

佛教與 H 提案：

曼都仙諾郡禁止基因改造生物的生長與養殖

Buddhism and Measure H: Banning the Growing and Raising of Genetically Modified Organisms in Mendocino County

易象乾教授 2004 年 2 月 14 日講於萬佛城大殿
BY RON EPSTEIN, PH.D. AT THE CITY OF TEN THOUSAND BUDDHAS ON FEBRUARY 14, 2004
近廣節 中譯 CHINESE TRANSLATION BY JIN GWANG SHR

我很感謝法師邀請我今晚來談談。也許有些人在想 H 提案和佛法有什麼關係 - 我們需要利用聽經的時間來瞭解它？我們應該記得一切法都是佛法；上人也教導我們，我們住在哪裡就對那個國家要盡義務。在世界上，美國是少數的幾個國家 - 人民能有機會自由地修行佛法，而不受到政府的干擾或壓迫，因為這是個民主國家，有宗教自由。為保持宗教自由和國家的民主，我們這些國民，不論居士或出家眾，都必須負起責任。如果你是一國的公民，你就有義務參與明智的選舉。如果你是老師，就有責任教育學生知識和盡國民的義務。如果你是學生，就該瞭解何謂負責任的公民。如果你都不是以上的身份，你還是有責任去盡力減輕這國家內一切有情眾生的苦。基於以上的原因，我們應該瞭解 H 提案以及它與佛法的關係。

這是佛教首次在一个真正民主的國家出現，在佛教的歷史上這種選舉的義務從未有過。我們該瞭解佛教僧伽和居士與民主政府的關係 - 參加選舉，確保我們有賢明的民意代表，確保我們有好的法令，瞭解選舉的內容等等，這些在佛教裡都是前所未有的。上人常說他對這國家很感恩，願意盡力幫忙，他總是鼓勵我們做公民的該為政府選賢與能。

I would like to thank the Sangha for inviting me to speak with you tonight. Some of you may be wondering what Measure H has to do with the Buddhadharmā and why we are taking time during the period for sutra lectures to discuss it. I think it's very important to remember that all dharmas are Buddhadharmas, and that the Venerable Master Hua taught us that we have a responsibility towards the country in which we are living. This is one of the few places in the world where we can freely practice Buddhism without interference or oppression from the government. This is a democratic country in which the principle of freedom of religion is practiced. In order to protect freedom of religion and to maintain the democracy in this country, all the people in the country, including us—both lay Buddhists and monastic Buddhists—must act responsibly. If you are a citizen, you have the responsibility to vote intelligently. If you are a teacher, you have a responsibility to teach the students how to be knowledgeable and responsible citizens of this country. And if you are a student, you should learn what it means to be a responsible citizen. And if you are in none of those categories, you still have a responsibility to do whatever you can to lessen the suffering of all the sentient beings in this country. That is why it is important that you understand about Measure H and its relationship to the Buddhadharmā.

Here in the United States is really the first time that Buddhism has existed in a truly democratic country. Throughout most of the history of Buddhism, this kind of responsibility was not an issue. And so the relationship of the Sangha and the Buddhist laypeople to a democratic government—voting, making sure we have good representatives in the government, making sure that we have good laws, and that we understand what we are voting for—all these things are relatively new in Buddhism. The Venerable Master Hua often said that he was very grateful to this country and wanted to do whatever

在3月2日的選舉，有兩個重要的提案都會直接影響到萬佛城和法界佛教大學，一是選舉代表本區的郡委員，另一個則是H提案。H提案如果通過，法令將禁止在曼都仙諾郡做基因改造生物的生長養殖。我聽說城內有很多選民收到關於這個議案令人混淆的選舉文宣，而不知到底該反對或贊成它，這是為什麼我要來跟大家討論這個問題。

