Kosher and Ethical Animal Products

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In "Why is there no kosher meat or poultry that is certified humane?" (*Hakirah* 24, Spring 2018, 173–190), Heshey Zelcer and Malky Zelcer describe "problematic methods" supposedly used in commercial production of food from animal sources, present the Torah's view of how to properly treat animals, and bemoan the lack of concordance between the two. They advocate that the Jewish community have a mechanism to certify that meat and poultry are humanely raised.

All of us have worked in the science and medical fields, three of us (AZZ, AG, EB) are *shochtim*, each for over three decades, and we have keenly observed how the issue of animal welfare, and pain and suffering, has become central in Western society. That is a very good thing. However, endemic in Western society is taking social concerns to the extreme, in this case putting the animal's treatment above human welfare.

We want to assert from the get-go that we are in favor of the finest animal welfare in the production of animal products. However, emotional, societal, and philosophical preconceived notions of suffering often prevent a clear and balanced assessment of both the reality of modern animal husbandry and the halachic definition of *tza'ar ba'alei chayyim*.

Without having been to so-called factory farms, commercial egg laying or broiler houses, an accurate assessment cannot be made. There is much "fake news" that often appears in YouTube videos smuggled out

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of facilities that do not reflect the vast majority of commercial animal husbandry operations. In our opinion, there are both general methodical issues and specific factual errors in the article that will affect how halacha views these topics.

Surely the authors have good intentions in their quest to improve animal welfare. The concept of treating animals appropriately¹ originated with the Torah, and its discussion in Jewish literature predates its appearance in most other cultures by millennia.

Definition of Tza'ar Ba'alei Chayyim

As the authors noted (p. 178): "Halakhah prohibits inflicting gratuitous pain on animals." The prohibition of *tza'ar ba'alei chayyim* is not "causing pain to animals." Rather, it is to precipitate or increase the suffering of an animal for an unjustified reason. The Torah gives us the right to use animals for human needs.

There is a debate in the Talmud if the prohibition of *tza'ar ba'alei chayyim* is a biblical or rabbinic prohibition,² and the majority of Rishonim (e.g., Rambam,³ Rif⁴ and Rosh⁵) rule that it is a Biblical prohibition. It therefore takes precedence over a conflicting rabbinic decree such as *muk*-*tzah*.⁶

An illustrative example of a halachic approach to the definition of *tza'ar ba'alei chayyim* and its practical implications is that of the Nodeh B'yehudah (Rav Yechezkel Landau, b. 1713). He was asked if it is permissible to go hunting with a "*kaneh aish*," a rifle.

The Noda B'yehuda raised several potential issues. He ruled that in hunting there is no prohibition of *tza'ar ba'alei chayyim* because the animal was killed and not left to suffer. There is no problem of *bal tashchit*, waste, because even though a Jew could not eat the meat because the animal was not properly slaughtered, halachah accepts that it could be sold to a non-Jew or fed to animals. Yet it was clearly not acceptable Jewish behavior to

¹ We dislike the term "animal rights," although we may use it for convenience, or for that matter "human rights," and prefer the notion of obligations that humans have towards animals or obligations a person has towards his fellow persons.

² Baba Metziah 32a.

³ See Kesef Mishna, Hilchot Rotzeach v'Shmirat Hanefesh 13:9.

⁴ Baba Metzia 32b.

⁵ Ibid.

⁶ Shulchan Aruch OC 305:19.

hunt for recreation. His prohibition on hunting was based upon the danger of going into the forests and accidental injury, unless it was the person's livelihood. Apparently if there was no danger in hunting, it should be permitted. Yet he ends his thoughts by finding an underlying philosophical obstacle with hunting.⁷

I am puzzled by the essential aspect of the question. We do not find [in the Torah] hunters except Nimrod and Esav. And it is not the way of the descendants of Avraham, Yitzhak, and Yaakov.... how can it be that a Jew would kill a living being with his own hands just for no purpose other than spending his time on the pleasure of hunting... and since hunting is not his profession and his intent is not for financial gain, his actions are nothing more than cruelty.⁸

Legitimate Need versus Wanton Pain

This is the crux of the matter. Chazal had to balance the legitimate need for animal products and use, which by definition requires inflicting some suffering to the animal, with an exquisite sensitivity, unseen in world history, to the needs and suffering of animals.

