What Happens When You Change Your Body For Sport?

"... I think it's because you gained weight ... this is the reason you didn't do well."

Imagine being told by your coach that you need to lose weight to perform better. This is reality in many sports associated with a certain body physique such as running, swimming, and gymnastics where the pursuit of a 'fat-free body' often overshadows the underlying physical and psychological dangers.

It was at the end of the 'Division 1' Cross Country outdoor season, the season Cate Barrett didn't do as well, when, her coach told her the that reason why her performance was lagging was that she had gained weight. From that moment on, Cate's relationship with food changed.

Before joining the college track team, Cate didn't have a bad relationship with food, she never counted calories, but her coaches' influence changed that.

"From that point on I was like, 'I guess we got to focus on this' ... so I went home that summer and I did try to lose weight."

Cate's story reminds me of my years as a teenager when I competed in track and field back home in Switzerland. I remember the day my coach pulled my teammates and myself aside to tell us to stop eating sugary foods and cut down on carbohydrates during the entire season. This happened just before our peak training time started. Sometimes, we would have to weigh ourselves at training in front of everyone and our coaches would drop comments about our weights.

When your coach says 'thinner makes you faster,' of course, you listen because in the end you want to win races. And like Cate, I listened to my coach and started restricting my calorie intake. Little was I aware that this was the beginning of becoming trapped in a vicious cycle that led to a battle with disordered eating behavior.



Cate Barrett (credit: Instagram, @beingcate)

In most sports, a particular physique is idealised over others. Research has shown that this imprinted ideology and ideal physique is mainly being reinforced by coaches and managers. Regular weighing, fat measurements and dietary controls are some of the reinforcements that coaches justify by arguing that 'weight management is performance gain'.

At one point during our conversation, Cate took a deep breath and then said: "Maybe I got this from my coaches, that like, you almost kind of have to like make a deal with the devil and like, be a little bit too thin to perform well."

Swimming, gymnastics, and running are sports that have been shown to demand its female athletes to have such a 'fat-free body' physique. Where so-called 'slim to win' or thinner is faster' ideologies are in place, athletes are exposed to short- or long-term consequences. Further, the above-mentioned reinforcements by coaches can lead to negative consequences where the coach-athlete relationship become strained and where the athlete's performance and health drops. And more often than not, eating disorders develop 'unintentional', said sports dietician and researcher Dr Dominique Condo.

"It all begins with having a negative relationship with food, but eventually it can turn into something more than that," says Dr Condo.

Eating disorders are psychological issues and are a group of diseases that are marked by severe disturbances in daily eating patterns. The most common eating disorder is anorexia nervosa (AN), which is a compulsion to become thin and often characterised by an intense fear of gaining weight and self-induced starvation. Another common eating disorder is bulimia nervosa (BN), which is characterised by recurring episodes of binge-eating and consecutive vomiting, purging or intense exercise to avoid weight gain.

Besides a high level of body dissatisfaction, attempts to regulate body mass by restrictive eating, overtraining or vomiting are amongst some of the characteristics of eating disorders. Furthermore, athletes' individual characteristics such as perfectionism, determination and competitiveness are also common to patients with eating disorders. Therefore, athletes with such personality traits are arguably at higher risk of developing disordered eating behaviors.

The rise of eating disorders in athletes has led to the shaping of the label 'anorexia athletica'. It is not a diagnostic classification but is used in reference to athletes experiencing some sort of disordered eating behaviors.

During Cate's time in her 'College Division 1' track team, a lot of girls showed symptoms of developing some sort of disordered eating behavior, or as mentioned above 'anorexia athletica'.

"Every year there were other women to the team who were exhibiting, what I consider to be, disordered behavior around eating."

While her coaches would tell the team not to under fuel, the nutritionists, on the other hand, would focus their talk on calorie intake, basically telling them not to get fat.

"So implicitly, what was not said but what was encouraged, was the runners who were really been praised for performing well."

While men often have a greater desire to be more muscular and bigger, it is the females who are more likely to develop an eating disorder because of the type of sport and the body image issue more than anything else, said Dr Condo. Of course, men can have body image issues, which Dr Condo sees a lot with, but it is more women who have the body image issue that are causing the biggest effects.

"Females are most likely more prone because of the type of sport and the body image issue more than anything else.

"Over half of female athletes that I see would have some sort of disordered eating in some way," says Dr Condo.

Research further shows that the reasons why female athletes are at higher risk of developing disordered eating behaviours is due to social influences (coaches), sports practices (weigh-ins), as well as personal attributes. According to a Norwegian study conducted in 2004, 42% of elite female athletes in aesthetic sports, and 24% of female endurance athletes showed symptoms of having an eating disorder (Borgen, 2004).

Whilst eating disorders can negatively impact an athlete's performance more than they will benefit it, eating disorders can ultimately take a great toll on the athlete's physical health.

"There are different effects, first it probably starts with fatigue. If you are not eating enough you are not going to have the energy to actually be able to perform," says Dr Condo.

In Cate's track team, the girls who were especially good at restricting food intake, were also the ones who would be frequently injured. Cate remembers that the coaches' reactions would be:

"Oh that's just bad luck. It sucks that they're injured but they're training really hard."

And her coach would tell her to be like them. Reflecting on it, Cate says that it scares her how nobody understood that these girls were training too hard, that is why they were too thin, and that is why they were injured a lot.

The so-called relative energy deficiency in sports syndrome (RED-S), also known as the 'female triad', is one of the most harmful conditions. It can ultimately lead to impairments of bone health, immunity, and menstrual function. Lack of menstruation or irregular menstruation results in a significant decrease in estrogen, which further poses a risk to maintaining strong bone health. Research suggests that predominantly in sports emphasising on aesthetic or leanness, up to 66% of female athletes are missing their periods (Miller, n.d.).

"The longest I went without my period was like six months," remembers

Cate.

Advanced Sports Dietitian Lisa Middleton believes that it is important to reduce that pressure on athletes and looking at the way we approach body composition. Educating female athletes early on about their monthly cycles and how it affects bone health and injury, and how that relates to nutrition, she says could help prevent eating disorders.

"I think in the next 20 years as some of those more junior athletes that are becoming coaches, they are more aware of the approach and the harm it can do if you're putting a lot of extra pressure around the body composition and diet.

So as those athletes become coaches, then the coaching strategies should start to change," says Lisa Middleton.

While Cate believes that she definitely took her eating habits to an unhealthy level, and she sometimes still feels like her body is not good enough, she said that she is lucky that she didn't harm her body even more.

The following words, are very empowering, I find, and I wish I had heard them earlier:

"The number one way for you to perform your best is to take care of yourself.

"And the main thing about why you need to take care of yourself and not try to be as thin as possible at all times, is that it helps you avoid injury.

"And when you're avoiding injury, you're training consistently. And when you're training consistently, that's when you see improvement.

"So like longevity is more important than short term gains."