Carl’s Case

Carl listened to his teammate Joey describe how steroids had helped him bulk up and improve his performance on the field. In fact, Joey told Carl that he would be at a real disadvantage if he didn’t use steroids, because so many of the other high school baseball players used them. “Don’t forget that the rest of the team is counting on you,” Joey said, “to make this our best season.” Carl felt an obligation to both his team and his school to perform well.

Although Carl had heard about some of the side effects of long-term steroid use, he thought he might use them for a short while, only until he was able to get his prime physical condition back. He’d lost muscle tone while recuperating from a broken leg earlier in the year, and now it was a real struggle getting back to playing baseball. He just wanted to catch up to where he was before his accident.

Carl knew that other players were also using painkillers, vitamins, supplements, and special exercise-physiology testing to try to improve their game. He even had a friend who was taking growth hormone supplements because he was self-conscious about his height. Was his desire to take steroids really any different? With a college scholarship riding on this season, Carl felt strong pressure to do whatever it would take to prove his athletic abilities.

What should Carl do? Why?

Steroid Background Information

There are two major types of steroid hormones, anabolic steroids (which build up muscle mass—such as testosterone, a sex hormone) and catabolic steroids (which break down muscle and reduce inflammation—such as cortisone and prednisone). Catabolic steroids are widely used in medicine and help individuals with asthma, arthritis, and skin conditions.

Synthetic substances that are similar to the sex hormone testosterone, anabolic androgenic steroids, have been used by bodybuilders and athletes to increase their muscle mass. The term “androgenic” means that the steroids increase what have been thought of in the past as “male characteristics,” such as muscles. Hereafter, androgenic steroids will be referred to as “steroids” for short.

Although anabolic steroids might be prescribed by doctors for people who don’t make enough testosterone on their own, using anabolic steroids without a prescription in order to build muscles is currently illegal in the United States. Steroids can be taken in pill form or injected. The costs of steroids vary widely depending on type, quality, and source. Tablets are available illegally for $10 each or less, while liquids (such as testosterone) can cost as much as $150/10 mL.
Steroids can help build muscle mass, “six-pack” abs, and bulging biceps and can enhance sports performance. They can also speed recovery time from injury. Steroids only work, however, if the athlete continues to work hard; they are not a substitute for training. And, these benefits can come at the expense of a steroid user’s health and well-being. One serious side effect is stunting growth in adolescents. Because the body naturally stops growing once certain hormone levels have been reached, increasing hormone levels artificially with steroids can shut down the body’s growth earlier than normal.

Other serious side effects have to do with the fact that steroids are sex hormones. They can cause men to grow breasts. Women who use steroids can grow excessive hair all over their faces and bodies, and their voices can become deeper. Men can experience shrunken testicles and reduced sperm counts. Both sexes can have increased acne and baldness.

Steroids travel to—and damage—cells throughout the body. Livers can grow tumors and develop cancer. Arteries can become clogged with fat deposits. This condition, atherosclerosis, can block blood flow to the heart and brain and cause heart attacks and strokes. Steroids also affect the immune system, weakening the body against attacks by diseases. Injecting steroids with shared needles can increase the risk of contracting HIV and hepatitis.

Steroids can also affect mood, because they act on the part of the brain that balances mood and emotions (the limbic system). They can cause a wide range of emotions, from feeling very happy to feeling extremely depressed, and they can even cause someone to become delusional. Steroids may cause users to go on “roid rages”—violent and angry outbursts. Stopping steroids suddenly has caused users to go into deep depressions or have suicidal thoughts. Steroid use has also been tied to a shortened life span.

However, some individuals argue that the evidence supporting the dangers of steroids is insufficient and that the dangers have been greatly exaggerated. Dr. Norman Fost, a pediatrician and director of the medical ethics program at the University of Wisconsin, believes that not enough long-term studies of steroid use have been conducted to determine whether the effects of steroids are reversible in adults. In addition, he notes that many sports carry risks far greater than those posed by steroids. “The major risk of disability from the lure of fame and fortune of sport is the sport itself,” Fost says. “Steroids are just way, way low on the list in terms of the risk of getting hurt or dying.”

Fost sees steroids as part of a larger process in sports that includes advances in nutrition, equipment, and training methods. He notes that steroids provide only slight gains and that they can’t substitute for natural talent. “You and I could take steroids till the cows come home,” Fost says, “and we wouldn’t hit home runs.”