Human Papilloma Virus (HPV)

What is HPV?
HPV is a very common virus that can cause venereal warts and is associated with abnormal Pap smears. It is contracted from one of a group of more than 100 related human papilloma viruses. Each type of HPV has the potential to cause an abnormal growth on different parts of your body, including genital warts, lesions on or near your genitals or anus, common warts on your hands, plantar warts on your feet, and warts and other lesions in your mouth and upper respiratory system. It is estimated that 75 percent of women will have a genital HPV infection at some time in their lives. About 20 million people in the United States have some type of the HPV infection. HPV can cause cervical cancer, although this is rare. The majority of women that have HPV do not even show symptoms of any kind. The genetic material of the virus used for identification is in the DNA of HPV. It has been found in virtually all abnormal Pap smears and cervical cancer cells. However, in even the most severe cases of HPV, cervical dysplasia is not a result.

How do you get HPV?
Like herpes, HPV inserts itself into the DNA of the tissue it infects, and once it does this, it may lie dormant for years. So the appearance of the virus is no indication of the timing you actually got the virus. The more sexual partners you are involved with, the greater your risks for the HPV infection. It is a sexually transmitted virus, but with a healthy immune system you can fight this virus off without growth to a more serious condition.

How is HPV treated?
Treatment is aimed at removing any visible warts and making sure abnormal or precancerous cells are not growing. Discussion options with your doctor is absolutely necessary. Treatments may include laser treatment, Podophyllin (chemical used on warts), Cryocautery (freezing warts off), electrocautery (removing large collection of warts), and LEEP (used to remove infected area). Finally, Gardasil is the HPV vaccine that was made to help prevent the most common HPV infections which are implicated in cervical cancer.

HPV and its relation to Cervical Cancer
Most women who have HPV do not go on to develop abnormal Pap smears or cervical cancer, because most viral activity and infections are halted by good immune functioning. Unfortunately, for those that do not live a lifestyle that supports the immune system, HPV can reoccur and lead to cervical cancer.

Low risk HPV infections rarely cause cancer. It is the high risk HPV infections that can lead to cervical cancer. In general, the more severe the abnormal cell change, the greater the risk of cancer. Cell change can be monitored through pap smears and other prevention methods that your doctor can help you with. Virtually all cervical cancers are caused by high-risk strains (named Type 16 and Type 18) of the HPV virus. Cervical cancer can develop if proper treatment is not used. Cervical dysplasia, or abnormal pap smears, are not reversible if left untreated, and can progress to cervical cancer, especially if a person is infected with HPV. With proper treatment, your body can clear infection from your body, and the cells of the cervix will remain healthy. But if the body does not clear of infection, often a result of a suppressed immune system or failing to visit the doctor, then the cells in the cervix can continue to change abnormally. This is what can lead to precancerous changes or cervical cancer.

Risks that increase your chances of having HPV and eventually cervical cancer include having many sexual partners, avoiding annual check-ups or Pap smears, smoking (nicotine has a fondness for cervical cells, and can make cells more susceptible), having many children, giving birth to a child before age 22, oral contraceptive use and compromising your immune system.

Cervical cancer, one of the slowest growing cancers, can be prevented. Nutrition is an extremely important part of prevention. Eating a healthy whole foods diet that is rich in green, yellow, and orange vegetables and lignans.
The Role of the Immune System

Depressed immunity makes it much more likely that any HPV present on the cervix or in the vagina will attack already weakened cells. As Christiane Northrup describes it in her book *Women’s Bodies, Women’s Wisdom*, “the HPV virus is an opportunist at the scene, like buzzards around a dying calf.” An effective immune response against HPV can lead to viral clearance and resolution to HPV infections.

The link between abnormal pap smears and deficient immune system functioning is well known. Women who have organ transplants and are on drugs that suppress the immune system have a much greater chance than normal of developing abnormal pap smears. They also frequently have recurrent wart and herpes outbreaks.

In addition, studies have shown that women with cervical cancer have a less immune-system-friendly environment and lifestyle. Other things that can contribute to an unstable immune system include broad spectrum antibiotics, douching, intercourse without condoms, smoking, caffeine, depression, anxiety and stress.

Nutrition & Prevention

Good nutrition and prevention can greatly help our immune system, and offer the ability to fight off this virus. In addition, nutrition and prevention can help our body fight off the HPV infection if you already have it, preventing further complications such as cervical cancer.

Foods that help heal and prevent cervical dysplasia include foods high in antioxidants, such as vitamin C, folic acid, vitamin A, vitamin E, beta carotene, and selenium. Green tea & Grape seed are also found to be very helpful due to its antioxidant properties and proanthocyanidins. Avoid processed foods and stick to whole foods!

The Influence of Stress and Emotions

Chronic stress and specific attitudes about sex actually change the body flow to cervical tissue and affect its secretions. Studies have shown a correlation between stress and the development of infection or disease in these particular areas. Suppression of the immune system as a result of chronic emotional or other stress can lead to changes in immunity that allow increased virus production in the first place.

Stress has a very close relationship with hormones. Oftentimes, when we are stressed, the hormones in our body can change. Along with an unhealthy immune system, this can contribute to an unbalanced internal environment, often leaving an unsuitable environment for health. This can result in HPV and further complications such as cervical cancer.

Because HPV can include symptoms of warts, the psychosocial aspect of this virus is extremely important. Encouragement of self-improvement and positive emotions can directly impact health and the outcome of the virus. The mind-body connection is directly impacted with this virus but can be addressed along with nutrition.

Diet & Lifestyle for HPV Prevention

**Fruits & Vegetables**

Fruits high in vitamin C are much needed in HPV and cervical cancer. Oftentimes, the abnormal cells are affected and depletion of vitamin C can result. Cruciferous vegetables (broccoli, brussels sprouts, cauliflower and kale) have indole-3-carbinol in them. This substance has the potential to prevent and treat certain cancers.

**Water**

Water is a lubrication for the cells of our body. In order for our body to produce health cells (including cervical cells), we need water. Drinking 8-10 glasses of water daily is absolutely essential for ultimate health. Quick tip: try drinking 2 glasses right when you wake up!

**Carotenoids**

Studies have shown that beta-carotene deficiency in the cervical cells plays an etiologic role in the development of cervical dysplasia. Lycopene, another carotenoid, is found in tomatoes and has found to be directly responsible for an improvement in dysplasia.

**Exercise**

Exercise is one of the main lifestyle choices that will contribute to a strong immune system. In addition, exercise contributes to the health of cells, preparing the cervix and surrounding areas for health and prevention.

For more information, please read *Women’s Encyclopedia of Natural Medicine* by Tori Hudson and *Women’s Bodies, Women’s Wisdom* by Dr. Christiane Northrup.