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How the consideration of animal welfare in the supply chain impact the consumers' perception and behaviour towards food brands and how to improve it.

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When asked to choose a topic for my Master's thesis, the idea of writing a dissertation on animal welfare seemed fairly obvious. As well as being one of the most significant issues in today's society, and one whose direction in the years to come will determine a large part of the face of tomorrow's world, it's also a subject that is close to my heart. Understanding the complicated relationship between a consumer's perception and a brand's behaviour with regard to animal welfare is a great challenge, one which I have tried to meet.

To achieve this, I was able to count on the help, insights and invaluable contributions of many people, in particular the five speakers, Mr. Wolf Gordon Clifton from Animal People, Mr. Phil Brooke from CIWF, Ms. Francine Luna from ChuckJoe, Mr. Cris Burello from PETA, and Mr. Philip Horemans from Green Seed Belgium, to whom I would like to express my deepest gratitude because, without their expertise and willingness to share their knowledge, I would not have been able to complete this thesis. Each discussion offered me a fresh perspective, giving me a better understanding of the multifaceted landscape of animal welfare.

I would also like to thank the 104 anonymous respondents to the survey carried out as part of this thesis to better understand how consumer perception and behaviour is impacted by different contexts, it would have been hard to collect accurate, valid and representative data to create the empirical backbone of this thesis without them.

Finally, I want to extend my thanks to my supervisor, Mr. Régis Coeurderoy, for his precious advice, guidelines and answers to my many questions, which really helped me focus and grasp what was most important without getting off track.

I hope that as a reader, you will enjoy browsing through this thesis, which I took great pleasure in writing, that you will learn a lot from it, and that, who knows, maybe it will influence you to pay more attention to your eating habits in the future. It is my hope that this thesis serves not only as a culmination of academic endeavours but also as a catalyst for continued discourse and action towards more ethical and conscious behaviour practices.

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I. Introduction

Communicating in today's world is an essential skill for any brand wishing to establish itself in its market. The most important thing in communication is that it is well received and, above all, that it is believed. There are areas where this is fairly straightforward, and there are others where it's much more sensitive, and where the asymmetry of information is much greater, making people distrustful. Animal welfare clearly falls into the second category, particularly within the realms of the food industry. On top of that, developing an understanding of and improving the living conditions of animals in intensive agriculture is a subject that is progressing too slowly, and yet has the power to completely change the face of tomorrow's world depending on the direction we decide to take in the next few years, because of its paramount significance in today's socio-economic landscape. It’s increasingly apparent that the consideration of animal welfare within the supply chain is not simply an ethical issue anymore, but also a key determinant shaping consumer preferences and market dynamics.

That's why I chose to look at how the consideration of animal welfare in the supply chain and the way it is communicated can impact the consumers' perception and behaviour towards food brands and how to improve it, both in terms of compliance with animal welfare and communication around it. Of course, another reason why I chose this subject was the fact that animal welfare is a subject I'm particularly sensitive to, and to which I wanted to add my stone by trying to understand how best to consider it and how best to communicate about it.

To this end, this thesis will attempt to unravel the often overlooked facets of animal exploitation, delving into the fundamental paradigms underlying the issue. This thesis is, therefore, divided into three parts. The first aims to set a theoretical context for animal exploitation, dissecting its origins, the sectors involved, and, of course, the problems it causes, both for animals, the environment and in terms of laws and policies. It also contains a more in-depth analysis of the methods currently used depending on the type of animal, the challenges preventing faster improvement, and an explanation of potential alternatives, both methods enabling better animal life and concrete alternatives no longer involving animals.

The second section will focus on practical research into the effectiveness of communication. How stakeholders in animal agriculture communicate and through what means generally, how

this is perceived by consumers, in theory and in practice, how animal welfare associations try to increase public awareness on this subject, and why their role is essential.

Finally, the last part is more of a matter of guidance. In it, I will draw conclusions from the results obtained throughout the work to determine the best concrete possibilities for improvement, both for food brands and for other industry players, such as governments, consumers, associations and supermarket chains. After reviewing concrete animal welfare improvements, we'll move on to the marketing strategies that stand out as the most effective for communicating to consumers, and examples of how to implement them while addressing prevalent challenges such as welfare washing and the importance of not resorting to it.

To gather as much knowledge as possible on the subject and cover all points of view, in addition to the research and scientific articles that can be found in the bibliography, I conducted five interviews, three with animal welfare associations, Animal People, CIWF, and PETA, and two with marketing agencies specialised in the food sector, ChuckJoe and Green Seed Belgium. This enabled me to get a concrete opinion from inside the industry and not just a scientific approach. A survey was also carried out using a Google form questionnaire to get a grasp of consumer opinion, perception, behaviour and understanding of the situation, as their point of view is essential to this dissertation.

The main difficulties encountered were finding the right interviewees for a qualitative thesis and gathering a sufficient sample of consumers, but in both cases, they were overcome. Limitations that remain and may have had an impact on the quality of the thesis are the quality in terms of representation of the sample, which is not perfectly heterogeneous demographically speaking, and the asymmetry of information, which means that having complete and verified information on the consideration of animal welfare in concrete terms can be quite complicated, and that I sometimes had to base myself solely on their communication to get the brands' point of view.

This work aims not only to contribute to academic discourse, but also to serve as a call for a more conscientious approach within the food industry. I hope that the ideas gathered here will inspire stakeholders to take transformative action that prioritises ethical considerations in the supply chain, thereby promoting a more sustainable and humane future.

II. PART I: Theoretical research on animal exploitation

1. The use of animals in the global industry

1.1 Origin and definitions

Just like machines are increasingly replacing human resources right now, there was a time, in the early nineteenth, when the transition was being made from human muscle power to animal power. That permitted a huge expansion in most domains of the global industry, especially in agriculture and transport, thanks to the majority of power utilised in 1870 being produced by animals, and more specifically, horses (Greene, 2023). Many could think that at that time, animals were less efficient than some machines, using for example steam technology, and it's true, but animals were providing a flexibility that machines were unable to reach back then.

Of course, with these new techniques of animal exploitation arose new ethical problems. People started worrying about the consideration of animal welfare, their living conditions and most sadly, their death conditions. Animal welfare refers to the rights of animals to be treated ethically, without unnecessary suffering and with their basic needs fulfilled. It gathers policies whose goals are to make sure they are treated with respect and with specific attention to their well-being (Hewson, 2003). These concerns regarding the consideration of animal welfare never stopped growing over the past century, as awareness has been raised on this topic.

Indeed, a new concept was even created in regard to that, the Animal-Industrial Complex (also called AIC). This concept was introduced for the first time in 1989 by Barbara Noske, and it describes the systematic exploitation of animals by humans and that for the sake of capitalism. It gathers all industries and economic activities that can be lucrative and that make use of animals, such as the food industry, research through animal testing, medicine, clothes, entertainment, and so on. The specificity of this AIC is that it refers to the industrialisation of the exploitation of animals within an economic structure aiming at retrieving profits from that activity.

1.2 Concerned sectors

As we saw in the previous section, it all began mostly with the exploitation of horses and mules in transport and agriculture. But over the years, the focus on animal potential usefulness shifted to other industrial domains, domains that we are more aware of now, and that usually imply life-threatening experiences, poor and non-natural living conditions, premature and unnecessary death, and so on.

Among these domains and industries, we can recognise four major ones nowadays:

- The science research industry
- The fashion industry
- The food industry
- The entertainment industry

a) The science research industry

Science research is one of the less controverted industries, as, in opposition to the three others, it can reveal itself as necessary and inevitable to ensure our perpetuity and better understand how to fight some medical problems humans are confronted with. The most common animals used in science experimental testing are mice, usually followed by fish, rats and birds, representing 98% of the total animals used in experimental procedures (Figure 1). However, when none of these are suitable, they can use horses, dogs, monkeys, cats, and so on. And it's sad to say, but most of the time, people are not feeling too guilty when the experiments are done on this first 98%, but they do feel compassion and empathy when it comes to dogs, cats, monkeys, etc. This was explained by Miralles et al. (2019) when they proved that people feel better about animals that are closer to them in terms of evolution.

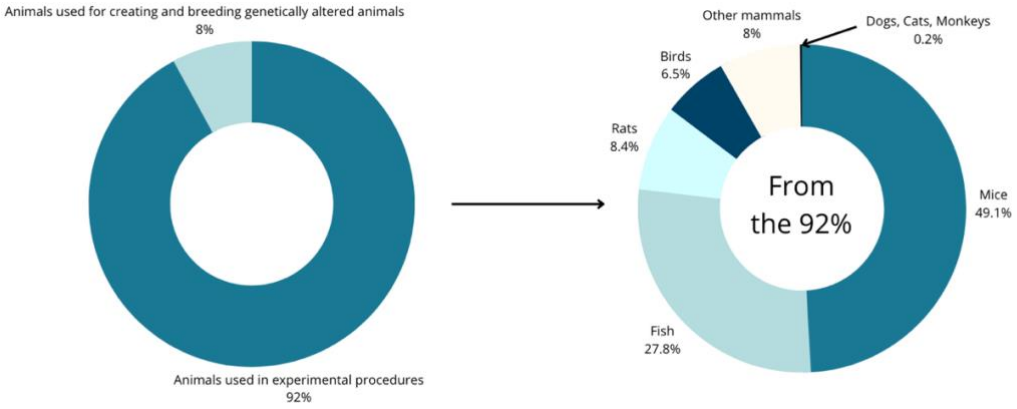

Figure 1 – Animals used in Science Research (European Commission, 2023b, pp. 4-6)

In Great Britain, which is a major user of animals in Europe, the trend over time shows two peaks between 1939 and 2022, one in the 70' and one recently around 2015 (Figure 2). We could think that each peak means it went down after, which is a good thing, but the first decrease is explained by a change in the counting methodology in 1987, and the second decrease is probably due to the Covid-19 crisis and the whole medical system being slowed down (Understanding Animal Research, 2023). So we actually have no clue about the current trend and how the numbers will evolve over the next few years.

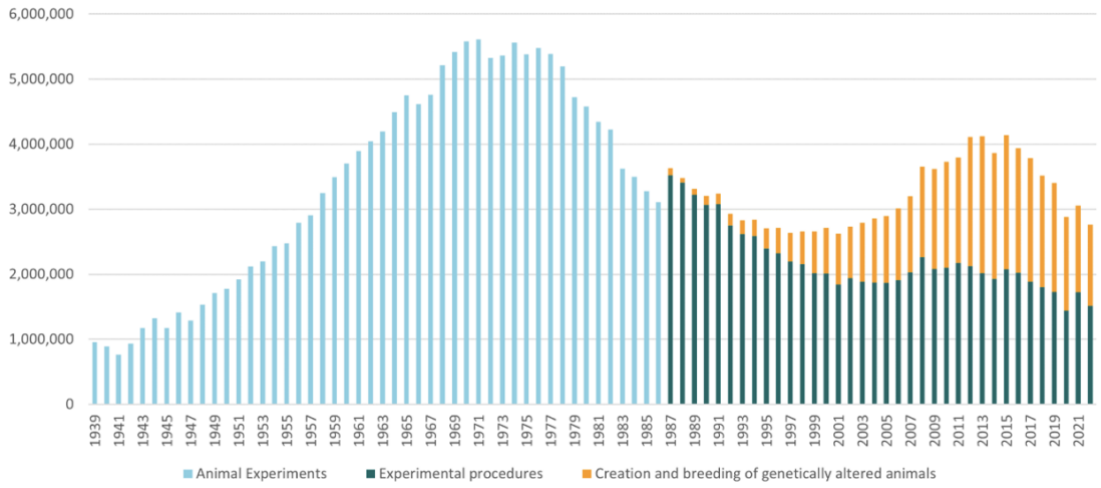

Figure 2 – Experimental procedures and creation and breeding of genetically altered animals between 1939-2022 (Understanding Animal Research, 2023)

2.76 million animals were used in Great Britain in 2022, and more than half of them were mice (Royal Society of Biology, 2023). In South Korea, it's the double with almost 5 million, which is the highest number since they started counting in 2012 (Humane Society International / South Korea, 2023)

In Europe (with Norway but excluding the UK), in 2020, almost 8 million animals were used. On one hand, countries with a lower number than in previous years are congratulating themselves, when in reality, it's probably due to the delay caused by Covid-19. On the other hand, the countries with a higher number say that it's because of new Covid-related research projects. In conclusion, it's hard to really compare the evolution of animal use in science research over the last few years. (European Commission, 2023b). Now there are different types of experiments, with, of course different severity and multiple outcomes. In 2020 in Europe, as you can see in Figure 3, half of the experiments were light, a third of them were moderate, and the last 15% were either really heavy for the animal, or resulting in death.

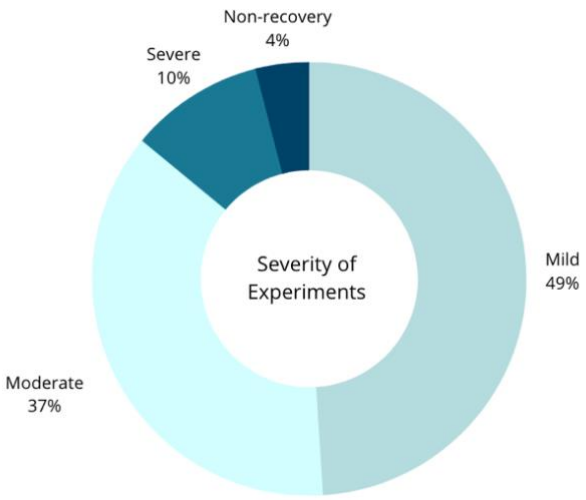

Figure 3 – Severity of experiments in EU in 2020 (European Commission, 2023b, p.34)

In the United States, it's moreover 50 million experiments on animals in 2020 (no precise numbers are available). The problem there is that most of the commonly used animals in research are not protected by the Animal Welfare Act (AWA), signed in 1966, which is the only American law controlling the breeding, transport, testing, and so on, of animals in research. (The Humane Society of the United States, 2023)

Globally, it's really hard to have a precise number. Cruelty Free International (2023) said the most reliable estimation in 2015 was around 192 million animals used for research purposes, but even they admit they don't know to which extent we can trust these numbers.

b) The fashion industry

In this industry, animals are mostly used for their fur, exotic skins or feathers, which is completely non-essential to human prosperity, and thus causes way more controversies amongst people than the previous section. The most commonly used animals for fur or exotic skins are mink, raccoon dogs, foxes, chinchillas, rabbits, kangaroos, pythons, crocodiles, and so on. Every year, moreover one hundred million animals are bred and killed for their fur, which represents 95% of the total fur sold in the fashion industry (Hakansson, 2022). Among these one hundred million, half of them are killed to supply the fashion industry. Sadly for them, being killed after a year, when their fur is perfect, is not even the worst part of their short life. They grow up in small cages, deprived of their basic needs and instincts, sometimes with untreated diseases and wounds, before being electrocuted, beaten or gassed.

In addition to the animals being bred, there is also the one caught by hunting and trapping, accounting for many more millions every year. The problem with the trapped animals is that they suffer a lot because of the traps. It can injure them for life, and they can be left there for days, bleeding and without food or water, before someone comes. And when someone comes, it's only to beat them to death. Some animals are even self-mutilating in order to try to escape, like coyotes gnawing their own limbs.

Fortunately, this market is shrinking because people and brands are realising how much of a non-sense it is, and are more and more quitting real fur! Countries and governments are also increasingly banishing fur production, and even fur sales recently. Thanks to all this, from 2014 to 2021, excluding rabbits and trapped animals, Europe's annual production went from 43.6m to 12m, China's one from 87m to 27m, and North America from 7.2m to 2.3m (Humane Society International / Europe, 2023).

c) The food industry

The food industry now is a bit more complicated and opinion-balanced than the two previous ones. On one hand, to work perfectly, the human body does need some ingredients that are mainly found in meat, like protein or iron. On the other hand, even though these ingredients were indeed thought to be almost only found in meat in the past, it's not the case anymore. People are more and more aware of the available alternatives, and it's now more about a change of mentality in the consumer's mindset. Because only a change in the consumer's behaviour will be able to have an impact on the food industry's process and production.

Just as in the fashion industry, most of the animals used for the food industry are factory-farmed. Factory farming is simply the fact of breeding animals with the only objective of using them as food, while maximising the profit and minimising the costs. It's a real economic vision of animal exploitation and can remind us of the Animal-Industrial Complex we spoke of earlier.

Of course, minimising the costs often implies no consideration of animal welfare. They have less space, no daylight, get less food, and receive less treatment and attention. In the food industry, the commonly bred animals are cows, chickens, pigs, hens and fish. To give an idea of the enormity of the industry, just in the United States, without including aquatic animals,

266 farmed animals were killed every second in 2017. This is more or less 23 million animals per day, and 99% of them are factory-farmed (Roberson, 2023). In a single year, it represents 10 billion animals killed, which is more than the world's human population, and this is just in the United States.

We can see in the following graphs (Figure 4) that chickens are the huge majority of animals being factory-farmed in the US, with almost 9 billion of them being killed every year (Anthis, 2019). However, for the not factory-farmed animals, cows are well ahead, representing almost 70% of the total animals in the United States.

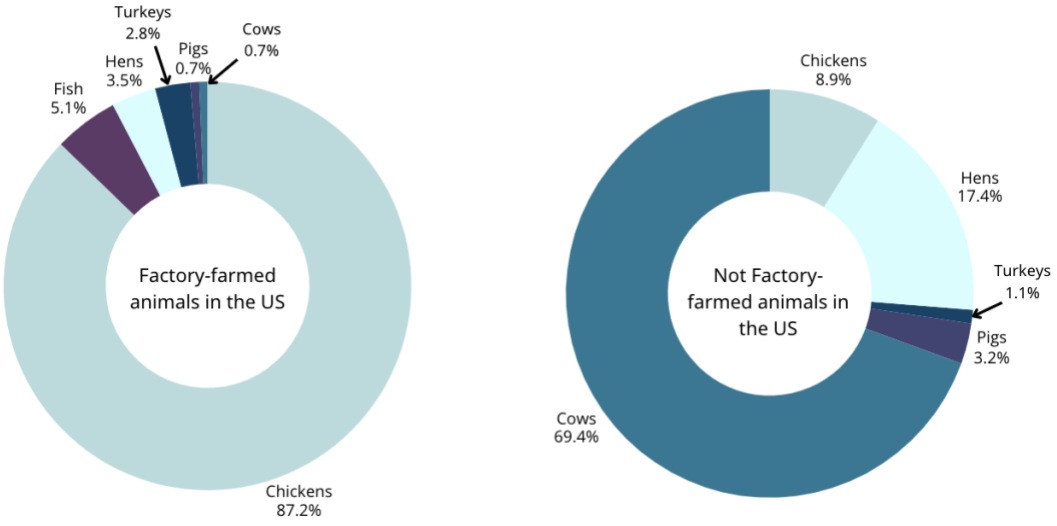

Figure 4 – Percentage on Factory-farmed and not Animals in 2017 in the US (Anthis, 2019)

On a global scale, the numbers are just skyrocketing. More than 75 billion land animals are killed for the food industry every year (Ritchie, 2023). For the aquatic animal, it's harder to determine the exact number, but estimates from Jacy Reese Anthis (2019) would bring the total number to 111 billion if we included the farmed ones, while wildly caught ones are impossible to say. Of course, these numbers are not to be believed with your eyes closed because they are estimates, but they do give us an idea of the problem.

The tendency we saw just before in the United States, with chicken accounting for 87% of the total factory-farmed animals is also totally true for the rest of the world too. As you can see below (Figure 5), chickens represent a growing percentage of the animals slaughtered for their meat every year, way above any other animal (Our World in Data, 2023b).

