

Fat in the Fire:
A Personal Narrative on Disordered Eating in
Competitive Distance Runners

Kelsey P. Hart
University of Iowa Carver College of Medicine
Robert D. Sparks Writing Contest
20 March 2017

I sat on the bus, my mind numb, body trembling, head throbbing, stomach and throat burning. I didn't feel present but lost in a strange haze. The stop closest to my house came and went. *What's wrong with me? I take this route home nearly every day.* I manage to pull the cable for the next stop. The bus lurches to a halt and I stand up. Instantly my surroundings spin and sway around me. It's as if I had just gotten off one of those horrible amusement park rides that spin you around and around for what seems like forever and stops right when you're on the verge of vomiting. I pause for a moment before clutching the cold, metal support bar, and step out onto the snowy sidewalk. Limp and listless, I shuffled home through the snow and slush. Although my mind felt empty, I knew exactly what was wrong with me.

Eating disorders are characterized by a disturbance in one's pattern of eating, resulting in impaired physical and/or psychosocial health. One of the more commonly known eating disorders is anorexia nervosa, which has four main requirements for a clinical diagnosis: restriction of caloric intake resulting in a body mass index less than 18.5, an intense fear of gaining weight, and a distorted body image. No, I have never suffered from a clinically diagnosable eating disorder. Then why did I let myself go eight hours without eating? It started as sort of an accident, getting caught away from home with class, meetings, a track workout, and no time in between. That got me to about five hours. Now I could have dug out my wallet, bought myself a deliciously toasted Which Wich sub or even my favorite monster cookie. But there was something clinging to my mind, pleading for an explanation that pushed me further into the realm of hunger.

I was in the weight room on a Sunday morning. After three years on the track and cross country teams at our University, my roommates and I had the Sunday morning long run and

weight session programmed on autopilot. As expected (and dreaded), chin-ups were in the line-up for the day's circuit. If you're not familiar with distance runners, we're not exactly known for our weight lifting abilities. I could do six on a good day. I jogged lightly from the box jump station to the racks for front squats, passing by the chin-up station on the way. Glancing up briefly as Reagan made her way up to the bar, my eyes were drawn back instantly. It was like watching a horror movie as a kid, wanting to look away but not being able to pry my eyes from the screen. I couldn't help but stare as her frail body struggled like a worm being tortured in the sunlight after a rainy day. Unable to move, I watched each tendon, bone and vessel protruding through her thin, translucent layers of skin.

I knew instantly that it had gone too far. There were times in the past few months when I wanted to scream at her that it wouldn't kill her to go out and enjoy a friend's birthday dinner or grab froyo after practice, like we used to so many times. One night after we finished tough exams, I giddily brought home one Molly's cupcake for us to split in celebration. Instead of enjoying a late night dessert accompanied by gossip and giggles, I ate my half alone. Reagan, in her usual oversized sweatshirt, retreated to her basement bedroom early. It was an exhausting day, understandable. A week later, I felt my heart sink as I discovered half of the peanut butter nutella cupcake, stowed away in the back of the freezer amongst the lost containers of leftovers.

Thus began the apprehensive distancing. Allotted time with roommates progressively dwindled, the elaborately documented schedule in her planner arranged to the minute. Unsure if they were real or imagined, sideways glances were nearly palpable when I baked homemade pizza or cookies on the weekend, as if these occasional indulgences detracted from my level of

commitment to the team. We used to always bake cookies together on weekends. Among distance runners, I was not alone in the anxiety that crept in, gnawing on my sanity. At 123 pounds I began to feel like Andre the Giant as I toed the starting line. But it was on that Sunday morning when I finally realized that none of that mattered. Not my frustrations or insecurities or even our relationship. This was about Reagan's health.

Outside of weight loss and poor nutrition, the complications of eating disorders can include a variety of organ systems. Decreased energy intake is compensated for by breakdown of fat and protein. This breakdown can eventually lead to loss of mass and function of organs such as the heart, kidneys, intestines, muscle, bone and liver. To name a few, complications range from anemia, to decreases in bone mineral density, to degeneration of reproductive function, to cardiac valve problems and arrhythmias (a leading cause of death). [7] Some of these complications can even have effects much later in life, for example, over half of anorexia patients report at least one fracture when surveyed 40 years after their diagnosis. [3] Eating disorders are also associated with development of depression, alcohol abuse, and suicidality. Although there is limited research on long term outcomes, eating disorders tend to be devastatingly difficult to treat, potentially becoming a lifelong battle.

I knew that she thought what she was doing was "healthy." She was running faster too. It makes sense: the less you weigh, the easier it is to glide along the lush fields of a cross-country course to a record-breaking finish. *Imagine how much harder it would be running with five or ten pounds strapped to your waist*, as was told to some of the more non-stereotypically shaped runners on the team. Unfortunately but not surprisingly, a tibial stress fracture abruptly ended her last indoor season. Restrictive eating, especially in female

athletes, is associated with a higher risk of stress fractures and other injuries. This is the result of several factors including decreased bone mineral density, decreased estrogen levels, and decreased calcium and other nutrients that are needed for bone remodelling. Without this, bone cannot adapt to the stress of intense athletic training, making them far more susceptible to fracture.