基因改造生物包括植物、動物、細菌、病毒、樹木、昆蟲及各種有情類都可以由基因工程重新變化，以人造的方式把一種生物的去氧核糖核酸（DNA）移植到另一種生物上；例如植物的去氧核糖核酸移到動物身上，或動物的移到植物上，或甚至於人的去氧核糖核酸移到你所吃的蔬果裡，這些都是基因工程改造的基因改造生物（GMOs）的例子。這些基因改造生物都不是經過自然繁殖或交配接種而產生的，而是在去氧核糖核酸基本結構上的改變，去氧核糖核酸是決定這個生物如何成長的基本模式。去氧核糖核酸包含基因，基因再製造出核糖核酸，接著製造核酸，核酸再製造蛋白質。蛋白質是一切生物的基本構造。也就是說，基因工程能非自然性地，跨過生物種類的界線來改變所有生物最基本的去氧核糖核酸。將來很可能在無意之中，科學家會改變人類的去氧核糖核酸，使支持我們身體修行以便開悟的系統受到破壞。

讓我告訴各位為什麼我會成為H提案的發起人。在1990年代早期，我讀到科學家把蟲和動物基因放在蔬菜裡的報導，因為我是素食者所以我就很關心它，我可不想吃到有蟲或動物基因的食物，我想那是不如法、不純淨的蔬菜。所以開始調查這回事，結果不但發現這種蔬菜真的已經培植出來，而且還發現他們竟然把人的基因也放進蔬菜裡，因為法令並未規定要加標籤，所以根本無法得知你吃的是否是素食

he could to help it, and he always encouraged those of us who were citizens to make sure that we voted and selected wholesome people to hold public office.

In the election coming up on March 2, we have two very important tasks that affect the City of Ten Thousand Buddhas and Dharma Realm Buddhist University directly. One is voting for the county supervisor for our district and the other is voting on Measure H. If approved, Measure H will ban the growing and raising of genetically modified organisms in Mendocino County. I've heard that many registered voters at the City of Ten Thousand Buddhas have gotten some confusing campaign literature in the mail about this particular measure and don't know whether to vote for or against it, and that's why I've come to discuss it with you.

Genetically modified organisms are organisms (plants, animals, bacteria, viruses, trees, insects, all kind of sentient life forms) that are made or transformed through genetic engineering, which involves artificially moving the DNA from one species to another species. For example, using genetic engineering you can put plant DNA in animals, or animal DNA in plants, or human DNA in the vegetables or fruit that you eat. All of these are examples of genetic engineering creating genetically modified organisms (GMOs). These GMOs are different than anything that would naturally occur or that would be developed through breeding or hybridizing. GMOs have fundamental changes in their DNA, which is the program for determining how the particular organism will develop. DNA contains genes, which then create RNA, which then creates nucleic acids, which then creates proteins. Proteins are the basic building blocks of all living things. In other words, genetic engineering changes the fundamental DNA of all living things in a way which is very unnatural and cuts across species boundaries. It is very possible that in the future, scientists will, probably unintentionally, change human DNA, so that the bodily support systems for the process of self-cultivation that leads to enlightenment are damaged.

Now I want to tell you something about the history of how I became an author of Measure H. In the early 1990's I read that scientists were putting insect and animal genes in vegetables. As a vegetarian I was very concerned, because I didn't want to eat vegetables that had insect and animal genes in them. I felt that this violated Buddhist principles about pure vegetarian food, and so I started looking into this matter. Not only did I find out that such vegetables were actually being developed, but I also found out that some scientists were putting humans genes into vegetables. Since there were no laws to require labeling of GMO vegetables, there was no way to know whether you were eating pure vegetables or vegetables with weird genes in them. In 1993 I wrote a short article for Vajra Bodhi Sea about the