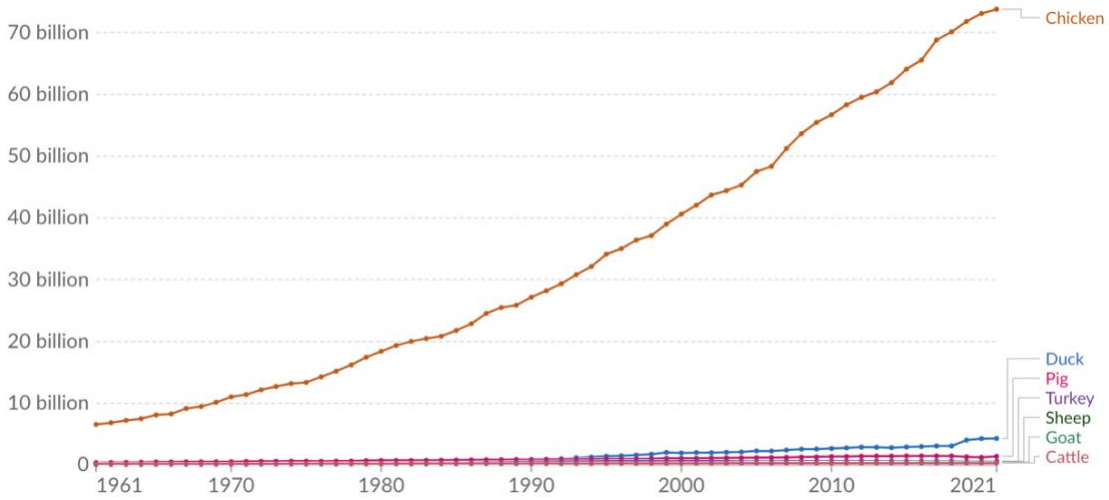

Figure 5 – Number of animals killed for their meat in the world, 1961 to 2021 (Our world in Data, 2023b)

In addition to the extreme suffering inflicted on animals, factory farming also has an impact on the environment, an impact often less taken into account, even though it's the one directly impacting both human and non-human beings. With the global population increasing, food production will have to follow, and is expected to have to grow by 70% by 2050. And if we keep the same actual process we have for food production, the problems it's already causing, like greenhouse gas, deforestation, water use and pollution, will be tenfold (Sandler, 2022). But we will elaborate more on that subject in a following section.

d) The entertainment industry

The animal place in entertainment is totally absurd. We all, at least once when we were kids, went to a circus show where we could see tigers, elephants, bears, and so on. Back then, none of us realised the problem, but now, just thinking about it, animals being trained to perform non-natural behaviour through negative reinforcement and violence, being transported in small cages leading to physical deformities and mental distress (Dorning et al., 2016), not living in a community with animals from their own species, it's absolute nonsense. In the entertainment industry, we can find animals in mostly four domains:

- Circus shows
- Tourism industry
- Wildlife park
- Film industry

There are many known uses of animals for entertainment that we don't directly think about because they're so implemented in us and normalised that we don't realise how cruel and painful it can be towards animals. Think about bullfights in Spain for example, or elephant riding in South Asia, or taking pictures with lamas in Peru; all of them are a materialisation of animal cruelty, and it's only a really small insight into the global situation. Animals are used for different type of activities based on the world region, as you can see in Figure 6 below (Malchrowicz-Mośko et al., 2020).

The way animals are used	Examples
Animals competing with other animals	- cockfighting in Bali, - camel wrestling in the Aegean region - dog racing in Ireland
Animals competing with humans	- bullfights - Fiesta de Interes Turistico Internacional in Spain
Animals involved in competition between humans	- camel polo in Mongolia
Animals as religious sacrifices	- Gadhimai festival in Nepal
Animals as game	- dolphin slaughter organized by Japanese fishermen every year. - A hunt for pilot whales in the Faroe Islands
Animals used for tourist transport	- elephants in Southeast Asia
Animals as circus attractions	- circuses worldwide
Animals as roadside attractions	- snake charming using a musical instrument in India
Animals as toys, playthings	- Tiger Temple in Thailand
Animals in tourists' photos (selfies with wild animals)	- photos with llamas in Peru - photos with dressed-up monkeys in Asian countries
Animals as a delicacy for tourists	- China Dog Meat Festival

Figure 6 – Example of ways of using animals in the entertainment industry (Malchrowicz-Mośko et al., 2020)

Hopefully, as for all the industries we spoke about above, it's changing. Governments and countries are adopting more and more laws regarding animal welfare in the entertainment industry. In Europe, most countries have already voted bans and legislation against the use of animals in circuses, even though the extent of restrictions varies from one country to another (Kapera et al., 2022). At the same time, people's mindset has evolved to a better consideration of it, and are thus boycotting it.

Compared to other industries, it's hard to have a precise list of the most commonly used animals, as it can vary a lot depending on the region. But if we had to determine a general list, it would be elephants, tigers, bears, whales, orcas, dolphins, horses, cats, dogs, pandas, koalas, snakes, monkeys, wolves, zebras, lions, parrots, giraffes, and so on. These animals, in addition to the physical or mental pain and transport discomfort, often lack the right veterinary care and proper food in line with their natural diet. For example, in 2016, PETA

(People for Ethical Treatment of Animals) investigated the film industry and discovered that one of the biggest animal suppliers for films, BAU (Birds & Animals Unlimited), was completely denying the most basic rights of the animals they were in charge of. Dogs, owls, penguins, pigs, and cats that are believed to be seen in famous movies were sleeping outside on concrete floors, without veterinary care, alone in small uncleaned cages, without fresh water or starved to "match" film demands (PETA Investigates, 2016).

One of the main reason that is used to justify animal uses in entertainment is to "educate" the new generation on the diversity of life. But it doesn't make sense when alternatives that are non-cruel or dangerous for animals do exist. Holograms have been used in Circus Roncalli to represent performing animals in a brilliant way. Or The Seasonal Group and Edge Innovation, who respectively created an animatronic reindeer and robotic dolphin. Even simply favouring sanctuaries and natural reserves to wildlife parks is a great alternative (Kim, 2022). And honestly, why educate people on wild life diversity by killing it ?

1.3 Problems it's causing nowadays

a) Animal welfare non-consideration issue

In regards to everything that was just said in the previous sections, no need to remind why not considering animal welfare is causing a huge problem in our society. Even if we said at the beginning that animals are less used in transportation and as a workforce in agriculture nowadays, it's only true for developed countries and continents. Parts of Africa and Asia are still relying on them, just like America and Europe used to. And this is just for transportation and agriculture. When it comes to food, clothing, medicine or research, there is still a major problem, especially in the United States and in Europe.

The cruelty of the system currently in place begs the question: how have we got this far without the main players questioning themselves at some point? Dogs have their hearts, kidneys and lungs used as test chambers to determine the effect of various substances on human beings. Chickens are bred at high speed, their legs no longer being able to stand upright because of their weight. Cats with damaged spines are forced to run to study the nervous system. Various animals are implanted with pacemakers, or pregnant animals are forced to inhale cigarette smoke and/or pesticides to deduce the effect on a pregnant mother (The Humane Society of the United States, 2023).

At the risk of repeating this, if all this is problematic and must be seen as such, it is because we are causing unjustified pain and unnecessary stress to animals that can feel it. It's true that, for the moment, we can't completely do without a system where people eat animal meat, but that doesn't prevent us from avoiding intensive factory farming, where living conditions are so low that death, however painful, is almost a relief. Just like us, they have pain receptors that allow them to feel pain, and they have behavioural and physiological responses that can be positive or negative, and that vary in intensity, all of which evolve over the course of their lives (Broom & Johnson, 2019, pp. 39-40). Disregarding the scientific research proving this is like denying the facts to ease our consciousness of the actions we take.

Furthermore, and we'll speak about that later on, working towards meat-free alternatives is entirely possible. If the economic resources invested in factory farming by certain food giants were redirected towards the research and development of this kind of alternative system, the improvement in consideration for animal welfare would go in a much better direction. And if avoiding useless animal suffering was not enough, intense factory farming, which is often the main cause for animal welfare flouting in the food industry, also has a responsibility for other actual problems, like the environmental ones.

b) Environmental issue

As previously seen in the food industry section, the environment and climate change are heavily impacted by animal suffering in the agricultural sector, much more than we can realise. The primary motivation for neglecting animal welfare in the food sector is the need to constantly produce more, faster and cheaper. So there's no question of rearing a chicken in the open air and letting it grow normally. It takes too long, requires too much space, and doesn't provide enough meat in the end. So, to get a better yield, we're going to stack them up and feed them crops like soy and cereals, grown from soil and water. These crops will allow them to grow and gain muscle more quickly and abnormally until they die. Over the course of their lives, animals will emit greenhouse gases such as CO_2 and methane, which have an impact on climate change, and thanks to intensive livestock farming, there are more animals and, therefore, more gases. Finally, even after the animals have died, and still with a view to saving money, the meat is often transported by highly polluting means such as semi-trailers and sent to the four corners of the earth to meet demand (PETA, n.d.).

If we were to remove the economic aspect and the desire to meet as much demand as possible in order to grab market share, a more rational approach based on knowledge of the resources available to us on earth would be slower, more respectful of the stress suffered by the animals and their well-being, and with local resale.

The main problem here is that we don't realise the proportions involved. Everything said at the beginning of this section makes sense, but did you know that 80% of the world's agricultural land is used to produce animal feed and livestock, as well as dairy products (Ritchie, 2021). And yet, this 80% of agricultural land produces only 20% of the world's calorie supply (Ritchie, 2017). Simply switching to a vegetarian diet would free up 75% of the land used for agriculture in the world, mainly because there would no longer be any need to produce food for animals, and because producing a protein from beef or lamb requires a 100 times more land than for a plant-based protein (Ritchie, 2021). It would also greatly help to reduce the use of fuel energy in animal agriculture as we need 11 times more fuel energy to produce one calorie from animal protein than to produce one from plant protein (PETA, n.d.). Furthermore, switching to a vegetarian diet would benefit the reduction of gas emissions from animal agriculture, and especially the reduction of N_2O emissions, as in the U.S., animal agriculture is found to be the largest single source of methane emissions (The United States Environmental Protection Agency, 2023). And for the record, methane is a greenhouse gas 30 times more powerful than CO_2 (Petrovic et al., 2015).

Another environmental issue that has not yet been addressed is deforestation due to animal agriculture. Meat production is also the biggest source of deforestation in the world, with farmers going so far as to set fire to forests themselves in order to free up land for growing livestock and crops to feed them. So not only is it the main cause of methane production, it’s also the main cause of deforestation, reducing the earth's capacity to manage and recycle this methane (Sandler, 2022). Additionally, growing these crops requires more water than growing fruit and vegetables directly for human consumption, which leads us to the fact that 90% of the world's water footprint and 70% of all freshwater available is used by agriculture (Sandler, 2022). Of course, for the water that’s left, there’s still pollution caused by all the pesticides used to grow crops used in animal agriculture.

The environmental problems caused by the lack of respect for animal welfare were also one of the points discussed during the interviews I did with associations for this thesis. Mr. Wolf Gordon Clifton, Executive Director of Animal People, Mr. Phil Brooke, Research and Education Manager at Compassion in World Farming (CIWF), and Mr. Cris Burello, Supporter Services assistant at People for Ethical Treatment of Animals (PETA), whom I was lucky enough to interview and whose interview transcripts can be found at the end of this document. We'll talk about these exchanges and the associations later, but they already emphasised that the environmental aspect of factory farming was one of their main battles, and it's a topic that regularly comes back when we speak about factory farming.

Mr. Phil Brooke said about Compassion in World Farming that, "Away from factory farming, we're trying to promote regenerative system that actually improve the soils, and improve the welfare of the environment instead of harming it". For Mr. Wolf Gordon Clifton, whose association is more focused on lobbying at the U.S. government, environmental issues are even one of the main arguments for defending animal welfare. And it's working, as in March 2022, the United States Environment Assembly (UNEA) adopted the NEXUS Resolution, which is, according to Mr. Gordon Clifton, "the first UN resolution in any UN process, specifically dedicated to animal welfare as a subject. What it does is recognising that there is a connection between animal welfare and sustainability and environmental protection, which means UN was acknowledging animal welfare as a strategic means of realising its mandate"

c) Laws and policies

According to Hewson (2003), animal welfare can be measured through different things, such as animal longevity, frequency of disease, depression, reproduction, but also its behaviour and psychology. It's hard to determine which is best to assess animal welfare but a combination of all of them can help to create a better view of animal welfare science.

Now, one of the biggest challenges is to put laws in place to protect animal welfare. If it's hard to quantify their welfare, it's even harder to protect it. Many laws exist throughout the world, each with its own level of complexity, definition and scope, and to make an exhaustive list of all the laws would require a dissertation dedicated solely to this. However, here are some of the main and most important declarations concerning the consideration of animals around the world.

In Europe, the first major law to bring together several governments was the Universal Declaration of Human Rights of 1978. It was accepted at UNESCO headquarters in Paris, and this declaration is still the one referred to today in terms of animal rights. Containing 14 articles after being reworked in 1989, its main aim is to recognise that animals have rights, that these rights must be respected and that they must be able to live in peace, without threat, without stress, without violence, at their own pace, and so on (UNESCO, 1978). We can see that at the time, when we spoke of animal rights, this was not exactly the same thing as animal welfare as discussed in this thesis, animal welfare being a more recent term. Before that, it was really just a matter of giving them their basic rights without ensuring their proper development, fulfilment, emotions, and so on. At the end of the day, this declaration from 1978 was making sure that the human place was at the centre of the animal kingdom, not at its summit.

This first law is not to be confused with another really important law proposed at the moment on the other side of the world, in the United Nations. It's an important declaration in the sense that it is the one that brings together the most organisations and has the support of a large number of countries towards the common goal of animal welfare, namely the Universal Declaration on Animal Welfare (UDAW). This declaration was drawn up by the World Society for the Protection of Animals (WSPA) and submitted to the United Nations with the aim of motivating the world's governments to implement and develop their own animal protection laws. From the outset, it has had the support of a huge number of international organisations involved in the fight against animal violence, including Compassion in World Farming, one of whose research and education managers I was lucky enough to interview as part of this thesis. The main aim of this declaration is to convey and ensure acceptance and understanding of the following message: animals are capable of suffering, they are sentient, and particular attention should therefore be paid to their welfare, specifically when they are in the hands of human beings (World Society for the Protection of Animals, 2007). Unfortunately, despite all the support for this declaration around the world, it has still not been accepted by the United Nations. However, this in no way detracts from the considerable impact it has already had.

In addition to these fundamental declarations at the European and United Nations levels, there are a multitude of other laws and declarations depending on the country, some of which stand out as being more important. The European Union started to implement legislation

around the 1970s because many activities, such as the transport of animals, are of supra-national nature, and thus there was a need for a bigger organisation than just a country to take care of that (Caporale et al., 2005). Most of the laws that have been passed in Europe over the last 40 years concern farm animals, so mainly the food industry, although laws have also been put in place for the entertainment and medical research industries. In fact, in terms of legal acts, the European Union's animal welfare directives are the biggest field of legislation in the EU (Simonin & Gavinelli, 2019). All these directives are grouped together in Article 13 of the Treaty on the Functioning of the European Union (TFEU). The latest of these directives is an improvement in the rules governing the transport of animals, which was adopted on the 7th of December 2023, just a few weeks before this thesis was submitted. The cause, the Eurobarometer showed that 84% of Europeans felt that animal welfare policy was not sufficiently or fairly enforced in their country, and that 83% of them were in favour of limiting the amount of time animals spent on transport (European Commission, 2023a).

In the United Nations, we can find important legislation like the Animal Welfare Act (AWA) of 1966, mostly regulating the treatment of animals for the purpose of medical research, or the Humane Slaughter Act of 1958 that ensures that livestock are slaughtered humanely. In the United Kingdom, a major user of farmed animals in Europe, we also find an Animal Welfare Act but adopted in 2006, which is the main law of the UK protecting vertebrate animals.

Overall, whatever the laws, governments, associations or countries, most directives try to ensure five main points which, if respected, cover a large part of the spectrum of animal welfare:

- **Housing and environment**: making sure that animals have enough room to live, and in appropriate conditions.
- **Nutrition**: making sure they can eat what they want and on a diet that suits them.
- **Health**: making sure they receive the necessary health care and are not ill.
- **Transportation**: moving them comfortably and without causing stressful situations.
- **Ethical treatment**: making sure they can perform their natural behaviour and that they are treated with respect, without violence.

Each of these points, when put together and applied, helps to ensure the five freedoms suggested by Professor Roger Bramwell in the 1960s and incorporated into European legislation in 1978. These five freedoms are (European Commission, 2023a):

- Freedom from discomfort
- Freedom from hunger and thirst
- Freedom from pain, injury and disease
- Freedom from fear and distress
- Freedom to express normal behaviour

Now, there is always the question of the extent to which these laws are enforced, and according to the interview with Mr. Phil Brooke, enforcing the laws is definitely not happening enough at the moment. In Europe, although the laws are passed by the European Union, it is the duty of each member state to ensure that they are implemented in their country. As Simonin & Gavinelli (2019) put it: “Whatever the EU legal text is a directive or a regulation, Member States have to provide the technical instructions and logistical arrangements necessary for appropriate implementation as well as setting up an appropriate system of sanctions”. And this is often where things get tricky.

Another problem with Europe is the duration of a commission's mandate. Mr. Phil Brooke said during his interview: “You have one commission per four years […], but if all the previous ones are bad, it takes more than four years to get results. So you need more time than your mandate, and if the next commission doesn’t give priority to it […], all the results can be lost”. This is a major obstacle to laws and policies being quickly created, adopted and enforced in Europe.

2. Focus of this thesis

So far, we have talked about animal welfare in its broadest sense, to give a definition and a general context to any reader who might start with a basic knowledge of the subject. We've talked about animal welfare practices in the medical research sector, the fashion industry, the food industry and the entertainment industry. Now that we have established a good overview, we will focus on one industry in particular for the rest of this thesis, namely how consideration

and communication around animal welfare throughout the food process will influence consumer behaviour and their perception of a brand based on its communication.

As you will have gathered, the target sector is the food industry. It was chosen because it is probably one of the industries where communication and consideration for animals are most important for brands, given that consumers see the animal directly as the final product. So they are constantly reminded that they are consuming animals directly, unlike other sectors where they are used indirectly, that these animals have had a life, and that we should, therefore, take care of them. Paying attention to animal welfare is therefore essential, particularly these days when it is an increasingly important and decisive issue. And as well as paying attention to them in general, it's also vital to communicate them effectively, as we'll see later.

And as we saw earlier, the use of animals in the food sector is not just growing strongly, it is completely soaring, as we can see from the following graph (Figure 7) on the evolution of the number of land animals killed for their meat (Our World in Data, 2023b):

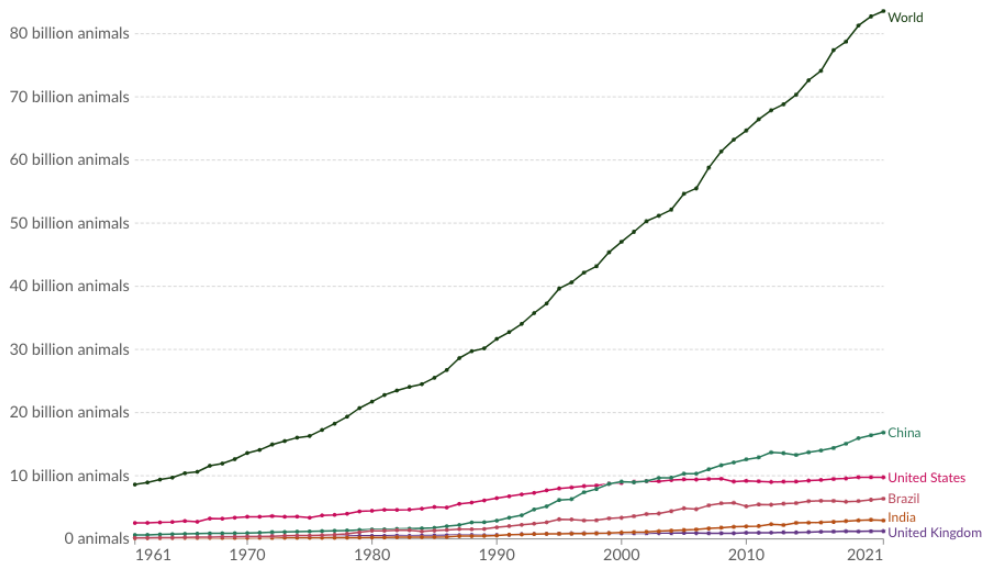

Figure 7 – Number of land animals slaughtered for their meat in the world, 1961 to 2021 (Our World in Data, 2023b)

It shows that since 1961, the number of land animals killed for their meat has only increased, reaching 83 billion animals killed for their meat per year in 2021, twice as many as just 25 years ago. Unsurprisingly, the big powers such as China and the United States are at the top of these rankings.

If we take a closer look at Europe's position in relation to the world's other major nations (Figure 8), we can see that it is still ahead of the United States, with more than 12 billion, compared with almost 10 billion for the Americans. However, China is still ahead with almost 17 billion, equivalent to more than 20% of the world figure.