Chazal's definition of *tza'ar ba'alei chayyim* is different from Western society's definitions. If there is a valid human need for using the animal, despite the animal suffering, *tza'ar ba'alei chayyim* does not apply. The mishna thus relates that Rabbi Yehuda suggested cutting the toe off a white chicken before selling it to an idolater so he would not use it for idolatrous purposes.⁹ Muzzling an ox while threshing is a prototypical example of *tza'ar ba'alei chayyim*, yet the mishnah mandates muzzling an ox that is threshing Temple produce so the grain is not used in profane ways.¹⁰ Such pain does not fall under the forbidden treatment of an animal.

Surprisingly, the article did not mention *foie gras*, a common target for animal rights advocates. In producing *foie gras*, large quantities of food are

⁷ It is worth noting that *zayid*, usually translated as hunting as in this context, often is more precisely trapping. *Zayid* for essential food was necessary and even had a halachic component. Jewish trappers knew the local fauna well and were thus relied upon to give testimony that there was a tradition for the kashrut of a specific bird. The *Shulchan Aruch (YD* 82:2) says: "A trapper is believed when he says my trapping rebbi permitted this bird." The Shach explains it very clearly, "his hunting teacher and not his Torah teacher."

⁸ Shu"t Nodeh B'yehudah, Tinyana YD:10

⁹ Avodah Zara 1:5

¹⁰ Meilah 3:6.

forced into the goose's esophagus to produce an enlarged, fatty liver. Some people think this causes pain and discomfort and that it is being done merely for the sake of human enjoyment of the liver. It has thus been banned in many jurisdictions, including in Israel, for perceived reasons of animal welfare. However, JMR and EB have personally observed how the birds come willingly to their feeders with their mouths open, suggesting there is no pain. Furthermore, for hundreds of years Jews in eastern Europe fattened geese for the schmaltz and liver, and no *poskim* even mention the issue of *tza'ar ba'alei chayyim* with regard to force-feeding until the late 20th century. The single concern raised against¹¹ this practice by the rabbinic authorities, who saw the geese in their backyard and were familiar with the procedure, was that of *treifot*. The concern was that force-feeding may cause difficult-to-detect perforations in the esophagus, rendering the animal a *treifa*.¹² Any purported pain and suffering was not the reason to prohibit it.¹³

The article cites over a page (pp. 179-180) of quotes from *Sefer Hasidim*. Not all statements of R. Yehudah haChasid are accepted as halachah. For example, the authors did not quote section 1038 that condemns the raising of pet birds and admonishes that one should rather give to charity the money one would have spent on the bird food. The warning of *Sefer Hasidim* not to cut the tail of an animal is logical. Indeed, modern studies confirm what the *Sefer Hasidim* said. It has been found that fly numbers are greater on tail-docked cows.¹⁴ In general, it should not be done on most animals and the trend is to move away from tail docking. Several European countries have prohibited tail docking of dairy cattle and in Israel tail docking of dogs is illegal.

¹¹ On the other hand, the rabbis were aware that geese used to being fed in this manner would not eat any other way and thus, out of concern for *tza'ar ba'alei chayyim*, permitted, with certain stipulations and against the normative ruling, force-feeding geese on Shabbat (*Mishna Berurah* 324 27).

¹² *Yoreh De'ah* 33:9.

¹³ Pain although difficult to measure is possible to detect, but suffering is an abstract concept for which it is unclear whether lower animals can suffer, and we are as of yet unable to measure it.

¹⁴ Eicher, SD, Morrow-Tesch, JL, Albright, JL, Williams, RE. 2001. Tail-docking alters fly numbers, fly-avoidance behavior, and cleanliness, but not physiological measures. Journal of Dairy Science 84:1822–1828.

Research, Hands-on Knowledge, and Facts

While we strongly applaud the intentions behind the article, we are troubled by the lack of factual basis to much of it. The authors concede that they did not have any firsthand information and that their data are based on "what has been reported by authors, activist groups and news agencies" (p. 175) and "we therefore use sources from activists who knowingly or not may overstate their case" (n. 8). We feel that, when writing an article with such a sweeping condemnation of common practice and centuries of experience, farms should have been visited, experts consulted, and the scientific literature reviewed. To do otherwise is irresponsible. In our opinion, this article does not meet the usual rigorous standards of *Hakirah*, and was clearly not sent to outside expert reviewers.

