# Improving human performance



Some people claim that there is immense scope for technology to improve how the human body performs and functions. How would your religion view this?





If God enables us to use our skills to improve the human condition through making tools and using technology, does this mean we can also try to make internal improvements to the human body? What would you like to enhance if you could?



If it was possible to use pills, implanted chips, electrodes etc., would you improve: appearance, physical strength, need for sleep, memory, concentration, facial recognition, mood? Or something else?



**B7** 

# **B104**



If human life is the gift of God, is it something we should not interfere with by seeking to make our own improvements.

Human enhancement

Human enhancement

Human enhancement

Human enhancement

Missing the point?



Our deepest human problems are moral, spiritual and relational, not our bodily limitations. No physical enhancements could solve these. These are religious questions needing religious solutions.



**B105** 

Altering **B106** nature and altering ourselves?



If your religion allows or encourages humans to manipulate the natural world, would it also encourage us to enhance our human bodies, or would this cross a forbidden line?

Human enhancement

What is a human being?



Are we a bag of genes, a conscious mind in a body, the image of God, etc.? Are we material or spiritual, separate individuals or dependent on relationships?





Are there some basic things about how God has created humans, which would diminish our humanity if we tried to change them?

# **Keep within** our limits or extend them?



Are we fooling ourselves to imagine we can design the human body better than God? Should we respect the physical limits within which God created us? Or should we use new technologies to extend them?

**B109** Radical or more limited enhancement?



**B110** 

Would your religion encourage us to use technologies to make radical changes to the human body – aimed at improving its performance and functions – or only small changes, or none?

**Everybody** wins



**B11** 

**B15** 

Enhancement is like most new technologies; it will create new winners and losers. As they become more widely adopted, costs come down. Most people should be better off in the end

Make poverty history?



**B12** 



If enhancements would give competitive or commercial advantages, should the priority in research be on applications to help the poor and disadvantaged? Is this possible?

Human enhancement

Human enhancement

Human enhancement





A civilised society should be able to prevent enhancement leading to discrimination, just as it seeks to do in other areas.

**B13** 





Human enhancement would always be socially divisive. To allow a privileged few to 'hard-wire' permanent physical or mental advantages into their bodies would cause even more division and injustice in our world.

**Enhancements** for only some?



If enhancements really were so good, it would be unjust if they were only available if you could pay, with the rest left behind in the new human race.

Human enhancement

Enhancement and eugenics? **B16** 



Some say it is a short step from human enhancement to social engineering or eugenic practices, for example to offer radical life extension only to those deemed to be functionally 'fit'

## Opportunity Cost?

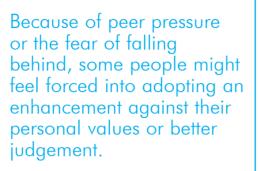


**B17** 

Faced with poverty, hunger, disease, and climate change, would our research effort and resources be better spent on other goals than trying to enhance ourselves? Peer pressure and values



**B18** 



# Dual Use



**B19** 

**B23** 

Scientific breakthroughs in medicine may also have military applications used for enhancements. Should this 'dual use' be restricted, or should that choice left to the military?





Are the implications of enhancement too serious to treat just as matters of personal preference? Or has society no right to prevent an individual to flourish by making enhancements?

Human enhancement

Human enhancement

Human enhancement

Human enhancement





The relative benefit of a competitive performance enhancement would be lost if everyone adopted it. No one would dare stop using it, but no one would benefit any more. Everyone becomes locked in to a now pointless technology.

B21 W th ar



We got to the moon and back!



Enhancement builds on the scientific skills we have developed over generations. Of course we can't predict all the outcomes, but if we never try we'll never improve ourselves.

Human enhancement

Risks can be handled



Just as invasive medical procedures are done under careful regulation to avoid causing unnecessary harm, we will be able to handle any risks of human enhancement.



**B24** 



If we cannot make household appliances that don't break down, and if we mismanage so many complex projects, are we fooling ourselves to think we can redesign ourselves?

# Can we keep in balance?



Some sports enhancements have had tragic results, e.g. among racing cyclists. Can we enhance one part of our body, without upsetting its overall balance?





There are serious risks in many aspects of intervention in the human body, for which enhancement has no balancing good like a hope of treating terminal illness.

# Not so fast!



**B2** 

**B**31

Commercial, medical or military pressures can sometimes drive the application of science faster than we understand it. We can't afford this to happen with human enhancement.







Many so called enhancements might not turn out to have made things better – e.g. radically improving our memory: there are many things we're glad to forget.

Human enhancement

Human enhancement

Human enhancement

#### Human enhancement

Do we have wisdom enough to alter ourselves?



We have greatly altered many ecosystems and other species. Too often we've done unintended harm. Do we have the wisdom to alter ourselves? Would we just be 'playing God' badly?

9 Brain/computer links and s? freedom?



Links between our brains and computers might give me better performance. But would I lose some degree of control and no longer have full freedom of thought? Why seek to be enhanced?



Practical: to overcome one's limitations; not getting so tired, thinking quicker; Competitive: beating one's rival at last;

Aesthetic: doing a job better, a more skilled musician; Altruistic: helping someone

else better; For fun!

Human enhancement

Altruistic enhancements?

**B32** 



Would the most satisfying enhancement be, say, to create a finer work of art or craft, just for the sake of it, or to help someone else – in other words, something which is not just for my sake?

#### Enhancement **B133** - the highest aspiration?



Would the prospect of transcending our human limits, using technology, be relevant to salvation, or your religious goals and aspirations?





**B134** 

Some people say that instead of 'health' we could use 'well-being' as a vardstick to assess enhancements. What criteria would your religion use to judge what makes people's lives go best?

### Is it really winning?



**B**35

**B139** 

If I got an enhancement to beat my rival, would I be satisfied, knowing I wasn't actually better, but I'd just used a smart drug or implant, and he/she didn't?

#### Would we **B136** be 'better' humans in God's sight?



Suppose we could become stronger, quicker thinking, more memory, longer lived, or even had entirely new human capacities, would we be better human beings in the sight of God?

Human enhancement

Human enhancement

#### Human enhancement





If I started using an enhancing drug, so that I could manage with less sleep, for example, would I become more dependent on technology, and less free to be the human being God made me?

**B137** 





If people want to be enhanced technologically, are they right in being dissatisfied with themselves but wrong about what they want to change? Is it God that they are really seeking for? No bodily improvement would finally satisfy.

Human enhancement

Making the most of ourselves?



Is our success as humans about using our abilities, with God's help, to make the very best of what God has made us? Or should we seek to gain new capacities by technology?

#### Human enhancement

What is an enhanced person?

**B140** 



What would an enhanced person be, in God's eyes, according to God's standards?

## How would enhancements be used in practice?



If an infrared vision chip was available, that was intended to help me drive more safely at night, would I just use it to drive faster, instead of safer?



**Parental choice** 



We decide all kinds of things in advance for our children. Would they blame us if we did not enhance them, given we had the option? Or blame us if we did?

Human enhancement

#### Is technical efficiency always a good thing?



Technology can reduce drudgery and increase efficiency. But do we use well the space that we gain? And can we lose important human or social 'goods' by pursuing mere technical efficiency?

Human enhancement

Should we enhance trust using a special drug?



Researchers claim that giving rats the chemical oxytocin increases their trust of other rats. Should we try this on humans? But is it real trust, if it's induced by chemicals? Is it too open to manipulation?

Human enhancement

Human enhancement

Enhancement as a condition

of employment





If work performance could be enhanced, should we allow such enhancements to be used in employment: as a condition of getting a job, winning promotion, or keeping your job in hard times?