In our primary care–based study in the United Kingdom, we observed that the prevalence of Rome II criteria IBS was 10.25% (123/1200) and that the prevalence of undiagnosed celiac disease in this cohort was 3.3% (4/123),[3] a prevalence similar to that observed by Locke et al.

Fasano et al[4] recently showed that case finding for celiac disease in high-risk groups in the United States reveals a hidden iceberg—the disease appears to be more common than previously recognized, as are delays in diagnosis. In addition, patients clearly benefit symptomatically from a gluten-free diet.[5] Finally, given the sample size in the study by Locke et al (n=50), their study had only a 20% power to predict a 3-fold relative risk (assuming a .05 significance level).

In view of these observations, we believe that it is imperative that we are more circumspect about dismissing a possible link between IBS and celiac disease. Larger population-based studies are required to help clarify whether this relationship exists in the United States.

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Iman A. F. Azmy, MD
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1. Locke GR III, Murray JA, Zinsmeister AR, Melton LJ III, Talley NJ. Celiac disease serology in irritable bowel syndrome and dyspepsia: a population-based case-control study. *Mayo Clin Proc*. 2004;79:476-482.
2. Dickey W, McMillan SA, Hughes DF. Sensitivity of serum tissue transglutaminase antibodies for endomysial antibody positive and negative coeliac disease. *Scand J Gastroenterol*. 2001;36:511-514.
3. Sanders DS, Patel D, Stephenson TJ, et al. A primary care cross-sectional study of undiagnosed adult coeliac disease. *Eur J Gastroenterol Hepatol*. 2003;15:407-413.
4. Fasano A, Berti I, Gerarduzzi T, et al. Prevalence of celiac disease in at-risk and not-at-risk groups in the United States: a large multicenter study. *Arch Intern Med*. 2003;163:286-292.
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In reply: We appreciate Sanders and Azmy's comments and their interest in our article.[1] We wish to clarify that our study design was different than inferred by Sanders and Azmy. The patients in our study were identified by the symptoms they reported on a survey mailed to a random sample of the community. Hence, ours was a population-based sample, not a sample of primary care patients. The study consisted of minimal-risk interventions, and thus the patients did not undergo small bowel biopsy as part of the study protocol. The results of celiac serologic testing were unknown at the time of the physician interview and did not play a role in any decisions about patient care.

Sanders and Azmy discuss the possibility of endomysial antibody–negative celiac disease. We recognize that it can occur and may be more common than has been appreciated previously.[2,3] However, we believe that it is important to highlight that false-negatives are a lesser issue in populations with a low prevalence of disease. Even if all the patients who were TTg-positive and endomysial antibody–negative in our study were considered to have celiac disease, the differences between the cases and controls are minimal.

Although Sanders and Azmy were also concerned about the power of our study to detect clinically relevant differences, we believe that the order of magnitude of the prevalence rates must be emphasized. Some may argue that the difference of 4% in patients with IBS and 2.6% in controls is clinically important. However, a study of 2700 subjects per group would be needed to detect this size difference (with 80% power at an α level of .05). Our goal was to estimate the importance of celiac disease in explaining why IBS symptoms are so common in the community. We did not mean to imply that there is no association between celiac disease and IBS or dyspepsia in the community. Our findings, however, support the conclusion that the vast majority of people with functional bowel symptoms in the community do not have occult celiac disease.

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1. Locke GR III, Murray JA, Zinsmeister AR, Melton LJ III, Talley NJ. Celiac disease serology in irritable bowel syndrome and dyspepsia: a population-based case-control study. *Mayo Clin Proc*. 2004;79:476-482.
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Unenabled Embryo Use

To the Editor: In the commentary by Guenin[1] in the June 2004 issue of the *Mayo Clinic Proceedings*, the author explained cogently why 6 arguments in support of using human embryos in research and therapy do not work. Fortunately, his "argument from nonenablement" also does not work.

Guenin advances the curious argument that the parents' conceptual intent regarding the embryo's future and the accident of where the embryo is located (petri dish vs uterus) actually determine the embryo's ontological status, ie, *what* it is. According to him, the decision to suspend the embryo's development at an early stage and donate the embryo for experimentation transforms it into an "epidosembryo," to which no "possible person" corresponds. This is transubstantiation by mental fiat and physical location—a truly miraculous occurrence!

The real issue is the ontological status of the *zygote* because all subsequent development consists simply of growth. Growth is *accidental* change, whereas conception is *substantial* change. A gamete implanted in a woman's uterus will never grow into a baby.

