

STITCH

HOW DO I KNOW IF I'VE GOT STITCH?

Typically stitch is felt in the right upper abdomen, but may also occur on the left-hand side, or may irritate the upper and lower regions of the body.

WHO GETS STITCH?

"Classic" stitch is more likely to occur to insufficiently trained people than well-trained athletes. Stitch is most prevalent among younger athletes, but older athletes can still suffer the problem.

Runners tend to exhale every two or four steps. Most people exhale as the left foot hits the ground, but some people exhale when the right foot hits the ground. It is the later group who seem more prone to get side stitches.

WHAT CAUSES STITCH?

The pain is caused by a spasm of the diaphragm muscle. The inner organs are hanging from several ligaments, which in turn, are fixed to the diaphragm, (the muscular 'plate' between the chest and abdomen). The Liver, spleen, stomach, small intestine and colon form a weight of several kilograms, hanging from the diaphragm. The impact of every step forces the inner organs to move downwards. Additionally, the diaphragm moves upwards on every expiration to force air out of the lungs. This continuous up/down stress may cause a cramp in the diaphragm resulting in a stitch. Stitch occurs most often on the right hand side because of the liver being the heaviest organ and therefore the one stressing the diaphragm the most.

Exhaling when the right foot hits the ground causes greater forces on the liver (as the liver is on the right side). So just as the liver is dropping down the diaphragm raises for the exhalation. It is believed this repeated stretching is what leads to spasms in the diaphragm.

Studies have shown that you are more likely to suffer from stitch if you eat before exercise. Drinking before running can also be a contributing factor, but less than eating a meal. Obviously you need to eat and drink before exercise to ensure an adequate energy supply, but research and anecdotal evidence suggest you should avoid the following: -

- Carbonated drinks and those with a high concentration of sugar and salt
- fatty foods
- apples
- bananas
- chocolate

The risk of stitch may be increased by exercising at high intensity, failing to warm up and working out in cold conditions. So if you are going for a run on a cold day make sure you warm up first!

SHOULDER TIP PAIN

Yes you can get a stitch in your shoulder! The diaphragm is supplied by branches of the phrenic nerve, which originates in the neck. This may explain the common association of stitch with shoulder tip pain.

HOW DO I GET RID OF STITCH?

Like any other muscle spasm, when a side stitch occurs it is important to stop the activity that brought the stitch on in the first place, or at the very least reduce the intensity of the activity.

If you don't want to stop you can:

- Grasp your side where you feel the stitch just under the bottom rib and halfway across between the side and the bellybutton.
- Thumb to the rear and fingers to the front.
- Squeeze firmly and bend at the waist (45 - 90 degrees) while still running or walking.
- After about 15 meters slowly straighten. The stitch should have gone.

Another effective treatment for a side stitch is to alter your breathing pattern. First concentrate on taking full, deep breathes and avoid shallow breathing. Then, if you are one of those people who exhale when your right foot hits the ground, try instead to exhale when your left foot hits the ground.

PREVENTING A STITCH

There are a number of measures that help to prevent side stitch, the main ones being:

- Improve your cardiovascular fitness
- Concentrate on breathing deeply during exercise (helps to stretch the diaphragm)
- Warm up properly before exercising
- Gradually increase exercise intensity
- Strengthen your core muscles (lower back, abdominal and oblique muscles)
- Stretch more, especially your lower back and abdominal muscles
- Avoid eating before exercising (leave at least 1 hour between eating and exercise)
- Drink more fluids. (dehydration can cause muscle cramps)