The question asked in the title, "Why is there no kosher meat or poultry that is certified humane?," which is asked again as the concluding sentence of the first paragraph, was answered in the essay itself near the end of the article (pp. 186-7). Every one of the animal welfare organizations whose approval the authors are looking for deem *shechita*, which we clearly believe to be the best way to slaughter an animal, as cruel and inhumane and think it should be outlawed. They would therefore never certify any kosher meat! This "unnerved" the authors. Indeed, it should give one an indication that the "standards" used by such organizations do not necessarily have any relationship to the Torah's values and often not to the science either.

Days of Yore

The article establishes a dichotomy between the caring family farming of years past and the unsympathetic factory farming of today, when in fact that distinction is fallacious. In the US today, the overwhelming majority of broiler farms and milk farms are family farms.¹⁵ They may be using modern techniques, keeping animals indoors where conditions can be controlled, and be larger than the traditional farm in most people's childhood notions. They might be called "factory farms" but they are still family farms. According to the United States Department of Agriculture (USDA),¹⁶ over 95% of US farms are family farms and they produce over 78 percent of the value of all farm products sold. Thus the claim that "family farms practically ceased to exist" is simply not true. Their idyllic

¹⁵ True, they are often larger than farms were in the past, and the families likely incorporated for financial and other reasons, but they are still family farms.

¹⁶ https://nifa.usda.gov/family-farms.

description of driving along NYS Route 17 to the Catskills has not changed, and one will still see the cows grazing peacefully.

And are those farms, described wistfully in the utopian vision (p. 184), really such a good idea? That fanciful notion is an urban myth regarding the farms of yesteryear. The animals on those "traditional" farms had shorter lives, higher mortality, greater stress, and less productivity. Winter on those farms is neither discussed nor described. No cows ever went out to pasture for the many months of frozen ground and limited food.

The article opens with the judgmental, and probably factually incorrect, statement that "farm animals today are treated much worse than they were fifty years ago." The reality is different. In a "factory farm" where the bottom line is the bottom line, the need to have animals less stressed is critical for optimal production.

The article targets the "factory farm," a phrase laden with negative connotations. But what is wrong with these farms? They are efficient and get the job done well. The farmer wants to keep the animals "happy" because otherwise the farm is non-competitive. Animals today are in a better place than in the past. The individually owned donkeys or camel and cattle herds of the Bedouin or African shepherds are certainly no better off than the animals on "factory farms" and in actuality probably worse off. As will be shown, "factory farms" have reduced the price of animal products and reduced the cost to the environment to produce a unit of product.

Old Facts

The article (p. 175) repeats the old canard that all "factory farmed" animals are treated with hormones to make them grow faster. In the US and Israel, absolutely no poultry receive any form of hormones, it's illegal, and they have not been used for many decades. And while it is true that it used to be standard to give antibiotics to speed up growth, in the US the vast majority of poultry are no longer given any antibiotics. The government is also working with the farming community and veterinarians to ensure that antibiotics are used when medically required for the animal's health, i.e., when needed to keep the animal from pain and possibly death. The veterinary and animal-feed industries are all working together to find alternatives to antibiotic growth promoters. Ironically, due to pressure from "animal rights" groups, antibiotics are often not even given to treat flocks that get sick, because then they would be unmarketable, which often results in them dying from their disease. Finally, antibiotics should not be part of this discussion. It may have a bearing on public health, and indeed a significant one, but it has nothing to do with *tza'ar ba'alei chayyim*.

In Israel, where bulls are often not castrated,¹⁷ they are sometimes given the female hormone estrogen. But this has to be put in perspective: A 220 g (roughly 6 ounce) steak from an animal given a hormone implant contains 42% more estrogen than a steak from a non-implanted animal. But that additional quantity is minute, 5.1 nanograms to be exact. One nanogram is one-billionth of a gram. By contrast, one birth-control pill, taken daily by more than 100 million women worldwide, can contain 35,000 nanograms of estrogen.

Layers (chickens raised for eggs) are described as living in constant pain due to the mesh flooring. How animal rights activists know they are in pain is difficult to ascertain. However, observing many such chickens in many poultry houses does not give any indication of discomfort. And the claim that "their claws sometimes grow around the wire cages" is simply false. The assertion that because of the conditions in which they are raised, they are bruised and lose their feathers actually describes a rare occurrence.

