1. Excessive Exercise

While physical activity and exercise are important for disease prevention, there are some people who exercise excessively. Excessive exercise is physically and emotionally damaging in and of itself, as well as being a risk factor for developing an eating disorder. Clinicians observing any of the following should be alerted to a potential exercise and/or eating disorder:

- Loss of a significant amount of weight and/or rapid weight loss
- Excessive gym attendance – consistently or in bouts of extreme activity
- Complaints in reduction of performance
- Exercising despite medical recommendation not to (e.g. during injury or illness)
- Complaints of ‘dizzy spells’ or fainting whilst exercising

2. Overtraining

Overtraining is a condition in which the psychological demand of an exercise regime outweighs the ability of the body to adjust to the demand. Overtraining negatively affects several psychological systems, including the neuroendocrine, immunological, cardiovascular, and musculoskeletal systems. Overtraining is characterised by poor performance in competition, frequent illness, disturbed sleep and alterations in mood.

3. Exercise Dependence

Some people can be described as being ‘dependent’ on exercise. Exercise dependence is also a probably cause of overtraining. Symptoms of exercise dependence include:

- Narrowing of the exercise repertoire leading to a stereotyped pattern of exercise twice or more daily.
- Increased priority of exercise over other activities of life
- Increased tolerance to the amount of exercise performed
- Physical and psychological withdrawal symptoms
- Relief or avoidance of withdrawal symptoms by exercising
- Awareness of a compulsion to exercise
- Rapid return to previous pattern of exercise and withdrawal symptoms after a period of abstinence

4. Athletic Menstrual Dysfunction

Athletic Menstrual Dysfunction is a term used to describe a number of menstrual disorders (including amenorrhea, dysmenorrhea, anovulation and delayed onset of menstruation in puberty), which can occur in active women, particularly in competitive athletes who participate in sports where a lean body mass is common.

Factors such as energy balance, exercise intensity and training practices, body weight and composition, disordered eating behaviours, and physical and emotional stress levels, may contribute to its development. Menstrual dysfunction significantly affects long and short term health, as well as sporting performance and should be considered an indicator that the athlete’s health is compromised.
5. The Female Athlete Triad

The female athlete triad is a term used to describe three interrelated disorders which can occur in girls and women who are driven to excel in their sport or activity – these are, disordered eating, amenorrhea and osteoporosis.

These disorders (alone or in combination) obviously impact negatively on physical and mental health; they can also result in deterioration in athletic performance. Health consequences become more serious, potentially life threatening, when the three disorders occur simultaneously.

**Amenorrhea** can be associated with many factors, including low body weight or body fat, disordered eating behaviours, poor nutrition, excessive exercise and stress. However, a negative energy balance is the most likely problem. Athletes who are amenorrheic are 4.5 times more likely to sustain a fracture than an athlete who menstruates.

**Disordered Eating** in athletes can cause electrolyte imbalance, mental slowing, decreased athletic ability, problems with temperature regulation, cardiac abnormalities, impaired immune system, depression and more. Estimates of disordered eating among female athletes range from 15-62% - significantly higher than the general population.

**Osteoporosis** Weight bearing exercise is not enough to counteract the effects of chronic caloric deprivation and amenorrhea with regard to the bones. Osteoporosis and osteopaenia increase the risk of fracture and fragility.