

Performance and image enhancing drugs

What are performance and image enhancing drugs?

Performance and image enhancing drugs (PIEDs) are substances taken by people with the intention of improving their physical appearance and to enhance their sporting performance.

Types of PIEDs

Anabolic steroids – ‘roids, gear, juice

Anabolic-androgenic steroids are synthetic hormones that imitate male sex hormones, specifically testosterone. They can be taken either as an injection or as a tablet. Steroids are used due to their anabolic effects that assist in the growth and repair of muscle tissue.

Peptides

Peptides stimulate the release of human growth hormone, which has an important role in muscle and bone growth. Peptides have become increasingly popular among professional and amateur athletes as they are hard to detect, due to how quickly they are absorbed by the body.

Hormones

Hormones are chemicals released by the body. For example, the pituitary gland naturally releases growth hormone which tells bones and muscles to grow and repair. There are numerous artificial hormones and hormone stimulating drugs available in the PIEDs market.

These include:

- Growth hormones like AOD-9604, which has fat burning properties and is used by athletes to increase power-to-weight ratios.
- Selective Androgen Receptor Modules (SARMs) appear to only act on anabolic receptors that cause tissue (such as bone and muscle) growth. These are classed as a prohibited drug by WADA.
- Insulin-like growth factors (IGF-1) is a hormone produced by the liver, necessary for cell growth in the body. It is used for muscle growth and the development of cartilage and bone. This substance is a prohibited substance according to the WADA list.
- Mechano growth factor (MGF) is derived from IGF-1 and helps with tissue repair and adaptation. It is used mostly by bodybuilders and is on the WADA prohibited list.

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Why do people use PIEDs?

For most people who use PIEDs, body image is the main motivation for use. Due to desirable effects on physique, and improved self-esteem and confidence, people who use these drugs can develop a psychological dependence. However, for professional athletes it is the advantage in physical strength and size that is the main reason for use.

The expected benefits of using these substances may include:

- Increasing the size and definition of muscles
- Reducing water retention
- Reducing body fat
- Increasing strength and endurance
- Helping the body recover quicker from injury.

Harms

There is no safe level of drug use. Use of any drug always carries some risk – even medications can produce unwanted side effects. It is important to be careful when taking any type of drug.

The harms associated with PIEDs, depend on the type of drug being used: different categories of drugs have different harms, although there are a few shared harms.

When injected, PIEDs have the additional harms associated with other injecting drug use, including infection, transmission of disease through needle sharing and other problems caused by incorrect injecting technique.

People who use steroids should be aware of a number of negative physical, psychological and behavioural side effects including:

- Acne
- High blood pressure
- Liver and heart problems
- Gynaecomastia (growth of breast tissue)
- Hair loss
- Increased aggression and irritability ('roid rage')
- Depression
- Shrinking testicles and prostate problems.

As a number of synthetic peptides hormones are experimental or not yet approved for human use, it is difficult to pinpoint the specific harms they may cause.

Reported side effects of peptides and hormones include:

- Water retention
- Numbness of the hands and feet
- Increased tiredness

It is important to note that many of these drugs do have legitimate, medical uses when they are prescribed and supervised by a medical professional.

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Further Information

The Druginfo website has information on:

- Steroids
- Help and support services
- Links to further information on PIEDs
- References for this fact sheet

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