

# Doping as a public health issue.

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# Fundamental principles

*Practically all doping substances and methods are medicines and/or medical interventions which have been developed for the prevention and cure of disease, or alleviation of symptoms.*



*Their administration in the absence of medical indications (e.g. to healthy sportsmen) is medical malpractice against which legal action should be taken.*

# Two different aspects

- ▶ Doping in elite sport
- ▶ The use of doping substances in society

# Doping in elite sport

- ▶ Ephedrines/Amfetamines 1940s – 60s
- ▶ AAS 1960s – 70s
- ▶ Hormones 1980s
- ▶ Oxygen carriers 1990s
- ▶ Gene transfer 2000 - (?)

# Some key years

- 1928 IAAF-rules on stimulants
- 1960 Rome Olympic Games
- 1961-67 IOC Medical Commission
- 1968/72 Testing för stimulants at OG
- 1972 IAAF Medical Committee

# Arnold Beckett



# Manfred Donike



# Further key years

*1974 AAS banned and tested for by IAAF*

*1979 Doping control laboratories by IAAF*

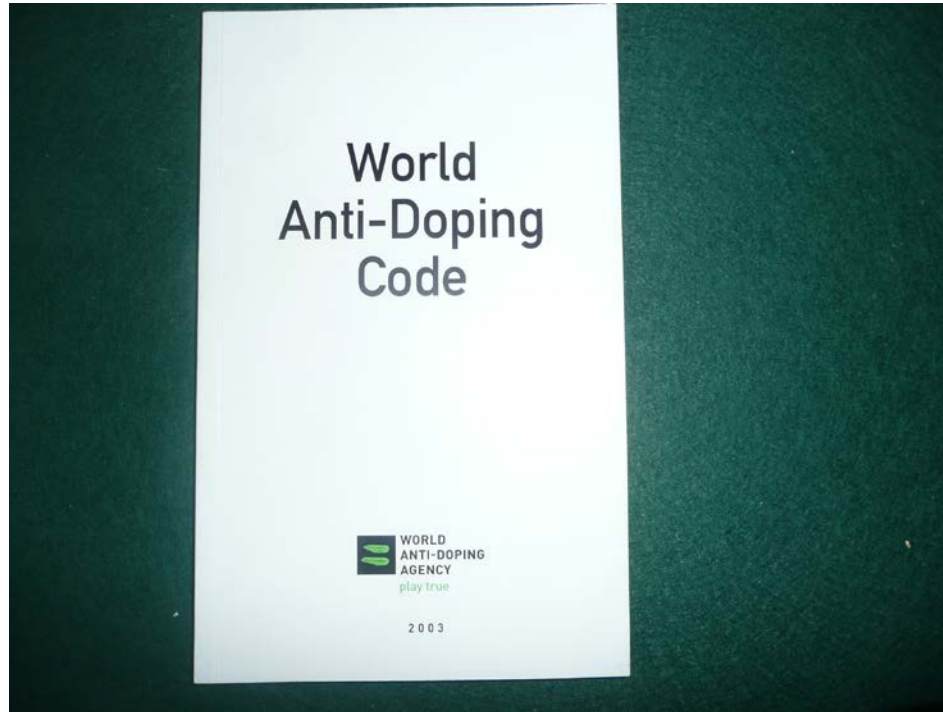
*1984 Court of Arbitration for sports (CAS)*

*1988 Seoul OG*



## Further key years

- 1989 "Cold war" fades
- 1999 WADA
- 2004 WADA Code
- 2005-07 UNESCO Convention



2000 Sydney Games

The IAAF / US story

Bush's "address to the nation"



# Scandals



2002  
Salt Lake City-OG  
New generation  
of Epo (Aranesp)



2003  
Balco



2004  
Aten-OG

# Scandals

2006

Torino Olympic Games





## How will sport answer the **Russia question?**

Russian doping has rarely been away from the headlines in recent times, and it is still far from certain when the crisis will end. Liam Morgan investigat

Sochi 2014

# Kula, Diskus, Slägga

- ▶ Endast 3 av de 15 medaljörerna vid Rio-OS 2016 i dessa grenar hade kommit på prispallen i Seoul 28 år tidigare.
- ▶ Alla världsrekord i dessa kastgrenar - män och kvinnor - är över ett kvarts sekel gamla (det yngsta från 1990 - mäns kula).

