Headless chickens put to the test

RESEARCH SCIENTISTS at Massey University are using scissors to decapitate young chicks in an experiment to test whether the euthanasia method is humane.

The chicks are under general anaesthesia so they do not actually feel anything – instead the scientists use electrodes to measure electrical pain signals to their brains.

The world-first study is to confirm that chicks used for research are treated as humanely as possible.

Professor David Mellor, co-director of the university’s Animal Welfare Science and Bioethics Centre, says the chicks are a few weeks old when they are anaesthetized and tiny needle electrodes are slid into their scalps.

Mellor emphasises that the birds are already unconscious and the decapitation takes less than a second. Any electrical signals for what the scientists call “noxious sensory inputs” show up in the chick’s brains which tells the scientists how painless and quick the method would be for unaesthetised chicks.

At the moment decapitation is widely considered humane, but not used commercially. It is mostly used when researchers need to study an animal’s brain after its death when drugs would complicate the research.

Mellor says all the scientific evidence from other studies suggests decapitation is humane: “[it] is thought to stretch the brain stem then you immediately go unconscious”.

This study is “an opportunity to double check … We’re just having a look because if it is [humane], that’s good to have confirmation. If it isn’t we need to know so that we can change practices.”

The study is expected to continue for about a year.

Massey’s ethics committee has approved the study and scientists follow strict ethical guidelines. No industry funding is involved.

Four or five birds have been decapitated so far, Mellor says. This will continue until they have conclusive results – “you can start with three or four, and review the results, and then you can go and do another two or three … you can stop when you have enough … Researchers do the very best they can to minimise the harm they do”.

Hans Kriek, from animal rights group SAFE, says the group is against any animal testing, but because anaesthetics are used in this study it is on the “lower level” of those SAFE is concerned about.

Consumer awareness about the treatment of chickens is running high after celebrity chef Jamie Oliver gassed a cage of chicks to death for his show Jamie’s Fowl Dinners which screened in New Zealand last month.

Later in the Massey study some chicks will be euthanised in this way. Mellor says they want to reevaluate this method too, because of concern that high concentrations of CO₂ could irritate the mucous membranes of the chicks before they lose consciousness.

The euthanasia research is part of a larger study investigating when chicks become conscious, and therefore able to feel pain.

Michael Brooks, head of the Egg Producers Federation says that in New Zealand, CO₂ is used to kill about a million male chicks each year.

Another million are killed by instantaneous fragmentation – “basically they are put through a machine that’s like a very fast-moving blade he says.

Male chicks are superfluous to the poultry industry.

Regardless of the research results producers would not be making any decisions on their practices, Brooks says. Instead the research would be considered by the National Animal Welfare Advisory Committee.