The cages are indeed stacked as the article says (p. 176), but unlike what the authors claim, it is not true that the chickens are covered in feces. Anybody reading this should realize that it simply makes no sense. The chickens would get sick, die, and produce no eggs. Rather, the cages are staggered, or, if not, a conveyor belt under each row of cages removes the feces so neither the bird nor the eggs are covered in feces as described, unlike alternative methods of raising layers where contact with feces for both the bird and the eggs is common.

¹⁷ Castration is a biblical prohibition in both humans and animals. Neutering is a good example of the inconsistent philosophy of animal rights activists. This procedure would anthropomorphically seem to be "inhumane." Indeed, in Norway it is illegal to neuter a dog if it is not medically indicated. There are also many health risks and diseases that affect neutered animals in higher percentages than non-neutered animals. In Neutering Dogs: Effects on Joint Disorders and Cancers in Golden Retrievers, PLOS One 2013, spayed golden retrievers exhibited a higher incidence of hip dysplasia (twice as common), knee ligament damage, lymphatic cancer in males (3 times as common), blood vessel wall cancers (4 times more common in females) as compared with non-neutered animals. Yet inexplicably, many "animal rights" groups are strongly in favor of this surgical procedure.

Societal Advantages of "Factory Farms"

Eggs, a food with high nutritional value, are reasonably priced and accessible to even lower income people because, as the authors note, chickens today can lay upwards of 315 eggs annually. The article tells us that this productivity is due to the forced molting, feather shedding to promote new growth, which they undergo. This is inaccurate. It is because we now understand chicken physiology, and this high productivity is because chickens are tricked into thinking it is perpetually spring, which is maintained by giving the birds 16-17 hours a day of light. There is no stress, pain, or suffering involved.

In some places, after about 11-12 months of productivity, there is a forced molting to enable a second season of productivity. In other places, the forced molting is not done; the chickens are euthanized after 15 months of production and new layers are used. When forced molting is used, it is used to extend the time of productivity and reduce the number of chickens that need to be raised, and not to increase the productivity in the first year. It should be seen positively by animal rights activists because fewer layers are euthanized and fewer males are killed. In the past this forced molting might have involved starvation and no water, but work in recent years along with an industry commitment to animal welfare has allowed for the development of molting systems that do not require such harsh measures to be successful. In the EU forced molting has been outlawed and similar legislation is pending in Israel.

The statement that the calf is separated from its mother shortly after birth is true. This is done because the data show that, if they will be separated, it is preferable to separate them immediately, before any bonding takes place.¹⁸ Thus, the last half of the paragraph, "a calf wants its mother and the mother wants to care for its baby" are pure speculation and anthropomorphism. Visit a dairy farm and observe the newborns and young calves. One perceives no sense of discomfort or pining for mothers.

Selective breeding (mentioned on p. 176) is indeed used to make raising chickens more efficient. But the claim that this has led to "90% of broiler chickens effectively unable to walk" is incorrect. Anybody reading such a statement should realize that it would be impossible to raise such

¹⁸ Weary DM, Chua B. Effects of early separation on the dairy cow and calf. 1. Separation at 6 h, 1 day and 4 days after birth. Appl Anim Behav Sci. 2000 Oct 1;69(3):177–188; Flower FC, Weary DM. Effects of early separation on the dairy cow and calf: 2. Separation at 1 day and 2 weeks after birth. Appl Anim Behav Sci. 2001 Jan 26;70(4):275–284. Note that issues of how to separate them and what is best from both animal welfare and productivity perspectives are the subject of ongoing research.

birds. The birds would be unable to reach their food and would be sitting in their own excrement. Sometimes, in the course of selectively breeding for a desired trait an undesirable trait will also result. When this type of unintended change results from selective breeding, and it does, it is dealt with by the breeders. Thus, the short-lived issue with the unacceptably weak legs of raised birds has been minimized. This statement about the inability to walk is an example of the type of fake news animal welfare organizations disseminate, and the innocent, well-meaning public accepts without analysis.

