Question (Q): Do you want to be an organ donor?

Answer **(A):** To make this vital decision, you must be well informed about what is required to be an organ donor. For an organ to be suitable for transplantation, it must be a healthy organ. When a heart is taken for transplantation, the heart is beating with normal blood pressure, circulation and exchange of oxygen and carbon dioxide in all organs and tissues of the body. Seconds or at the most, minutes before the heart is cut out, the transplant surgeon stops the beating heart.

Q: Which organs are transplanted?

A: Heart, lungs, liver, kidneys, pancreas, and intestine are transplanted – all are vital organs. To be suitable for transplantation these organs must be healthy. When the heart, whole liver, pancreas and/or intestine is taken, the donor becomes truly dead. When a portion of the liver, a part of one lung, one of two lungs, or one of two kidneys is taken, there is risk of death of the donor and the donor will be weaker. When one kidney is taken, the donor will no longer have a kidney in reserve for himself and might have reduced kidney function and other effects.

Q: Who has healthy organs?

A: Only living persons have healthy organs. Organs are taken from persons of all ages, but especially desirable are those who are 16 to 30 years of age. When there is brain injury, persons 16-30 years are prime candidates to have their organs taken. This is because these younger people have the healthiest organs. Their lives are in jeopardy!

Q: After true death (Latin: *mors vera*, distinguished from apparent death *mors apparens*) can vital organs be healthy and suitable for transplantation?

A: No. After true death, vital organs are so damaged that organs cannot be transplanted. After circulation and respiration have stopped, within 4-5 minutes at normal temperature, the heart and liver are corrupted to such degree that they are not suitable for transplantation. For kidneys, this time is about 30 minutes. After true death; tissues, namely, skin, bones, cornea, veins, heart valves and connective tissues can be transplanted. Note that these are tissues, not organs.

Q: Then why are we asked to be an organ donor if they won't wait until we are truly dead?

A: After true death, no organs can be transplanted. Applicants for a learner's permit or driver's license are not informed about the risks of being declared "brain dead" or "heart dead" rather than being truly dead. When organs are taken, all donors are living and not truly dead. Donors are paralyzed to keep them from moving and squirming when cut to take their organs. In some countries, such as England, and more recently in USA donors are given an anesthetic to avoid pain.

Q: What is "brain death"?

A: "Brain death" revolves around cessation of neurological functioning while heartbeat, circulation and respiration continue, although supported by a ventilator. "Brain death" was concocted to get beating hearts for transplantation. The Harvard Criteria, developed in 1968, was the first set of criteria for determining "brain death" to get beating hearts for transplantation.

This is called donation by "brain death" (DBD) or heart beating donor (HBD). Many more sets of criteria have been developed since then. A person can be declared "brain dead" by one set but still alive by other sets. The declaration of "brain death" legally is "in accordance with accepted medical standards" (*Uniform Determination of Death Act*). "Major differences exist in brain death guidelines among the leading neurologic hospitals in the United States" (*Neurology* January 2008). There is no consensus as to which set of criteria is used. Criteria to declare "brain death" are not evidenced based (*Neurology* July, 2010). Thus, there are no "clearly determined parameters commonly held by the international scientific community, [for] the complete and irreversible cessation of all brain activity" as postulated by Pope John Paul II (Address to International Congress of Transplantation Society, August 29, 2000).

Q: What is donation by cardiac death (DCD)?

A: Such donors have a functioning brain and do not fulfill any "brain death" criteria. The desire is to get their organs. First, a Do Not Resuscitate (DNR) is obtained. The patient is taken off the ventilator for 10 minutes; the patient's respiratory rate, inspiratory effort, age and other parameters are scored. This is known as the Wisconsin Score, which is used to predict (60 or 120 minutes after the ventilator is taken away for the second time) when the patient will be without a pulse. Note that the donor-patient's heart continues to beat, but the heart beat is not strong enough for a pulse to be recorded. When there is no pulse for 5, 2 or 1.25 minutes (depending on the locale), this is the signal to take the organs. The 1.25 minutes (75 seconds) was the time without pulse for two babies in Colorado when their beating hearts were cut out and transplanted (*NEJM* 8-14-10). Their hearts never stopped beating; the beating hearts were cut out and continue to beat in the recipients!

Q: What happens to the donor after vital organs are taken?

A: After the heart, whole liver, pancreas and/or intestines are excised, the donor is truly dead. When a portion of the liver, a part of one lung, one of two lungs, or one of two kidneys is taken, the donor will be weaker. When a portion of the liver is taken, regeneration of the liver might occur. When one kidney is taken, the donor will no longer have a kidney in reserve for himself and might have reduced kidney function. Long term follow up raises concern about related heart disease.

Q: What happens to the recipient?

A: The recipient must take anti-rejection drugs for the rest of his/her life. These are antiimmune, anti-nature drugs. The recipient exchanges one set of problems for another set of problems.

Q: What is the moral teaching of Pope Benedict XVI on this topic?

A: "Individual vital organs cannot be extracted except *ex cadavere*. [Pope Benedict XVI used Latin *ex cadavere*, from a dead body]. . . The principal criteria of respect for the life of the donator must always prevail so that the extraction of organs be performed only in the case of his/her true death" (cf. *Compendium of the Catechism of the Catholic Church*, n. 476).

Q: What does the Catechism of the Catholic Church teach about this?

A: Article 5; The Fifth Commandment, Section 2296 states: "*Organ transplants* are in conformity with the moral law if the physical and psychological dangers and risks to the donor are proportionate to the good sought for the recipient. Organ donation after death (Latin: *post mortem*) is a noble and meritorious act and is to be encouraged as an expression of generous solidarity. It is not morally acceptable if the donor or his proxy has not given explicit consent. Moreover, <u>it is not morally admissible to bring about the disabling mutilation or death of a human being, even in order to delay the death of other persons</u>." (bold and underline added by author.)

Q: Now, do you WISH to be an organ donor?

A: After full and explicit information is obtained, it seems one cannot be an organ donor because it is only healthy organs that can be transplanted. Within minutes after true death, organs are so corrupted that they are no longer suitable for transplantation. When taking part of a lung, a whole lung, a portion of the liver or one of two kidneys, the donor is weaker and has less reserve than what was given to them by the Creator.