# Summary

- ▶ An interesting 45 years´ journey from almost complete unawareness to general understanding and support, and to.....
- ▶ The creation of WADA in 1999
- ▶ USA president´s "address to the nation" in 2004
- ▶ An international anti-doping code 2004 (2009, 2015)
- ▶ Global support in the form of a UNESCO-convention in record time 2005-2007
- ▶ National antidoping-organisations all over the world

# Use of doping substances outside sport

## International studies

*"The use of doping agents, particularly anabolic androgenic steroids (AAS), has changed from being a problem restricted to sports to one of public health concerns".*

Sjöqvist F, Garle M & Rane A. Lancet 2008 May 31; 371 (9627) 1872-82.

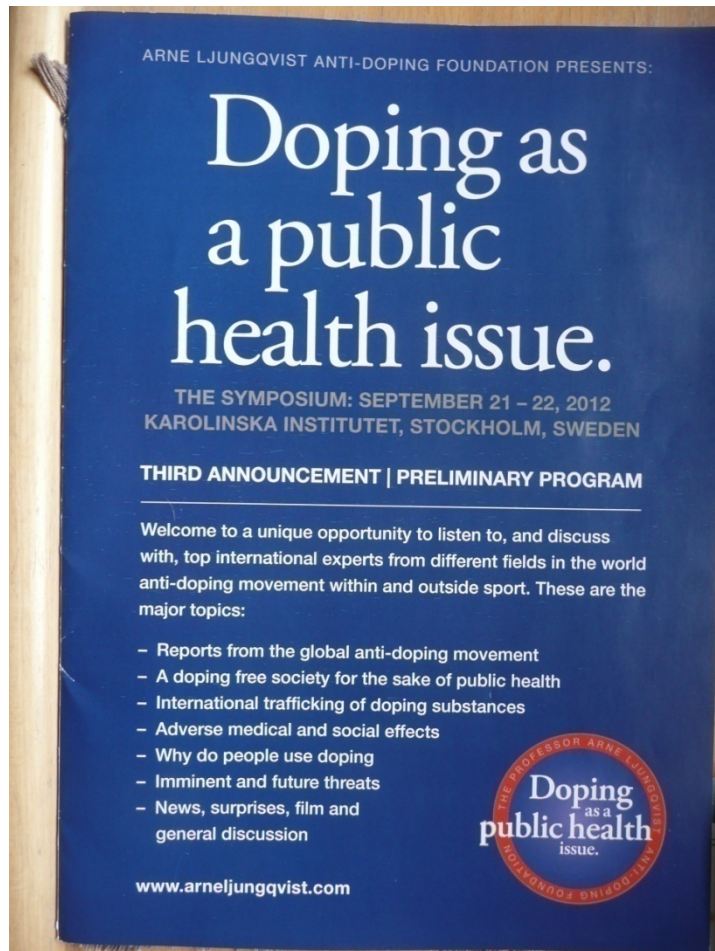
*"Use of Anabolic Androgenic Steroids and other similar doping substances is a substantial problem in Europe – primarily among young men – which until recently has not been given much attention."*

In *Strategy for stopping steroids*, Anti-Doping Denmark, 2012



# International Doping symposium, Stockholm 2012

(IOC, WADA, WHO, UNESCO, INTERPOL and others)



- ▶ *"The misuse of doping substances in the broader society is a health and security issue. Action must be taken by governments and organizations within a harmonized legal framework and policies."*

Stockholm Sept. 2012.

