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Chinese Consumers' Attitudes Toward Animal Welfare: Behaviors, Beliefs, And Responses To Messaging

October 2022

Authors: Jah Ying Chung (Good Growth),

Jo Anderson (Faunalytics), &

Jack Stennett (Good Growth)



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Background

Despite being comparatively neglected until recently, the suffering of animals in Asia is starting to command more attention from global animal advocacy activists. In particular, as the largest country in the world by both human and farmed animal population, and among the largest when measured by economy and land mass, China plays a central role here. However, the key question of how best to improve outcomes for farmed animals in China remains difficult to answer, due to the recency of the movement and a comparative lack of research on the topic.

Although China's per capita meat consumption is lower than most wealthier, Western countries (Ritchie & Roser, 2017), the country's size and the rapid growth of its meat industry means that it houses and slaughters more farmed animals than any other country in the world (Faunalytics, 2022). Despite this, animal welfare remains a relatively fringe issue in China. Because of the scale of China's agriculture industry, even small changes have the potential for an outsized effect.

For these reasons, research on animal protection in China is crucial. While previous reports (including Phase 1 of this study) have focused more on China's animal protection community, this report seeks to shed light on Chinese consumers, and in particular, explore advocate assumptions that we identified in Phase 1.

After seeking input from members of the farmed animal protection community in China, we conducted focus groups regarding the attitudes of Chinese consumers towards meat consumption, the concept of farmed animal welfare, different types of messaging and strategies for encouraging movement growth. Be sure to check out our <u>Chinese / English Guide To Animal Advocacy Terms</u> below as you read along.

Key Findings

1. Chinese consumers are interested in higher welfare products not due to animal welfare concerns, but for food quality and food safety reasons. Many participants mention having tried or being interested in various higher welfare products, such as those labeled as "organic" or "village-raised" (tǔ ±). However most justified this choice in terms of the benefits in quality and food safety. Higher welfare products are considered tastier and more fragrant when cooked. In terms of food safety, products labeled as higher-welfare are more trusted, while lower-quality products are associated with a range of concerns, including animals being raised in unsanitary conditions, and the use of hormones, antibiotics, and GM products on farms. Despite this, zoonotic diseases were not mentioned as a food safety concern in reference to farmed animals. Welfare considerations are not necessarily ignored, but are likely to be secondary.



- 2. Although animal welfare is not well understood, most participants were receptive to the idea after watching a short video explaining the concept. Participants had varying levels of understanding of the concept upon hearing the Chinese term for animal welfare (dòngwù fúlì 动物福利), and there were several common misunderstandings. However, once it was explained through a video that illustrated the concept using a framing based on the Five Freedoms (WOAH, 2022), participants generally reacted positively to the concept. By the end of the session, some even reported changes in their beliefs and intended behavior. After viewing welfare-related content, many aspects of animal welfare appealed to the participants, such as reducing cruelty, allowing animals to live according to their natural desires, and reducing antibiotic use on farms. Many participants believed that animals felt pain, that they had a morally valuable existence, and that people had a responsibility or duty to treat farm animals more humanely.
- 3. Most consumers believe that meat consumption is necessary for health, but "health" actually encompasses a wide range of specific concepts. Participants gave many specific nutritional explanations for why they felt it was necessary to consume certain animal products; for instance, to support children's growth or help with certain medical conditions. For example, beef is viewed as healthy for childrens' development, but is often avoided by older people or those with health problems.
- 4. Meat is preferred for a variety of reasons, beyond just taste. Participants mentioned the positive sensations associated with high-quality meat products, including being filling, mouthfeel, fragrance, and taste. For example, the term xiāng (香), often translated as "fragrant," referring to either a good smell or a distinctive taste, is one of the most common words used to positively describe the sensation of eating meat. The concepts associated with these positive sensations were often culturally distinctive, and should be understood by advocates as aspects of food preferred by Chinese consumers.
- 5. Perceptions of the human-animal relationship are distinctive and nuanced. There are different ways that participants conceive of human-animal relationships, and this affects what level of welfare, if any, they feel an animal or animal species deserves. Ideas of emotional connections to humans, reciprocity (helping animals in response to a service they provide), that human and animal welfare are intertwined through ecology and food safety concerns, and the perceived purpose of animals all contribute to the perceptions of human-animal relations.
- **6. Animal welfare was not generally seen as a foreign concept.** Contrary to what some China-based advocates suspected in our Phase 1 report, we found that most participants exposed to the concept and details of provisions for animal welfare did not generally see it as something foreign, Western, or associated with foreign values.



