

**WORLD CONFERENCE
ON DOPING IN SPORT**
KATOWICE 2019 | 5-7 NOVEMBER

SESSION 14

The Prohibited List: Reflections and Evolution

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List changes

Changes in content, format and stakeholder interaction due to:

- The 2021 Code
- Enhancements in science & analytical techniques
- Identification of doping trends
- List Expert Group (LiEG) internal strategic review





The List - what's new? **Code Changes**

- **Substances of Abuse** – **Articles 4.2.3 and 4.3.3**

“Frequently abused in society outside of the context of sport & are specifically identified as Substances of Abuse on the Prohibited List”

- **Specified Prohibited Methods** – **Article 4.2.2** amendment

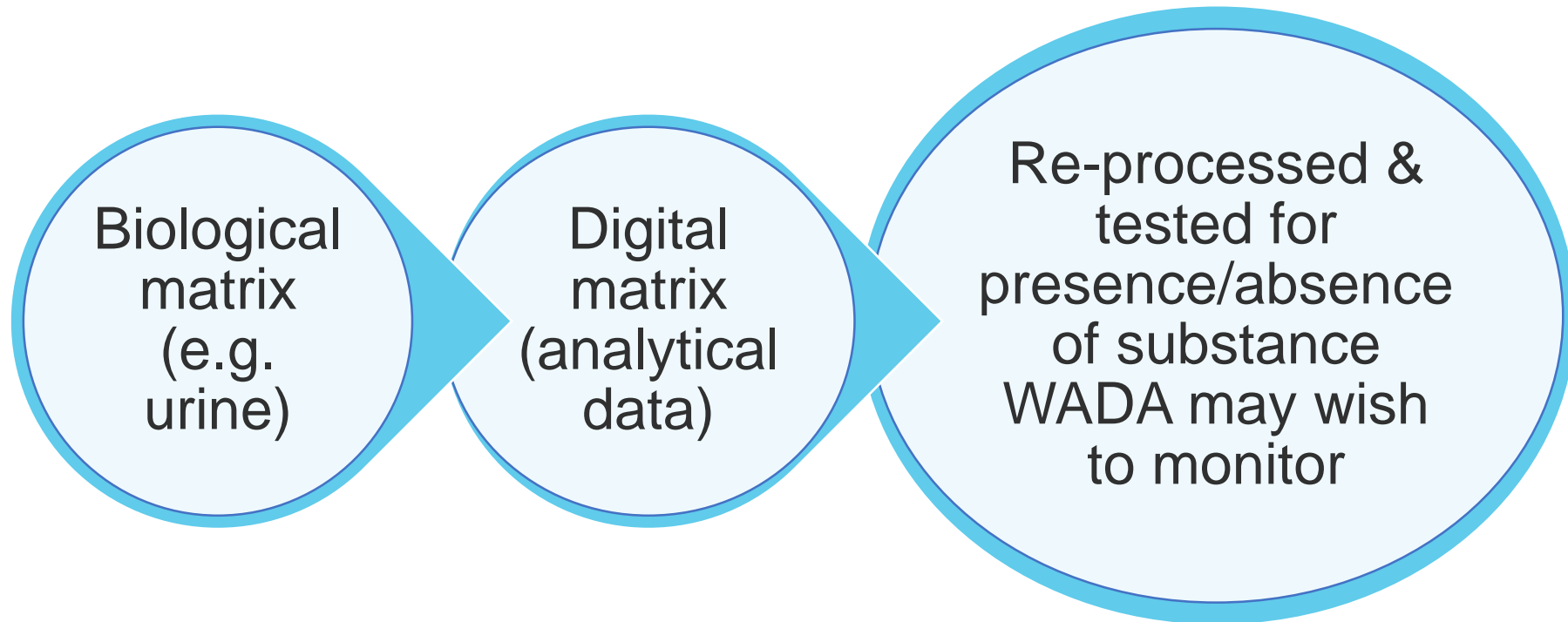
- Currently all methods are non-specified
- 2021 Code allows certain prohibited methods to be identified as a Specified Method