## ■ DOPNING ÖVERSIKT

### ■ FAKTA 4. Psykiska biverkningar

- Depressiva besvär
- Ångest
- Oro
- Sömnstörningar
- Nedsatt impuls kontroll
- Panikångest
- Affektinstabilitet
- Psykos
- Megarexi
- Empatistörning
- Sänkt mentaliseringsförmåga
- Svartsjuka
- Aggressivitet
- Paranoid misstänksamhet
- Våldsamhet

Rane, A. et al. *Steroider ett växande problem på gymen.*

Läkartidningen Nr 39-40, 2013, vol 110

# Food supplements

- ▶ *” Det är vetenskapligt klarlagt att c:a 20 - 25% av alla kosttillskott som saluförs till idrottsmän som prestationsförhöjande innehåller dopingklassade substanser”.*

Larsson, G. et al. Doping - översikt, vård och behandling. Slutrapport från nationellt kompetensutvecklingsprojekt (NKD) 2013-2015, Region Örebro Län, 2016

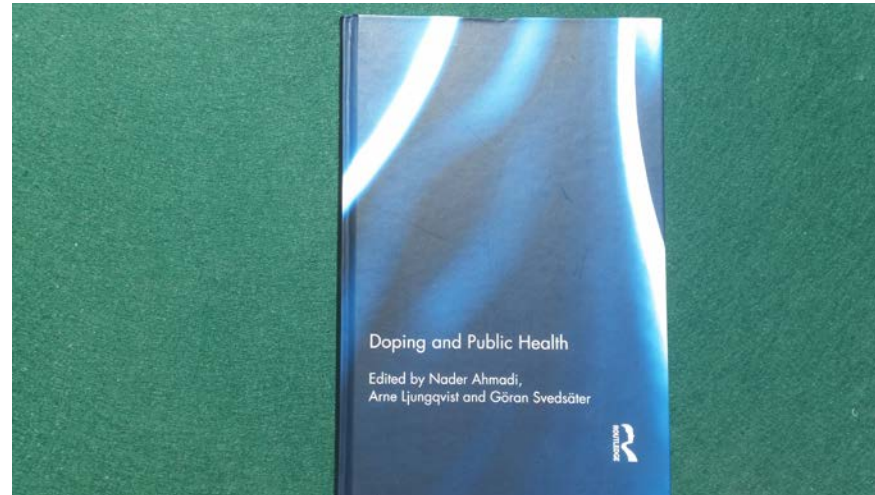
# Food supplements ctd.

- ▶ 1. "14 av 85 undersökta kosttillskott bedömdes utan anmärkning. 21 av preparaten borde ha varit läkemedelsklassade och därmed förbjudna att saluföra."
- ▶ 2. "Bara 2 av 43 förpackningstexter uppfyllde märkningskraven. I 30 av 43 produkter ingick växtextrakt som kan innehålla hälsofarliga substanser. 8 av produkterna skulle kunna klassificeras som läkemedel."
- ▶ [www.rf.se/Antidoping/Kosttillskott](http://www.rf.se/Antidoping/Kosttillskott). 31 jan 2018

# Food supplements ctd.

*"New sources of doping substances are the market of adulterated nutritional supplements and unapproved pharmaceuticals. These are extremely fast-growing markets because of the readily available raw materials needed for doping substances and the ease of trading the products via Internet".*

Geyer, H. Adulterated nutritional supplements and unapproved pharmaceuticals are new sources of doping substances for fitness and recreational sports. In Ahmadi, N, Ljungqvist, A & Svedsäter, G. *Doping and public health*. Routledge, London and New York, 2016, pp. 64-70.



# Food supplement sales in Sweden

▶ År	Millions (SEK)
▶ 2015	4 569,0
▶ 2016	4 669,4
▶ 2017	4 876,2

Source: "Svensk Egenvård". Pressrelease, 3 April 2018

# Recent statement

- ▶ *“Dagens utseendefixerade och prestationsinriktade samhälle har skapat en lukrativ illegal marknad för anabola steroider (AAS). Denna omfattande men samtidigt nedprioriterade kriminella subkultur är betydande och de fysiska och psykiska skadeverkningarna av steroidmissbruket är ett folkhälsoproblem som samhället väljer att inte se.”*

Hermansson, G. *Fokus på AAS-missbruket*. Svenska Narkotikapolisens Tidskrift, 5: 58-63, 2017.

Hermansson var tidigare narkotikapolis med särskilt ansvar för dopingområdet.