。那時我就給〈金剛菩提海〉寫了一篇短文說明基因工程對素食者造成的危機，希望法總的佛友都能知悉。那時的編輯委員會最後把文章呈給上人定奪，上人說：「這是非常重要的，你們必須趕快登在〈金剛菩提海〉裡，並且要引起大家的注意。」後來上人問我為什麼寫了這篇文章？我說：「這種科技發展很危險，因為它不如法，而且對環境也不好。」上人就說：「你把它寫出來真好。你說的完全對，我們必須採取行動，否則基因工程就會危害到這個世界，你還應該繼續寫。」1996年法總的董事會正式通過了一項決議，全文如下：「法總相信基因工程所生產的食物不合佛法，它沒有保證，篡改自然形態，我們的世界在最根本、最危險的層次受到它的影響。沒有標籤的基因工程食品就違反了宗教自由。因為沒有標籤，佛教徒就無法避免買到基因改造的食物，以致令佛教素食者違背了他們基本的信仰教理。佛教素食者也無法避免買到含肉類基因的食品。法總鼓勵所有國家都應對基因工程的食物加上標籤。」

不論您受過菩薩戒並且吃素，或者您未受戒但想吃素，您都應該關心經基因改造的生物。因為目前食物沒有標明，但估計美國約有70-80%包裝食品都是經基因改造卻未註明的。除非能自己耕種，否則您就要買有機的食品。依國家有機食物標準是食品內基因改造生物不能超過1%，所以您如果想要吃純素，大概您只有去買有機食品。

有些人或許認為：「這個問題美國政府會管制的，像美國食物毒品行政處、農業部或環保局應該瞭解，並細心的做實驗；也應該推廣相關法規並敦促食物加標籤，所以我們可以清楚食物的安全性。」一個理想的民主國家應如此。歐洲聯盟對基因改造生物的危險較敏感，因為他們大都不讓基因改造的生物進入市場，進口的基

dangers of genetic engineering for vegetarians, because I wanted all of the members of DRBA (Dharma Realm Buddhist Association) to become aware of the problem. The editorial board of Vajra Bodhi Sea eventually took the article to the Venerable Master, who said that this was really, really important and that they should publish the article right away in a fashion that would draw everyone's attention to it. Soon afterwards the Master asked me why I wrote the article, and I said, "Well, I think this development in science and technology is very dangerous. It goes against Buddhist principles, and it's going to not be good for the environment." The Master then told me that it was very good that I had written the article, that I was completely correct, and if we didn't do something about it, genetic engineering would cause tremendous damage to the world. He then strongly encouraged me to continue to write about the dangers of this genetic engineering.

In 1996 the Board of Directors of the Dharma Realm Buddhist Association (DRBA) passed a formal resolution about genetically modified organisms, which reads: "DRBA believes that genetic engineering of food is not in accord with the teachings of Buddhism. Buddhism considers genetic engineering of foods to be unwarranted tampering with the natural patterns of our world at the most basic and dangerous levels. DRBA believes that the lack of labeling of genetically engineered food is a defacto violation of religious freedom. Without labeling, Buddhists have no way to avoid purchasing foods that violate their basic religious beliefs and principles. And Buddhist vegetarians have no way to avoid purchasing foods that contain genes from non-vegetarian sources. The DRBA urges all countries to require labeling of all genetically engineered foods."

Therefore, if you have taken the Bodhisattva precepts to eat pure vegetarian food, or if you have not taken the Bodhisattva precepts and you want to eat pure vegetarian food, this is an issue that concerns you.

It is estimated that about 70-80% of all the packaged food in the United States has GMOs in it already, even though they are not labeled. The closest you can come to avoiding GMOs in your food, other than growing your own food from organic seed, is to buy organic food, because according to the National Organic Standard, anything that is labeled as officially certified organic cannot have more than a very small amount of GMOs in it. In all other cases, you won't know whether you are eating GMOs or not.