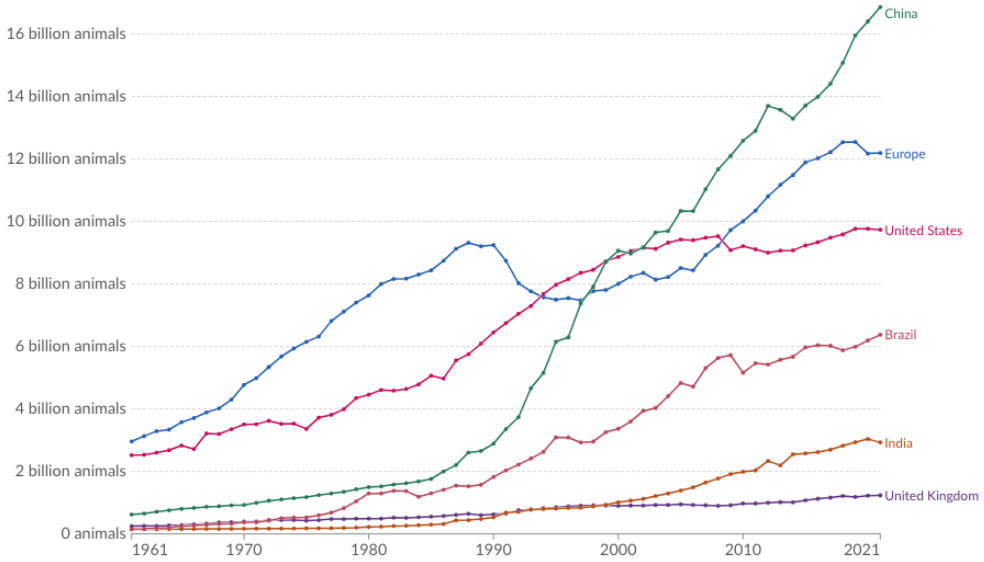

Figure 8 – Key players in the number of land animals slaughtered for their meat, 1961 to 2021 (Our World in Data, 2023b)

3. Specific use of animals in the supply chain

3.1 Which methods are currently used in the food industry?

To fully understand how consideration for animals and their welfare along the supply chain can affect consumers, it's important to know what's going on there. This generally varies from one species to another. That's why we're going to take a look at how different animals are treated in the food industry around the world, and the methods used along the supply chain. We'll only speak here of the five mainly used animals in factory farming, namely chickens, egg-laying hens, pigs, cows, and turkeys.

However, we are going to see that certain practices and methods are fairly common to all animals, such as the fact that space is often reduced to a minimum to save space and that this prevents natural behaviour, the fact that animals often injure each other because of stress and that to prevent this their teeth, tails and beaks are mutilated without anaesthesia, or even the fact that uncontrolled hypergrowth causes injuries and organ failure, and so on (Compassion in World Farming, n.d.).

Before we start, it's important to define what a factory farm is, also known as a CAFO (Concentrated Animal Feeding Operation). A farm is considered intensive and, therefore, CAFO according to the number of animals it contains, and this figure obviously varies according to the type of animal. For example, a farm with 1,000 pigs could be considered a medium-sized CAFO, whereas one with 10,000 turkeys would be considered small. The problem with this definition is that it takes absolutely no account of the size of the farm. So, a farm that keeps 2,000 cows on 5,000 square metres will be called a factory farm in the same way as one that does it on 20,000 square metres, and that makes no sense in terms of animal welfare (Ritchie, 2023).

a) Chickens and egg-laying Hens

I've decided to put these two together because the farming techniques used on them are so very similar. Being by far the most factory-farmed and killed-for-meat animal in the world, the industry knows its fair share of methods for making the most of chicken (male), also called broilers in this case, and egg-laying hens (female), and always to their detriment.

The first thing is that they are reared at a very high speed to meet demand. A chicken can live for more than six years, yet the 70% of chickens that are reared intensively are killed after only six weeks, after eight weeks for free-range broilers and 12 weeks for organic broilers (CIWF, n.d.). This obviously creates leg problems, with broilers spending their lives without walking because their legs are unable to support their weight. Since they take less exercise than a free-range chicken, their respiratory system is less developed and many of them die of heart attacks every year. Actually, they grow so fast that the association Compassion in World Farming (n.d.) said that 25% of them suffer from lameness.

Something that is particular to egg-laying hens, called forced molting, and which is particularly cruel, is that they are often starved the month before they are killed (around their one year) in order to force them to lay as many eggs as possible before the end (The Humane League, 2021a). Of course, in their case, there are also genetic modifications that allow them to lay up to 300 eggs a year, compared with the normal 10. But their bodies aren't ready for this, so they suffer from tumours, osteoporosis, uterine prolapse, and so on (The Humane League, 2021a).

As far as living space is concerned, a 2007 European directive limited the number of broilers per square metre to 19, which works out as one broiler per A4 sheet more or less (CIWF, n.d.). And that's when the law is respected or at least not bypassed, because when barren battery cages were banned in Europe, factory farms just created “enriched cages”, basically slightly bigger cages. In terms of the living environment, in addition to the lack of space and light and the fact that they are stuck together, the broilers generally do not have access to separate litter boxes because these are underneath them and are only cleaned once they are ready for slaughter. The problem with this is that the ammonia that escapes from the excrement can cause injuries to their eyes, legs/feet/chest and respiratory system (CIWF, n.d.). Because of all this, chicken’s immune system is weak, and there is thus a need for antibiotics to support their growth. Hopefully, it’s illegal in Europe, but moreover 80% of all produced antibiotics in the U.S are supposed to be used for farmed animals (Food and Drug Administration, 2014). Now, the underlying problem with this, which we don't immediately think of, is that getting them used to antibiotics makes them and the people who eat their meat resistant to them. This is considered to be one of the greatest current threats to global health (The Humane League, 2021a).

Finally comes transport. Broilers are either caught by hand or by machine, which often causes them injuries. They are often deprived of food for several days before transport to avoid excrement, and if we add to this the injuries and stress caused by transport, no fewer than 20 million chickens a year have already died by the time they reach Europe's slaughterhouses. And for the final stage, i.e. the slaughter, they are most often hung by their feet, head down, plunged into electrified water before their throats are cut, but it doesn’t completely work, which means their throat is cut while they’re still conscious (The Humane League, 2021a).

b) Pigs

Living conditions for the pigs are not much better. In the case of pregnant sows, we talk about sow stalls and then farrowing crates. Sow stalls are metal cages in which pregnant sows are kept on the floor and underfed during their 16-week gestation period. When they reach term, they are placed in farrowing crates, which are essentially the same thing, but this time with room on the side for the piglets without risking of crushing them. In these two types of cages, they have no way of turning around. Obviously they get bored, stressed, don't perform any of

their natural behaviours, and so forth. The piglets are then removed from them after a maximum of one month, much more quickly than they would be removed in a natural environment, and the sow is made pregnant again (often artificially). After three years, she is sent to the slaughterhouse and replaced by a new one, which will in turn produce two batches of 10/12 piglets each year (CIWF, n.d.).

Now, in the case of pigs that are fattened for their meat, they obviously have no access to the outdoors, to daylight, are castrated (again without anaesthetic), and very often live and sleep on the floor. One thing that is quite particular to pigs (but also happens to chickens) is tooth clipping or docking their tails. In fact, because of all the stress their environment creates for them, it's not uncommon for pigs to injure each other by biting their tails. To prevent this, their teeth are clipped and their tails docked without anaesthetic, which is extremely painful and can cause lifelong trauma. And this is done from a very young age with piglets to prevent them from injuring themselves, fighting for the best teat. The European Food Safety Authority (2007) claimed that in Europe, more than 90% of all pigs are tail-docked, even though it's completely illegal.

c) Cows and Veal

The amount of milk that cows are capable of producing has evolved enormously over the last 40 years, more than doubling. In 2020, a cow in Europe produced an average of 20 litres of milk a day (European Commission, n.d.), and did so for 4/6 years, after which they are killed for their meat as the quality of the milk declines, even though they could live for more than 20 years. Like most other factory-farmed animals, cows rarely have access to outdoor pastures and are confined to restricted spaces and tied up, preventing them from socialising (The Humane League, 2021b). Let's remember that to lactate, they need to be pregnant, so they're usually artificially impregnated around 14 months old.

Another less common concern is their diet. Normally, a cow needs a high-fibre diet, but in order to get the best quality milk, they are often fed a high-nutrient diet, which ends up causing stomach acid and diarrhoea (CIWF, n.d.). With the same concern for milk quality, they are sometimes injected with rBGH or rBGT growth hormones, which also increases their risk of disease (Animal Welfare Institute, n.d.). Poorly fed and living in poor hygiene environments, they often get infections and suffer from leg problems from standing up.

For calves, separated at birth from their mothers and raised/sold for their meat, they also grow up in very little space and under poor conditions, as there are few laws in Europe governing this, bearing in mind that there are not even any restrictions on bedding allowances once they are over two weeks old (CIWF, n.d.). On the other hand, there are a few laws governing their diet, but these are not considered sufficient since even when they are reared, some do not receive enough iron and fibres, giving them a weak and fragile immune system. Unlike cows, calves are often placed in crates, where they are tied by the neck, preventing them from turning around and performing physical activities, which would make their meat less tender as they would develop muscles (The Humane League, 2021b). Fortunately, these crates have been banned in Europe, but continue to be used in the rest of the world.

For the last part of their lives, cows are usually taken to the slaughterhouse, where they are shot in the head with a handgun so that they won't be conscious during the painful stages that follow, namely hanging them by their feet, slitting their throats and dismembering them. Of course, this doesn't always work, and some remain conscious (The Humane League, 2021b).

d) Turkeys

As with everything else, the aim here is to maximise the final weight of the turkey, and a number of techniques and methods are used to achieve this. It begins with artificial insemination, because the genetic modifications that have occurred through intensive breeding to make turkeys bigger and more muscular prevent them from reproducing naturally. The turkeys are then incubated (also artificially) a thousand at a time in sterile conditions before being harvested, transported and killed in exactly the same way and under exactly the same conditions as the chickens we mentioned earlier.

During their lives, they are also victims of debeaking, i.e. the trim of their beak, victims of desnooding, the snood being the little part that hangs under their beak, and victims of detoeing, which is basically clipping their toe. All this without anaesthetic or sedative of course, and under the pretext of avoiding injury. (Dell, 2022).

3.2 Why is it not changing faster?

As can be seen from this model (Figure 9), the well-being perceived by the animals (animal benefit) depends on the livestock's productivity (and therefore human benefit). When welfare is in its natural state, productivity is zero, but it can be increased by improving welfare to its maximum level. However, thereafter, the slightest increase in productivity will reduce animal welfare until it reaches a minimal, even unbearable, level.

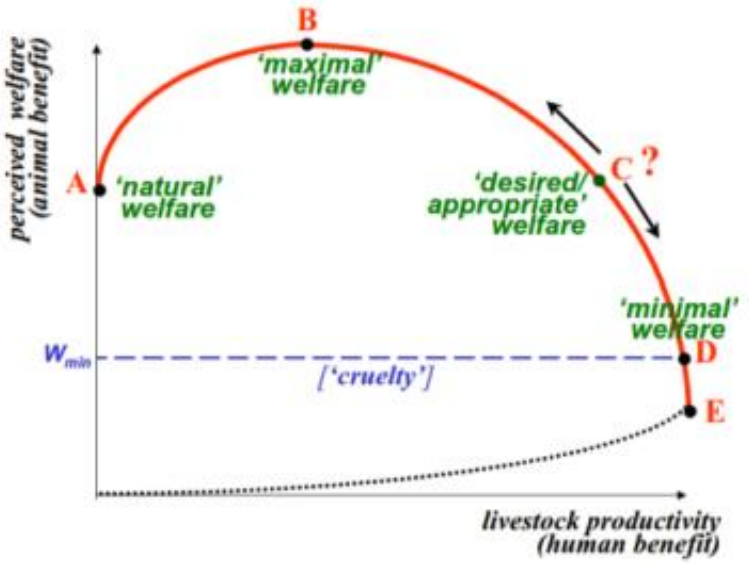

Figure 9 – Welfare-productivity (McInerney) model (Vetter et al., 2014)

What we can learn from this is that the slope from point D to point C is very steep, which means that with very little improvement, and with a very slight reduction in productivity and therefore in the benefit to humans, we can rapidly increase animal welfare considerably, even to the level at which it would naturally be found. Of course, achieving 'maximum' animal welfare would cost much more than livestock productivity, but something in between is already very good and achievable without too much sacrifice. This follows exactly Pareto's famous 80/20 law, which states that acting on 20% of the causes solves 80% of the problem. In this case, making a 20% effort to reduce productivity would improve animal welfare by 80%. The percentages are obviously not exact, but they give you an idea of the concept.

This highlights the fact that even just a few small changes can already make a big difference to animal welfare, so why does it seem so complicated and slow to achieve change? We'll look at a few reasons, all of which have their share of responsibility and impact, either positive, negative, or kind of balanced.

a) Balanced impact: Increased extra production cost

Respecting animal welfare requirements does increase costs, this is not news, and this, of course, has an impact on the product's price. But only in the short term. Indeed, it's a common belief in the food industry that adapting your infrastructure to be in line with the regulations is expensive, and it's true. Production costs are impacted first, and this could lead, and has led, some companies to go bankrupt (Vetter et al., 2014). But this is only on the short term, and furthermore, if they don't adapt to regulations, they'll go bankrupt at some point anyway.

In the long term, Vetter et al. (2014) claimed that applying new and more expensive methods and techniques enables to:

- Boost productivity.
- Keep companies competitive.
- Increase market share because some competitors are not able to follow.
- Increase the value of marketable products by having an animal welfare quality standard system.
- Relieve animals from all sorts of stress, injuries and emotional troubles requiring energy from them, which could thus improve their general performance and rentability.

b) Balanced impact: Misleading false positive change in consumers' purchasing behaviours

As we've seen previously, consumers are indeed more and more aware of animal welfare and its environmental impact, as it's a rising issue in society's mind. A study from the ASPCA & Technomic (2018), interviewing 300 supermarket retailers, found that over the last three years, more than 70% of companies that have invested money in certifying their products have reported an increase in sales. As a result of that, 30% of the interviewed supermarkets said they were interested in expanding their range of animal welfare products. So that should push all the food industry towards implementing better animal welfare.

On the other hand, even though their thoughts and perceptions of it have changed, some academic works show that their purchasing behaviour hasn't. Most consumers' first concern is finding products with the characteristics they're looking for, but for a set of "equivalent"

characteristics, they then tend to look for the cheapest one (Vetter et al., 2014). They focus on value rather than on values. Of course, this varies from one country to another, with Scandinavian countries still having purchasing behaviours more in line with current changes in mentality on animal welfare around the world. But the fact is that, sometimes, based on the study looking into this, it does not improve sales. Although, even if it doesn't improve sales, it decreases the chance of sales losses (Hughes, 1955).

c) Negative Impact: Lack of complete and enforced regulations from governments

One of the biggest obstacles to effective implementation of animal welfare worldwide is the lack of precise, comprehensive and enforced legislation on the subject. For example, in the European Union, there were laws in 2007, 2012 and 2013 banning veal crates, barren-battery cages and sow stalls, but in the end all they did was replace the cages with others that were just a little bit bigger.

For Mr. Phil Brooke, Research and Education Manager at CIWF, if the system is not changing, there are many reasons, but one of them is the lack of requirements and legislation from the governments. He believes that "they need to lay down some minimum standards on animal conditions, or farmers that respect animal welfare won't be able to compete with the ones who don't". The lack of governmental subsidies to promote the implementation of change was also discussed, as he thinks that animal welfare should be seen as a public good and thus be helped by money from the people, given by the governments through subsidies.

So why is it so hard to get these legislation and subsidies? The main thing that came out of the interview I did with Mr. Wolf Gordon Clifton, Executive Director at Animal People, was the pressure and lobbying exerted by the big multinational food companies on governments. We'll speak about that right now in the following section.

d) Negative impact: Food industry's influence on political forces

According to Mr. Gordon Clifton's opinion, the private sector is more the source of the problem than it is part of the solution. He thinks that they are so many corporate investments in animal agriculture (the livestock industry, the meat, dairy, eggs, …) that industries have enormous political influences. This is because many elected officials are relying on support and donations from these companies, which therefore makes progress rather slow once they're elected.

Because the lobby has so much influence, they managed to get references to be taken out of major reports on climate change. Mr. Gordon Clifton said that, “the latest UNFCC report on climate change does make some allusions to agriculture as a leading source, but the explicit references, including recommendations for people to reduce their meat consumption, were actually taken out of the final draft because of the influence of these companies”. This power of influence undoubtedly plays a large part in the slowness of the system to put things in place.

He also said that, at UN events, he had seen major agriculture representant there lobbying their activity as “family farming”, but in reality they are huge companies and multinationals, and even if they’re in fact family-owned, it’s far from being “family farmed” in every other aspect. But they present it as being the solution for food systems. To conclude, he stated, “Companies are very active in protecting their assets, and pressing any kind of opposition, and I think that’s number one obstacle!”.

e) Negative impact: Media representation

During the interview with Mr. Cris Burello, Supporter Services Assistant at PETA, the subject of animal welfare’s representation in media was tackled. According to him, “it is imperative for the media to relay your communication and multiply its visibility”, but the problem with large media is that they won’t do it out of the goodness of their hearts, but you need them to get free advertising, because they're the only effective way of advertising against the big food companies, which have substantial resources for lobbying, advertising and influencing people's opinions. And for them to be interested, your advertising promoting animal welfare, often the one of an association fighting for it, needs to be controversial. Mr. Burello added, “The more controversial the advertising, the more space it will get [...] When we attach a gimmick, that very same animal abuse ends up in newspapers and on televisions nationwide”.

f) Positive impact: Prevention of material losses

Caring for animals prevents material losses, or at least prevents them from being larger than the expenditure for caring for animals. By material losses, we mean here losses in livestock breeding. Because these losses are the results of diseases and injuries due to poor conditions of breeding, feeding and raising, implementing better animal welfare would significantly reduce material losses, and therefore counterbalance the cost of improving animal welfare (Vetter et al., 2014).

3.3 Are there alternatives?

a) Light improvement alternatives

First of all, there are the “light” alternatives, those that don't completely solve the problem but that push things in the right direction. For example, for broilers, there are farms that offer a better quality of life by giving them more space indoors, natural light and access to the outdoors. This is why there is the denomination free-range chicken for those who are free to spend the day outdoors on 1 square metre per chicken (and four for hens) for at least half their lives, and the denomination organic chickens for those who have access to four square metres outdoors (and 10 for hens) for at least a third of their lives (CIWF, n.d.).

For pigs, providing them with outdoor access from birth and letting them grow up for longer with their mothers would provide them with a much less stressful and more enjoyable life. It would also mean not having to dock their tails or clip their teeth. Furthermore, providing better food for pregnant sows would result in better milk in greater quantities, thus avoiding starving piglets (CIWF, n.d.).

Finally, for cows and calves, there are obviously farms that offer them free access to the outdoors all year round, or at least in summer, room to express themselves and socialise, straw to lie down comfortably, a more natural diet, and so on. In Europe, these are known as Organic systems (CIWF, n.d.).

To conclude this section, it is important to note that research has also shown that, in order to achieve maximum impact, it is much better to stop eating beef and dairy products than to cut chicken or fish out of the diet (Ritchie, 2021). For Mr. Brooke from CIWF, the main objective and the alternative they’re advocating for is to get to eat fewer animal products. Not for them to go vegan, but at least to eat less meat. Because it reduces the amount of factory farming, it’s better for people’s health and for the environment. Mr. Burello from PETA is pushing it even further; for him, there is no such thing as “humane” meat. “Humane slaughter” is an oxymoronic term used by industries that kill animals. All supermarkets are now packed with tasty vegan foods and easy-to-find vegan alternatives wherever you are. He said, “PETA has pushed for vegan living since our inception. Our motto is “Animals are not ours to eat, wear, experiment on, use for entertainment or abuse in any other way”.

b) Concrete technological alternatives

Then, of course, there is the possibility of adopting real alternatives, and these days we are seeing more and more of them appearing in the form of companies with innovative processes, technologies, methods and solutions. Food-oriented companies offering alternative solutions are generally grouped into three categories: those producing meat from plants, those producing meat from animal cell cultures, and those producing meat through fermentation (McInerney, 2023). The aim of this thesis is not to make an exhaustive list of them, but here is a small selection of some that have been making noise in the food industry recently:

- *Cell-based alternatives*
    - **Upside Food** does make and sell meat, but it is developed in a laboratory from animal cells.
    - The same goes for **Mosa Meat.**

- *Plant-based alternatives*
    - **The Supplant Company** is a company that uses the leftovers of harvests for their fibre and nutrients to make more environmentally-friendly ingredients.
    - **Just** makes eggs using only mung beans, considerably reducing the need for water and land.
    - **Beyond meat** is creating plant-based burgers, sausages, and so on. They even managed to work on McDonald's plant-based offering.
    - **Impossible Food** is just the same with their Impossible Burger for Burger King.
    - **Quorn** is a well-known plant-based meat company in the UE. I interviewed a member of the company handling their marketing implementation in Belgium.
    - **Plenty** is developing vertical farming, with fresh, pesticide-free produce that requires less land than normal farming.