The List - what's new? Code Changes (Cont'd)

- **Monitoring program** – Article 4.5

Inclusion of anonymised, retrospective analysis





Evolving topics | Emerging themes

S3: Beta-2-agonists



- **Threshold Approach**

To distinguish inhaled normal therapeutic doses (permitted) from inhaled supra-therapeutic & systemic administration (prohibited)

S3: Beta-2-agonists (Cont'd)



- Threshold studies nearing completion

Vilanterol & salmeterol

- Establishment of a threshold remains an issue

Terbutaline

- Re-evaluating methods of analysis, such as inclusion of sulphoconjugate, etc.
- Question of daily allowable dose and/or fractionation still debated

Salbutamol

Enantiomeric analysis: emergence of arformoterol & levoformoterol, etc.

S4: Thyroid Hormone (TH)

- Thyroid conditions are prevalent in the general population including the elite athlete population
- Supplemental TH not effective in weight regulation^{1,2}

¹ Dubois *et al*, Thyroid 18:13-19

² Roef *et al*, Eur J Endocrinol 167:719-726



S4: Thyroid Hormone (TH) (Cont'd)



- Lack of global consensus amongst endocrinologists regarding:
 - normal ranges?
 - sub-clinical hypothyroidism?

¹ Dubois *et al*, *Thyroid* 18:13-19

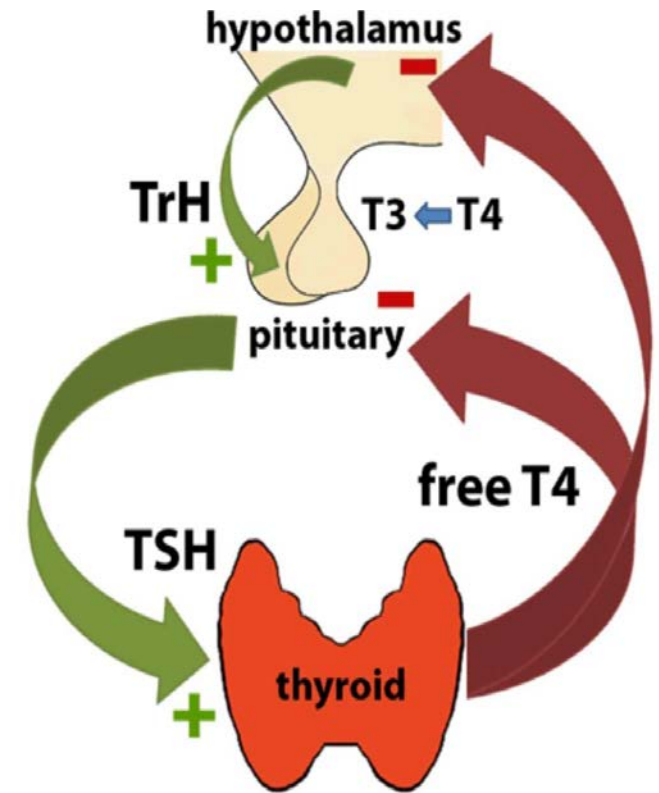
² Roef *et al*, *Eur J Endocrinol* 167:719-726



Why Thyroid Hormone (TH) is not currently prohibited



- Aware of abuse especially in certain sports
- **T4** (Levothyroxine, L-Thyroxine) & its active metabolite **T3** (lithyronine, triiodothyronine)
- **TH** and **Thyroid Stimulating Hormone (TSH)** operate in a tightly regulated pituitary-thyroid feedback loop

