

## A Bio-Oil® guide to Pregnancy Stretch Marks





The material in this brochure has been drawn from various external sources and collated by Bio-Oil to provide one user-friendly reference on pregnancy stretch marks.

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### What are stretch marks?

Pregnancy stretch marks are lines on the skin that may develop on the abdomen, as well as on other areas of the body during pregnancy. While they pose no risk at all to mother or baby, many women have concerns about their appearance.

### What causes stretch marks?

The skin adapts to continuous movement of the body by expanding and contracting, but during pregnancy it may have insufficient time to adjust, causing internal tears in the skin tissue. When these tears repair themselves they form the scars that we know as stretch marks.

A second factor causing stretch marks, which is still a subject of debate, involves the priming of the skin by increased levels of hormones. These hormones attract more water into the skin, which relaxes the bonds between collagen fibres. This makes it easier for the skin tissue to tear when it is stretched, causing stretch marks to form.

## When do stretch marks form?



While stretch marks generally become visible during the last trimester of pregnancy (around the sixth or seventh month), some women will start to see them forming as soon as their bellies start growing. Most lighter-skinned women tend to develop pinkish stretch marks, whereas darker-skinned women tend to have stretch marks that are lighter than the surrounding skin.

## What are the stages in the development of stretch marks?



Stage 1: Early stretch marks will appear pale in colour, and may also be itchy. The skin immediately around the stretch marks may also look flattened and thin.



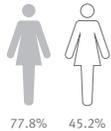
Stage 2: Gradually, the stretch marks will enlarge in length and width and become darker and more pronounced.



Stage 3: Once the stretch marks have matured and when the skin is no longer under tension, they will start to fade and become paler. They may also appear slightly depressed and irregular in shape or length.

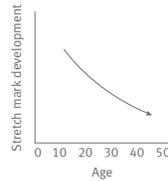
## Do all pregnant women get stretch marks?

It is estimated that up to 90% of women are prone to developing stretch marks in pregnancy. In studies conducted over the years, the likelihood of developing them has been found to vary according to:



### SKIN TYPE

Stretch marks tend to be associated more with darker-skinned women than with lighter-skinned women. In a mixed race study, 77.8% of those with darker skin developed stretch marks in pregnancy, while only 45.2% of lighter-skinned women got them.



### AGE

Interestingly, it has been found that as you get older, you are less likely to develop stretch marks.

### FAMILY AND PERSONAL HISTORY

In a study conducted in 2004, it was found that of the women who developed stretch marks in pregnancy, over half had mothers with stretch marks. In the same study it was found that 81% of the women with pregnancy stretch marks had pre-existing stretch marks.

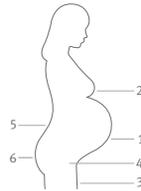
#### WEIGHT

Stretch marks depend on the extent to which the skin expands. As such it is thought that rapid or excessive weight gain can exacerbate their formation. It is, however, better during pregnancy to focus on eating the correct healthy foods than to worry about how much weight you are putting on.

#### SKIN CONDITION

Maintaining a nutritious diet and keeping skin well-hydrated will ensure that it is better able to stretch in pregnancy.

#### Where do stretch marks form?



Most women develop stretch marks on their abdomen<sup>(1)</sup> in pregnancy, however it is also common to get stretch marks on the breasts, thighs, hips, lower back and buttocks<sup>(2-6)</sup>. While they can appear anywhere on the body, they are most likely to appear in places where larger amounts of fat are stored.

## What can be done to prevent stretch marks?

The best defence against stretch marks is to ensure that skin maintains its maximum elasticity throughout pregnancy. This is achieved by keeping skin well-hydrated and supple at all times.

### SKIN FOOD

Collagen and elastin fibres in the skin are necessary to keep rapidly growing skin taut, and the stronger they are, the less likely they are to break and leave resulting stretch marks. It therefore makes sense to eat foods that are rich in Vitamin E and C, zinc and silica, which help to form collagen. Vitamin C in particular is an important antioxidant that helps protect tissue from damage. Vitamins B2 (Riboflavin) and B3 (Niacin) are also said to help promote and maintain healthy skin. In addition, drinking sufficient water (approximately 2 litres a day) is seen to be essential in order to help strengthen and renew the skin.

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### Recommended skin foods for pregnancy:

- › Vitamin C – Citrus fruits, bell peppers, green beans, strawberries, papaya, potatoes, broccoli, tomatoes.
- › Zinc – Red meats, poultry, beans, nuts, whole grains, fortified cereals, oysters, dairy products.
- › Vitamin B3 (Niacin) – High protein foods, fortified cereals and breads, meats, fish, eggs, peanuts.
- › Vitamin B2 (Riboflavin) – meats, poultry, fish, dairy products, fortified cereals, eggs.

#### EXERCISE

In addition to boosting energy levels, reducing mood swings, improving sleep patterns and enhancing one's overall self-image, exercise can also help prevent stretch marks forming. Exercise improves circulation, which keeps the skin elastic and more able to stretch as it grows. This improved circulation also reduces the possibility of varicose veins and swollen ankles in pregnancy.

#### KEEPING SKIN SUPPLE

In addition to ensuring that you keep your skin supple through eating the right foods and getting enough exercise, you should use a topically-applied product that is specifically formulated to maximise the skin's elasticity. By applying a product twice daily throughout pregnancy, your skin will remain well-hydrated and better able to stretch.



Application

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#### Recommended pregnancy exercise:

- › Swimming – many healthcare providers say that swimming is the safest exercise for pregnant women. It raises your heart rate and keeps your body toned without adding weight or stress to your joints.
- › Walking – walking is easy on your knees. You should start slowly and make sure that you stretch well before and after.
- › Jogging – if you usually jog, you can continue during pregnancy, making sure that you're well-hydrated and don't overheat.
- › Cycling – Cycling places less stress on your body as the bicycle supports your weight. A stationary bike is great exercise during pregnancy because you have less of a chance of falling.
- › Yoga – Most forms of yoga will be safe for you and your baby, as long as they are not excessively vigorous. Some yoga instructors offer special classes for pregnant women, where you will be sure to not over-stretch.

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#### Exercises to avoid in pregnancy:

- › Skiing
- › Water skiing
- › Horseriding

References:

- 1 Wong, C, Ellis, C. *Physiologic skin changes in pregnancy*. J Am Acad Dermatol 10:929-940, 1984.
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- 4 Chang AL, Agredano YZ, Kimball AB. *Risk factors associated with striae gravidarum*. J Am Acad Dermatol 2004; 51:881-5.

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