The Catholic Church teaches unequivocally that "human life must be respected and protected absolutely from the moment of conception."[2] If fertilization brings substantial change and the zygote formed is both alive and human—facts accessible to both philosophical and scientific analysis—a soul is present because the soul is the principle of life in a material body and the form of the body.[3,4]

Guenin's reference to the Vatican document *Donum Vitae* is misleading. That document does not teach that a person is a genome. It also does not teach that a person is a union of body and soul because this would preclude angelic persons and the 3 Persons of the Trinity. The classic definition of Boethius is "*persona est naturae rationalis individua substantia*," a person is an individual substance of a rational nature.[5] Actually, since person denotes a "who," not a "what," a person cannot be subject to strict definition, which refers only to the "whatness" of a thing. *Donum Vitae* explicitly affirms the *human* person as a substantial union of body and spiritual soul, the immediate creation of the spiritual soul of each human person by God, and the inviolability of the human person from the moment of conception. It also explicitly (and presciently) rejects the argument from nonenablement.[6]

Perhaps realizing the weakness of his argument, Guenin buttresses it with references to the embryo not being sentient or capable of forming preferences and adopting ends, thus confusing the actualization of various potencies with the underlying nature in which such potencies are grounded. He also buttresses it with references to the relief of human suffering, which is actually the utilitarian defense of embryo use he previously (and properly) rejected, a variant of the Machiavellian principle that the end justifies the means—a principle covertly or overtly embraced by today's brave new world of bioethicists. According to Guenin, "Therefore nothing that we might do to an epidosembryo can cause it discomfort or frustrate it." I would submit that killing is the ultimate frustration for the victim.

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1. Guenin LM. The morality of unenabled embryo use—arguments that work and arguments that don't. *Mayo Clin Proc*. 2004;79:801-808.
2. *Catechism of the Catholic Church*. 2nd ed. Washington, DC: United States Catholic Conference; 2000.
3. Aristotle. *De Anima (On the Soul)*: *The Complete Works of Aristotle*. Barnes J, ed. Princeton, NJ: Princeton University Press; 1984.
4. Denzinger H. *Enchiridion Symbolorum (The Sources of Catholic Dogma)*. Fitzwilliam, NH: Loreto Publications; 1955.
5. Tixeront J. *History of Dogmas*. Westminster, Md: Christian Classics; 1984.
6. Sacred Congregation for the Doctrine of the Faith. *Donum Vitae*. Vatican City; 1987.

To the Editor: In general, it is not possible to espouse any position that is truly free of bias, including the one I shall mention at the end of this letter. That is certainly true of the article by Guenin[1] on the morality of embryonic stem cell research.

I read Guenin's article with great interest, being both a physician and an ordained minister of the Roman Catholic Church. Guenin's argument from nonenablement appears to flow primarily from one simple premise, that the biologic mother of an embryo has the authority to decide that embryo's fate and can therefore offer it for research or for intrauterine development, at her own choice. This is a premise that permits yet another interpretation.

The other position is that there is no human being who has such authority, because such authority rests only in God. This is a position that certainly seems irrational to us limited-view human beings, who can see only the physical world around us. However, I believe it is the ultimate truth on which all the other arguments must be based. Given this premise, no argument would seem "acceptable" to allow embryonic research. In any case, this is the position from which the arguments must start. As stated previously, this is my personal bias, although it certainly dovetails with that of many others in our society, not just those in my own church community.

Undoubtedly, Guenin will claim some ability to read the mind of God in this regard, since he did so twice in his commentary. However, having admitted my own bias in this regard, I invite Guenin to admit his.

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1. Guenin LM. The morality of unenabled embryo use—arguments that work and arguments that don't. *Mayo Clin Proc*. 2004;79:801-808.

To the Editor: Does a human life begin at birth, during the formation of the neural tube, when the heart starts beating, or when a human form is recognizable? Logically, human life begins at conception, which means at the moment of the union of an egg and a sperm. Nonenablement, as discussed by Guenin,[1] is an interesting concept but inadequate to justify mass cannibalism of human embryos. Just because nonenabled embryos will otherwise perish, it does not follow that we have a right to manipulate and cannibalize their life.

The concept of a person being a union of a soul and a body implies that the 2 are joined at the moment of conception and grow together. An embryonic spirit/soul is still a spirit and soul. Once we deem an embryo unenabled, is it then nonhuman? Guenin strips all human personhood from unenabled embryos but quickly wants to cannibalize their tissue for replacement *human* organs. The basic intellectual contradiction is as glaring as the gaping portal onto the path descending into the moral abyss that is paved by the good intentions of scavenging embryonic and fetal stem cells.

Aborted fetuses are "unenabled." Why not use aborted tissue for research as well? It could help ameliorate the feelings of guilt if a woman knew her dismembered or brain-evacuated child could provide tissue and organs for other people. Why don't we just breed unenabled anencephalic (no brain) babies, grow them in tanks, and then harvest their organs? How about killing severely retarded people (who may