

BENEFITS AND HARMS OF GENE DOPING

Mind maps were utilised to gather the public's opinions on the benefits and harms of gene doping to athletes who use this technology, fellow (clean) athletes and other sections of the community. The collective thoughts of the general public (obtained at the "Science behind sporting success" exhibition), Year 12 (aged 16-17) students and Key Stage 4 and 5 students (ages 14-18) students are given below.



General Public @ "Science behind sporting success" exhibition

BENEFITS

Athlete

- Physiological elite
- Advancing science (& human race)
- Ultimate athlete
- More medals
- More money

Fellow clean athletes

HARMS

- Turn blokes into women
- Feel guilty
- Is record true?
- Everybody abnormal
- Takes honour away from winning
- There can be side effects and they can get ill
- It's our uniqueness that makes life wonderful
- Long term effects
- Only available for rich athletes not poor
- Playing god
- Where does it end? Sports only?
- Ruins their reputation
- ve role model for kids
- Could get disqualified

- Immoral
- Lose
- Cheated on
- Less money won
- Racing something that cheated, robot race
- Athletes move to other sports
- Forces others to do same
- True greats denied recognition
- Cheated out of life's goal
- Artificial sport
- Not level platform



BENEFITS

Coaches

Get to win
No risk

Fans

2 competitions, one for clean & one for enhanced athletes
Sports more entertaining to watch

Sports Governing Bodies

Get more medals
Get better/more Press
More athletes joining

Press & TV

More events per day, shorter timings
More people will be watching & listening
Sell more stories = more money
More scandal

HARMS

Damage to reputation if something goes wrong elsewhere
Abuse of position
Influence drugs

Money, divert cash from gene therapy
End up watching a freak show
Goals unachievable for fans to reach
Dishonest/disrespect, cheat, against Olympic spirit
Lied to
Playing to see a fixed sport
No, no, don't mess about
Keep it for gene therapy

No tests
Messing about with this, shouldn't
Undeserved achievement

Stories change

University of Leeds Year 12 Conference, July 2012

BENEFITS

Athlete

Get golds
Can train more, more adrenaline
Reputation & money
Break more records
Rich & famous
Respect & good reputation through winning
Happy their winning
Glory
Fame & endorsements
Medals

Other Athletes

Better reputation for sport, more adverts
Motivation
Incentive to work harder
Force them to adapt
No risk for them
Might not work better, might make traditional athletes look better

HARMS

Guilty
Risk of degenerative disease
Rich man's technology
Prestige of being a winner lost
Expensive
Health risk
Dishonest
Unknown side effects
Long-term effects after retirement?
Unaware of whether it works

Sports reputation ruined
Only available to rich
Unfair competition
Disappointment at having goal/dream taken from them
No competition
Poor athletes get priced out

BENEFITS

Other Athletes (continued)

Coaches

Increases chances of athletes winning
Successful so more people are going to go
to them for training
Easier job
No risk
Good for business & reputation

Fans & General Public

Adds interest to sport
More to aim for, role model
Pushes athletes more
Able to watch super Olympics
More money
Boosts country's reputation for winning
People who have no experience of sport take part
Get to see some amazing sport
More entertaining
Win more fans

Sporting Organisations

Cash for sports development
More sponsorship
Advances the sport
More money to invest in athletes

Doctors & Scientists

Reduce steroid use
Advances human race
Creates reputation & earns cash
Researching the limits of the human body
More exploration into wonders of human body
Money for designing new drugs
More jobs
More attention
Advances technology

HARMS

More competition
Have to work a lot harder
Lower self-esteem

Loss of job, trust
Fine
No Jobs
More pressure
Not been recognised for coaching skill
Misuse of science

Disappointed, cheated
More expensive sport
Boring to watch
Cost to NHS
Don't want to pay to watch cheating
Get tired of seeing same people win all the
time

Bad for sports reputation
Negative press
Lose integrity
Can't afford
Sports companies lose money
Sport becomes more of a business
Science becomes the greatest factor rather than skill or
dedication

Potential health issues, mutations
Doctors/scientists playing God
Risk of creating new diseases
Contradicts a doctor's role
Ethical dilemma
Doctors shouldn't provide potentially
harmful treatments
Lose job
Should concentrate on gene therapy not doping



Leeds Festival of Science (Key stages 4 & 5), March 2012

BENEFITS

Athletes

Country proud
Win more medals (4)
Girlfriend
More money (2)
Better life
Personal best
More fame
World record
Good for the country
They will feel better about themselves
Big reputation

Fellow athletes

Have a better life
Other athletes can't come first
Keeping reputation

Coach

Better reputation (2)
More money
Doesn't affect them
Doesn't have to stop competing
Furthers career
Better teams

Fans and general public

Good reputation for sport
Better to watch
Looks good on your nation
Your favourite athletes could win
More interesting sport to watch

Sporting organisations

Good for economy
More money
Good reputation for exciting sport
If nobody finds out then it looks good that they won medals
Because somebody is winning
Looks good for their country

Doctors & scientists

More publications
More funding (2)
Experiment more on gene development
Earn more money (2)

HARMS

Feel bad
Disqualified
Banned
Might harm the human/body (3)
Bad offspring
Not allowed to compete
Let the country down
Could get addicted
Get caught
Lose previous achievements
lose their fame
Lifetime ban

Won't want to compete
Unfair
They will feel cheated & could get angry
Harder competition
Fans turning against them

Risk might get caught
Lose job (2)
Fines
Hurts their reputation

Lose interest
Not pay
False hope
People could lose money betting
Disappointment on athlete

Bad reputation
Lots of paperwork
Looks bad on the country which is holding it if doctors find out
Makes the whole sport look bad
Looks negative against them

They will lose their jobs/get the sack (4)
No tests
Dangerous to the athlete
Cost a lot more



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