Why didn't I buy myself lunch that day? My initial explanation was that I just wanted to know how she could do it. How was she able to lose nearly 20 pounds off of her already petite frame within just a few short months? Of course I knew that it wasn't simply by not eating for eight hours straight. She ate. The nearly constant chomping and crunching of carrots audible from every crevice of the house became like a metal fork scraping against a glass window. The sound still makes me cringe today. As I walked home in the slush, desperate for the kitchen awaiting me, her distant demeanor no longer felt aggravating, but heartbreaking. No, I have never suffered from a clinically diagnosable eating disorder. However, I see these eating disorders as only one end of a very large spectrum.

Disordered eating is a term used for a wide range of behaviors, perspectives and preoccupations that lie anywhere between healthy eating behaviors and attitudes, to severe disorder requiring hospitalization. These disordered eating habits are also a criterion in a common phenomenon known as The Female Athlete Triad. This triad, also on the continuum of eating disorders, consists of disordered eating, absence of menstruation, and decreased bone mineral density. Many of these behaviors are subtle to outsiders: intrusive thoughts, perceived pressure from the sport, an inability to be content with your own physical fitness, appearance and performance. *Why aren't my arms that slender, delicately tapering down from the*

shoulder, yet carved with sharply demarcated musculature? The perfect balance between strong and feminine. False associations develop. *Leanness means higher athletic performance, higher work ethic, a higher level of commitment to the team.* Behaviors develop. Food becomes rationed according to the day's activity level, a light or skipped meal makes amends for rare day off from running. Every other Saturday off becomes only once per month. For me, these pervasive thoughts and behaviors became even worse after I graduated, when I was no longer running at the division one level. Your body *feels* very different once you suddenly stop the intense 70 mile weeks combined with circuit weight training. My dysmorphic body image was no longer about desiring a faster personal record, but I actually felt out of shape and thus "fat". Motivation to keep up that level of physical activity inevitably drops, and the mechanism of "control" switches from exercise to diet.

After that Sunday in the weightroom, my mind ran wild, searching for the proper way to address the situation. The image of her skeletal body lingered. Approaching her directly seemed the most straightforward, but risked adamant dismissal and inevitably a hostile home. If not direct, expressing my concerns to the coach or athletic trainer seemed like valid options. However, she was in fact running faster. Her accomplishments, including her shrinking figure, were praised by the sport. A day at practice flashed into my mind when a photo of professional runner, Morgan Uceny, was passed around our team huddle. In the photo, she was equipped with an eight-pack of abs after having "transformed herself into an elite athlete," strides beyond her "soft" days as a collegiate runner for Cornell University. Ultimately I went to the coach. As expected, my concerns were listened to but politely dismissed. Her physique was simply within the realm of distance running, even considered a marker of success.

I still love the sport of distance running. There's something about expanding the bounds of your mind and body that is both exhilarating and extremely satisfying. But what happens when those bounds get distorted? The line between healthy dedication and distortion is very fine. I've seen the pattern too many times: a perfectionist personality combined with pressure to succeed, followed by a preoccupation with food and restrictive eating. I can count five teammates from my four years of collegiate running who struggled significantly with eating disorders. Some continued running, while others left the team for rehabilitation and recovery. Even more have struggled with subclinical disordered eating, falling into the category of The Female Athlete Triad, including myself. Research studies continue to demonstrate that disordered eating is far more prevalent in athletes, ranging from 13 to 42% of elite female athletes compared to 4.6% of the general population, depending on the sport. [7] While more common in females, males are also at risk with one study revealing 8% in elite male athletes compared to 0.5% of the general population. [8] Sports associated with aesthetics and leanness are at especially high risk. For example gymnastics, dance, diving, and endurance sports such as running, skiing, swimming, and cycling. With the denial and normalization of eating disorders in athletics, many go unreported making the true prevalence even higher.

This story sat unfinished for nearly four years. I am embarrassed to say it had no end because, well, I didn't know the ending. The topic of disordered eating was like the Voldemort of distance running. It was whispered about and tiptoed around, but too frightening to approach directly. The person I once shared everything with, from gossip to professional aspirations, was going through the most difficult time of her life and I knew nothing about it. I knew only that it was happening. This is my biggest regret. Now as a third year medical student,

I realize that this passive response only perpetuates the problem. I wish that I would have approached her directly. I wish I was persistent with my concerns to both the coach and trainer. I wish I would have asked “*how are you doing?*” so many more times. I wonder now, what can be done to *prevent* athletes from slipping into such a detrimental downward spiral. A variety of disordered eating questionnaires have been designed for those in high risk sports. They ask questions about diet, weight changes within the last year, missed menstrual cycles, and history of stress fractures among other things. [2] However, screening has yet to be proven effective. Why? Because athletes don’t report their disordered eating behaviors, either out of fear or simply because they see them as normal. [10]

