

Supplementary Table S1: Script of the questionnaire study 2 with the specific questions of the study and demographics

Dear participant: This questionnaire is part of a survey from the University Federal in Santa Catarina about public opinion on farm animal production practices. Your participation is completely anonymous and voluntary. Only respondents 18 years old and over are invited to participate. You can opt out of participating at any time.

☐ I agree to participate in this survey

DEMOGRAPHIC QUESTIONS

Sex

☐ female

☐ male

Age

☐ 18-24 years old

☐ 25-34 years old

☐ 35-44 years old

☐ 45-54 years old

☐ 55-65 years old

☐ over 65 years old

Area where you live

☐ urban

☐ rural

Region of Brazil of residence

☐ South

☐ Southwest

☐ North

☐ Northwest

☐ Centre-West

Do you have any kind of connection with animal production?

☐ not currently, but I grew up in an environment related to animal production

☐ no

☐ yes

How do you identify yourself in relation to your food consumption?

☐ I consume all or some products of animal origin

☐ I'm a vegetarian or vegan

Family income

☐ I prefer not to say

☐ Up to 2 minimum wage

☐ 2 to 5 minimum wage

☐ 6 to 10 minimum wage

☐ Over 10 minimum wage

Education

☐ up to high school

☐ college or university (completed or ongoing)

“Genetic modification is defined as the process of using biotechnology to alter an organism's genetic information (DNA) to produce a certain characteristic.”

How much have you heard or read about genetic modification of animals?

Nothing at all (1) (2) (3) (4) (5) Very Much

How much have you heard or read about GE of plants, animals or humans?

Nothing at all (1) (2) (3) (4) (5) Very Much

PLEASE READ THE TEXTS BELOW AND ANSWER THE QUESTIONS

The Belgian Blue bovine breed has a gene that allows muscle growth approximately 20% greater than the breeds generally used in our production systems. A possible alternative to increase meat production in Brazil, maintaining other characteristics of meat quality, is to insert this gene in the desired breeds.

Do you consider genetic modification of cattle to produce more meat ... [image of a Belgian Blue cattle].

Totally unacceptable (1) (2) (3) (4) (5) Totally acceptable

In Brazil, almost all dairy cows have their horns removed when they are young by burning or cutting the cornual tissue. Removing the horns is painful and medication is generally not used to minimize pain. A possible alternative is to genetically modify cattle so that the horn never grows. This method consists of integrating a 'hornless' gene (found in some cattle breeds) into the genome of dairy breeds; as a result, all calves are born hornless.

Do you consider genetic modification of cattle so that they do not have horns... [image of one horned and one hornless adult cows].

Totally unacceptable (1) (2) (3) (4) (5) Totally acceptable

In Brazil, most dairy cows are raised on pasture, and in many cases have little or no access to shade. Dairy breeds have little resistance to heat and suffer from thermal stress. A possible alternative is to genetically modify cattle so that it has characteristics that give it greater resistance to heat. This method consists of integrating the 'slick' gene (found in some cattle breeds) in the genome of dairy breeds. As a result, all calves are born more resistant to heat.

Do you consider genetic modification of cattle to make them more resistant to heat... [image of dairy cows at pasture in the shadow].

Totally unacceptable (1) (2) (3) (4) (5) Totally acceptable

Assess the risks of the gene edition of cattle for the purposes presented above

No risk at all (1) (2) (3) (4) (5) Very Much

Assess the benefits of the gene edition of cattle for the purposes presented above

No benefits at all (1) (2) (3) (4) (5) Very Much
