

## Women's guide to triathlon – cycling

The most relevant question to answer is exactly what constitutes a women's bike? Typically it means offering frames in smaller sizes, perhaps with smaller wheels, smaller or narrower components, shorter cranks, lower gear ratios and more feminine cosmetics. On the face of it, this suggests making a bike women-specific simply about making it smaller and prettier. But there's more to it than that...

### **Sizing**

A good bike must fit your size and shape, be appropriate to the discipline you're intending to participate in, and your level of competence and experience. This is true whether you're male or female. Women tend to be shorter than men and therefore have shorter arms and bodies – as you might expect. Women also have shorter legs than men but, taken as a proportion of their entire body, women's legs are longer. Women are naturally less strong than men.

If a bike is too big for you, you'll have to stretch too far to reach the handlebars. This is a particular problem for female riders as, being weaker, overreaching will lead to neck and shoulder pains, as well as poor handling. Poor handling contributes to a lack of confidence and that leads to poor performances.

Women do require smaller bikes than men because they're generally shorter. Smaller bikes can be made in two ways – shortening the top tube to give a shorter reach while keeping the wheelbase the same length or building a bike based around 650c wheels.

Women under 158cm (5ft 2in) will normally benefit from a 650c-wheeled bike. The smaller wheels also have the effect of making the gear ratios lower (easier) and more suited to less powerful riders. Crank length is important too, and 165mm cranks are more suitable for shorter riders.

Women above about 162cm (5ft 4in) may find a 650c-wheel bike is too small. There could be a problem with your foot overlapping the front wheel, so a 700c-wheeled bike with a longer wheelbase is recommended.

### **Positioning**

Shortening the top tube on a 700c frame to achieve a smaller size can have the knock-on effect of bringing the saddle forward over the bottom bracket, which in turn will affect your saddle position. Your saddle should be set up so that when the cranks are

horizontal, a plumb line running down from just behind your kneecap is in line with the pedal's axle. This ensures optimal power transfer through to your pedals.

Taller women, or women with proportionally longer legs, might have trouble getting the saddle far enough back on some so-called women's-specific bikes. A number of manufacturers, notably those at the higher end of the market, offer a range of women-specific bikes with shorter top tubes yet shallower seat tube angles. A seat tube that leans further back allows you more flexibility when it comes to setting up your saddle in the correct position.

Use top-tube length as a guide when choosing a frame as this governs your reach to the handlebars – get this right and everything else normally falls into place. Given that women are generally weaker in the arms and shoulders, you're likely to need a shorter top tube than for a man of similar proportions. A shorter, more upright position is also useful for novice riders as it creates a greater feeling of control.

Women are naturally more flexible than men so can ride a more extreme position in terms of the drop between saddle and handlebars. However, many women shy away from this aerodynamically efficient position because they lack confidence in their bike handling skills and prefer a 'safer', more upright position. If the bike fits you'll feel more in control and more confident. Your riding will be more enjoyable and, more importantly, your performances will improve.



## Equipment

Standard handlebars are typically 44cm wide, which is quite simply too wide for the vast majority of female riders. Many anatomic bars also have a deep sweep forward and down, making it difficult for people with smaller hands to reach the brake levers.

Women-specific handlebars are available, but what most women really need are

narrower 38-40cm width, standard bars with reduced forward and downward throw.

Always check bars out before you buy them because different brands classify their sizing differently. The right size bars should be only fractionally wider than your shoulders.

Go for brake levers with a shorter reach – Campagnolo's sit closer to the bars than Shimano. Don't be tempted into shortening the stem too much: this should be proportional to the rest of the bike. A stem that's too short will adversely affect the bike's handling and therefore your confidence, enjoyment and performance.

Crank length should also be proportional to your height. 165mm cranks are ideal for short or less powerful riders; 170mm are better for average height riders; 172.5mm (standard for men) should be reserved for taller women.

As yet, there are no women-specific gear ratios. However, women are often less powerful than men so the new generation of compact chainsets provide gear ratios that are much more appropriate to women's performance levels.

Finally, there's your saddle. This is as much a personal preference as anything else. Women are obviously built very differently to men in the downstairs department and need just as much cushioning as support, just in different places. Some women's saddles are very wide at the rear and designed for the 'sit-up' style of non-competitive riding (touring, for example). For racing, however, a narrow saddle with a soft nose is often all that's needed. Tipping the saddle's nose down slightly can also help relieve pressure in those sensitive areas.

## **Training**

Your training needs aren't so much gender specific as individual specific. They relate to time, opportunity, ability and ambition. An often-misquoted belief is that women require a greater recovery period. Recovery is related to fitness, nutrition and age – not sex. If a woman spends the weekend training with stronger men, she'll be more tired and need more recovery but only due to the fact she worked harder to keep up.

A woman's heart rate is likely to be higher than a man's, both at rest and during exercise. This is simply because, like the rest of the muscles, the heart is smaller and so needs to beat faster to supply blood to your muscles.

Some texts refer to subtracting your age from 226 for an approximation of your maximum heart rate, compared to the men's method of subtracting your age from 220. This might hold true in general terms, but both women and men will benefit from determining their own personal training zones precisely. You can do this with either a fitness assessment or by extrapolating the information from race and training data.

### **A final thought**

Sports scientists and medics say menstruation and menopause shouldn't affect your sporting performance. However, the fact is that if you feel tired, bloated and flushed you won't be performing at your best and won't get the full benefit from your training.

It's much better to plan your training around your monthly cycle. Taking a light training week every month and then doing three weeks of good solid work will pay dividends all round.