The authors claim that beak trimming is done to broilers; that is not true—it is done for layers. It is a quick process for an important purpose (i.e., short acute pain for an important purpose, possibly akin to vaccination). The claim that a significant portion die due to the procedure is simply not true. The procedure is extremely safe. A recent Danish study found that hens with untrimmed beaks had poorer plumage; higher incidence of keel bone deviations, with both keel bone fractures and deviations and with body wounds; and higher mortality.¹⁹

The article makes no attempt to distinguish between acute and chronic pain. Most people do not like shots, but we tolerate acute pain when it serves a purpose. Trimming layer beaks serves an important animal welfare purpose. Meta-analysis of 3851 flocks of chickens showed higher cumulative mortality in flocks with untrimmed beaks irrespective of housing system, but a higher cumulative mortality in free range or open coop systems.²⁰ Similarly, removing horns is an animal welfare concern until such time as there are more polled (no horns) cattle with good genetic traits.

The need to kill male newborn chicks in the layer industry is indeed a problem that is being worked on by geneticists, embryologists, engineers, and others. But there is absolutely no pain and no halachic problem involved. In Israel, the current method used is massive mechanical crushing. In fact the machines in Israel were designed in conjunction with animal rights organizations and the chicks die in well under a second.²¹ While it certainly does not look good or sound nice, the idea that death comes almost instantaneously means that there is no suffering. As the early 19th-century philosopher Jeremy Bentham (An Introduction to the Principles

¹⁹ Riber AB, Hinrichsen LK. 2017. Welfare consequences of omitting beak trimming in barn layers. Frontiers of Veterinary Science, 18(4):222.

²⁰ Weeks CA, Lambton SL, Williams AG. 2016. Implications for welfare, productivity and sustainability of the variation in reported levels of mortality for laying hen flocks kept in different housing systems: A meta-analysis of ten studies. PLOS One. 2016, 11(1).

²¹ Personal communication: Prof. Joseph Yanai, Hebrew University.

of Morals and Legislation, 1948, p. 310) pointed out regarding the slaughter of animals: "The death they suffer in our hands commonly is, and always may be, a speedier and, by that means, a less painful one than that which would await them in the inevitable course of nature." This is certainly true for the newborn male chicks. The current situation is certainly not ideal and the goal of current research is to determine the sex of the birds early in the egg development to prevent the need to kill them after they have hatched.²²

The article states that the modern chicken has more fat and less protein than chickens in the past and thus "A daily diet of chicken" is unhealthy. A daily diet of anything is probably not great and variety is commendable. But together with fish, poultry is a great source of protein. Most of the chicken fat is found in the abdomen and not eaten. People mostly eat "white meat" and the fat pads are used in place of other fats (schmaltz). Recent studies are showing that this is probably not the villain of high blood cholesterol it has been made out to be in the past. In any event this is not an issue of animal welfare.

The assertion (p. 177) that most antibiotics are given to promote growth in animals is no longer the case. Indeed, the problem of antibioticresistant bacteria is a growing problem worldwide, also contributed to by parents who demand antibiotics from their doctor prematurely or for suspected viral infection. However, this is not an issue of animal pain and should not be in the purview of their article. It may have significant public health implications, but that is not what the authors claim to want in their linkage between animal welfare and the kosher consumer.

The implication is that cattle should be send out to the pasture in what the article describes as the natural way it was done throughout history. But animals eating grass grow slowly. The conventional method for cattle production today produces a 569 kg carcass in 444 days and the grass-fed method a 486 kg carcass in 679 days. That's fewer days that the animal is putting out methane and using less maintenance energy, while giving more product.²³

A full page is devoted to Rav Moshe Feinstein's teshuva in which he is critical of veal farming. That is an important teshuva because it is a classic example of how *poskim* take the prohibition of *tza'ar ba'alei chayyim* seriously and apply it to real life situations. However, it probably has little

²² See here regarding an Israeli company's contribution to this effort: http://nocamels.com/2016/11/novatrans-saves-chicks-deaths-culling/

²³ Capper JL. Is the Grass Always Greener? Comparing the Environmental Impact of Conventional, Natural and Grass-Fed Beef Production Systems. Animals (Basel). 2012. 2(2):127–43.

relevance to the kosher veal that is available on the market today. Most of that is not real "veal" but simply young calf. For decades the OU has been certifying kosher veal and for the majority of the time Rabbi Yisrael Belsky z" was the lead *posek* for the OU on meat matters. As a *talmid muvhak* of Rav Moshe he would explain that Rav Moshe's teshuva was dealing with "white veal," while veal certified by the OU was raised under more humane conditions, not chained in tight pens, and using a different diet than the white veal. Rav Belsky had discussed this issue with Rav Feinstein.