- *Fermentation-based alternatives*
    - **Nature's Fynd** produces fungus-based proteins for the food industry using new fermentation techniques.
    - **Perfect Day** also uses the same kind of techniques to create whey protein.
    - **The Every Company** is also doing that, but this time from sugar.

For our interviewee Mr. Gordon Clifton from Animal People, he thinks the alternative plant-based protein industry and the cell cultivating industry can have a valuable impact because an economic argument can be found there, and that might eventually shift the actual system.

III. PART II: Practical research on communication efficiency

4. Information flows and advertising

4.1 Companies' communication

I've already had the opportunity to tell you about the first three interviews I did as part of this thesis with Animal People, CIWF and PETA. I've also done two others, which will be useful from now on, to represent the food business side of things. I obviously tried to contact large and medium-sized food companies to ask them all my questions about the consideration they gave to animal welfare and how this affected their consumers. Unfortunately, none of them gave me any positive feedback, despite the large number I contacted. As a result, I thought it might be interesting to turn to companies specialising in marketing and communication in the food industry, whose clients were the same companies that didn't want to answer my questions. That's why I interviewed Ms. Francine Luna, Executive Assistant at ChuckJoe, and Mr. Philip Horemans, Managing Director at Green Seed Belgium.

ChuckJoe is a company that helps food and beverage brands develop their marketing and communication plans to improve sales and maximise revenue. They work with their clients to develop their strategy, social media management, data analysis, email marketing, relationships with influencers and the media, and so on. The difference from other companies in the same field is that they specialise in working only with brands whose image revolves around respect for animal welfare, locally sourced products, and so on.

Green Seed Belgium is also an international marketing agency that helps companies in the food sector to adapt their marketing and communication strategy in order to implement themselves effectively in a given country. Mr. Philip Horemans handles all implementation cases in Belgium. They support and advise companies on the products they want to market, and answer the following three questions: is there a market for my product, which one, and what's the best route to market (do I go direct with a trade or do I work with an import, do I go retail, and so forth). After that, they put their customers in touch with the big Belgian food retailers, i.e. Delhaize, Carrefour, Colruyt, and others. Finally, and probably the most complicated part, they help to sell by putting marketing, promotions and communication in place beforehand to convince consumers that they should select this product.

The aim of this section will be to see how companies in the food sector communicate about the consideration they give to animal welfare in order to then see how this is received and perceived by consumers, whether it is effective, and the paths of improvement that could be taken in the future.

a) Efficient ways of communicating on animal welfare

According to Ms. Luna, if ChuckJoe were to sum up the most effective way of communicating about animal welfare in their view, it would be by incorporating animal welfare into brand narratives, emphasising responsible sourcing, humane treatment, and ethical practices in the supply chain. For example, running campaigns highlighting free-range practices, obtaining humane certifications, or showcasing suppliers with transparent and ethical standards are some of the most effective techniques they see for emphasising ethical practices within this industry.

In particular, as we'll see later in the survey we carried out for this dissertation, obtaining labels and certifications for products can greatly influence their perceptions of that product, or at least in theory. Indeed, according to Mr. Horemans, it's true that this kind of certification, or the Eco score and Nutri score introduced by certain retailers like Colruyt and Delhaize, can have an impact on the consumers' choices, but that's more of an add-on than a real argument to convince them.

An interesting and effective way for meat-free brands, according to Green Seed Belgium, is to communicate not necessarily on the consideration of animal welfare but on the existence of alternatives that are just as good. Stressing the impact of simply switching from a meat solution to a meat-free alternative without losing any pleasure or taste has proved to be quite effective. For example, Mr. Horemans mentioned the case of the meat-free week they had done with the Compass company, where they had a partnership with a large restaurant chain where they were serving additional sweet Quorn during a week instead of meat, and based on the numbers of meals they served, they calculated how many litters of water were saved, how much CO2 was prevented from going in the air, and they would put that on poster and display it in the restaurant as an advertisement for meat-free product or in this case, for sweet Quorn.

Still, according to Green Seed, creating an engaging story around a brand or product and insisting on it is a good communication technique, but at the end of the day, people won't buy a product for its story but because it's good, of good quality, tasty, or because they're emotionally attached to it. Indeed, the action of buying something rather than another is more an emotional reflex than a concrete choice because they're used to it and are generally loyal to a brand.

b) Communication deviance

Now, one point that came out quite a lot in the research, and in particular in the interview with Mr. Horemans from Green Seed, is that companies try to profile themselves in one way or another, unfortunately a lot of companies profile themselves in terms of ethical practices because they're expected to do so, even though it’s none of their priority. This is obviously a problem because how can we study consumers' perceptions and behaviour with regard to a brand's consideration for animals if all we can base ourselves on is the brand's communication and not its actual actions, and this communication is sometimes done solely to meet society's expectations and not out of any real ethical principles. We'll talk about that later, but it's important that companies are careful not to fall into welfare washing, hardly knowing what they're talking about, just because it’s trendy and needed. It's not morally or ethically acceptable in the first place, but on top of that, if it's noticed, as it often ends up being, the brand can lose all credibility very quickly and see its brand image and sales plummet.

And at the same time, it's quite normal for brands that want to succeed in a market to adapt and profile themselves according to this sustainable, environment-friendly, animal-friendly aspect because the big retailers (Delhaize, Carrefour, Colruyt) have sustainable policies that they put in place to force themselves to put more responsible and ethical products on sale and available to consumers. This pushes food brands to focus as much of their communication as possible on this, even if it's not totally true. Pressure from retailers and consumer society pushes them to insist on this, even if this in no way excuses those who welfare wash, as there's nothing to stop them from responding to these societal pressures by actually putting things in place.

c) Communication's evolution based on hot topics

Another thing that came out of this interview with Mr. Horemans, and which is to some extent related to what has just been said, is that at present, companies are profiling themselves way more as being sustainable and environmentally friendly than as being respectful of animal welfare, mostly due to the fact that this is a hot topic at the moment. We're talking more about sustainability and environmental issues than animal welfare because it's more appealing to people and therefore better for business. And it's understandable that it's speaking more to people because it's also a really important topic, but people don't realise the environmental impact of intensive factory farming, which we mentioned earlier. Let's not forget that animal agriculture is one of the largest single sources of methane emissions (The United States Environmental Protection Agency, 2023) and that methane is a greenhouse gas 30 times more powerful than CO2 (Petrovic et al., 2015).

Given this and the fact that brands are adapting to current trends, it's interesting to note that brand communication and positioning have evolved a lot over the last few years and are greatly influenced by public opinion and the topics that are topical and important to consumers or not. For example, Green Seed has worked with Quorn, which is a meat-free brand, for over 30 years. Mr. Horemans said, "Over those 30 years, the motivation or the baseline of the communication varied". It went from being seen as an alternative protein intake to something more focused on health and fibre while passing by animal welfare. "For the last five years, the marketing main topic has moved to sustainability, and the other subjects are still valid, but they now want to highlight the fact that they use less land, less water, less energy", according to Mr. Horemans.

The challenge that businesses or brands have nowadays is that you can't communicate on too many topics at the same time, so you need to choose your battles. It's like Quorn, it's meat-free, it's healthy, it's sustainable, but you don't want to communicate on all that at the same time or it would lose the consumers, it would be inefficient.

d) Communication's channels

When it comes to the best channels for communicating animal welfare considerations to consumers, the food sector is no exception to the general trend: social media. In fact,

according to both Mr. Horemans and Ms. Luna, even if it partly depends on the product or brand's target group, social networks remain one of the best ways to be as close as possible to the consumer. What's more, animal welfare is a subject that is much more relevant to the younger majority of the population, who are generally more inclined to change and concerned about the future, making social networks the perfect tool for communicating the issue. Ms. Luna insisted that transparency, storytelling, and visuals showcasing animal-friendly practices resonate well, especially in visual video content, which are taking more and more space in recent marketing. ChuckJoe is often collaborating with TikTok, Instagram, and YouTube influencers who are passionate about protecting our environment, humans, and animals, as it resonates deeply with younger generations and is the perfect way to communicate a company's consideration for animal welfare. At ChuckJoe, they're even convinced that the future of marketing and communicating on animal welfare will involve even greater emphasis on transparency and augmented reality for immersive experiences showcasing supply chains.

4.2 Consumers' perception and purchasing behaviour

a) In theory

In the next section, we'll look at how consumers perceive this communication on animal welfare from brands and how this is reflected in their behaviour in practice, but for the moment, let's concentrate on how they perceive it in theory, according to the studies that have been carried out so far. Animal welfare is, as we saw earlier, an increasingly important issue for the public, and this is due to the fact that beliefs about animals have changed significantly, with the public now overwhelmingly convinced that animals are capable of suffering when treated poorly (Harper, 2001). However, the fact that these concerns have evolved enormously in recent years is also due to a number of other factors, such as rising incomes and education levels, the urbanisation of consumers, the growing attachment to pets, health concerns, and unanimous political support on this subject.

However, it has also been shown that even if concerns about it increase, this is not always reflected in behaviour and food choices. Although they say they're willing to pay more for improved animal welfare, quality, safety, health and price still have the upper hand in the final choice (Caporale et al., 2005; Harper & Makatouni, 2002).

And there's an explanation for that. In a survey commissioned by the European Union in 2001, it was discovered that when a group of people were asked which characteristics were most important to them when buying food, animal welfare was rarely mentioned, or at least not as a priority. But when these same people were asked whether consideration of animal welfare was important to them, many said it was very important. This can be explained by the fact that, basically, it's only human to be in favour of animal welfare, and so it's almost expected of people, almost like a social obligation, even if it's not actually one of the priorities in their purchasing behaviour. This explains why, despite the large percentage of people who say they are prepared to pay more for an improvement in animal welfare, in reality, their consumer behaviour does not really change (Harper, 2001).

Of course, this doesn't mean that animal welfare considerations can't have an impact on the food choice. One of the things that has had the greatest impact on purchasing behaviour, in theory, is labelling and certification. In recent years, food labelling has played an increasingly important role in compensating for consumers' lack of information and therefore has a major impact on their behaviour (Cheftel, 2005). Yet, there is something of a contradiction between the studies that have been carried out. In an analysis carried out by Tsakiridou et al. (2010), some consumers expected labels and certifications to be clear and precise, easy to understand and containing all the necessary information, while on the other hand, some of them relied on logos without really understanding what they meant. This also emerged from focus groups, where it was clear that despite having selected people who said they were concerned about animal welfare, their knowledge of it was often very limited, especially among the lower social classes, and especially on red meat production. Hence, the need for clear, easy-to-understand labels and certifications (Harpers, 2001). But it's something that people are realising because, in the same Harpers study (2001), people did indeed mention the lack of information about animal welfare considerations in a supply chain as one of the biggest barriers to consuming animal-friendly products, with the lack of availability.

However, contrary to what was found in the Caporale et al. (2005) report, it has been proven that consumers who pay greater attention to animal welfare, in particular by checking certifications and labels, consume greater quantities of certified products. And this is even more true when they are convinced that the animal welfare inspection and regulation system is working properly and that certifications prove something (Tsakiridou et al., 2010).

In its perception of consideration for animal welfare, there are bound to be sources that are more likely to be trusted by consumers than others. Research has shown that people are more likely to trust television current affairs programmes, quality newspapers and reports from customer organisations, research organisations, or animal welfare organisations, whereas government reports or reports directly from the food industry seem to have less credibility (Frewer & Shepherd, 1994). It should be noted that this study is beginning to look a little dated and that it would perhaps be a good idea to carry out new ones, as trusted channels have certainly evolved a lot too.

According to research by Harpers (2001), it would appear that the people who are most concerned by animal welfare, and whose perception and purchasing behaviour is, therefore, most influenced, are young, female, highly educated and potentially mothers of young children. However, the research is unable to conclude whether this is really a question of animal welfare per se or whether it's a search for safety and health, these three terms being linked in people's minds and difficult to separate, since better animal welfare is a sign of food safety and quality in people's minds.

In terms of consumption behaviour, in Ireland, the UK, Italy, Germany and France, which can be taken as representing Europe, we can clearly see a shift from red meat (down 30%) to white meat (up 17%), over five years, and already in the early 2000s (Harpers, 2001). But when asked about the reasons for this shift, it's mainly a question of meat health and safety, with animal welfare once again rarely mentioned, as already discussed in the previous paragraph.

b) In practice

When I say “in practice”, I'd like to emphasise that the term “in practice” refers to what was actually found during this thesis. Obviously, other studies have used practice to support their theories in the past, but these have been covered in the previous section. This section refers only to the practical research findings of this thesis, and these practical results have been put forward by means of a survey among 104 people.

First of all, a little demographic background (Figure 10): among these 104 responses, 64.4% were women and 34.6% men, mainly young people, with 69.2% aged 18-24 and 12.5% aged

25-34, but still 14.% aged 45-54. As for their status, 56.7% were students, 32.7% employees, and 4.8% either self-employed or job seekers. All the respondents are Belgian.

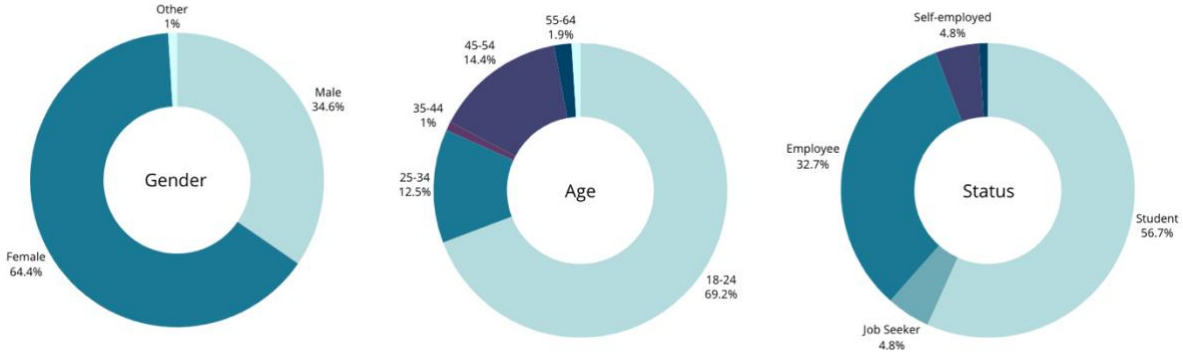

Figure 10 – Survey's demographic characteristics (Survey, 2023)

We can already see from the trends in the respondents' profiles that they are very much in line with the profiles that have been shown to be more inclined to consider animal welfare in their purchasing behaviour (Harpers, 2001), i.e. predominantly female, fairly young, and with a greater likelihood of having completed higher education. Of course, these last two points are probably also influenced by my own profile because although I tried to make this work as comprehensive and heterogeneous as possible by circulating this survey in circles that weren't my own, it's certain that the fact that it was mostly young students or employees is not insignificant. However, I still think that having a total of almost 65% women is indicative of greater interest because I don't think I've had any influence, except perhaps the opposite one. Such a high female response rate seems to indicate a greater predisposition on the part of women to take an interest and take part voluntarily in a survey of this type.

At the outset, to gauge the general level of the respondent sample, they were asked how familiar they were with the concept of animal welfare on a scale of 1 to 5 (Figure 11), and a fairly clear Gauss curve can be seen in the spread of responses, with 35.6% of respondents estimating themselves to be in the average range, 34.6% being at 4/5 and 29.8% estimating themselves to be at 1/2. It is surprising, in relation to the theory mentioned earlier, to see that despite a sample composed mainly of educated young women who are “more sensitive” to this cause, almost 30% of people feel unfamiliar with the concept.

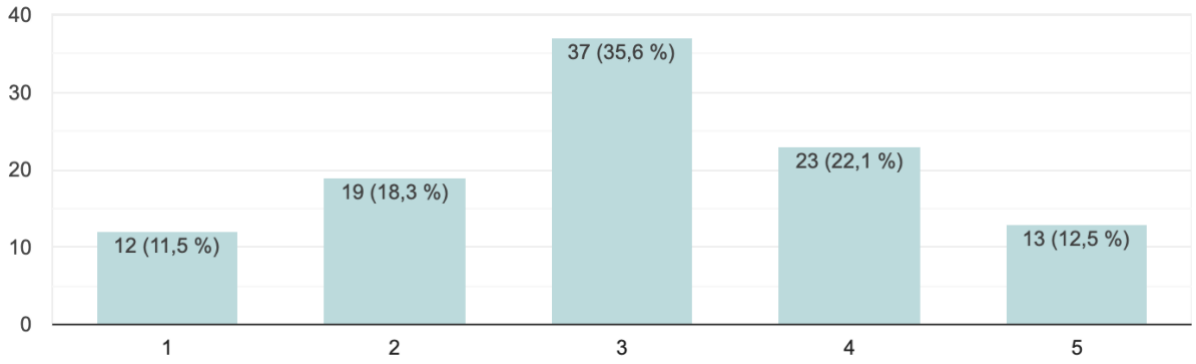

Figure 11 – How familiar are you with the concept of animal welfare in food supply chains? (Survey, 2023)

However, after a short definition of the concept, when asked how important animal welfare is to them in their food purchasing decision, we can see on the graph (Figure 12) that the results shift to the right, with 41.3% at 4/5, still a majority of 37.5% at 3, and only 21.1% saying that it is not very important to them at 1/2.

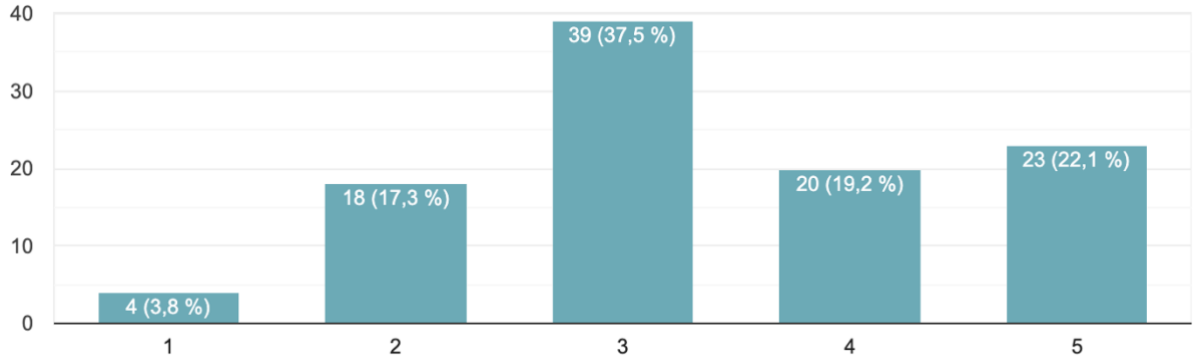

Figure 12 – How important is animal welfare in your food purchasing decisions? (Survey, 2023)

These results are entirely consistent with the theory that animal welfare is not a characteristic that comes directly to consumers when we ask them what determines their purchasing behaviour, but that once we explain it to them or ask them directly if it is important to them, they are much more likely to say that it is. And again, that's normal because it's simply human to be in favour of this for animals, almost like a social obligation.

We've seen in theory that this doesn't always translate into a change in purchasing behaviour, but is their pre-purchase research influenced by the importance they attribute to it? Well, not really, at least that's what emerges when asked if they actively seek out information about a food brand's animal welfare practices before making a purchase. 12.5% say they always do, 24% often, 29.8% rarely, while a third never do. We can therefore see that, although only

21.1% of people say that animal welfare is not very important to them (Figure 12), there are still over 63% who never or very rarely look for information on animal welfare before making a purchase. This is entirely in line with the theory discussed in the previous section.

