The Genetic Revolution

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Early experiments

I am slightly less uneasy about experiments on fertilised eggs or on small balls of cells up to the first week or so of life.Part of this is the need to be consistent.If we are really going to take the moment of conception as our starting point for the protection of human life, then we should do away with the coil as a method of contraception for a start since it's only method of working is to create such an inflamma -tion of the inside of the uterus that the fertilised egg has not a hope of implant -ing there some five to seven days after conception. In the strict sense a coil produces a possible abortion every month.

I do not believe it is right to deliberately fertilise human eggs for the purpose of experiments.Nor do I think it is ethical to fertilise more eggs than can properly be implanted into the mother's womb.It is the latter practice which has produced thousands of surplus embryos each year - embryos which can either be washed down the sink or grown for a while in the test-tube. These are all very difficult questions to which there are fewer straight forward answers than you might think.

Humanised germs

I cannot see any ethical objection to using a bit of human genetic code to tell a bacterium what you want it to do.Nor can I see any real difficulty in enhancing the genetic code of plants or animals.It would seem to be a logical outworking of the ancient command given to man by God, recorded in Genesis to be fruitful and subdue the earth. God has given it to us to enjoy and be custodians of.Why shouldn't we make bacteria and viruses work for us - after all they cause us enough problems and misery with the diseases they so often cause us?

However I would draw the line at attempts to give another mammal sig -nificant parts of the human genetic code.The bible teaches us that when God made us, he made us in his own image.We are not the same as monkeys or baboons and efforts to blur the distinctions genetically I feel are wrong.

Writing good law

Having seen where regulations are needed for safety, or where they nay be desirable ethically we still face a big problem: laws need to be introduced and enforced globally to be effective. The problems in agreeing about what needs to be regulated are huge enough. However the greatesr difficulty of all is finding somegood definitions that will close certain avenues effectively while leaving others open (1940).

A recent example of chaos was what happened in Australia following adoption of the Infertility (Medical Procedures) Act in 1987.This outlawed "cloning".This was meant to prevent human cloning experiments like those we looked at in chapter three of this book.However, it also effectively banned the cloning of individual human cells - nothing short of disastrous.Monoclonal antibodies were in danger of becoming illegal for a start.Calls have therefore been made to amend the Act (1950).

In conclusion then, genetic engineering has the power to change every aspect of our lives, and even the nature of human life itself. It promises us spectacular benefits and brings awesome new problems. It is here already and advances every day. Genetic engineering needs urgent public debate with international regulation, so that the quality of life on earth cn be improved, without threatening human existence.

The Genetic Revolution - free book by Patrick Dixon - published 1995