On the other hand, Rabbi Shmuel Kamenetsky wrote a teshuva specifically for the *Hakirah* article. He states that his decisions are based on the material presented in the article. However, his comments are not based on the current reality. For example, in the middle of the last paragraph Rav Kamenetsky states, "there is not much purpose in the pain caused in fattening the chickens as practiced." We have no idea what pain is being referred to. Leading *poskim* throughout the generations always strived to have the most accurate and up-to-date science before *paskening*. Rav Shlomo Zalman Auerbach grappling with electricity or Rav Moshe Feinstein dealing with medical issues had all the scientific facts in hand before proffering an opinion.

In the article, some positive facts are presented as if they were negatives. For example, the article states (p. 177), "From 1935 to 1995, the average weight of broilers increased by 65 percent while their feed allotment dropped 57 percent." That is good news, more meat for less feed. Indeed, from 1957 to 2005, broiler growth rates increased by over 400% with a concurrent 50% reduction in feed conversion ratio, due to breeding methods and nutrition. This resulted in the broiler industry reducing the amount of feed required to produce chicken meat by one-half, and breast meat by 67%.²⁴ Because feed accounts for approximately two-thirds of the cost of producing chicken, the resulting savings to consumers is substantial and the benefit to the environment due to this decrease in feed is a huge plus for sustainability. This is truly an amazing accomplishment on the part of animal scientists using low technology methods to benefit humans and animal welfare.

The methods used to obtain rapid broiler growth are often misunderstood. This transformative change in productivity was made possible by the inherent genetic potential in chickens. Simple, traditional selection methods, i.e., selectively breeding efficient and robust birds with high

²⁴ Zuidhof, MJ, Schneider, BL, Carney, VL, Korver, DR, Robinson, FE. 2014. Growth, efficiency, and yield of commercial broilers from 1957, 1978, and 2005. Poultry Science 93(12):2970–2982.

growth rates, has been a particularly successful strategy in poultry because of high reproductive rates and short generation times.

The call of the activists for "free range" chickens is not always in concert with the data. For example, free-range chickens have about double the rate of broken bones of traditionally caged birds.²⁵ They also have a higher infection rate. A 4-year study contrasting free range, litter-based and conventional cage systems shows a higher mortality for the former over the latter. Free-range chickens have a higher infection rate, and suffer skin ailments, internal ailments and mites more than do cage-raised birds.²⁶

Organizations for animal rights

There are certainly issues that need to be dealt with in the commercial production of animal products.²⁷ The videos that periodically emerge from slaughterhouses are disturbing. Part of the problem is that some of the people in the industry do not receive proper training or should not be working with animals. Often they are low income workers, and in the US, are often illegal immigrants doing the work. And indeed, sometimes management does not give sufficient attention to animal welfare. But rarely is it the family members working on the family "factory farm."

Another place where there is a genuine concern, one that is not even mentioned in the article, is *kapparot*. While the practice can in theory be carried out without animal welfare issues, in reality, the way it is done in most large Jewish urban population centers is often problematic. In light of the biblical prohibition of *tza'ar ba'alei chayyim*, it seems to us that it would behoove the community rabbis to oversee this erev Yom Kippur practice.

The authors' suggestion that "these [the small, "traditional"] farms are relatively small, and they are sustainable" is not true. They are inefficient and thus unsustainable. They are not good for society. In Israel organic eggs are 140% more expensive. Not a way to help feed the planet. An

²⁵ Opinion on osteoporosis and bone fractures in laying hens, FAWC (Farm Animal Welfare Council, UK), 2010. (Available at: http://edepot.wur.nl/161696)

²⁶ Lay, DC Jr, Fulton, RM, Hester, PY, Karcher, DM, Kjaer, JB, Mench, JA, Mullens, BA, Newberry, RC, Nicol, CJ, O'Sullivan, NP, Porter, RE. 2011. Hen welfare in different housing systems. Poultry Science 90(1):278–294.

²⁷ Several times there is mention of lack of US federal oversight. While that may be true, it may be because of the structure of the US legal system. Many of these issues are dealt with at the state level (and several examples of state regulations are cited in the article) and thus the US is the equivalent of 50 countries.

