ANTI-DOPING
WHAT, WHY, AND HOW?

Yvonne Yuan, PhD
Head of Secretariat
Hong Kong Anti-Doping Committee

WHY DOPING CONTROL?

WHY DOPING CONTROL?

- Ensure the spirit of sport
- Protect athletes’ right
- Protect health and well being of athletes
SPIRIT AND VALUE OF SPORT
- Ethics, fair play and honesty
- Health
- Excellence in performance
- Character and education
- Fun and joy
- Teamwork
- Dedication and commitment
- Respect for rules and laws
- Respect for self and other participants
- Courage
- Community and solidarity

ATHLETE’S RIGHT
- To compete on a level field
- To compete in a drug free environment

HEALTH RISKS OF DOPING
- In most cases
  - addiction, psychological dependence

Steroids
- Abnormal liver function & disease
- Mood swing, aggressive behaviours
- Cardio-vascular disease
- Carcinogenic

In Females
- Masculinization
- Abnormal menstrual cycles
- Excessive hair growth
- Baldness
- Deepening of the voice

In males
- Acne
- Breast enlargement
- Premature baldness
- Impotence

In adolescents
- Acne
- Stunted growth

Stimulants
- Anxiety, irritability, depression
- Loss of judgment
- Elevated blood pressure
OTHER CONSEQUENCES OF DOPING

- Disqualification of competition results
- Ineligibility
  - Prohibition against participation
  - Withholding of financial and/or other support
- Financial sanctions

MORE CONSEQUENCES OF DOPING

- Damage to personal reputation
- Damage to the sport’s reputation

WHO IS COMPETING ON THE FIELD?
**Doping Control – How?**

- Testing
- Education
- In-comp & Out-of-comp
- Athlete & Athlete support personnel
- Random vs. Target
- Fact vs. Value

**Why Some Athlete Choose to Dope?**
- High personal standard
- Coach believes in ‘Win at all costs’
- Beliefs – many athletes are using drugs anyway
- First time is associated with ‘critical incident’ e.g. injury, prolong career
- Health concerns not considered initially

**New Trends in the Fight Against Doping**

Collection of blood sample

Sample to be stored up to 8 years

Role of investigation & intelligence sharing (non-testing based evidence)
Possible sources of information
- Information hotline
- Customs
- Witnesses interviews
- Substantial assistance and ‘amnesty’ admission

Athlete passport / Biological passport
Monitoring of an athlete’s biological variables to detect abnormal variations that indirectly reveal the effects of doping, as opposed to the traditional direct detection of doping

Target testing
- Supported by investigation and intelligence sharing
- Abnormal findings from biological passport
- Sudden improvement in performance
- Frequent updates of whereabouts
- Large no. of unnecessary overseas trips
- Frequent diluted samples
- Testimony of third person

WHEREABOUTS PROGRAMME

REGISTERED TESTING POOL (RTP)
World Squash Federation (WSF)’s RPT
- Top 5 ranked men and women world rankings as at the 15th of Dec, Mar, Jun, and Sept annually
- Athletes in the RTP are required to submit their whereabouts on a quarterly basis
WHEREABOUTS REQUIREMENTS

Minimum requirements:
- Need to update
- Daily 60-min time slot (6 am – 11 pm)
- Daily residence

Others:
- Competition schedule
- Other regular activities (training, school, etc)

WHEREABOUTS FAILURES

- **Filing Failure**
  - Failure by the athlete (or representative) to make an accurate and complete whereabouts filing

- **Missed Test**
  - Failure by the athlete to be available for testing at the location and time specified in the 60-minute time slot

Any combination of **3 Filing Failures** and/or **Missed Tests** committed within an **18-month** period → **Anti-Doping Rules Violation**

POSSIBLE CAUSES OF FILING FAILURES

- Do not submit whereabouts before deadline
- Do not include a 60-min time slot for each day
- Do not include a residence for each day

POSSIBLE CAUSES OF FILING FAILURES (CONT’)

- Do not update changes in schedule
- Address provided is incomplete
- DCO cannot get access into the specified venue (e.g. private club)
- Repeated unsuccessful attempts

RIGHTS AND RESPONSIBILITIES OF ATHLETES
**Responsibilities of Athletes**

- To be knowledgeable of and comply with anti-doping rules
- To be available for sample collection
- To take responsibility for what they ingest and use
- To inform medical personnel of their status as an athlete

**Rights of Athletes**

**During sample collection**
- Accompany person
- Individually sealed drinks
- Selection of doping kits
- Clear explanation
- Comment on irregularity

**After sample collection**
- Sample being safely stored and transported
- Right of hearing and appeal

**Post-sample Collection**

**Results Management**
RESPONSIBILITIES OF ATHLETE SUPPORT PERSONNEL

- To be knowledgeable of and comply with anti-doping rules
- To cooperate with the athlete testing programme
- To use their influence on athletes values and behavior to foster anti-doping attitudes

HAVE YOU EVER CONSIDERED USING DRUG TO IMPROVE PERFORMANCE?

INADVERTENT DOPING

Principle of strict liability

WATCH OUT

- Certain medicine for treating medical conditions, especially if doctor has not been reminded
- Certain over-the-counter medicine
- Not only pill and syrup, but also lotion and inhaler

WATCH OUT

- Herbal medicine
- Health and nutritional products

WATCH OUT

- Second hand smoking – marijuana
- Meat and animal products contaminated with steroids
- Cake and bread containing poppy seeds
WAYS TO AVOID INADVERTENT DOPING

- Remind your doctor
- Avoid frequent switching between doctors
- Minimize the use of over-the-counter medicine
- Always refer to the latest prohibited list
- Apply Therapeutic use Exemption (TUE) in advance
- Supplement?

IOC FUNDED RESEARCH - 2002

- 634 supplements (13 countries, 215 manufacturers)
- 94 (14.8%) contain prohibited hormones and their precursors

WADA’S POSITION ON SUPPLEMENT

- Good diet is of utmost importance to athletes
- Some athletes know little about what real benefits supplement provide, and whether or not they contain prohibited substances
- Taking poorly labeled supplement is not an adequate defense in a doping hearing
- Athletes should be aware of the dangers of potential contamination of supplement

Should athletes use supplement?

How to choose supplement?

Use of supplement is the only way to enhance exercise performance?
GENERAL WARNINGS

- Supplements with ‘muscle building’ or ‘fat burning’ capabilities are more dangerous - anabolic agent or stimulants
- ‘Herbal’ and ‘natural’ do not mean ‘safe’
- Pure vitamins and minerals are not prohibited, but be aware of possible contaminations

ADVICES

- Ask professional advice
  - Team physician, sport nutritionist, etc
- Keep a log of your supplement use
  - Including batch or lot number
- Keep some of the contents from each container of supplement

GENERAL WARNINGS

- Avoid products from black market or unlabelled products
- Avoid purchasing supplement through internet when the company only provide post office boxes and email
ANTI-DOPING RULES VIOLATIONS

1. Presence of Prohibited Substance

2. Use of Prohibited Substance/Method

3. Refusing Sample Collection

4. Failure to File Whereabouts & Missed Tests

5. Tampering
6. Possession
7. Trafficking
8. Administration

THANK YOU