Recommendations

For Advocates:

- 1. Highlight health, food quality, and food safety when advocating for high-welfare or plant-based consumption.
 - Many consumers were willing to purchase products associated with higher welfare, but concerns about food quality and safety were generally greater drivers of this consumption than concerns about animal welfare

2. The most promising consumer demographics included mothers and grandparents.

- Mothers appear to be more receptive to animal welfare messaging and more willing to purchase higher welfare products. Mothers were particularly concerned about food safety issues that may affect their children, and were willing to pay for products that were perceived as safer.
- Orandparents also seem to be more receptive to animal welfare messaging. Many have had experience with higher quality animal products in the past, may pay more attention to food quality, and likely have more time to investigate quality products. Although this may not always be true, it's notable that this contrasts with what advocates shared in Phase 1 of our research. As noted in our previous report, advocates said that older people had been through harder times, and may therefore find it difficult to change their habits.
- For more information, see the *Choosing Your Audience* section of the report.

3. When talking about animal welfare, consider using Five Freedoms framing and take care with terminology.

- While the "five freedoms" terminology may not be best suited for Chinese audiences, the *concepts* of this framework were well-received. The ability to express normal behavior by providing animals with a better living environment particularly resonated with participants.
- Animal welfare 'dòngwù fúlì 动物福利' terminology may be misleading to some demographics. Participants associated the term with social welfare benefits (such as welfare payments to lower-income individuals) and more-than-basic treatment of animals.

4. Target messaging based on animals' connections to humans.

- Animals perceived as having connections to humans were valued much more highly than those without. For more details, see the <u>Perceptions Of The</u> <u>Human-Animal Relationship</u> section in the Methods and Results section.
- While messaging portraying farm animals (pigs, cows, sheep and chickens) and an article discussing a dog were accepted, a message related to crustacean welfare was generally rejected, even by participants who approved of general welfare messages. Sympathy for lobsters was not



increased, and may have even been reduced, when an attempt was made to draw emotional connections between a lobster and a dog.

5. Provide actionable advice for consumers

 Participants who were relatively unconcerned about lobster welfare were still willing to try stunning lobsters before cooking, to reduce their suffering.

6. Represent messages visually to appeal to different demographic groups

Participants suggested that communicating ideas visually could increase the
effectiveness of messaging, but preferred methods may differ according to
age group. A grandparent suggested the use of pictures alongside text in a
visually appealing way, while a student suggested using cartoon or anime
videos.

For Alternative Protein Companies:

- 1. Pay attention to specific consumer interests beyond taste.
 - Health and food safety concerns about meat can be highly specific, and differ based on individual cases, demographic groups, and user profiles. Features of alternative proteins that address these concerns could be used to improve messaging for alternative proteins, such as protein content, fatty-acid content, and reduced antibiotic use. For more details, see the Influences On Consumption section in Methods and Results.
 - Mouthfeel, fragrance and the physical sensations of meat-eating are important to consumers. For example, many people want meat products to make them feel full and satisfied, while others mentioned enjoying the juicy, oily sensation experienced while eating certain meat products.

For Researchers:

- 1. Compare the tractability of distributing media focused on the Five Freedoms animal welfare framing, with a framing focused on food quality and safety.
 - The Five Freedoms framing elicited concern for animal well-being, but food safety and quality concerns may be more effective in promoting consumption of higher welfare products.

2. Systematically analyze interest in events and platforms targeting different demographic groups.

- Events such as open medical lectures, farm visits, sponsored sporting events (runs) and food events were mentioned as events that participants may be interested in attending.
- Commonly mentioned online platforms included WeChat, Weibo, Xiaohongshu, and Bilibili, while older participants reported watching more television.