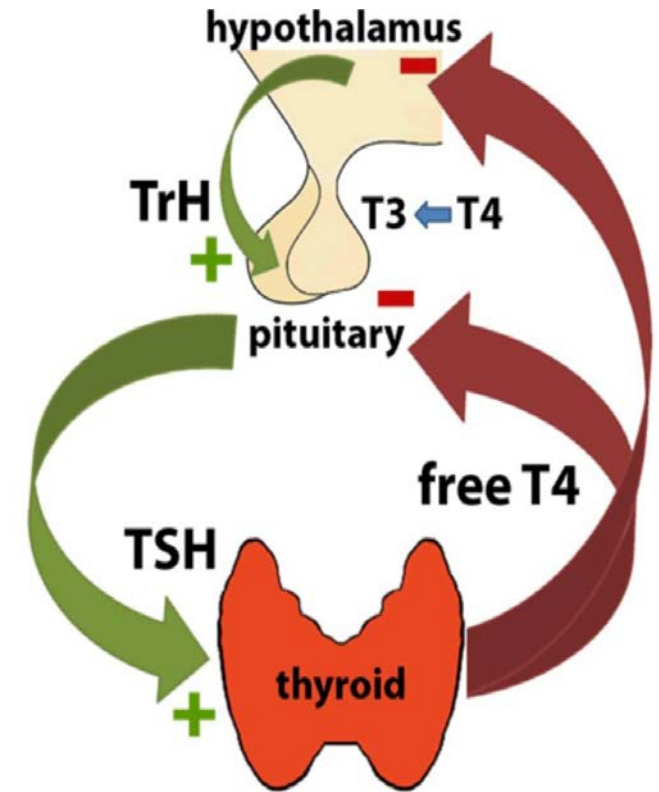


American Association for Clinical Chemistry

Why Thyroid Hormone (TH) is not currently prohibited (Cont'd)



- Impact of small doses of TH
- Impact of high doses of TH
- No benefit in the monitoring of TSH/T3/T4 in urine/blood



American Association for Clinical Chemistry

S6: Stimulants

- Stimulants: Prohibited in- & out-of- competition?
- Exploring the idea of certain currently non-specified stimulants that possibly could be prohibited at all times



S7: Narcotics

- Ongoing studies on tramadol (update in 2020)
- UCI prohibition of tramadol
 - No apparent switch to codeine



S8: Cannabinoids



- **THC (Δ 9-tetrahydrocannabinol): Legal status differences**
“legalised” or “medico-legalised” in some countries while in others possession is a criminal offence, irrespective of circumstances
- **Cannabimimetics & other cannabinoids** are emerging in large numbers and all are prohibited except **cannabidiol (CBD)**

S8: Cannabinoids (Cont'd)



- **List 2020 wording clarifies the status**
- **The following cannabinoids are prohibited:**
 - Natural cannabinoids, e.g. cannabis, hashish and marijuana
 - Synthetic cannabinoids e.g. Δ 9-tetrahydrocannabinol (THC) and other cannabimimetics
 - Except: Cannabidiol

Warning: Cannabidiol (CBD) oils and tinctures extracted from cannabis plants, may also contain THC and other cannabinoids that may result in a positive test

S9: Glucocorticoids (GCs)

- **Prohibited:** administered by “systemic routes” i.e. orally, rectally, IM, IV
- **Not prohibited:** administered by nasal, inhalation, topical, intra-articular & local injections

Problem Statement

- Administration by “non-systemic” routes (IA, periarticular, etc.) may result in urine/blood GC levels similar to systemic administration



S9: Glucocorticoids: Ad hoc Working Group



- Currently a model developed which maps the equivalence to daily cortisol production of a range of GCs from a range of routes of administration

S9: Glucocorticoids: Ad hoc Working Group (Cont'd)



- Preliminary information (confirms much of what we know):
 - Systemic GC administration can increase the body's natural cortisol at relatively low doses
 - GC from inhalation or nasal administration have only a small effect on cortisol levels
 - Effect of administration from other routes (IA, periarticular, etc.) dependent on the GC, dose, route

S9: Glucocorticoids: Ad hoc Working Group (Cont'd)



- Ultimate objective is to develop thresholds between what is regarded as normal variances and what could potentially be of concern from an anti-doping aspect.
- The final outcome could be the establishment of thresholds which in turn could result in a reclassification of some currently permitted routes of administration to a prohibited status.