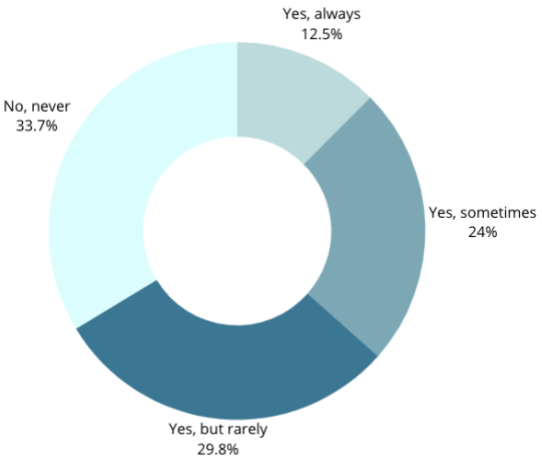

Figure 13 – Do you actively seek information about a food brand's animal welfare practices before making a purchase? (Survey, 2023)

This is supported by the following question, where they were asked if they had ever changed brands because of animal welfare considerations. Almost 65% of them answered no, which proves that although most people attach (great) importance to it, it rarely translates into purchasing behaviour. Among the 35% who answered yes, their reasons for changing were relatively the same, with a large majority deciding to buy their meat directly from the farm or butcher rather than from the supermarket, to stop buying products containing palm oil such as Nutella, or to switch to free-range or organic products, whether for meat or eggs.

I thought that one of the reasons that might have prevented these 65% from shifting to more animal welfare-friendly alternatives, despite the importance they say they attach to it, might have been price. However, the survey does not confirm this hypothesis, as over 70% of respondents say they are prepared to pay a premium for food products certified for higher animal welfare standards. When we look at the amount of this premium they are prepared to pay by asking them what percentage they would consider (Figure 14), almost 40% of respondents would be prepared to pay between 5% and 10%, and almost 35% would pay between 10% and 15%. Just under 10% would either pay less than 5%, between 15-20%, or would be prepared to pay more than 25% of the price for certified animal welfare products. So price isn't the reason for this lack of change in purchasing behaviour, and not necessarily the problem that the food system and brands should be focusing on to improve their

communication. Of course, between what is answered in a survey and the reality in the store, it's not impossible that some respondents overestimated what they were prepared to pay.

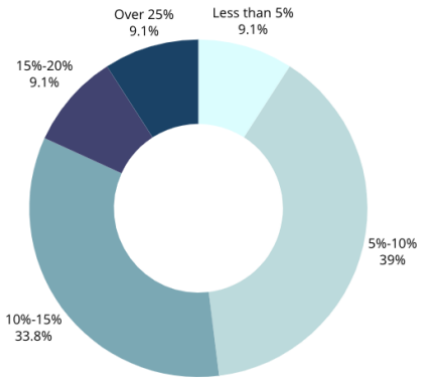

Figure 14 – What percentage of the price would you be willing to add for certified higher animal welfare standards? (Survey, 2023)

In the last question of the first part of this survey, I asked them how frequently animal welfare considerations were impacting their food purchasing decisions, to directly confront the theoretical aspect we know with reality. It has to be said that this corresponds fairly well to what was found before, where almost 65% of respondents said they never or very rarely looked for information on animal welfare before making a purchase. Here (Figure 15), we can see that for more than 54% of people, animal welfare considerations never impact their purchases or only once every few months. However, 26.9% of them still see their food purchases affected by these considerations every time they go shopping, and just under a fifth have their purchases affected at least once a month. It should be remembered that at the start of the survey, over 75% of people said that behaviour was important or even very important in their food purchasing decisions (Figure 12). It is, therefore, clear that this concern for animal welfare is not reflected in food purchasing behaviour (Caporale et al., 2005; Harper & Makatouni, 2002).

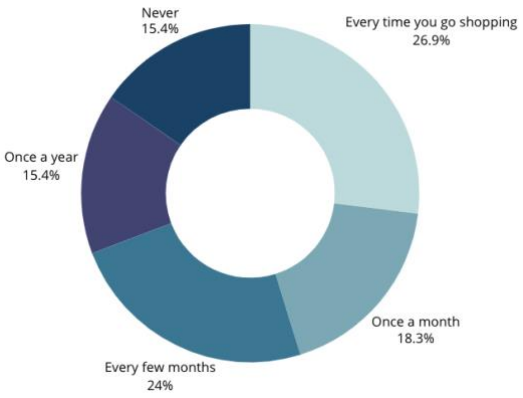

Figure 15 – How frequently do animal welfare considerations impact your food purchasing decisions? (Survey, 2023)

4.3 Awareness campaign from organisms

When it comes to communication about animal welfare and how it is perceived by consumers, there are, of course, those produced by food brands, but we mustn't forget those produced by animal defence organisations.

a) Interviewed organisms' presentation

Before talking about how and why these associations communicate, let's start by introducing them properly. The first interview was with Mr Wolf Gordon Clifton, Executive Director of Animal People. Animal People is an association that went through several different phases, starting in 1992 as a media association, publishing newspapers on animal welfare and rights. In 2015, they switched to an online forum and magazine, but as the media landscape in terms of animal welfare was already pretty saturated thanks to social media, they shifted again the focus of most of our activities towards policy, especially advocating United Nations processes of increasing people's attention to animal welfare. They are involved in high-level political form conferences, which the UN hosts every summer in New York, the convention on biological diversity, and the UN environment. They are especially advocating for Animal Welfare as a component of sustainability and a component of biodiversity. They are overall trying to raise awareness around the importance of animal welfare in itself, as they believe we all have an ethical obligation to treat them with compassion. Their ideal goal is to create a food system and organisations in which people no longer exploit animals.

I also had the chance to interview Mr. Phil Brooke, Head of Research and Education at Compassion in World Farming. Their main goal is basically to get rid of factory farming, which could have benefits for both the environment and for the animals. They're not advocating for people to go vegan; the objective is more to advocate for people to eat less and better, rather than telling them not to eat meat. They believe better food systems are going to be regenerative ones, so animal welfare should be at the centre of it, and are thus opposing cruel systems, any form of cages, any kind of systems where animals are bred to grow faster to be more productive which effectively puts them in a cage of disability. They think that welfare is a mental state, and to achieve good welfare, you have to be in a good physical state and you have the opportunity to perform your natural behaviour. Away from factory farming, they're

also trying to promote methods improving the soils and improving the welfare of the environment instead of harming it.

Finally, and probably one of the most interesting interviews because of the scale of the organisation and its impact, I interviewed Mr. Cris Burello, Supporter Services Assistant at People for the Ethical Treatment of Animals (PETA). PETA believes in both animal rights and animal welfare. Their final goal, in the long term, would be to see animal rights adopted universally. But for the moment, billions of animals are suffering in the food, clothing, experimentation, and entertainment industries each year, so they are taking immediate action to try to alleviate some of their suffering. For that, they campaign against companies for improved animal welfare standards while also vigorously promoting a vegan diet as the best way to help animals, with the goal of bringing animal liberation at a more rapid pace. By pushing people to recognise that animals at least deserve better treatment, they hope more humane systems will be developed.

b) Importance of awareness campaigns

Now, why do associations defending animal welfare have to advertise too? Well, on one hand, because there are many things hidden by food companies, and as we saw in the theory section just above, according to consumers, one of the things they crucially lack in order to consume animal-friendly products is the lack of information about animal welfare considerations in a supply chain (Harpers, 2001). Even in the case of Animal People, which lobbies the government on behalf of the animal cause and which should therefore not be dealing with hidden information that should be revealed or put clearly in front of consumers' eyes, there is still a need to inform consumers. Mr. Gordon Clifton said, “The information is not really hidden, the [UN] reports are out there and available to the public. The problem is more that the UN is not emphasising the findings”, by which he meant that even though the UN reports exist, nobody emphasises them, if not worse. Indeed, for example, in 2004, the first UN report really showing animal agriculture as a leading driver of climate change came out, but still, the UN did not advocate “Eating less meat” to people, as the industry has enough influence to keep them from doing so. That's also why there’s a need for communication and advertisement from this kind of association.

At the same time, it is also essential for animal rights groups to communicate and remind people of their fight on a regular basis, as it is a fight that tends to take second place to sustainability and respect for the environment, as mentioned in several of the interviews, most notably the one with Green Seed conducted in conversation with Mr Horemans. One reason for this favouritism towards sustainability and ecology has been found in the fact that it is not just out of pure indifference, but it is already so complicated to obtain changes on important subjects that directly concern humans (global warming, racism, etc.), that animal welfare falls by the wayside (Kateman, 2023).

c) How do animal welfare associations communicate?

But what are the subjects on which the organisations communicate, and how? CIWF's main campaigns at the moment are for the abolition of cages and to stop the massacre of fish, in addition to petitions that people can sign to show the scale of the people concerned. They also lobby food companies in Europe. PETA, on the other hand, vigorously promote a vegan diet as the best way to help animals, fighting on similar issues to CIWF for the factory farming part, but unlike CIWF, they also fight on many other areas concerning animal suffering, such as the medical research industry, fashion, entertainment, as we talked about at the beginning.

The slight difference between CIWF and PETA is the way they campaign rather than the subject of their campaign itself. CIWF's campaigns are more conservative, very well done, and denunciatory on important subjects such as cages, transport, honest labelling, the danger of antibiotics, but they are “calm” in their communication on these campaigns. Whereas PETA is known for being much more shocking, with strong slogans, strong actions, people dressing up as animals to denounce, naked marches, harsh images, secret undercover investigations to reveal things, and so on. And they do this to attract media attention, which is very important, as we discussed in the section “Negative Impact: Media Representation”. The two are undoubtedly necessary and complement each other.

CIWF and PETA advocate mainly towards consumers to inform them and remind them of the importance of the issue, and this is necessary! Animal People, on the other hand, also campaign and advocate for the cause but with a government, so how do they do it? Well, according to Mr Gordon Clifton, speaking regularly at conferences has already made the term much more familiar to people since 2016. One of the big successes was the recent NEXUS

resolution in 2022, the first UN resolution specifically dedicated to animal welfare and recognising its connections with environmental issues, which was a huge victory that required a lot of effort on their part (among other things), but which has helped to normalise the idea of animal welfare even further. They are also already trying to put in place the acceptance of a new SDG specifically for animal welfare and its protection by 2030, which would allow a lot of change thereafter, as well as redivide subsidies more fairly to reduce the price gap between meat products and their more respectful alternatives. These are all steps that they need to take directly to governments rather than to people to hope for substantial change.

5. Effect on the brand's perception/reputation/sales/...

5.1 Consumers' sensibility to marketing strategies

In Tsakiridou et al. (2010), it's said, "Henson (1996) and Hughes (1995) found that women and young consumers are more positive in paying a price premium for certified food products, while Wandel and Bugge (1997) found that consumers with a higher level of education are more willing to pay for certified products". This, as we clearly saw in the analysis of the first part of the survey results, is entirely consistent with what we have and, therefore, reflects a difference in sensitivity among the respondent profiles. We have already seen how consumers perceive animal welfare and behave in relation to it, so let's now analyse how their sensitivity to this message varies according to the way companies communicate about it.

From the outset of this second part, the first question was what might influence a consumer's perception of a food brand's commitment to the cause at hand (Figure 16). To create the list of possible factors, I based myself on what was generally found in all the studies and surveys I have read for this thesis. It has to be said that it quickly joins up with the theory, as the first influencing factor is labelling and certification, which once again reminds us of their importance for consumers and the impact they can have, hence the need for clear and easily understandable certification for all.

It's also interesting to know that people are even more sensitive to labelling and certifications that are accompanied by details of what the certification means in terms of animal welfare and that it encourages them to buy products with greater respect for animal rights when they have this additional information (Cornish et al., 2020). This is because, in today's society, there

is so much distance between consumers and the production of the products they buy that this information is one of the only ways for people to know what they are consuming.

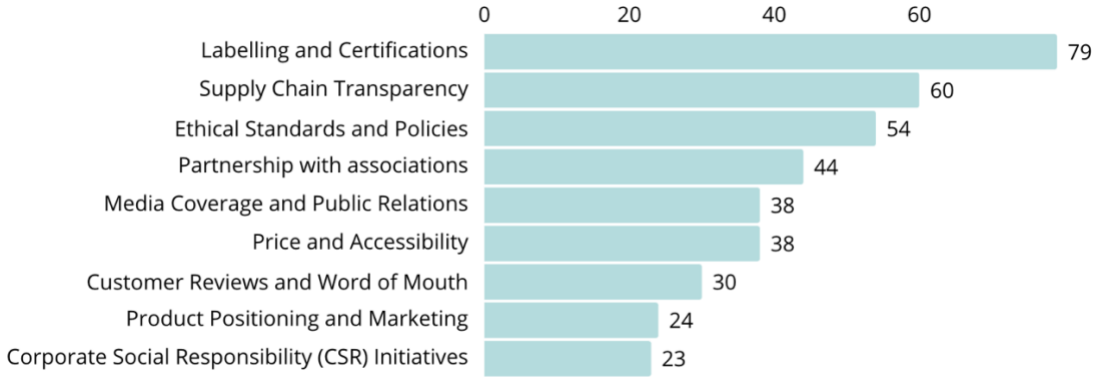

Figure 16 – What factors can influence your perception of a food brand's commitment to animal welfare? (Survey, 2023)

Following on from the top 3, we find supply chain transparency and the ethical standards and policies implemented by the company, two things that are directly under the company's control and responsibility. This proves to us that demonstrable actions are better than words for consumers. In the middle range of influence, we find more of a media aspect, with partnerships with associations and public relations or the media, as well as price, which is often a good indicator of a product's perceived quality and ethics. Finally, the least influential factors for consumers are customer reviews and word-of-mouth, product positioning and marketing, which are obviously much less important than any certifications, and CSR initiatives in place.

But over and above these factors, which can have a major impact on people, to what extent are they prepared to believe a brand that communicates its commitment to animal welfare, on average, whatever the brand. We can see (Figure 17) that the results are fairly neutral, with a slight tendency to trust brands. In fact, around 5% will not believe the brand at all or, on the contrary, will believe it wholeheartedly. Over 20% will trust them a little, while the remaining 67.4% of people are evenly divided between believing them normally and starting to really trust them. This shows that, in general, people are quite receptive to brand communication in terms of animal welfare, hence the importance of communicating it well, and we'll see how shortly afterwards.

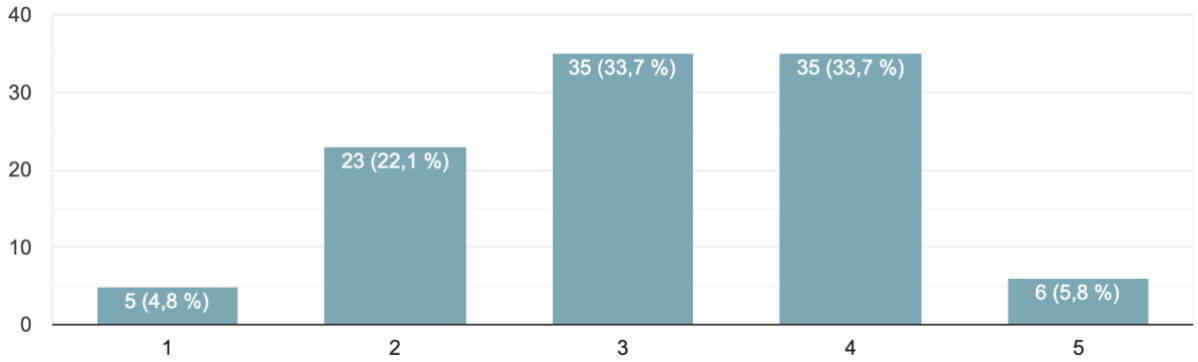

Figure 17 – How likely are you to trust a brand that communicates its commitment to animal welfare? (Survey, 2023)

In the first graph in this section (Figure 16), we asked what factors influence the perception of a brand's commitment. Here (Figure 18), we're asking what factors influence people's trust in a brand that communicates its commitment. But it has to be said that the results, though slightly different, do converge. Some of the factors we mentioned earlier, such as supply chain visibility and traceability, demonstrable actions, consistency and transparency, and certification or ethical standards, are all in the lead. Among those that do have some influence, we find past behaviour and actions of the brand, as well as their responsiveness and commitment. Surprisingly, public perception and brand reputation seem to play only a very small role in why consumers do or don't trust a brand's commitment communication, which is the opposite of what you might think at first glance.

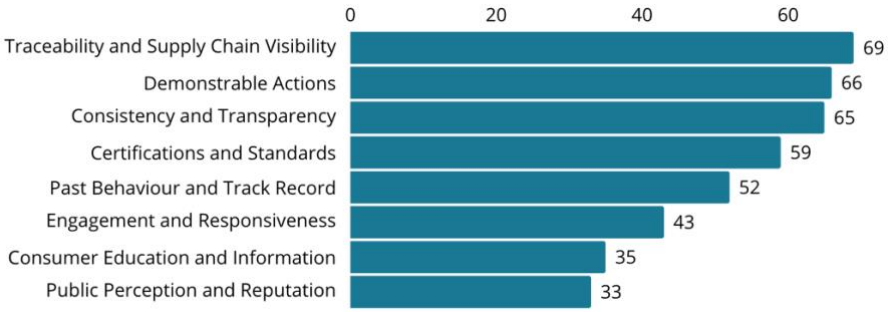

Figure 18 – What can influence why you trust or not a brand communicating on its commitment to animal welfare? (Survey, 2023)

Now that we know the factors that most influence people's perception of a brand's commitment, it is interesting to know which communication channels can have the greatest impact on people's perception (Figure 19). To do this, respondents were given a list of 9 communication channels and asked to select the five with the most influence for them and rank them in order of influence. The graph shows that, overall, packaging and labelling are still very important means of communication (clearly first in terms of greatest influence), as is

advertising in general, which was strongly cited as the 2nd and 4th greatest influence. In the moderate influence category, we find a section that is more similar to building a community, i.e. social networks, partnerships with associations, writing blogs, and more. This definitely resonates with the communication channels that work best according to marketing agencies ChuckJoe and Green Seed. By contrast, the "least good" communication channels for communicating your commitment to animal welfare, according to the respondents, are marketing emails, the brand website and video content.

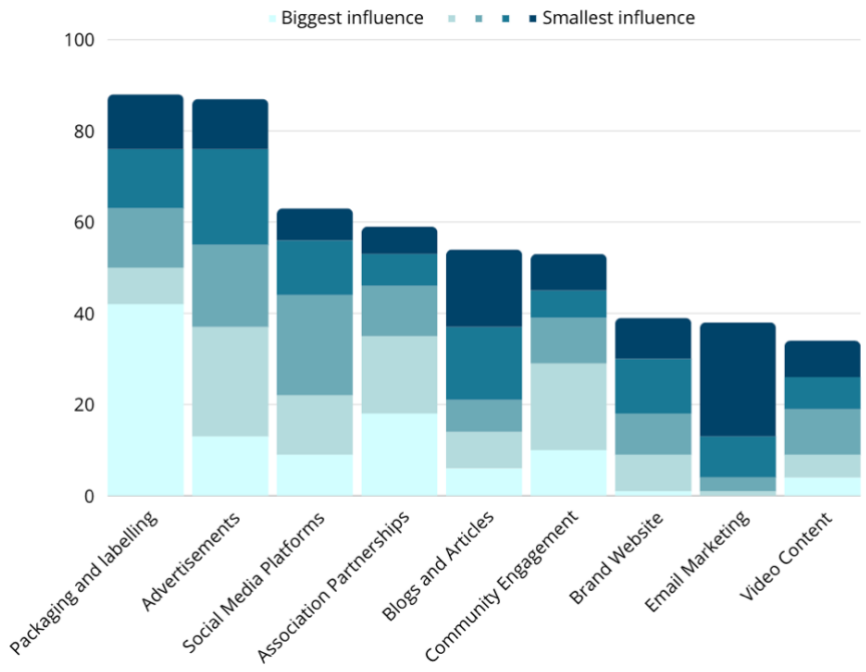

Figure 19 – Which communication channels influence your perception of a brand's animal welfare efforts the most? (Survey, 2023)

The question of whether companies and brands that insist on animal welfare (rightly or wrongly) have a competitive advantage over their competitors was raised several times in the interviews, and the opinion was fairly mixed. When we put the question to the respondents (Figure 20), the answer seems quite clear. A majority of respondents, just like Ms. Luna from ChuckJoe, do indeed think that it provides a competitive advantage, with just under 60% of people answering that it is a big competitive advantage (4/5), and almost 30% who still consider it to be an advantage on the market. This is probably because people think animal welfare is very important to them, but as we've seen, it rarely translates into a buying trend, so it's complicated to say whether it's really a competitive advantage in reality.

