

Medical Ethics Discussion

General Information

Some of you may not be familiar with the term “medical ethics” and as such not really understand what you are going to be discussing. Medical Ethics has to do with evaluating the appropriateness of using controversial medical procedures. These practices may include procedures like cloning, genetic engineering, in-vitro fertilization and other assisted reproductive technologies, and even things like euthanasia or assisted suicide.

Because of the complexity of the issues I will briefly outline the main concept of each process.

Cloning is the process of making an identical genetic copy of an organism, tissue, organ, or cell. This may be done to any number of things including bananas, new tulip varieties, champion race horses, human hearts, pig livers, highly productive dairy cattle, human beings, or sheep (Dolly).

Genetic Engineering is the procedure by which scientists place genes from one kind (species) into the chromosomes of other kinds so that organisms obtain traits that they were not created with originally. The new organism is called a transgenic organism. Some examples of transgenic organisms are cows that produce human breast milk, goats that produce human blood clotting factor for hemophiliacs, Roundup Ready corn that will not die from Roundup, “golden rice” which produces Vitamin A for people that may not have enough, and perhaps someday spinach that produces vaccines (proteins) so that we no longer will have to get pricked with needles at the doctor’s office but instead just have to eat a salad.

Reproductive Technologies include all technologies that help couples have children when they are not able to have them by traditional means. For example a man may produce sperm that do not swim well because they lack tails or because the tails are too short. Doctors could artificially inject the sperm near the egg so that the two fuse to become one cell. In addition if a woman has poor quality eggs doctors can literally “harvest” an egg, keep it nourished in a petri dish, suck out the bad parts of the egg, fertilize it with the husband’s sperm, and then place the embryo back into the woman. In this way a couple can have biological children of their own.

Euthanasia is the process of “mercy killing.” An individual may be in severe pain as a result of a deadly and painful cancer. When the cancer is advanced and the

individual is only in agony and not able to function normally, he may opt to kill himself rather than prolonging the agony.

Assisted Suicide is really a form of Euthanasia except that a professional doctor helps you with suitable techniques and painless drugs.

Questions for Discussion

1. General questions you should consider before discussing the specific technologies:

a. Is any technology or object wrong in and of itself?

b. The Heidelberg Catechism in LD 33 says that good works are those that proceed from a true faith, are performed according to the law of God, and to his glory. This Lord's Day should guide you as you discuss the questions. Which of the medical technologies can you really justify in this light? Briefly discuss this.

c. Discerning God's will for our lives can be a very difficult process. What principles can we use to know His will with regard to our use of these technologies?

2. Regarding **Euthanasia** and **Assisted Suicide**, are these ever morally right for humans to engage in? Come up with specific scriptural ideas to support your answer.

3. Genetic Engineering

While walking through the modern supermarket one is exposed to a variety of foods that have been artificially bred and selected for by humans. The fruits and vegetables that existed in Noah's days were quite different from what we see today. For example, foot long ears of corn are a recent development that humans bred into them. Green apples, yellow apples, red and yellow apples, red and green apples, sour apples, sweet apples are also recent developments. Did you know that broccoli, cauliflower, kale, brussels sprouts, and cabbages are all the same plant? They are all *Brassica oleracea*. They differ because of breeding for their various characteristics over many years. In addition to fruits and vegetables, the meats also in supermarkets are taken from animals that are more than likely somewhat different from what God originally created. These have also been modified. Many of these are purebreds that humans selected for because of their meat or dairy qualities. As such these specific types have only recently come into existence. Bible storybooks that show the Garden of Eden with long ears of corn, Jersey cows, tall wheat plants, rows of broccoli plants, and perhaps cocker spaniels are giving children (and maybe some of you) false impressions.

a. In Genesis 1 we repeatedly read that God created things good. What did He mean by that? Can we change that which God created “good?” In other words is it ethically right to breed and as such alter the species of animals in God’s creation? For example, without human intervention poodles would never have existed. Is it ethically right to breed a poodle?

b. Now, instead of breeding new traits into organisms, is it ethically right to take the faster route and just splice (cut and paste) a new gene into an organism? By the way, traditional breeding is very slow and it would never work to take a gene from one species and give it to a completely different one. So for another example, what do you think about taking a gene for the “natural” production of steroids and splicing it into cows so that they grow large muscles over fewer years and without as much food and shots of steroids?

What is the ethical difference between breeding and genetic engineering or are they ethically equivalent?

Proverbs 25:2 says “It is the glory of God to conceal a thing: but the honour of kings is to search out a matter.” Does this indicate that it is honorable for men to discover the properties that God gave His creation?

Genesis 1:26 says, “And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.” Does the concept of having dominion include ideas of wise use rather than just simply control?