Some of you may be thinking "Well if there is a problem with GMOs, the U.S. Government Food and Drug Administration or the Department of Agriculture or the Environmental Protection Agency should be aware of it, do careful testing, and then propagate regulations and do labeling, so that we can know what is safe and what is not safe." In an ideal democracy, that would be the case. In the



因工程食品一律都必須標示；美國卻沒有這麼做。為什麼美國沒有？我國的民主受到嚴重的損壞，最簡單的解釋是在商業和政府之間有一個旋轉門——所謂「官商勾結」。由克林頓開始至今日美國總統布希的内閣，許多生產基因改造生物的跨國公司，以大筆政治獻金贈給克林頓總統或布希總統，以及很多的參議員和民意代表等。因為他們對政府很有影響力，克林頓總統和布希總統就會任命這些商業人士去制定有關這些行業的規章，讓企業界告訴政府他們自己的產品哪些安全或不安全，政府不用獨立進行任何測試。也就是說，官方對基因改造生物缺乏有效的監控，或客觀的測試，以確認它是否會危害人類和我們的環境。由於政府的疏忽，我們大家在基因改造生物計劃中不自覺地成了天竺鼠，進行這個堪稱人類歷史上最大的實驗。基因改造的生物一旦被釋放到我們環境裡，就不能再收回了。經過基因工程改造的生物，會有新合成的去氧核糖核酸，他們會永遠污染人類、動植物的基因。如果美國通用公司賣出有問題的汽車，廠商必須告訴所有購買的消費者：「我們不知道產品有瑕疵，請把車退廠修理，或換部新車。」可是基因改造的食物送出來後，就算有問題，也無法再做任何改變了，因為它們已經成為我們身體的一部份，成為自然環境的一部份。

因為國家未做好聯邦政府應做的工作，所以我和幾位關心人士就把它變成提案讓大家投票表決。選票上的提案是有所限制的，因為有聯邦法令的限制，我們就須服從而無法更改，例如：對於州立的商業法我們不能在郡裡立法改變。所以我們只能盡力而為在本郡保護居民和環境。這是一個很獨特的方式，所以這些國際生物科技公司使出各種招術來反對這提案；在本郡投注了大筆資金以製造誤導大眾的不實資訊——「這種提案基礎不夠科學、花費

European Union there is a lot more sensitivity to the dangers of GMOs, and for the most part they are not imported into the European Union, and those that are must be labeled. That is not the case in the United States. Why? It is because here in the United States there has been a serious breakdown of our democratic processes on the national level. The simplest way to explain that breakdown is what is known as a "revolving door" between industry and government. In other words, starting with the Clinton administration and now the administration of President Bush, the multinational corporations who make GMO products have contributed tremendous amounts of money to both President Clinton and President Bush and also to many senators and representatives. Because they have a tremendous amount of influence in the government, both Presidents Clinton and Bush appointed people from these industries to do the regulation of these industries, and allowed the industries to tell the government whether their products were safe or not, without the government doing any independent testing. What this means is, on the national level, there is no effective oversight of GMOs and no program of objective testing to see whether these products are safe for human beings and the environment. Because of this governmental failure, we are all unwilling and uninformed guinea pigs in what is probably the biggest experiment with human health and well-being in all of human history. Not only is that the case, but when these GMOs are released into the environment, they cannot be recalled. They will genetically pollute humans, animals, and plants forever with novel combinations of DNA. Suppose General Motors sells a car model that has some defects. According to the law, General Motors must tell everybody who has bought that car, "We didn't know it, but there was a defect in the car; please bring it back and we will fix it or give you a new car." But if we find out that there are dangers or defects in these GMO products, they cannot be recalled. They will be part of our physical nature, and part of the nature of the environment as long as we can conceive.