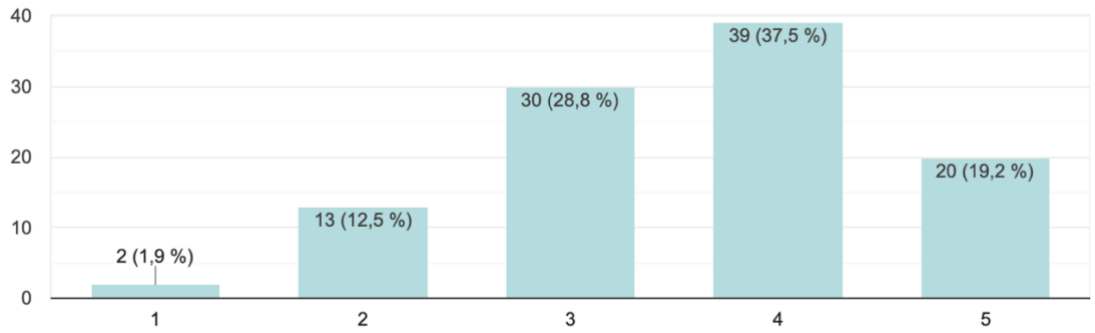

Figure 20 – Do you believe that food brands highlighting animal welfare considerations have a competitive advantage in the market? (Survey, 2023)

On the basis of all the influences that have been mentioned since the beginning of this section, there are several marketing strategies that can be implemented by brands, but what do consumers think of the different marketing strategies that exist (Figure 21)? Out of the 11 proposed, they were asked to select six with the most influence for them and to rank them in order of influence. Once again, insisting on labels and certifications, taking initiatives to make the supply chain more transparent, and forming partnerships with associations are marketing strategies that speak volumes to consumers. One strategy that we haven't talked about at all until now - storytelling campaigns - also seems to be particularly effective. Among the average influences is the creation of educational content and customer engagement, meaning consumers want more information but only on the packaging at the time of the final decision, not upstream. There's also donating a percentage of profits to a good cause, surely seen as a great solution but a bit of a cop-out, and event sponsorship. Finally, partnerships with influencers, interactive campaigns or special and/or limited edition products are not at all seen as effective marketing strategies for promoting animal welfare.

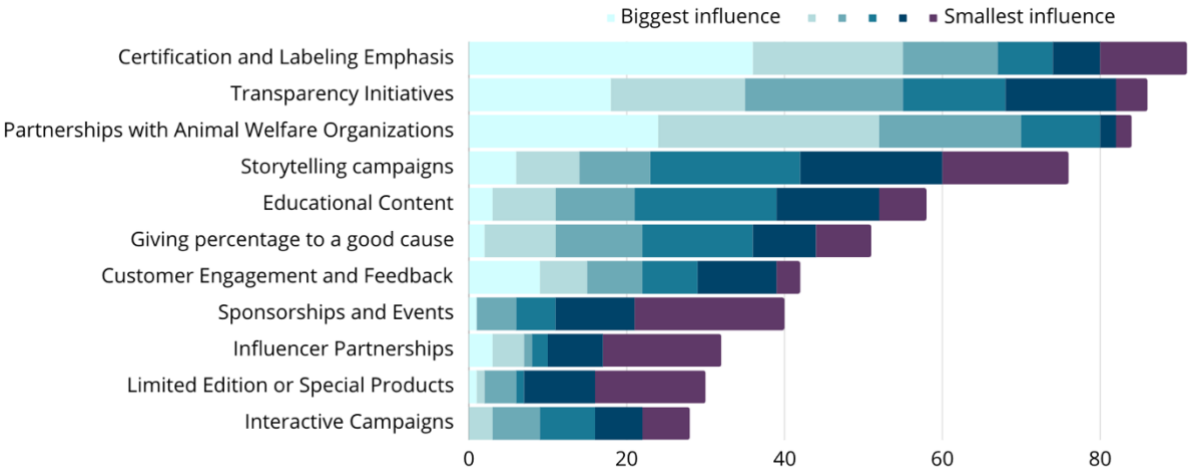

Figure 21 – Which marketing strategies related to animal welfare resonate with you the most? (Survey, 2023)

In the course of all these questions, there is one point that comes up again and again, and which makes sense from a theoretical point of view, and that is the importance of certifications and labels. To explore this further and confirm it, I asked respondents, on a scale of 1 to 5, to what extent this might influence their purchasing decisions (Figure 22). Unsurprisingly, more than half of people attach great or enormous importance to it, almost 30% of respondents find it normally important, and only just over a fifth find it not at all or at least not very influential. These results are in line with what has been shown so far.

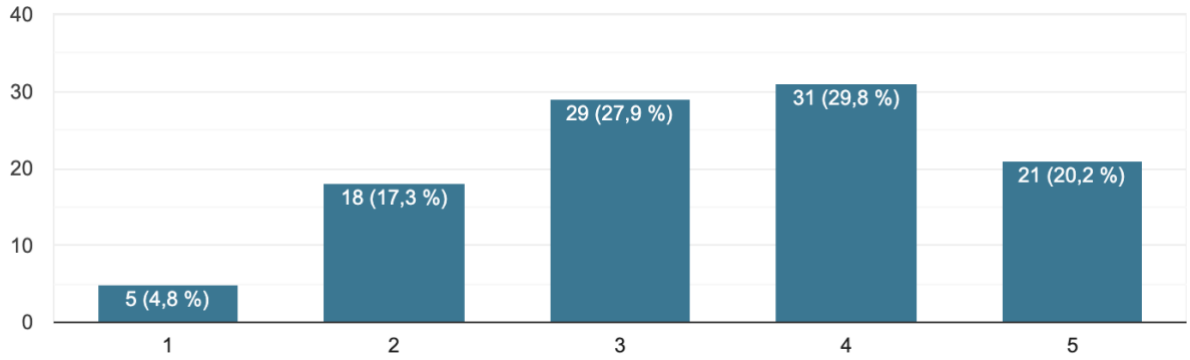

Figure 22 – How influential are ethical labels or certifications related to animal welfare in your purchase decisions? (Survey, 2023)

To get a little more practical, respondents were asked to select five measures that they thought food brands should put in place to better communicate their commitment to animal welfare (Figure 23). Once again, we find the importance of obtaining certification, having a message that is as transparent and clear as possible, and communicating through partnerships with animal welfare associations. This is exactly the same top 3 as in Figure 21, which shows a great deal of consistency in consumer sensitivity. Measures that might also be worth taking, according to respondents, are making public commitments (and keeping them, of course), educating people, and two new measures that hadn't really appeared before, regularly posting updates and reports online, but also performing due diligence on suppliers. This makes it possible to be sure that suppliers comply with the brands' ethical standards, and according to the respondents, it seems to be a good way of. What doesn't seem to be a good way of communicating, however, is engaging with customers online and providing storytelling or case studies. This last point makes no sense at all, given that storytelling campaigns were considered a very good marketing strategy in Figure 21. So, there's a bit of inconsistency in the responses here. It’s the second time (with Figure 21) that educating consumers is considered as important, and this translates in real life as in the interview with ChuckJoe, they

emphasised what they were doing, as a marketing agency, to educate consumers about the animal cause (weekly blog, monthly newsletter, interactive online modules, infographics explaining labels, etc.) and said it proved effective in raising awareness and influencing consumer behaviour.

Figure 23 – Select 5 measures that you think food brands should take to better COMMUNICATE their commitment to animal welfare (Survey, 2023)

Following on from Figure 22 and the importance of labelling and certification, I wanted to take a closer look at what kind of labelling consumers would prefer: one with more detail and information or something simple and straightforward. So they had to answer this on a scale of 1 to 5, 1 being clearer, simpler and more concise, and 5 being a detailed labelling with lots of information. In theory, we have seen that consumers were encouraged to buy products that were more respectful of animal welfare when they had more details about the certifications (Cornish et al., 2020). In reality, as can be seen in Figure 24, responses are evenly split between concise and detailed. However, we can still observe a slight preference with almost 30% for well-detailed labelling, without going into certifications that resemble an information sheet.

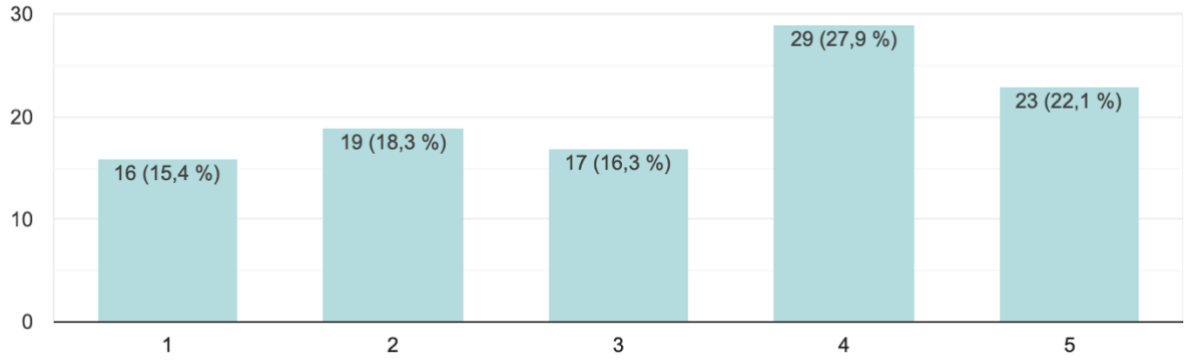

Figure 24 – Would you prefer a clear and simple labelling or with more detailed information about a brand's animal welfare practices? (Survey, 2023)

Now, unlike Figure 23, it is no longer a question of taking measures to communicate better, but rather of selecting five measures, which would be the most five important according to consumers, that would enable food brands to actually improve their commitment (Figure 25). This time, obtaining certifications is barely in the top 5 measures, which makes sense because it's not so important for actually improving animal welfare, it's more something that's useful for communicating the fact that we've improved it. Around this are the other measures, which may be interesting but are not the most important, i.e. set supplier standards and audit, educate people and invest in research and innovation, the latter being necessary to find alternatives that no longer require the intervention of animal life.

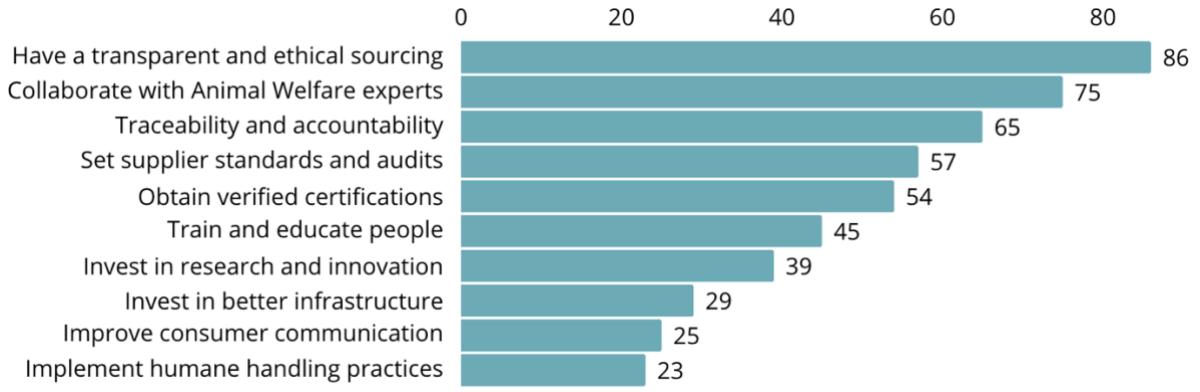

Figure 25 – Select the five more important steps food brands should take to ACTUALLY enhance their commitment to animal welfare (Survey, 2023)

The less important things are improving communication with customers, which makes perfect sense, implementing humane handling practices, and investing in better infrastructure. This last point is a strange one, as it is quite essential if we want to take better care of the animals, but its low ranking is perhaps due to respondents' ignorance of the need for better infrastructures to improve the animals' living conditions. The top three are all in the same vein: ethical and transparent sourcing, working with animal welfare experts to make sure we're doing things right, and implementing maximum traceability and accountability.

For the last part, I wanted to look more closely at what prevented people from switching to meat-free alternatives, whether plant-based, cell-based, fermentation-based, or simply becoming vegetarian/vegan. To do this, respondents were asked to estimate how familiar they felt with the impact of intensive animal agriculture on the environment and global warming (Figure 26). It can be seen that they are fairly confident about their familiarity with the subject, as almost 25% of them are very familiar with the concept, 34.6% are very familiar, over 20%

have normal knowledge of the subject, while barely 20% think they have no or very little familiarity with the concept.

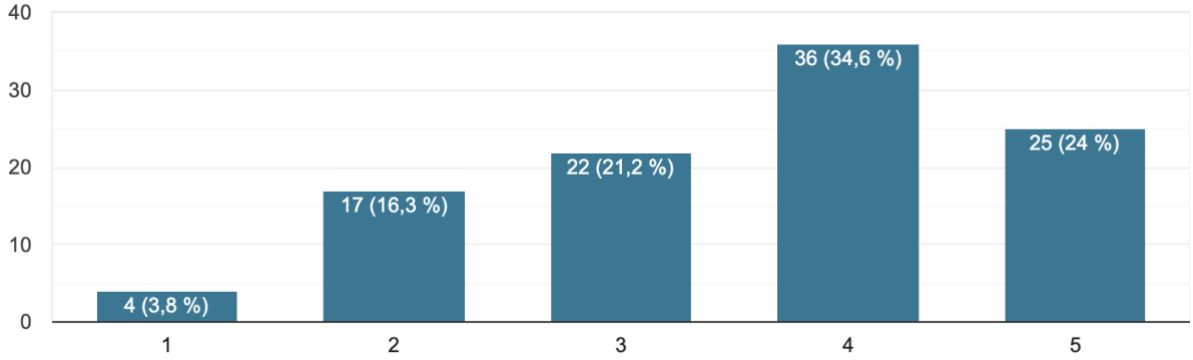

Figure 26 – How familiar are you with the influence of intensive animal agriculture on environmental issues and climate change? (Survey, 2023)

Surprisingly, the results are quite different and much more positive than what was observed in Figure 11, where respondents' familiarity with the concept of animal welfare was tested. It is astonishing that the same people feel familiar with a subject as complex as the dangers of intensive animal farming for the ecology and the environment, whereas they were less confident in their knowledge of a simpler concept such as animal welfare.

One potential explanation for this is a cognitive bias known as the Dunning-Kruger effect, whereby the more a person thinks they know about a subject, the less they actually know. In fact, this effect considers that only people who are truly experts in a field can realise how vast it is and how much there is to learn about it, and this is why experts are often well aware of their knowledge limits, even in their own field. People who don't know much about it, on the other hand, don't realise how much they don't know, and are therefore much more confident about their knowledge in a field they don't really master. In our case, it's possible that because we've been talking about this subject since the beginning of the survey, respondents now feel they know more about it and therefore rate their knowledge and level of familiarity as higher than before in the area of animal agriculture, even though it hasn't changed much and they're probably not as familiar with it as they say they are in Figure 26, although they think they are.

After a brief definition of the impact of intensive animal agriculture on the environment, the respondents answered three very similar questions, but which varied in one aspect. At first, they were asked how willing they would be to switch to a meat-free alternative if they

couldn't see the difference in price (Figure 27). The results are quite clear: if the prices were equivalent, almost 60% of people would switch directly to meat-free alternatives, 15.4% would be very tempted to switch, and just over 25% would not be tempted or not too tempted to switch to meat-free alternatives if the price was equivalent. Note that we're only talking here about whether the price is the same, all other inequalities remain.

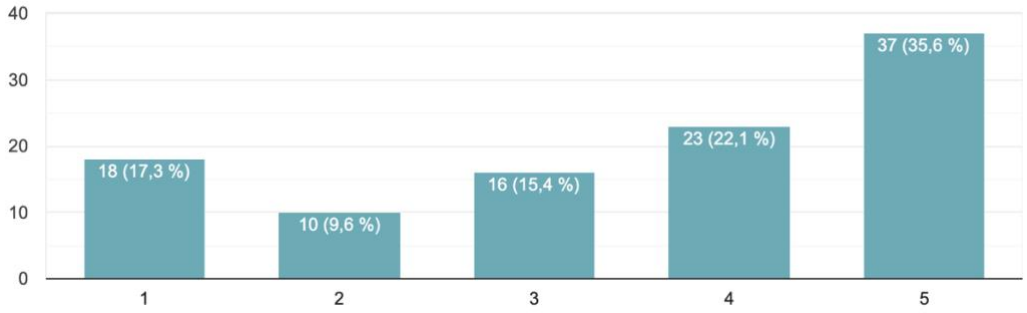

Figure 27 – How willing would you be to switch to meat-free or plant-based products if you couldn't see the difference in the price? (Survey, 2023)

In the second case, the same question was asked, but this time, it was whether they could see the difference in terms of taste (Figure 28). This aspect seems to have much more impact than price, as over 70% of respondents would immediately switch to meat-free alternatives if they tasted exactly the same as meat in general.

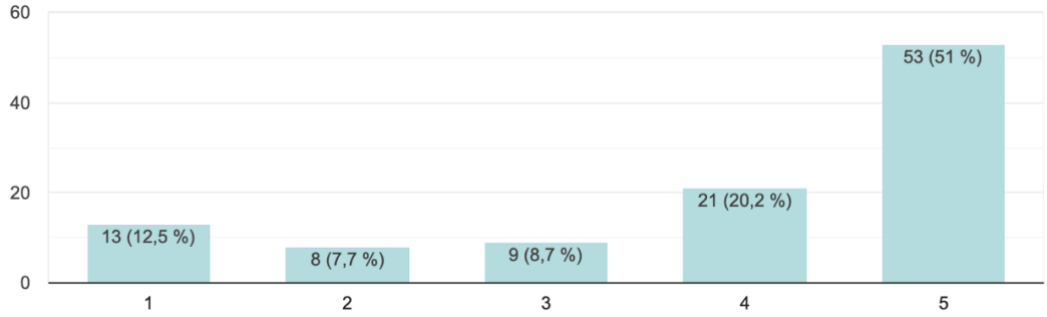

Figure 28 – How willing would you be to switch to meat-free or plant-based products if you couldn't see the difference in taste? (Survey, 2023)

Finally, the third question asked whether they could see the difference in terms of physical appearance (Figure 29). Here, we really find ourselves with an in-between of Figure 27 and Figure 28, where compared to Figure 27, it's as if the people who gave slightly neutral answers (2/3/4) had fallen back on the extremes by either switching directly or not switching at all. In comparison with Figure 28, it is more as if some of those who would have switched easily for an identical taste no longer switched at all for an identical visual aspect. This shows us that

the visual aspect is, therefore, much more polarising than the other two among the respondents, and that it is less important than the taste aspect for people to adopt animal-friendly alternatives because people switch more if the taste is the same than if the visual aspect is the same.

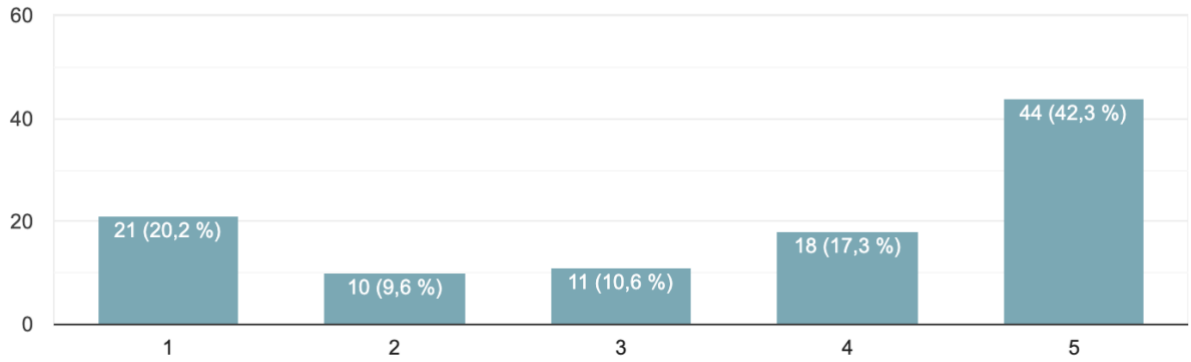

Figure 29 – How willing would you be to switch to meat-free or plant-based products if you couldn't see the difference in how it looks? (Survey, 2023)

To conclude, the survey ends with the following question for respondents: if none of the three previous aspects is taken into account, what would prevent you from switching to these meat-free alternatives, with a few suggestions and a free field to let respondents propose other ideas (Figure 30). We can see the top 4 clearly detached from the rest, including lack of availability, family preferences, perceived health concerns (often misconceptions about lack of iron), and the limits of culinary knowledge, which means that it could be important to educate consumers on these last two points to encourage the new alternatives that are emerging. Social and cultural norms also seem to be a big brake and are basically the same as social or peer pressure. Obviously, as just under 10% of respondents were already vegetarian or vegan, the question didn't really apply to them.

