

Amenorrhoea

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What is it?

A cessation of menses (monthly period). Running can also prevent menses starting in young females.

What causes it?

Often the main cause is insufficient calorie intake, a low body fat percentage (under 17%), stress, or a heavy training schedule without sufficient rest.

Many women who have amenorrhoea present with all these causes.

The 'Female Athlete Triad' is a recently identified condition amongst women - this shows a link between disordered eating pattern, amenorrhoea and low bone density.

What can be done about it?

As always, if you are worried about a health issue, you should see your GP. The following information will help, but is not a substitute for a medical check up and professional health care advice given on an individual basis.

1. Diet

Sufficient calories must be eaten for the workload on the body. Often female runners attempt to keep the body deliberately underweight thinking that they will run faster because of it. This is not strictly true as a healthy body which is in balance with vitamin and minerals and a good power to weight ratio will run well.

Not all distance runners stop menstruating, but if you do, the cause needs to be identified and corrected.

Amenorrhoea is closely associated with low bone density. It can lead to osteoporosis and irreversible bone thinning. When diets are too low in calories often the minerals, calcium and iron are lacking.

To avoid this:

- Identify the calorie intake needed taking into account the calorie expenditure of training
- Eat a variety of food ensuring 15% of calories come from protein, 25% from fat and 60% from carbohydrate

Calcium: The RDA for calcium is 800 mg, however the National Institute of Health in the USA recommends that amenorrhoeic women have 1200 to 1500 mg daily. This would equate to approximately 5 servings daily including a pint of milk. Minerals do not get absorbed best when supplemented alone so if the diet is providing the bulk of calcium, a multi vitamin and mineral or a calcium and magnesium supplement could help top up.

Iron: Iron deficiency is very common in female athletes resulting in anaemia that can also cause amenorrhoea. The main reason is insufficient intake in the diet. The body needs extra iron when undertaking heavy training especially for women. The RDA for iron is 10mg for men and 15 to 18 mg for women. Only a small amount of what we ingest gets absorbed and caffeine inhibits absorption while vitamin C enhances it, so watch what you are having with your iron. Iron supplements alone do not absorb well so try taking iron tablets that include other minerals and compounds that assist absorption.

Body weight often needs to be increased by as little as 2% to resume menses and avoid the risks involved with it.

2. Training

Cutting back on training by as little as 5% can be enough to resume menses. Introducing rest days where your body gets a break from physical stress will also help. Athletes have to train to improve but it is in resting that they get stronger. Look at the training schedule objectively and plan easy days, rest days and every 4 to 6 weeks an easier week. Backing off in intensity a little has been shown to help.

Both these steps are recommended because a loss in bone density will increase the risk of stress fractures significantly. This will result in time lost for training and a lay off that will be a lot more inhibiting on performance than gaining a few pounds or cutting back a little on training.

The slight reduction in training volume and increase in calorific intake could well reduce psychological stress too. This is because as the body fatigues it can look forward to recovery, and when it is hungry there is not a constant battle going on to restrict calories too much.

Remember, while it is important for runners to have low body fat, it can reach a point of being too low.

Body fat: We have essential body fat and storage fat. Essential fat is 12 to 15% for women. The average storage fat for women is 11% making a total of body fat at 23 to 26%.

Female athletes who train for distance running commonly have body fat percentage about 17 to 19%.

When you consider that the majority of that is essential fat and therefore keeps the body working correctly there is very little to lose. Occasionally athletes get their body fat down to below 12%. This is a danger zone for a woman and needs to be rectified to maintain health.

Fertility: Amenorrhoea could lead to problems with fertility at a later date. Although it is possible to have children following amenorrhoea, because the hormone oestrogen is reduced, there is a possibility that it will be harder to become pregnant.

The athlete with amenorrhoea can rectify the problem without compromising her performance. The sooner this is done the healthier the outcome. If after following guidelines the menses has not returned, you should visit your a GP who can test for other possible causes such as an under active thyroid. If a female has reached 16 and not begun menses then she should consult her GP for advice.