Contamination



- Reported in:
 - Food (especially meat)
 - Medicines (rare)
 - The environment (Water)
 - Dietary and nutritional supplements (accidental and deliberate)

Market	USD (Billion)
Global Market (2018)	115.06 ¹
Global Market (Projected 2025)	194.63 ¹
Global Sports Nutrition (2015)	27.82 ²

Area of high risk for those subject to anti-doping rules

¹Grand View Research ²Prescient & Strategic (P&S) Intelligence Private Limited

Contamination (Cont'd)



- **Doping substances**

S1. Anabolic agents including growth promoters	S6. Stimulants
S3. Beta-2-agonists	S5. Diuretics

- Instrumentation can now detect to environmentally low levels
- Public health and anti-doping issue



List Expert Group Internal Strategic Review

List Expert Group (LiEG) Internal Strategic Review



**Organised
by:**

LiEG supported by WADA Management

**Evaluation
of:**

Our processes, internal interactions, interactions with WADA Management, communications with wider stakeholder population

Outcomes:

1. Enhancement of the decision-making process with stronger involvement from other areas within the WADA structure (including Legal Department and Executive Office)
2. Enhanced communications/information
 - a. of the List itself
 - b. with our stakeholders

2a. Enhanced communications of the List



- The List could be regarded as a complex, scientific, legal, educational but relatively bland document that must be communicated to a wide range of different types of stakeholders

- Proposals include:
 - Using the skills of information specialists to make documents more engaging for athletes and prescribers
 - More information in the Explanatory Notes
 - More examples
 - Reformatting the presentation to include annexes

2b. Enhanced communications with our stakeholders

- 2,815 Stakeholders invited to participate in the Annual List Review Process
- Encourage participation & feedback
- Stakeholder letter
- Q&A on WADA website





The List: Timelines and Process



Timelines and process

- **January:** 1st meeting
- **April:** 2nd meeting
 - Preparation of Draft List, Monitoring Program & Explanatory Note
- **End April to July:**
 - Draft circulated to stakeholders for consultation & comment



Timelines and process (Cont'd)

- **August: LiEG 3rd Meeting**
 - Stakeholder comments discussed in detail
 - Prepare **PROPOSED DRAFT** List & Monitoring Program for recommendation to Health, Medical & Research Committee
 - Prepare Explanatory Note & Summary of Modifications

Timelines and process (Cont'd)



LiEG



Health, Medical & Research
Committee



Executive Committee



By 1st October – Published



1st January – In force

Encourage enhanced feedback from stakeholders: WADA Connect Changes



1. Feedback on the proposed changes

We want to ensure that we know who agrees or disagrees with the changes

2. Feedback on each Section and General Comments

Invite stakeholders to give their suggestions, thoughts and experience under each of the List Sections, Monitoring Program & General List comments



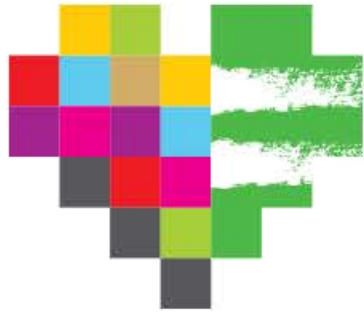
Feedback & interaction with stakeholders

- Comments on the List are the only time that there is requested interaction from Stakeholders, but ongoing interaction is always welcome
- We need our stakeholders to feed into the WADA Science Department and the LiEG

Feedback & interaction with stakeholders (Cont'd)



- You have: Local and cultural knowledge and sport-specific knowledge
 - A comment or information or a query you have could potentially result in a change to the List
 - Your comment could make the difference
 - Keep in touch



play true