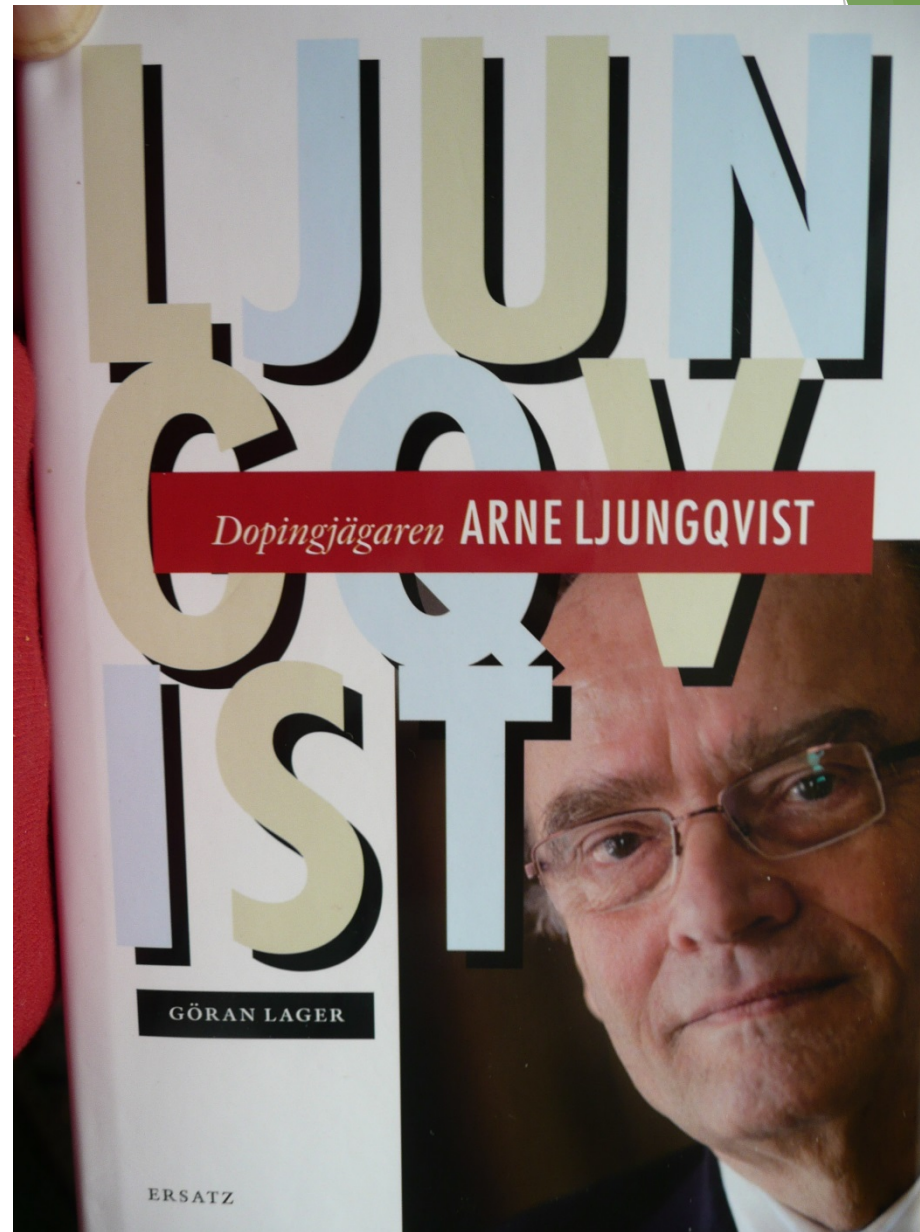
# Conclusion

- ▶ Sport has conducted a fight against doping for about 50 years with reasonable success
- ▶ Society has remained largely passive as the use of doping substances outside sport has become an increasingly important public health issue



# TACK!

“For pure health and clean sport”



# "Doping's Nemesis"



АРНЕ  
ЛЮНГКВИСТ  
**ВРАГ**  
**ДОПИНГА**

Ёран Лагер