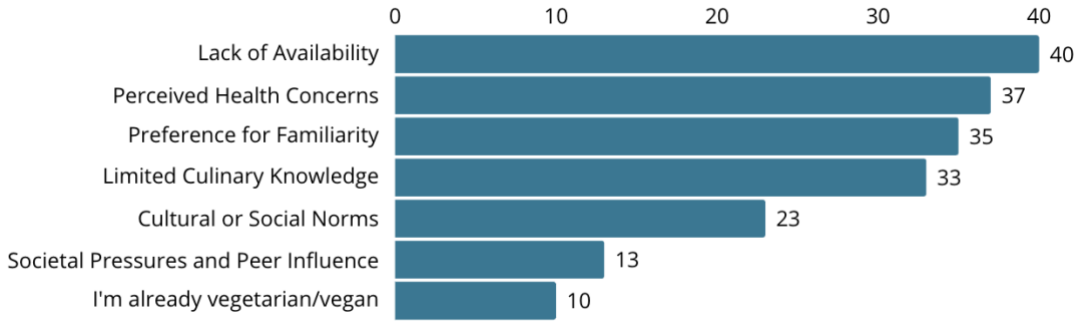

Figure 30 –What could be stopping you from switching to a meat-free alternative (other than price/taste/look)? (Survey, 2023)

5.2 Food industry's reactions

When you know all this about consumer sensitivity these days, and in particular, how it has evolved over the last few years, you have to wonder how the food industry has reacted to all this. Obviously, we've already talked a bit about how the food industry evolved in the first part of this thesis, which was more theoretical, but let's now take a look at what was said in the interviews. How have stakeholders in the food sector reacted and/or changed over the last few years? According to the Executive Director of Animal People, the results and reactions that have been achieved, such as the fact that there are indeed fewer and fewer animals in cages and more and more of those who are still in cages are at least in better living conditions than before, is partly due to consumers wanting it, partly due to food business and associations campaigning.

In general, thanks to the growing trend of consumers considering animal welfare, brands are reacting by incorporating more and more of these concerns into their practices and marketing strategies. Most of ChuckJoe's clientele always focuses more on sustainability and humane practices, pushing them to shift their digital marketing practices and strategies to make the most impact they can. They definitely noticed a greater emphasis on transparency, augmented reality for immersive experiences showcasing supply chains, and heightened consumer demand for verifiable ethical practices and expect this to continue in the future. Indeed, supply chain transparency emerged as a very important issue for consumers during the survey, so they're trying to prioritise it. Realising this also pushed them to rigorously assess and verify their clients' CSR practices to ensure alignment between marketing claims and actual practices, and it's the case in more and more of the marketing agencies in the market. If a brand's practices don't align with claimed values, they engage in a dialogue, advocate for genuine changes, or, if needed, simply discontinue the collaboration.

And it's not just marketing agencies that are doing this. In fact, it's also being seen more often in the major supermarket chains, as Green Seed pointed out. Brands such as Delhaize, Carrefour, or Colruyt in Belgium are paying increasing attention to the inclusion of sustainable food and drink and ethical practices, but they are also paying increasing attention to CSR and conducting due diligence with their suppliers.

Of course, as a result of the shift in consumer interest in animal welfare and the reaction this is causing in marketing agencies and large supermarket chains, it's also impacting big food brands and their marketing and branding. Unfortunately - and this was discussed in depth earlier in the thesis - some companies adapt their marketing simply to meet society's ethical expectations without actually changing anything in the process. Once again, the focus is on sustainability and ecology rather than animal welfare, according to Green Seed. Mr. Horemans said, ”There are some small companies axing their communication around animal welfare, […] the big and more mature ones know that it's more effective to emphasise sustainability and protecting the environment on mainstream marketing. They will probably make statements on it […], but they won't fly the animal welfare consideration flag”.

However, let's not forget that it's not all marketing and that the food industry is really moving in the right direction in terms of facts too. Take PETA, for example, whose actions and campaigns have brought about huge changes in the food industry. Mr. Burello cited just a few of them in his interview, “PETA has [...] drawn international attention to what happens to animals in the food [...] industries; closed the largest horse-slaughtering operation in North America [...]; cleaned up substandard animal shelters […]; and been responsible for the first successful prosecution of an animal experimenter under anti-cruelty laws”. This indicates that all is not lost and that it's not all marketing, as some things are moving in the right direction.

IV. PART III: What should the food industry's stakeholders be doing next?

6. Concrete improvement possibilities

6.1 What can be put in place by food brands to improve themselves on these issues?

We're beginning to have a very precise context, from the origins of animal exploitation to consumer sensitivity towards it, passing through the evolution in the different industries, the methods used, what prevents things from moving faster, and the alternatives on the market, not forgetting the way in which companies and defence organisations communicate about it and the way it's perceived and translated into consumer behaviour trends. We can now proceed with the final stages, namely to use our results and everything we have learned to advise not only companies but also the rest of the industry's stakeholders, on how to improve animal welfare consideration in the future, both in practical terms and in the way they communicate about it.

Let's start with the practical part, i.e. how businesses can make concrete improvements in terms of respect for animal welfare and have a better consideration of it along the supply chain. Let's not forget that, while communicating can have an impact on sales and profits, it's all pointless without real changes upstream and can even be very dangerous for the brand image, as we'll see in more detail in the section on welfare washing. Some points will no doubt have already been covered, either superficially or in detail, but this section will serve to bring all these guidelines together in one place, to summarise or explain some of them in more detail, as well as to introduce some new ones.

Concrete improvements that had already been discussed, for example, were in the "Light improvement alternatives" section. To sum up what had been said, whether it's about chickens, egg-laying hens, pigs, cows or calves, whatever the animals, they all need more or less the same improvements to thrive and have a better life:

- The abolition of cages, leading to a rich and spacious environment (with things to scratch on, to bath, and so forth).
- Possible access to the outdoors 24 hours a day, and with enough space to express their natural behaviour.
- Live in society with their fellow species.

- Be fed correctly with balanced diets in terms of fibre, nutrients and proteins.
- Have the right to slow growth and not an over-boosted one.
- Not have their tails cut off, their ears notched, or being debeaked, dehorned or castrated without anaesthesia.
- Have access to sufficient care if necessary.
- Be transported comfortably and without stress.
- Benefit from a “humane” and painless death .

Companies that really want to improve can already just look at these few points of improvement, which are the ones most often cited by animal welfare organisations as indispensable to their well-being. We're not going to talk about concrete meat-free alternatives here because it's no longer a question of improvements for a company but of a complete change of business model.

Most of the above points are fairly self-explanatory and therefore require no further explanation, but the point “Have access to sufficient care if necessary” might need some more explanations, or at least for one of its dimensions. The importance of reducing antibiotic doses as much as possible was raised in the CIWF interview because of the forecast of 10 million deaths by 2050 if we continue to develop antibiotic resistance as we are doing now. And if we do develop resistance, it's partly because we're eating meat from animals that are resistant to antibiotics, and they're resistant to them because we're providing them with an abundance of antibiotics instead of treating them properly. Hence, the importance of caring for them and treating them correctly, as an attempt in the Netherlands has shown that in such circumstances, a chicken would need nine times less antibiotics, which would solve the problem, as well as being a big money-saver for animal agriculture companies.

Digital transformation can also play an important role in improving animal welfare, for example, with technological monitoring tools such as CCTV systems or permanent whistleblowing processes. These kinds of measures and monitoring technologies are very important for effective animal welfare management in order to guarantee traceability of the entire process, and must therefore be implemented to ensure that all animal welfare directives are complied with. Another new technological tool that is well worth implementing is Precision Livestock Farming (PLF), which enables real-time monitoring to be used to warn

directly of any concerns, allowing a direct reaction to anything that might diminish animal welfare. This is possible because PLF detects and diagnoses problems and/or accidents instead of the human eye, which can make mistakes, even before they occur, using artificial intelligence to analyse the data and draw conclusions and diagnoses (Fernández-Mateo & Franco-Barrera, 2020).

As far as the survey is concerned, there was one question that was specifically linked to actually enhancing commitment to animal welfare for food brands, and that's Figure 25. We can therefore see that the most important things to accomplish to actually improve animal welfare for food brands according to consumers are the following, in order: implement ethical and transparent sourcing, work with animal welfare experts to effectively improve, implement maximum traceability and accountability, set supplier standards and audit, obtain verified certifications, educate people, invest in research and innovation, which is necessary to find alternatives that no longer require the intervention of animal life, invest in better infrastructure, and finally improve communication with customers, and implement humane handling practices.

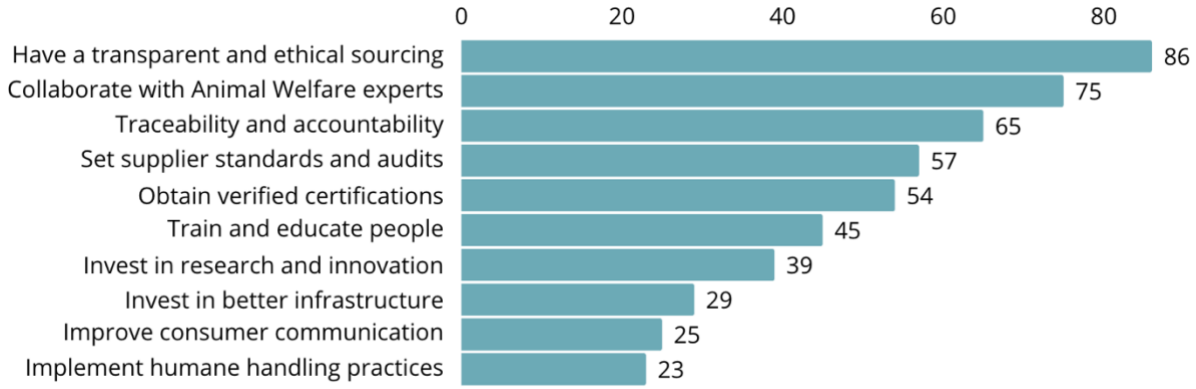

Figure 25 – Select the five more important steps food brands should take to ACTUALLY enhance their commitment to animal welfare (Survey, 2023)

All the points mentioned above are essential to the concrete improvement of animal welfare, and indirectly, this will also have an impact on the environmental consequences of animal agriculture. Of course, there are also some concrete actions that can be taken by food brands and companies in the industry to directly and concretely reduce the ecological impact of their activity and, therefore, improve. For example, if the methods used to manage the land and grow crops were changed, in particular the fertilisation of crops, this would already reduce

emissions. Methane from animals could also be reduced by making them live in better quality environments, and the methane that remains could be transformed into renewable energy, reducing the cost of all these changes as well as the ecological impact (The United States Environmental Protection Agency, 2023).

It's clear that the biggest obstacle to all these changes is the cost, added to the fact that even if consumers expect better treatment of animals, this is not reflected in their purchasing behaviour (Caporale et al., 2005; Harper & Makatouni, 2002). This gives the impression that the costs incurred to improve animal welfare are futile and lost forever as they are never recouped at the point of sale thanks to a premium on the price, and therefore pushes food brands to remain in a kind of economic inertia to avoid short-term losses (Appleby, 2005). However, it has also been shown that changes that do not entail major increases in the price paid by consumers can already have a significant impact on animal welfare, as shown by the graph based on McInerney's model (Figure 9) in the study by Vetter et al. (2014). Moreover, this was also supported by Appleby (2005), which shows that there should be no brake on concrete improvements in animal welfare despite the short-term cost surplus, as a small increase in price can already bring about substantial changes.

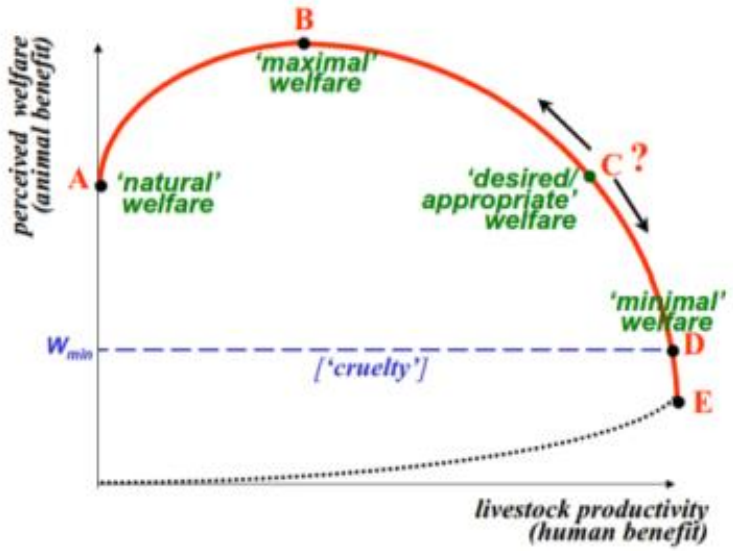

Figure 9 – Welfare-productivity (McInerney) model (Vetter et al., 2014)

6.2 What can be put in place by other entities to push society to improve itself?

Animal agriculture companies (whether big food brands or farmers) are obviously not the only ones who can actually put things in place; the spectrum of stakeholders is much wider and includes other people or entities, such as governments, consumers, marketing agencies, associations and supermarket chains. This was discussed several times during the interviews, where I asked the interviewees what were the next important steps needed to be taken to increase animal welfare in agriculture, and by whom. We are, therefore, going to talk here about everything that can be put in place by stakeholders other than the companies directly linked to animal agriculture. Obviously, these are only guidelines for getting things moving and not ready-made solutions that will be discussed here, but as was very well said in the interview with Mr. Gordon Clifton of Animal People, “We keep in mind that at the end of the day the goal is to reduce animal exploitation. We recognised that we're not going to end it overnight, so improving towards any reduction of it is a step in the right direction”.

Firstly, one of the actors that can have the greatest impact, although much less flexible and which, therefore, makes any action much slower, is governments. For CIWF, governments should clearly give greater priority to the animal cause, passing and enforcing more laws, the second part of which is too often left aside. On top of that, they should be giving more subsidies to high-welfare farmers and alternatives trying to do the right thing, and this money should be coming from taxes paid by the people so that the consumer pays the farmer for the basic living and then it's the money from tax pay that is achieving public goods. And that's a point where CIWF is joined by Animal people, who also think governments need to redirect harmful subsidies invested in animal agriculture toward more transformative technologies and food alternatives. Finally, governments need to be more honest about the results of their reports and advocate on the basis of them, free from the political pressure and influence of the food industry. As well as producing more reports and studies directly on animal welfare, it would also be interesting if they included a new SDG that would be completely dedicated to animal welfare in 2030, when a new sustainable agenda will be negotiated, because it would open up a lot of possibilities for change.

As far as consumers are concerned, they obviously play a central and essential role and can therefore have a colossal impact, even individually. According to the interviews, particularly those with associations, there are several ways in which people can help the cause or make a real difference:

- Support, financially or otherwise, the associations active in these processes.
- Sign petitions, such as the Plant Treaty, to help them become more visible and influential.
- Take part in grassroots activism, street marches and shock actions, as these raise awareness of animal welfare and create a sense of public responsibility.
- Write to politicians, governments, and supermarkets to make sure they know this is an important issue for people and that they need to act accordingly and as a priority.
- Ensure that the animals they eat have had a good life and have been reared in good conditions.
- And, of course, reduce their meat consumption, and in the best of all possible worlds, entirely go for a vegan diet.

Animal protection associations in the agricultural sector obviously have a key role to play, but there are no real recommendations, as all they can do is continue to do what they are already doing. In particular, Animal People stressed the importance of having a wide variety of different associations, all with slightly different aims, methods and requirements. Why is this? Quite simply because, according to Gordon Clifton, no single association has found the magic formula for getting things done easily, and that's probably because there isn't one. It's not easy to find the right balance between asking too much and not asking enough, so we need associations that do both with different approaches. It's essential to have associations with huge demands so that organisations that ask for less seem realistic and are listened to while at the same time moving things forward because if we never defend the ultimate objective with huge demands, we'll never succeed. But if there are only associations that demand a lot, they will be considered extreme and ignored, and no one will be considered moderate enough to work with. So we need a balance between the two, with big demands giving credibility to moderate demands so that they are directly accepted, while showing what the ultimate goal is and raising awareness.

Finally, a role that is much less thought of is the one played by supermarkets and other shops that act as intermediaries between animal agriculture companies and consumers to sell products. Even though they are paying more and more attention to the CSR of the brands whose products they retail, they still need to do more and conduct due diligence with their suppliers and the products they're selling, according to Green Seed. Their main advantage is that they are very flexible and can thus achieve results much more quickly than a government, for example, even though their impact will, of course, be less. So they need to have policies in practice to ensure that they encourage high welfare in the food system economy by conducting due diligence, cutting the farmers a sufficient price to enable them to keep up, ensuring a specific ratio of high welfare products, and by promoting the better choices instead of the cheaper price to attract consumers. All this could drive change in a positive way.

7. Marketing strategies

7.1 What type of marketing strategies to pass on information about animal welfare considerations to consumers efficiently?

In this section, I will bring together all the information I have learned through the research, interviews and survey in one place in order to concisely answer the following question: what are the best marketing strategies a food brand can use to effectively communicate to a consumer about its consideration of animal welfare along the supply chain.

a) Target groups and communication channels

One of the first things to define when setting up a marketing strategy is the target group(s), and we now know that the public most concerned by the animal cause in agriculture, and therefore most likely to act accordingly, are young, female, highly educated and potentially mothers of young children (Harpers, 2001; Tsakiridou et al., 2010), which was confirmed by the demographic of people voluntarily answering the survey (Figure 10). Focusing marketing strategies on these profiles to develop personas is an asset that should not be overlooked for effective communication.

As for the best channels for communicating with them and implementing the marketing strategies discussed in this section, whether from interviews or the survey, social media seems

to be the clear winner. Even though they're not always mentioned in some studies because it's a rather a “new” communication channel, and by that I mean that it wasn't present 10 years ago, social media are still the most common means of communication. In the survey, in addition to social networks, we found advertising, partnerships with associations in the sector, and packaging and labelling (Figure 19).

b) Educate consumers

Choosing the right marketing strategies is crucial to the success of a product, even if it must, above all, comply with the brand's ethical guidelines and not fall into the trap of welfare washing. This is essential, as almost 80% of respondents considered animal welfare as important, very important, or even essential in their food purchasing decisions (Figure 12). It was also found that there are still over 64% who never or very rarely look for information on animal welfare before making a purchase (Figure 13), and when we know that people who pay greater attention to animal welfare tend to consume greater quantities of certified products (Caporale et al., 2005), a first effective marketing strategy may be to educate people on the sensitive subject of animal welfare, because the more they know, the more they will look for information themselves, and the more likely they will be to buy the certified products sold by the brand.

Providing educational material was in fact considered to be the Top 5 marketing strategy to communicate about animal welfare according to consumers (Figure 21), and Top 5 measure for a brand to take to better communicate on its commitment (Figure 23), which proves without a doubt that it is something to take into account in its marketing strategy. This was also discussed with ChuckJoe, who confirmed that producing educational content was one of their strategies and was particularly effective. From this interview came a few examples of marketing strategies revolving around consumer education, which have proved effective in raising awareness and influencing consumer behaviour, such as writing a weekly blog or monthly newsletter, promoting interactive online modules, infographics explaining labels, and engaging social media campaigns for our customers.

c) Labelling and certifications

Speaking of labels, food labelling and certifications are playing an increasingly important role in compensating for consumers' lack of information and are therefore having a major impact on their behaviour, since lack of information is cited as one of the main obstacles to the consumption of animal-friendly products (Harpers, 2001), and people who pay more attention to certifications and labels tend to consume greater quantities of certified products (Caporale et al., 2005). In fact, it can even be seen as a way of simply educating people.

Figure 24 also shows that consumers are fairly divided between very simple, clear packaging and packaging with more information and detail, with a slight preference for the latter in the survey. In agreement with this, in Cornish et al. (2020), when facing additional farm animal welfare information at the time of purchase, demand for higher welfare products and purchase intentions are boosted. As a reminder of just how important this aspect of marketing strategies is to people, this was the Top 1 marketing strategy to communicate on animal welfare according to consumers (Figure 21), the Top 1 influencer of a consumer's perception of a food brand's commitment to animal welfare (Figure 16), especially for those that are accompanied by additional information and details of what the certification means in terms of animal welfare (Cornish et al., 2020), the Top 1 means of communication (Figure 19), and the Top 2 measure for a brand to take to better communicate on its commitment (Figure 23).

