necessary occupational tasks. Their

recourse is to claim a disability that requires evidence of medical causation as a prelude to an accommodation.

There is a need for expert witnesses in these cases, and exercise physiologists possess the appropriate education to serve in this role. Their training qualifies them to evaluate whether adiposity is the result of self-induced behaviors, or if there is an underlying physiological causation. However, the exercise physiologist's testimony is typically missing in action in these cases. The conflation of law and science on this matter is relevant to the exercise physiologist who has a basis to interpret the efficacy of behaviorally-based treatment programs and to determine the applicability of employer-based interventions.

Address for Correspondence: Margaret E. Ciccolella, Department of Health and Exercise Science, University of the Pacific, Stockton, CA. 95211. Phone: 209-946-2473
Email: mciccolella@pacific.edu

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