In my four years on the team, I don’t recall filling out a questionnaire. Although I do remember our athletic trainers screening for body fat percentage, and I vaguely remember being told there was a team psychologist. Rather than acting as a monitoring tool for healthy body composition, our fat percentage became a sort of competition. Boasting of low numbers took over the locker room talk for that week. And I never heard of anyone actually meeting with the team psychologist. Now as a medical student, a lot of “what ifs” drift through my mind. If screening for prevention is not enough, why not raise awareness and *change the culture itself*. Keep the screening forms. But *first* train someone: the psychologist, the coach, the athletic trainer, to *educate* the athletes. Teach them about disordered eating. Teach them that in their sport, there is often pressure to shed pounds in order to “look like a runner”. Teach them that it is not normal to sacrifice health, but it is normal to ask for help.

Only recently did I learn about Reagan’s experience. Ultimately, it was the stress fracture diagnosis that initiated her intervention. At that point, several teammates had

expressed concerns to the coach and athletic training staff, but her visit with the sports medicine doctor was the first mention of any concern to Reagan herself. She was given an option, to comply with rigorous outpatient treatment sessions or be admitted for inpatient therapy. She chose the prior. Restrictions from running, weekly appointments, and weigh-ins followed. The treatment is a multidisciplinary effort. She met with a dietician, psychologist, eating disorder physician, sports medicine physician, and our athletic trainer. She was required to keep a daily food journal and meet certain numbers of food servings that increased over time. At her weekly weigh-ins she wasn't allowed to look at the number on the scale. Meanwhile, I pranced around the subject of her many appointments, naive of what she was facing. I winced as she ranted about the impracticality of her exercise restrictions and how much she was actually doing, the number still over twice her allotted amount.

I'd like to think the reality of her collegiate running career ending finally freed her mind of the distortion. Like getting your first pair of glasses and realizing that you can actually see individual leaves dangling from an intricate web of branches, instead of blurred clumps of green. Realistically, I know from personal experience and scouring through research articles that many with a history of disordered eating continue to struggle with impaired psychological well being, even after treatment. [9] Even now, it is difficult for Reagan to share details about her experience with me, out of fear that her repressed dark memories will resurface.

Remembering back to the spring of 2013, our last day as collegiate athletes, Reagan described it as the most miserable time of her life. As we quietly cleaned out our lockers that day, I hoped that this ending did not sour her experience as a collegiate athlete: clouding the friendships

made, the weekends of travel, the season we finished nearly every race so close we could have crossed the line holding hands.

Resources

1. Bennell KL , Thomas SA , Reid SJ , Reid SJ , Brukner PD , Ebeling PR , Wark JD . Risk factors for stress fractures in track and field athletes a twelve-month prospective study. *Am J Sports Med* 1996;24:810–18
2. Bonci CM, Bonci LJ, Granger LR, et al. National athletic trainers' association position statement: preventing, detecting, and managing disordered eating in athletes. *J Athl Train*. 2008;43(1):80-108.
3. DynaMed Plus [Internet]. Ipswich (MA): EBSCO Information Services. 1995 - . Record No. 114614, Anorexia nervosa; [updated 2015 Sep 29, cited March 6, 2017]; Available from <http://www.dynamed.com/login.aspx?direct=true&site=DynaMed&id=114614>.
4. Forman, Sarah. Eating disorders: Overview of epidemiology, clinical features, and diagnosis. In: Post TW, ed. *UpToDate*. Waltham, MA 2017. www.uptodate.com. Accessed March 2, 2017.
5. Hilibrand MJ, Hammoud S, Bishop M, Woods D, Fredrick RW, Dodson CC. Common injuries and ailments of the female athlete; pathophysiology, treatment and prevention. *Phys Sportsmed*. 2015;43(4):403-11.
6. Mehler, Philip. Anorexia nervosa in adults and adolescents: Medical complications and their management. In: Post TW, ed. *UpToDate*. Waltham, MA 2017. www.uptodate.com. Accessed March 2, 2017.
7. Sundgot-borgen J, Torstveit MK. Prevalence of eating disorders in elite athletes is higher than in the general population. *Clin J Sport Med*. 2004;14(1):25-32.

8. Sundgot-borgen J, Torstveit MK, Skårderud F. [Eating disorders among athletes]. Tidsskr Nor Laegeforen. 2004;124(16):2126-9.
9. Tomba E, Tecuta L, Schumann R, Ballardini D. Does psychological well-being change following treatment? An exploratory study on outpatients with eating disorders. Compr Psychiatry. 2017;74:61-69.
10. Torstveit MK, Rosenvinge JH, Sundgot-borgen J. Prevalence of eating disorders and the predictive power of risk models in female elite athletes: a controlled study. Scand J Med Sci Sports. 2008;18(1):108-18.