This is probably the thing that has come out the most in this whole thesis, and I would advise all brands to put in place clearly recognisable labels, to obtain certifications that are valid, known to consumers, that provide them with information directly on the packaging about the quality of the product and its respect for animal welfare, because this can have a real influence on consumers' purchasing decisions, as only just over 20% judged it to be not at all or at least not very influential (Figure 22).

d) Supply chain’s transparency and traceability

Another point that would be very interesting to integrate into your marketing strategy is to show the traceability and transparency of your supply chain, as it seems to be a very effective argument for consumers, who particularly like demonstrable actions as a guarantee of truth and trust. This was the Top 1 influencer of a consumer's trust of a brand communicating on its

commitment (Figure 18), and the Top 2 marketing strategy to communicate on animal welfare according to consumers (Figure 21).

In practical terms, a brand can include in its marketing strategy the publication of reports during the year, which talk about supply chain practices and farming methods, detailing sourcing and the standards implemented, and push these reports on to consumers, which once again amounts to educating them about the cause. Of course, these reports alone will not always be taken seriously because they can be misleading, so allowing people to really check is important. Farm open days, photos and videos of the animals and their living conditions are good ways of giving consumers confidence. This was also said by ChuckJoe, who specified that visuals showcasing animal-friendly practices resonate well.

e) Clear communication and demonstrable actions

Even if it seems logical, clear and transparent communication is essential, even beyond a marketing strategy. It’s the basis for communicating about animal welfare and was voted by respondents as the Top 1 measure for a brand to take to better communicate its commitment (Figure 23). Talking about demonstrable action again, combining this with the fact of making public commitments and holding them, can already be a very effective way of communicating about animal welfare.

We were able to see that customer reviews, word of mouth, public perception and reputation are not that important in the consumer's perception of a food brand's commitment to animal welfare and his trust towards it (Figures 16 & 18), which means that even if a brand has had a bad reputation in the past, and consumers are quite averse to it at the moment, that it doesn't get good reviews, well it's never too late to start changing things and putting things in place, because this kind of reputation doesn't impact consumer trust or perception that much. Of course, it's a long way off, but it's not impossible. However, past behaviour and track record, which are concrete facts, are quite important (Figure 18) and are not easily forgotten, which makes a comeback complicated.

f) Ethical standards and due diligence policies

There are three more principal marketing strategies I would like to recommend in this section. The first is to implement ethical standards and policies, as well as rigorously perform due diligence on suppliers and every stakeholder with whom we interact throughout the supply chain. This is somewhat similar to the previous point about transparency in the supply chain, but the point here is not necessarily to prove it to consumers but to do it for yourself and your brand image. Too many times there have been examples of scandals due to suppliers who did not act in accordance with what they said. When you sell a product, you put your brand name on it and everything that goes with it, you're taking a risk, so doing your due diligence and making sure that everyone involved in the product is on the same wavelength is essential to avoid dramatic repercussions on your marketing strategy.

g) Associations partnerships

The second marketing strategy is to partner with associations. Once again, this is a demonstrable action that has come up repeatedly, notably as the Top 3 measure for a brand to take to better communicate on its commitment (Figure 23), the Top 3 marketing strategy to communicate on animal welfare (Figure 21), or the Top 4 communication channel (Figure 19). To carry out such a marketing strategy, a brand can start by promoting it via press releases or social networks to attract attention, take part in awareness-raising campaigns and charity events, create content in partnership with the association, invite the association to report on supply chain processes to emphasise their transparency, donate a percentage of the profits from certain certified products to a good cause, and much more, but these are just a few ideas that can be very effective.

h) Price perception

As for price, even if it's not really a marketing strategy in itself, it can be part of it and have an influence, which is why I'm including it here as the final principal marketing strategy. In Figure 14, we saw that 40% of respondents would be prepared to pay between 5% and 10%, and almost 35% would pay between 10% and 15%, and even if we don't know exactly how this translates into reality as it's hard to predict, it still shows that companies and brands shouldn't be too afraid of scarifying a bit their competitive cheap price as part of their marketing

strategies. In addition to this, price can also be an indicator of product quality and animal welfare practices, and therefore influence consumers if it's too high, but also if it's too low. In fact, when prices are too low, it sometimes scares consumers away and can even damage the brand image. This is called the price perception theory, and it can be explained by the Range Theory. According to Janiszewski & Lichtenstein (1999), “Range Theory suggests that people use the range of remembered price experiences to set a lower and upper bound of price expectations, and that the attractiveness of a market price is a function of its relative location within this range”. In other words, if the price is too far below what the consumer expects, he will not perceive the product as attractive.

i) Marketing strategies for meat-free alternative brands

As a meat-free brand offering alternatives, emphasising the communication and the marketing strategy on the fact that there’s no difference in taste (Figure 28) seems more effective than emphasising the fact that there’s no difference in price (Figure 27) or in how it looks (Figure 29). However, the main other barriers to switching are;

- Lack of availability.
- Perceived health concerns, which often are a misconception, so it's worth taking the gamble of educating consumers on this to remove a barrier preventing them from consuming meat-free alternatives.
- Limited culinary knowledge, which tells us that implementing, as part of the marketing strategy, the creation of recipes, available online or in a book that may be offered with the purchase of products, organising cooking classes, publishing videos explaining how to make equally attractive meals based on meat-free alternatives, could be a great idea to break yet another barrier.
- Preference for familiarity, and this is something that also came up in the interview with Green Seed; the consumers are more interested in emotional values, they buy because of an emotional reflex more than a concrete choice, they're used to it, so we're going to have to convince them to switch, after which if they adhere it'll be easier to keep them. To get them to adopt meat-free alternatives, one strategy might be to organise discovery events, where they can test and familiarise themselves with these new products so that they become used to them.

j) Less effective marketing strategies or with hard-to-predict results

A marketing strategy that seems to be a little controversial is the storytelling campaign. On one hand, it was considered one of the Top 4 marketing strategy to communicate on animal welfare (Figure 21), and on the other hand, it's not a good measure to implement for a brand that wants to better communicate its commitment (Figure 23). At the same time, ChuckJoe also presented it as a practice that worked well, saying that they often incorporate animal welfare into brand narratives.

Finally, the marketing strategies that don't seem to work at all or to be effective according to respondents, and which I wouldn't advise brands to prioritise, are sponsorship and events, influencer partnerships, which can be seen as “bullshit” and just there to take advantage of one's fame, limited edition/special products, and interactive campaign (Figure 21). Sure, it can't hurt and can always serve the total strategy a little on the side, but I wouldn't advise making it the main aspect of one's marketing.

k) Inherent implementation risks to avoid

Beware, however, as there are always several risks inherent in marketing strategies aimed at communicating consideration for animal welfare. The first is to alienate people, and this was very well put in the interview with CIWF; if you try to convince people and force them to do things they don't want to do, quite often, you run the risk of falling into the opposite results. Another challenge raised by ChuckJoe is to ensure authenticity in brand claims through thorough vetting of suppliers, advocating for certifications, and fostering transparency in the supply chain. Finally, Green Seed spoke of a 3rd challenge for today's food brands, namely not to communicate on too many different subjects at the same time. You have to choose them carefully, or you risk losing consumers by communicating on so many subjects at once. These three challenges are three important recommendations for the implementation of marketing strategies, and I therefore advise food brands to take them into account and pay attention to them.

7.2 Welfare washing

In the last section of my thesis, I wanted to tackle the subject of welfare washing. We've already talked about it several times during this work, welfare washing is to animal welfare what green washing is to the environment. It's when key players in the food industry put forward their practices and methods, which they sell as being ethical and respectful of the rights and welfare of animals, when in fact, they hardly know what they're talking about and have done absolutely nothing to resolve the problems encountered in the long term. I wouldn't want the results and findings that came to light during this study on how to communicate your commitment to animal welfare to be used solely for communication and not for concrete improvements. The aim of this thesis is to help food brands that really want to improve to find out how to do it and to know how to communicate effectively about it so that they can see the fruits of their efforts.

One rather obvious explanation for welfare washing is quite simply the asymmetry of information, which means that most of the time, consumers have no way of checking whether what they are told is true or not. This tends to create a market failure because in order to consume responsibly (12th SDGs), it is necessary to have correct information, hence the danger represented by welfare washing (Kitano et al., 2021). However, the distance that exists between the production site and the shopping consumer fosters this asymmetry of information.

Just performing welfare washing without changing the process is not a solution; it might foul some and work for some time, but in addition to being completely unethical, if it’s discovered someday, and it’s often the case, the backlash can destroy the brand. An interesting fact raised by a study by Dentoni et al. (2011) is how consumers perceive a shocking negative revelation about a brand's handling of animal welfare along its supply chain, depending on how the brand reacts. Such negative revelations, also known as scandals, can easily taint consumer perception and behaviour towards a brand. The extent of the impact on perception will obviously depend on the content of the revelation, but also on the context that determines who is responsible, how different consumers process information, and the loyalty or strong positive attitude and belief of consumers towards the brand in the beginning. As a general rule, when it comes to product-specific scandals, the risk is that consumers will realise that

they weren't aware of them, start to suspect other things, become suspicious, and develop aversive reactions. On the other hand, in the case of animal crises linked to an entire entity, consumers may feel compassion or solidarity towards the animals and completely disassociate themselves from the brand and its offer.

To “counter” the negative effects of such a revelation, a brand can govern in different ways, but some have been proven to be more effective. The first solution, known as ex ante, is to provide consumers with positive information contradicting the negative revelations before the latter even come out, and this works rather well to mitigate consumer perception and can even go so far as to have a positive effect on consumer attitudes despite a negative scandal, even though positive information usually has a weaker impact than negative information shocks. On the other hand, when acting ex post (after the revelations), providing positive information directly contradicting the negative is not effective. To best moderate the negative impact on customer perception and behaviour, it's better to provide positive assertions on another subject than the negative revelations (Dentoni et al., 2011).

For consumers, there are a number of things they can do to avoid falling into the trap of welfare washing. According to CIWF, for example, it's important to look for certifications or awards from a genuine high-level welfare system and to always check company websites or public opinion to see who they claim to be, even if this can also be misleading, but it's important to do your own research, according to ChuckJoe. Supermarket chains obviously also have a role to play in this by making sure that standards are real, even if it's not always easy for the supermarket to do this due diligence and select products with good labels and a good reputation.

However, ASPCA & Technomic (2018) showed that although a large majority of food brands claim to produce products that respect animal welfare, only 40% to 60% have products with verified certifications. In addition, the same study showed that although supermarkets are careful to make certified products available, they do not distinguish between those with animal welfare certifications and those with animal welfare claims. This obviously creates even more confusion for consumers, who are more likely to be victims of welfare washing.

To give you an idea of what to look for when deciding whether you're dealing with a real certification or just an unverifiable claim, here are a few certified animal welfare certifications that can be trusted because it's backed by auditors: Animal Welfare Approved, Certified Humane, Global Animal Partnership, American Humane Certified, Certified Organic, American Grassfed Certified, and Food Alliance Certified (Rajan, 2018).

Figure 31 – Trustable certified animal welfare certifications (Rajan, 2018)

V. Conclusion

Throughout this thesis, we have covered many topics, but it is time to conclude this work and recall the main findings that have been made on how the consideration of animal welfare by a food brand in their supply chain can impact consumer perception and behaviour towards it, and how to improve it.

Animal welfare is a highly sensitive current issue, particularly in the food sector, where more than 75 billion land animals are killed for the food industry every year (Ritchie, 2023), and rarely under humane conditions. This represents a global problem because the pain and stress caused are unjustified and unnecessary, considering that animals have the same pain sensors as we do; they are sentient beings with behavioural and physiological responses (Broom & Johnson, 2019, pp. 39-40). On top of this, the exploitation of animals in agriculture without regard to their welfare is also a major environmental threat due to deforestation for more farmland, the use of 90% of the world's water footprint (Sandler, 2022), and CO_2 and methane emissions swollen by rapid growth, unbalanced diets, and transport by trucks all over the world.

Although more and more laws, policies and legislation have been put in place in recent years, such as the UDAW, Article 13 of the TFEU, the AWA, or the Humane Slaughter Act, this is not enough to properly cover the issue, and completely banish unnecessary animal abuse. Furthermore, despite these laws emerging, it is also the duty of governments and countries to ensure that they are put in place, which is rarely the case and results in the fact that the five freedoms set out by Roger Bramwell in the 1960s are still insufficiently respected.

The methods currently used in the food industry in general, whatever the animal concerned, are not at all in line with existing directives. They show a lack of humanism that makes you wonder how it could have come to this. There are simple ways of improving the situation, but there are several reasons why things are changing so slowly. Companies are afraid of an increase in production costs with no return on investment at the end of the day, whereas we have shown that this is only in the short term and that there are many benefits that appear in the long term, such as boosting productivity, competitiveness and animal performance. On top of that, putting just a few things in place can considerably improve animal welfare without

too much repercussion on productivity and costs (Vetter et al., 2014). Other obstacles can be found in the misleading false positive change of consumers' purchasing behaviours, namely the difference between what they say they will do and what they actually do, the lack of comprehensive and enforced regulations, or the food industry's influence on political forces.

There are, of course, solutions, first and foremost light ones, to reduce animal suffering, such as the abolition of cages, free access to the outdoors, a balanced diet, a life in society with its species, slow and stable growth, appropriate care and no unnecessary injuries, humane transport and death, without stress or pain, or the implementation of technological surveillance tools such as CCTV systems, permanent whistleblowing processes, or the PLF. For those surveyed, the most important measures to put in place are implementing ethical and transparent sourcing, collaborating with animal welfare experts to effectively improve the situation, implementing maximum traceability and accountability, establishing standards and audits for suppliers, obtaining verified certifications, educating people, investing in research and innovation, which is necessary to find alternatives that no longer require the intervention of animal life, and investing in better infrastructure. Speaking of investment in research and innovation, in terms of concrete alternatives, we find all those that totally eliminate the use of animals and whose technologies are very promising, whether cell-based, plant-based or fermentation-based. These will need to be watched very closely in the coming years, as they are serious alternatives which, if developed properly, could hold great promise for the future.

Other players can obviously have an impact; governments must pass and enforce more laws, detach themselves from the political influence that the big food multinationals can have on them, and redistribute subsidies in such a way as to favour animal welfare. Consumers can support associations, sign petitions, go on marches, write to politicians and supermarkets, and adapt their diets according to their convictions. Supermarkets, meanwhile, need to conduct their due diligence and take care to promote more and more animal welfare-friendly products.

Although the public seems and says to be increasingly concerned about animal welfare (Figure 12), it would seem that, in reality, this is not always reflected in their purchasing behaviour (Harper, 2001), even though Caporale et al. (2005) have clearly demonstrated that consumers who pay greater attention to animal welfare, consume greater quantities of certified products,

especially when they are convinced that the animal welfare inspection and regulation system is working properly (Tsakiridou et al., 2010). However, animal rights associations play an important role in the industry, reminding us of the importance of animal welfare on a regular basis, as it tends to take second place to sustainability and respect for the environment.

The public most inclined to pay attention to animal welfare, according to the survey and theory, are predominantly female, fairly young, and with a greater likelihood of having completed higher education (Figure 10), and apparently, over 70% are willing to pay a premium. To engage with this target group, social networks stand out as the best means of communication, which is hardly surprising in the current era. Based on the survey results, I think it's worth combining advertising and partnerships with associations with social networks to communicate, as well as paying particular attention to labelling and certification.

I'm not going to reiterate in this conclusion everything that was found during the survey, but rather highlight the main guidelines and advice I'll be giving to food companies and brands wishing to communicate their consideration of animal welfare effectively, based on the results of the survey and the sensitivity of consumers. Firstly, I would recommend educating consumers. This is a strategy recognised as effective by several marketing agencies in the food sector and by consumers, and has proved to be effective because people rarely do any research before making a purchase (Figure 13), whereas people who know more are more inclined to consume certified products (Caporale et al., 2005). There are several ways of educating people, but the most effective are certification and labelling, as we have seen in Figures 16, 19, 21 and 23. I would therefore advise putting in place clearly recognisable labels and obtaining certifications that are valid and known to consumers, preferably with a little more information and detail because consumers prefer this (Figure 24), and it boosts purchase intentions when there are some (Cornish et al., 2020).

Transparency and clarity in all aspects of the company, but particularly in the supply chain and in communication, must be the order of the day. The survey showed that consumers are particularly sensitive to this (Figures 18, 21 & 23), and I think the best way to communicate transparency is through demonstrable actions, which guarantee truth and thus bring trust. I would therefore recommend organising farm open days, publishing visuals showing animal-friendly practices, photos and videos of the animals and their living conditions, as well as

reports on supply chain practices, sourcing details, and farming methods, because all these things can really give consumers confidence.

Two additional marketing strategies that are clearly worth looking into are setting up ethical standards and carrying out due diligence on all the stakeholders with whom a food brand interacts because this is absolutely essential for proper consideration and respect for animal welfare, and given that you associate your brand image with the suppliers you use, not carrying out due diligence is a huge risk not to be taken. The second strategy is partnerships with defence associations, taking part in awareness-raising campaigns and charity events, letting the association report on supply chain processes to promote their transparency, and so on. These are also demonstrable actions to which consumers are very sensitive (Figures 19, 21 & 23).

As we've seen, consumers aren't all that price-sensitive (Figure 14), so I'd advise food brands not to get too caught up in sacrificing their super-competitive price as part of their marketing strategy, within reason of course, because even if they say they're prepared to put in more, we don't know what it will be like in real life. However, even though price remains a criterion in the final analysis, a premium can be tolerated, and it's even an indicator of product quality according to the price perception theory (Janiszewski & Lichtenstein, 1999).

The main aspects holding consumers back from switching to meat-free alternatives, and thus limiting their ability to change their behaviour and purchasing habits, are mainly the difference in tastes (Figure 28), which should be the focus of meat-free brand communication, but also the lack of availability, misconception about health concerns and limited culinary knowledge, hence the need to educate consumers, and of course preference for what is already known and emotional attachment, probably the hardest thing to change, but I would recommend organising discovery events to familiarise them with these new alternatives.

As for things to avoid in terms of marketing strategy if you want to improve your communication on the things you're doing for animal welfare, don't base your entire marketing strategy on sponsorship and events, influencer partnerships, limited edition/special products, or an interactive campaign (Figure 21). I'd also advise you to be careful not to try and force people to do what they don't want to do, and not to communicate on too many

subjects at once. You need to remain consistent and coherent across all aspects of the marketing strategy without getting lost fighting over too many different subjects, as this can lose consumers' sense of the brand's authenticity. Finally, my biggest piece of advice is this: don't fall into welfare washing. There's no point in communicating about animal welfare just to meet society's expectations if nothing is done about it and living conditions remain deplorable. It's morally wrong, ethically disrespectful, and on top of that, it can cause serious damage to the brand and its image if people find out. The aim of this thesis is to help food brands that really want to improve find out how to do it, not simply learn how to communicate effectively about it.

During the course of this thesis, there were obviously some problems encountered. I have managed to overcome most of them, but two of them have imposed themselves as limits to the quality of the work, and I therefore feel it is appropriate to address them here. The first limitation affects the quality of representation of the survey sample. Indeed, although I did my best to gather a heterogeneous and diverse sample, the profile of young students/employees clearly stands out more than the others, and this is perhaps due to the fact that it corresponds more to my direct or indirect social surroundings. However, the survey was voluntary and therefore also reflects profiles that are more interested in the topic, and this corresponds with the theory of previous studies. A second limitation is that it's particularly complicated to assess companies' consideration of animal welfare other than through what they communicate, which may be influenced by their desire to meet consumer expectations rather than their concrete actions. I have done my best to find valid and trustworthy sources of information, but it's true that more in-depth studies, with access to a more heterogeneous sample of consumers and the means to carry out concrete surveys in the field beyond brand communication, could bring to light elements that have not been found or highlighted in this thesis.

Among the findings of this thesis are opportunities for transformative change. Concrete opportunities for improvement are emerging, urging stakeholders to embrace transparency, traceability and ethical standards within their supply chains. Effective communication strategies that engage, educate and help consumers better understand the ethical implications of their purchasing decisions are equally important. The significance of this thesis

goes beyond the academic; it is a call for concerted efforts towards a more humane and sustainable future. It invites stakeholders, such as food brands, regulators, consumers and advocacy groups, to collaborate in redefining the image of animal welfare in the supply chain. As the closing chapter of this thesis, it is my sincere hope that the ideas gathered here will serve as triggers for meaningful change. May they inspire action, dialogue and a collective commitment to a future where ethical considerations for animals in the food industry are no longer just a choice but an inherent aspect of our society's ethics.

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