African official of the United Nations Food and Agricultural Organization (FAO) once said, "Organic farming is practiced by 800 million poor people in the world because they can't afford pesticides and fertilizers and it's not working." (The Changing Scale of American Agriculture, University of Virginia Press, p. 238)

The "humane" NGOs so positively mentioned in the article can be problematic. The article states that "There are Halakhic problems with stunning an animal, even when it is done after slaughter" (p. 187). Indeed, pre-cut stunning is extremely problematic and no responsible kashrut organization would permit it. In addition, as detailed and explained so well in the teshuva written to them and referenced in note 37, post-cut stunning should be avoided. When necessary it is permitted and, as noted in the referenced teshuva, Rav Moshe Feinstein gave specific guidelines. Because of government regulations, all kosher cattle in Australia have postcut stunning and one should be careful not be motzi la'az on them. But that the Zelcers asked a *shaylah* if post-cut stunning can be permitted to meet the qualifications of those anti-Semitic organizations that view shechita as barbaric is troubling. Judaism has rules about tza'ar ba'alei chayyim that we should follow and be careful about. They apply from the beginning to the end of the process, including the shechita. Do the authors so crave the approbation of these non-Jewish organizations that they are looking for *heterim*? By the very nature of the question they are conceding that *shechita* as mandated by our holy Torah is less than ideal.

The goal of farming of any type, including livestock, is to produce healthy food at a reasonable cost to feed the planet's population. What is called factory farming does that. But as Carl Sagan said (Skeptical Inquirer, Volume 14.3, Spring 1990): "We live in a society exquisitely dependent on science and technology, in which hardly anyone knows anything about science and technology." Unfortunately, the first, and often the only, reaction that people have is an emotional, rather than a logic-based, one.²⁸

Modern food production attempts to accomplish the goal of providing appropriate food for all people, in sufficient quantities, while meeting cultural, religious, and ethnic requirements. In addition, it must balance the sometimes competing values of animal welfare, public health (human health and safety), environment and sustainability, impact on workers (labor), and economics. For example, as the world's population is increasing,

An example that makes use of this aspect of human nature is the video in note 3 that is intended to show things that look bad. But it is meaningless. It is showing out of context animals screaming. One can put together a similar video of human life showing a woman giving birth, a child held down for stitches, an open chest of a surgery patient, etc., and show them in quick succession with no explanation and it too would look very bad.

the available land for agriculture is decreasing and greater yield is thus desirable, and probably necessary.

Productivity, Profitability and Thriving Animals

A great example is "factory farming" of milk in the US. As the authors so clearly articulated, there is a common perception that pasture-based, lowinput dairy systems characteristic of the 1940s were more conducive to environmental stewardship than modern milk-production systems. Between 1944 and 2007 the number of US dairy cows has decreased from 25.6 million to 9.2 million, yet US milk production has increased from 117 billion pounds to 185 billion pounds. True, the increased production per cow requires the cow to consume more feed, therefore her individual carbon footprint has increased; it has actually doubled. Yet the increased productivity and associated costs has decreased the carbon footprint of a gallon of milk to only 1/3 of what it was in 1944! The modern dairy practices require considerably fewer resources than dairying in 1944 with 21% of animals, 23% of feedstuffs, 35% of the water, and only 10% of the land required to produce the same quantity. Waste outputs were similarly reduced, with modern dairy systems producing 24% of the manure, 43% of methane, and 56% of nitrous oxide compared with historical dairying.²⁹ Less dramatic but similar trends exist for beef production. Compared with 1977, modern beef production in 2007 used 19% less feed, 12% less water, 33% less land and exhibited a 16% decrease in the carbon footprint per unit of beef.³⁰

It is important to keep in mind that productivity and profitability are not usually in conflict with the principle of animal welfare and sustainability. It is actually the opposite in that they often go hand in hand. Healthy animals are more productive, hence, more valuable. As Torah Jews we should look inwards at our values for guidance. There is a biblical obligation to treat animals well. There is a biblical obligation to treat workers well and pay them on time. There is a value to ensuring that even the less well-off can afford healthy food. All of this must be evaluated with the facts in hand. We are disappointed in a presentation that relies on hearsay rather than facts and advocates for outside "ethics" rather than Torah values.