Putting the two passages together we come up with a calling to not only discover but also wisely use the properties that God placed in creation. I think man has done this in many ways including the development of complex electrical machines like computers. Humans discovered the phenomena of electricity that God placed in the earth for us and then used it wisely. That is in my opinion in accordance with scriptural mandates. Now, add to your thoughts Belgic Confession, Article 12. Among other things it says that God created the world for man. It goes on to say that He created it for man so that man is better able to serve his God.

Can genetic engineering of plants and animals relieve people of many time-consuming burdens so that they have more time to do other things like organize Bible studies, witness, and fellowship with believers? For example, Golden Rice was developed to have more Vitamin A than normal to feed third-world countries. This has the potential of alleviating the many problems that vitamin A deficiencies can bring. With the rice people can spend more time serving God in various capacities

rather than deal with their sicknesses. In addition, scientists hope to make cows that produce human antibodies, human breast milk, human blood-clotting factor, maybe even human blood of all types. What about eating your vaccines as a salad? We can make spinach “naturally” produce the vaccines (antibodies or viral proteins) and just eat them. Think of how easy it would be to vaccinate the old people or even a whole third world country against the major diseases just by giving them a salad! Is all of the above a way of developing the properties of creation so that it can better serve us so that we are better able to serve our God?

c. Now on to the genetic engineering of humans. Should we ever engineer our offspring for looks, brains, or athleticism?

Parents have a calling to rear their children both physically and spiritually. Does that calling start only after the child is born or did it start at conception?

Would it be ethical to have surgery to cure spina bifida in the womb? (Infants born with spina bifida sometimes have an open wound on their spine where significant damage to the nerves and spinal cord has occurred. Although the spinal opening can be surgically repaired shortly after birth, the nerve damage is permanent, resulting in varying degrees of paralysis of the lower limbs.)

Instead of performing a surgery in the womb for spina bifida, what if the doctors could someday correct a genetic problem like Down’s Syndrome in the womb. Would that be ethically acceptable and in accordance with the parent’s responsibilities to raise that child as best they can?

God uses many means to make His Church a body of Christ. Historically, sicknesses and diseases often make a congregation grow closer together as they experience that oneness in Christ and help and assist one another. Discuss the benefits of disease for your own congregations. Should this be a consideration in our discussion?

4. Cloning

a. Is it right to clone plants? For example, bananas as we know (eat) them are sterile. They can not reproduce on their own. In order to grow new trees, we have to artificially propagate (clone) them. May we do this?

b. Ok, by now you know what’s coming. Let’s move the discussion from plants and on to animals. If a champion racehorse gets injured so that it has to be killed and as such cannot be used for breeding, can the owner keep some cells and clone them? Cloning is complex but I’ll try to keep it simple. Typically what would happen here is

that the nucleus of a female horse egg cell would be removed. In its place a nucleus from any cell of the champion horse would get inserted. This egg with a new nucleus is then tricked so it thinks that it has been fertilized and then it is placed back into the horse's womb. The resulting colt will be a carbon copy of the original champion because it has exactly the same genes. You can think of it as an identical twin but that it was born 5 years later rather than only 5 minutes later. For a second example, we could image a police dog that was in many ways a perfect dog. It was good tempered, obeyed well, learned quickly, remembered commands, and had a great nose, eyes, and ears. Before its death it could be cloned. The pups could be trained even earlier and at the best facilities and really be great for a variety of police work. The clones themselves could also be cloned and any training mistakes that happened along the way could be lessened so that after several years you know exactly how to raise the dogs to be nearly perfect for your needs. Is that ethically right?

c. Now for humans. Is it right to clone any part of a human?

How about if you need a heart transplant? Often times the best heart you could receive would be exactly like your original. That heart would not be rejected by your body. Imagine that scientists could clone your heart cells and grow them in a petri dish for a few weeks. Soon the mass of cells is big enough to place into a young pig. We could give a pig a heart transplant so that its normal heart is removed and your little cloned heart replaces it. After several months the pig (and your heart) will grow to an acceptable size for insertion into you. Now we can simply slaughter the pig with YOUR heart in it and place it into you. Discuss the ethics of this idea.

How about cloning a child that was just lost in a car accident?

5. Finally, **Reproductive Technologies.**

a. Is it true that God can use childless couples in special ways in the church?

b. How can a couple know if God intends for them to remain childless and be greatly used by Him in the Church or if they can use technology that assists them in having children.

c. God primarily gathers His people from lines of continued generations. Can this be an incentive for us to have children and use these technologies?

d. Many of these procedures are wildly expensive. Is proper stewardship of our money even an issue in these matters?

e. Some facilities that assist parents in reproduction freeze embryos, throw poor quality ones away, and only implant a few. What are your thoughts on these practices and should these clinics ever be used?

f. Are reproductive technologies right for you?