







# Three Stages of Erectile Function

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## Stage One: Sexual Prime

Approximate Ages: 18-30

**Symptoms Experienced:** From puberty (ages 10-14) through the 20's there is an increasing frequency of nocturnal penile erections (NPE). This period is often described as

## Stage Two: Early Sexual Decline

Approximate Ages: 30-50

**Symptoms Experienced:** Many men over the age of thirty are experiencing a decline in their sexual function. This change can be very subtle. There is a significant drop in the total number of NPE erections related to a drop in testosterone<sup>[2]</sup>. The ability to achieve one erection quickly after the first subsides may be diminished. Many men who take lifestyle

## Stage Three: Increased Sexual Dysfunction

Approximate Age: 50 plus

**Symptoms Experienced:** More than 50 percent of men over the age of 40 experience some degree of sexual dysfunction<sup>[10, 12]</sup> with the numbers rising significantly as men age. Common conditions associated with vascular disease start to become apparent in these men, including coronary artery disease and high blood pressure.

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**What are the physiological events that lead to an erection?** An erection develops in response to signals from nerves which allow muscles around the arteries to relax. This results in increased blood flow into the penis. When the rate of blood flow into the penis overcomes the flow out of the penis, the penis lengthens and hardens, and a rigid erection results.

**Sexual Prime.** Erections during this stage are frequent and spontaneous events. They occur in response to sexual stimuli and also during Rapid Eye Movement sleep (REM sleep). The frequency of REM sleep erections peaks at puberty<sup>11, 21</sup> and is related to the peak in testosterone levels.

**Physiology:** Testosterone levels and the ability to maximally dilate blood vessels are at their peak during the **Sexual Prime** stage. Generally men are in excellent health at this time.

risks (smokers, abusers of alcohol and/or other drugs)<sup>3-6</sup> or who suffer from other medical conditions (diabetes, high blood pressure, or who have cholesterol or lipid problems)<sup>3-11</sup>, may start to have increasing difficulty achieving erections. The underlying problem is most often an early sign of inadequate blood flow into the penis. This may be the result of narrowed arteries and also a reduced ability to dilate those arteries in response to the nerve signals. These changes often go unnoticed as they

occur gradually over a long period of time. A number of men in this group are completely unable to achieve adequate erections<sup>10-12</sup>.

**What can be done to prevent these changes:** Stop smoking, exercise regularly, maintain a healthy weight, eat a balanced diet and seek appropriate medical attention to address health problems. If these items are not addressed they can lead to an increased risk for diabetes, vascular disease and erectile dysfunction.

More men are being diagnosed with diabetes, and cholesterol and lipid disorders. If these conditions are not treated aggressively they will significantly increase the risk of men suffering heart attacks, strokes and complications from peripheral vascular disease. Erectile dysfunction may be one of these complications and is commonly the first symptom men go to the doctor to seek help with. Unfortunately a substantial number of men with erectile dysfunction are not currently seeking treatment or help.

**What can be done to prevent these changes:** Stop smoking, achieve and maintain your ideal body weight, exercise regularly and seek medical attention for your health issues. Review all your medications with your doctor as some may actually worsen your erectile dysfunction. Additionally there are safe effective medications that will help the majority of men overcome their erectile dysfunction.

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