²⁹ Capper JL, Cady RA, Bauman DE. 2009. The environmental impact of dairy production: 1944 compared with 2007. Journal of Animal Science 87(6):2160–2167.

³⁰ Capper, JL. 2011. The environmental impact of United States beef production: 1977 compared with 2007. Journal of Animal Science 89:4249–4261.

Addendum

It sometimes appears that in today's society, if one does not adopt the extreme position they are perceived as being opposed to positive values. For example, not agreeing with "Peace Now" labels someone as pro-conflict. If one opposes civil liberties organizations because they don't think that gender neutral bathrooms are acceptable, they are branded anti–civil liberty and fascist. Similarly, if one does not agree with the position of the radical "animal rights" organizations, it is taken to mean one is in favor of *tza'ar ba'alei chayyim*. But that in no way is true.

Animal welfare in Jewish literature has two aspects. One is *halachic* and the other is hashkafic. The teshuva of the Noda Be'yehuda mentioned above is a good example. The halachic issues are discussed and weighed and a reason was found on halachic grounds to forbid hunting, i.e. that going into the forest is dangerous. As an addendum, he posits a philosophic argument that hunting is not something Jews should be doing. Halacha is not decided by philosophy; it might be influenced by it. Using philosophic texts to infer a halachic stand or to bolster a halachic opinion insinuates that the opposing arguments are incorrect philosophically. Everybody agrees with the deep spiritual implications and damage to the neshama in showing cruelty quoted in the name of R. Yehudah haChasid. No Jew would disagree with Rav Shimshon Refael Hirsch quoted on philosophical grounds, that *tza'ar ba'alei chayyim* is terrible and impacts who we are on a deep level. However, that is not how halacha works, and using philosophical arguments of kindness and spirituality makes an opposing opinion appear to be callous and not spiritual

I believe the authors do an injustice to Rav Moshe Feinstein's teshuva on veal. The way veal was raised was in a tight enclosure, little movement, in dark conditions, without mother's milk, and with fatty foods. Its meat was soft and white. Rav Moshe holds that this treatment does not affect the kashrut of the animal. In fact, he *paskened* that the opposite is true. The first paragraph of his text discusses how the abominable treatment causes unusual and extensive *treifot* that occur in the majority of the animals requiring extensive *bedikot*. The reason he actually forbids it is because he defines *tza'ar ba'alei chayyim* as poor treatment of the animal with *no* advantage to humans. Poorly treating the animal to make more money, without some improvement in the quality of the meat, is not a halachic need. Rav Moshe summarizes his opinion at the end of the response:

Nonetheless we see that not every action can a person do to cause an animal pain even if the human benefits financially from it. Only something that the human has direct enjoyment from like shechting animals [to eat] or doing work with the animals or the like. Similarly, one can feed them things [despite being less than ideal food, causing discomfort (added by the translator)] if it improves the flavor of the meat, or to fatten the meat such that people who eat it will enjoy it more than if you fed it hay. However, [in the case of veal] not so when the purpose is to cheat and mislead people that they be fed something that is no better and just to cheat them since they will see the meat is whiter and not the usual red and they will mistakenly think that the meat is better for health and more enjoyable and they will pay more for it.

Rav Moshe actually forbids the veal in particular less because of inhumane animal treatment, but because of *ona'ah*, price gouging and misleading people. However, if people knew that there was no difference in quality he states,

it might be possible to permit this if they informed customers that this meat was no better in quality, just prettier and that customers might prefer a prettier meat.

His conclusion is instructive. "It is forbidden to cause suffering to the animal, to feed it things it gets no pleasure from or suffers from for the human benefit of cheating people."

According to Rav Feinstein, the common practice of factory farms of feeding corn to steers to fatten them quickly is permissible. This is even if they cause some intestinal distress since it improves the fat content, taste, and softness of the meat.

Large-scale intensive industrial animal farming is environmentally damaging. Voluminous pools of animal waste not managed properly can seep into the earth and affect local water supplies. Use of large amounts of antibiotics might encourage development of antibiotic-resistant bacteria. Raising large quantities of ruminant animals can lead to large volumes of methane gas being released into the air. Scientists, farmers, and government should work to improve the situation. However, to say that the way the animals are raised on these farms is *tza'ar ba'alei chayyim* and that they should therefore be deemed unfit for kosher consumption, is incorrect in our opinion.