

Would Pain-Free Animals Make a More Humane Hamburger?

September 3 2009, by Lisa Zyga



Researchers say that breeding pain-free farm animals is less of a technological issue and more of an ethical issue. Image credit: Guido Gerding.

(PhysOrg.com) -- With advancements in genetic engineering, researchers say that it may soon be possible to breed farm animals that don't feel pain. The suggestion has sparked controversy on whether denying animals the ability to feel pain is inhumane itself, even if it does limit the amount of suffering the animals endure when raised at factory farms.

In recent decades, humans have been consuming more and more meat. Since the 1960s, human consumption of meat has increased by 50 percent, most of it coming from factory farms. Despite demands by animal rights groups for better treatment of farm <u>animals</u>, eliminating animal suffering seems to be an unrealistic goal. For example, chickens often have part of their beaks removed without anesthesia to prevent



them from pecking each other. If factory farms can't be persuaded to raise animals in humane environments, then maybe it's time to provide the animals with an inborn defensive mechanism of their own.

The solution may not be ideal, but, as Adam Shriver, a philosopher at Washington University in St. Louis says, "If we can't do away with factory farming, we should at least take steps to minimize the amount of suffering that is caused."

In recent years, scientists have made progress in manipulating the molecular and genetic bases for pain. A recent study found that mice that lack the Nav1.7 gene are less sensitive than normal mice to heat and pressure. Possibly, farm animals that lack such a gene would also suffer less under <u>factory farm</u> conditions.

In another study, scientists have engineered mice that lack specific enzymes and genes in the <u>anterior cingulate cortex</u> (ACC). This alteration enabled the animals to still sense pain, but not feel it as an unpleasant sensation. By still feeling physical sensation, the animals could avoid unintentionally injuring themselves, which often happens in individuals who are born without the ability to feel <u>pain</u> at all.

But there are other alternatives to pain-free animals, one of which is producing meat in vitro. Although not fully developed yet, the procedure involves growing animal muscle cells that could be used in processed meats such as chicken nuggets and fish sticks. However, lab-grown animal cells are currently costly, since they require expensive nutrients, and the technology would need to be scaled up in order to be profitable. Besides eliminating animal suffering, this option could also eliminate the other negative side effects of factory farms, including the large amounts of waste and greenhouse gases that are generated.

via: New Scientist



© 2009 PhysOrg.com

Citation: Would Pain-Free Animals Make a More Humane Hamburger? (2009, September 3) retrieved 9 April 2024 from

https://phys.org/news/2009-09-pain-free-animals-humane-hamburger.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.