# FEMALE ATHLETE TETRAD

Katy Magazine
experts discuss this
under-recognized
eating disorder
affecting female
athletes

Written by Krista Friedl



Women and girls most commonly diagnosed with Female Athlete Tetrad participate in sports that require a lean physique such as gymnastics, dancing, and track

Kacie Lane\* was always very health-conscious and active. She grew up playing sports and enjoyed eating healthy food. She never imagined she would obtain an eating disorder and truly believed she was doing good things for her body. "What started out as an innocent passion for fitness slowly evolved into an eating disorder. "My hobby of working out became an obsessive health hazard," says Lane.

### **Different Than Anorexia**

Female Athlete Tetrad is the result of undereating and overexercising causing anorexia, anemia, and osteoporosis. It is described as a tightly woven combination of compromised body systems initiated by disordered eating and characterized by absence of menstrual periods, weakened bones, and damaged lining of blood vessels. Anorexia and Female Athlete Tetrad are different in that anorexia is initiated by a distorted body image. "Female Tetrad sufferers don't necessarily want to lose weight, they just focus on everything else but proper nutrition," says Dr. Agnes Kisch of Westside Pediatrics.

### Who It Effects

During college, Lane took her exercising hobby to new heights. Her perfectionist disposition pushed her past her limits by running more miles on the treadmill and lifting heavier weights. "I started restricting my food intake severely, working out twice a day, and counting every calorie." Although she was physically fit, she became mentally unhealthy. "Young college students involved with athletics are the most vulnerable to Female Athlete Tetrad," Dr. Kisch says. For the first time the students are away from home, without supervision of parents, too absorbed in their goal of athletic achievement, and forgetting about healthy eating. However, athletes of all ages are vulnerable to this sickness, especially those athletes whose sport of choice requires a lean physique.

\*not her real name

## **Initial Signs and Symptoms**

Female Tetrad may be difficult to recognize because of the wide array of warning signs that might not seem to correlate at first. For Lane, in the beginning it just appeared as though she was developing food intolerances, because of chronic constipation which led her to cutting out starches, bread, and wheat from her diet. These actions only made her sicker. "Visits to my gastroenterologist led nowhere. I tried probiotics, countless medications, and test after test yielded no results to why my GI system was compromised," says Lane. She started feeling fatigued and was also unable to concentrate at work no matter how much coffee she drank; her 20/20 vision was becoming blurred and she found herself yawning during intense workouts.

Next, her once regular menstrual period vanished, as well as her libido. "I visited a gynecologist and after blood work, was diagnosed with polycystic ovary syndrome," says Lane. "I asked the doctor if it is possible for me to lose my period because I work out frequently but she told me my body fat percentage was high enough to where this wasn't the case."

She started noticing that her once oily skin was peeling weekly and friends and family regularly told her that her skin looked jaundiced. On top of that, her immune system was failing and she began getting cold at any temperature below 80 degrees. Dr. Hiedi Shultz of Fulshear Family Medicine says, "Female Tetrad may result in yellowing of the skin, soft baby hair, and electrolyte abnormalities." Lane adds that she would get so cold that her toes and fingers would go completely numb. "I finally visited a rheumatologist and was diagnosed with secondary Raynaud's, a precursor to an autoimmune disorder that had not yet surfaced. The only thing my doctor said he could do was put me on a blood thinning medication to help with the symptoms," says Lane. She didn't understand why at the age of 22, eating healthy and working out, she could be so sick.

## The Deeper Issue

Her multitude of symptoms from her chronic undereating and over-exercising left her worn out and depressed. "I was just going through the motions of my daily routine, feeling lifeless, and losing all feelings of affection toward others. I started battling depression. I lost my light," says Lane. According to Dr. Kisch, "The lack of energy will cause declining performance in every area, academics, sports, and social life. Needless to say, all of these will make them depressed, snowballing into an even bigger problem."

All the medications the doctors prescribed seemed to Lane like a Band-Aid to cover up the symptoms of a deeper issue. It wasn't until she came across an article about Female Athlete Tetrad and metabolic damage that she realized what had happened. "My undereating and overtraining was taxing my adrenal glands so much that my body systems were shutting down just to keep me alive. Slowly my digestive system, sex organs, liver, adrenals, immune system, and thyroid shut down. I had run down my body to a breaking point," says Lane.

## Road to Recovery

Treating the sickness just involves less exercise and higher caloric intake. Registered dietician Paula Mrowczynski-Hernandez at the Memorial Hermann IRONMAN Sports Medicine Institute says, "Depending on the athlete's situation, the treatment team may include hiring a sports medicine physician, mental health provider, dietitian, coaches, athletic trainers, or physical therapist."

Since Lane has discovered that she fell victim to Female Athlete Tetrad, she has been on the road to recovery. Some days she still battles not to go back to her old ways of thinking, but she says she has come a long way. "Today I celebrate the little victories. My face and hands are no longer yellow; I am eating foods that once made me anxious, my energy levels are back, as is my oily skin. Most importantly, I have a regenerated passion for life." **KM** 

KRISTA FRIEDLI is an editorial coordinator for Katy Magazine and loves writing features that can help people going through hard times.

#### Special thanks to our panel of Katy Magazine experts:

Dr. Agnes Kisch - Pediatrician at Westside Pediatrics
Paula Mrowczynski-Hernandez - MEd, RD, LD, at Memorial Hermann
Dr. Hiedi Shultz - Fulshear Family Medicine

## **TETRAD SYMPTOMS**

- Poor or impaired mental and physical performance
- Chronic fatigue
- Dry and yellow skin
- Brittle nails and hair
- Vitamin or mineral loss
- Inability to tolerate the cold
- Sleep disturbances
- Decrease in lean body mass
- Hormone imbalances
- Gastrointestinal complications
- Sadness and depression
- Loss of menstrual period or irregular cycle
- Throat or stomach rupture