Because the federal government is not doing its job, I and a number of concerned citizens got together and put Measure H on the ballot. This ballot measure is limited, because we can only regulate things that are not pre-empted by federal law. For example, we cannot make a law at the county level about anything that has to do with inter-state commerce. And so Measure H is the best that we can do right now to protect people and the environment in Mendocino County. Since the measure takes a novel approach, the banning of growing or raising of GMOs, the international bio-tech companies are very concerned about it and are doing whatever they can to stop it. They are pouring a lot of money into the county to give people false or misleading information about the measure. They are claiming that it is



大、稅款會增高、會干擾隱私權。」這些都是騙人的，可是我們沒有辦法制止他們這麼做，他們有勢又多金。

修行大乘佛法是要利益眾生的，所以我們有個特別的責任，不光是為我們自己的福利，也是為瑜伽市和曼都仙諾所有的鄰居，都應該要主動周遭發生的事。您如果想要更深入地瞭解佛教和基因工程生物的關係，請參閱刊登在〈金剛善提海〉和〈東西方宗教雜誌〉上本人的文章。謝謝大家邀請我今晚來這裡和您分享。

編按：經選民投票，此提案已獲多數通過，正式成為法令。萬佛聖城所在的曼都仙諾郡，成為美國第一個禁止種植及營養基因改造生物的郡縣！

(上接第 37 頁)

我以前就是念念經，根本就坐不住，我的腿是非常硬的，現在經過訓練之後，可以坐一個小時，主要是忍，這是我這次的收穫。因為我知道坐禪的好處，所以我選住的地方，離法界宗教研究院很近的，每天早晨六點鐘就去坐禪一小時。

坐禪中腿疼是很苦惱的事情，因為會坐不住；另外一方面又感到腿疼也有它的好處，因為腿疼每天不睡，不會感到想睡覺，每天早晨天還沒亮，我就去柏克萊佛寺，是比較暈，但等打坐完畢出來之時，就感到自己精神非常直爽，感覺非常好，所以腿疼也有它的好處，這是我自己的一點體會。

最後，我有一個最真心懇切的心願，各位法師，日後如果有機會，請到大陸去宣揚上人的佛法，讓很多饑渴的大陸人民能夠聽到正法，能夠把這個失去的東西再找回來，這是我最高誠懇切的希望。

based on bad science, that it will be very expensive, that it will raise taxes, and that it will interfere with people's privacy. None of these claims is true, but there is no way to stop them from spreading this disinformation. They are very powerful, and they have a lot of money.

Part of Mahayana Buddhist practice is taking responsibility for the welfare of all sentient beings, and that means that we have a special responsibility, not only to ourselves and our own welfare, but also to our neighbors in Ukiah and Mendocino County. That means that we have to be aware of what's going on around us. Those of you who would like to find out more about Buddhism and genetic engineering can take a look at my articles published in Vajra Bodhi Sea magazine and in the Religion East and West journal. You can also look at my website "Genetic Engineering and Its Dangers." Thank you for inviting me to come and discuss Measure H with you.

Editor's Note: Measure H was approved by the voters and is now law Mendocino County, where the City of Ten Thousand Buddhas is located, is the first county in the United States to ban the growing or raising of GMOs.

(Continued from page 37)

I would recite sutras occasionally. Basically, I could not sit still. My legs were very stiff. After some training, I can now sit still for one hour. The most important factor is patience. This is what I learned. Since I am aware of the benefits of Chan meditation, I chose to live very near the Institute for World Religions (Berkeley), where I join their hour-long Chan meditation every morning at 6 o'clock.

The leg pain you experience in Chan meditation is anguish. You can hardly sit still. On the other hand, the benefit of aching legs is you cannot doze off since you are in pain. When I go to Berkeley Monastery before dawn, I feel sleepy. When I leave after sitting meditation, my energy level is high and I feel great. This is my own observation. Aching legs do serve a purpose.

Lastly, I have a very sincere wish. I wish that should the chance arise in the future, I beseech that our Dharma Masters will go to China to propagate the Buddhadharma taught by our Venerable Master. This would enable more people starving for Buddhadharma in China to hear the Proper Dharma and help them retrieve what they have lost. This is my most earnest wish.

