

## Good Clean Sport School Toolkit 2021

# Lesson 2

### Understand the Health Effects of Doping

AUGMENTED REALITY - App



**Lesson duration**  
45 minutes



**Equipment**  
Electronic device, pen



**Learning objectives**  
To understand the negative health effects of doping  
To gain awareness of positive behaviours to enhance performance



#### Key Lesson Guidelines

These lesson plans use primordial and primary approaches to prevent initial consideration or engagement in doping. In year 7 to 9, autonomous learning tasks through engagement with interactive, digital education methods expose students to factors which promote the avoidance of problematic doping behaviour.

In Year 10 +, peer learning and presentation skills are developed through primary prevention approaches which aim to enhance adolescent's literacy of trustworthy information sources about doping and its deleterious outcomes.

This peer learning approach ensures students are exposed to six key prohibited substances and their negative effects through peer voice allowing greater translation of theory to practice.

# Lesson 2

## Understand the Health Effects of Doping

### AUGMENTED REALITY - App

This App takes students on a journey of the negative health effects of doping. Using their phones, students build an avatar and see how prohibited substances affect the body – stroke, liver damage, tumours, rage and anxiety are just a few of the side effects. Students will also be exposed to positive behaviours that can be used to enhance performance, including nutrition, rest and recovery practices.

Lesson plans are provided for years 7-9 and 10-13, respectively.

### Lesson Plan

#### > Video

Both lesson plans (Y7-9, Y10-13) should start with our **Kiwi Ferns - making good decisions** video

**Students are asked:** To think about a time in sport where they've had to make an uncomfortable decision. How did that feel? What were the potential issues? Who was involved? What should have been done (perhaps that wasn't?)

**WATCH VIDEO**

#### > Activities

### Augmented Reality App - Health Effects of Doping:

Please get students to download the following App:

**APPLE STORE**



**GOOGLE STORE**



**Substances covered in the Health Effects of Doping App include:**

- > Steroids - Erythropoietin (EPO)
- > Human Growth Hormone (HGH)
- > Opioids
- > Selective Androgen Receptor Modulators (SARMS)
- > Stimulants



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AUGMENTED REALITY - App

There are two activity options.

### 1. Year 7-9: Health Effects of Doping Worksheet

In this activity a worksheet is provided for students to work through and answer whilst using the App (answers are included in the teachers pack)

### 2. Year 10-13: Peer Learning and Presenting

In this activity the class is to be split into pairs or small groups and assigned one prohibited substance from the list below. Using reputable information sources (avoiding blogs and supplement websites), groups research their substance and report to the class on

1. general information on the substance (e.g. medical use)
2. side effects of use
3. examples of athletes who have tested positive for use
4. positive behaviours an athlete could use to achieve the intended outcome (e.g. alternative nutritional advice).

#### Guidelines

Aim for a 2 minute presentation (video or face to face), a 10 slide PPT or an A2 poster.

Pairs/groups to then present their findings back to the class so that students learn more about each prohibited substance.

**TIP:** Encourage engaging and interesting methods of presenting and for the class to ask questions of the presenting pair/group where appropriate.

DFSNZ would love to see final presentations and projects. Please email [education@drugfreesport.org.nz](mailto:education@drugfreesport.org.nz)

#### Banned substances for research

- > Steroids
- > Erythropoietin (EPO)
- > Human Growth Hormone (HGH)
- > Opioids
- > Stimulants
- > Selective Androgen Receptor Modulators (SARMS)

#### Possible resources

- > USADA - [Effects of Performance Enhancing Drugs](#)
- > Any approved student curricula database (e.g school library, intranet etc)

# Lesson 2

## Year 7 - 9 Worksheet

### Understand the Health Effects of Doping

#### AUGMENTED REALITY - App

- 1. What does clean sport mean to me? *Students own thoughts on clean sport.***
- 2. Abuse of painkillers (opioids) can make you sleepy. Why could this be dangerous in sport?**  
Injury risk to self & teammates E.g. 1) If you are a swimmer, someone else may have to put themselves in danger to help you. E.g. 2) If you are an archer or shooter, resulting inaccuracy may pose a risk to yourself and others. ***Students own thoughts on this.***
- 3. What effect can stimulants (often found in pre-workout supplements) have on your heart?**  
Heart Arrhythmia (a condition in which the heart beat is irregular, too fast, or too slow. Symptoms include palpitations or feeling a pause between heart beats, light headedness, passing out, shortness of breath or chest pain, stroke, heart failure and even death).
- 4. Which substance may increase your risk of a tendon rupture?** Anabolic Steroids (synthetic or human-made variations of the male sex hormone testosterone. Health care providers can prescribe steroids to treat hormonal issues, and diseases that cause muscle loss, such as cancer and AIDS. Some athletes abuse these drugs to improve their appearance or performance).
- 5. Are Selective Androgen Receptor Modulators (SARMS) approved for human use?** No.
- 6. Which health effect of Human Growth Hormone (HGH) use can be irreversible?** Acromegaly (a rare condition which results from excessive production of growth hormone by the pituitary gland, Symptoms include enlargement of the face, hands and feet).
- 7. Name a food other than broccoli which could help your body to recover from injuries.**  
Any other vitamin rich foods - e.g. leafy greens, citrus fruit, kiwifruit.
- 8. Which substance is associated with anger and depression?** Steroids.
- 9. Being well hydrated can improve your:** Blood flow.
- 10. Does EPO thin the consistency of your blood?** No, EPO can thicken your blood.
- 11. What are two factors besides good food that can help you become a better athlete?** Sleep, water, rest and recovery.