3. Look into linguistic and cultural associations that may affect messaging on this topic.

 The concept of animal welfare had some unexpected connotations. Further research is necessary to determine how this concept is understood differently in different Asian countries, and countries with a socialist history.

4. Explore the role of group dynamics and social influence on attitudes towards animal welfare.

- We found that different consensus views emerged in different groups, and it seems likely that the social influence of certain group members may have played a role.
- As behaviors around food consumption are connected to social dynamics, individual attitudes expressed in surveys may be different to observed behaviors.

Applying These Findings

We understand that reports like this have a lot of information to consider and that acting on research can be challenging. Faunalytics is happy to offer pro bono support to advocates and nonprofit organizations who would like guidance applying these findings to their own work. Please visit our Office Hours or contact us for support.

Research Team

This research was led by Jah Ying Chung (Good Growth), supervised by Dr. Jo Anderson (Faunalytics). Jack Stennett (Good Growth) contributed to analysis and writing. The focus groups were led by moderators from Daxue Consulting with support from lead researcher Jah Ying Chung.

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Chinese / English Guide To Animal Advocacy Terms













viāna orviānawši



a good smell or distinctive taste

Though often translated as 'fragrant,' this term doesn't have a direct translation in English





to remove fishy flavors

An essential process in Chinese cuisine, where the cook hides the meaty or fishy taste/odor.





a strong/flavor odor of animal products

A flavor/odor usually associated with fish or other seafood that people tend to dislike.





gamey or muttony taste or odor

A strong flavor/odor usually associated with lamb, mutton, and goat products that some people dislike.

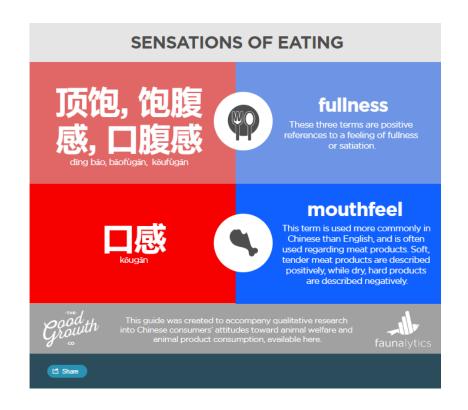




milk flavor or fragrance

The flavor or fragrance that milk should have.







METHOD & RESULTS

Sample

Data for this study came from eight semi-structured focus groups conducted between February 28 and March 6, 2022.

Each focus group included five members of the mainland Chinese public (except for the mothers group, which only had four participants), with each focus group targeting a different demographic profile. This enabled us to look for patterns in how different demographics think about these issues. The focus group profiles were:

- Mothers with young children (under 12), mixed classes
- Fathers with young children (under 12), mixed classes
- University students (without children)
- Grandparents, mixed classes
- Unmarried adults under the age of 50, mixed classes
- A mix of high-income people, (incomes over 30,000 Yuan a month)
- A mix of middle-income people (incomes from 12,000 Yuan-30,000 Yuan a month)
- A mix of lower/lower-middle income people (incomes below 12,000 Yuan a month)

The full focus group guide is available on the Open Science Framework in <u>Simplified Chinese</u> and an <u>English translation</u>.

Data

Due to the potentially sensitive nature of the interview questions, we had a strict anonymity and confidentiality agreement with participants. Therefore, interview recordings and transcripts from this work will not be published.

Some quotes were edited for readability: for example, repetitions, superfluous and filler words have been removed from the original Chinese text and the English translation; however, the meaning has not been changed.

Understanding Chinese Consumers

This section of the report analyzes discussions held with the eight focus groups. It examines how Chinese consumers perceive different animal and meat products, how they respond to ideas of farmed animal welfare before and after exposure to messaging, which people and messages they find influential, and how each of the demographic groups responds differently to farmed animal welfare messaging.



Animals by Degree of Association with Food

Chinese consumers have varying perspectives on which animals are associated with food. These perceptions are mostly similar to Western consumers, with a few distinct exceptions.

Animals Usually Seen as Food

Many animal species are seen primarily as food animals, and are rarely referred to in other contexts. These animals are pigs, chickens, cattle, sheep/goats (the Chinese term $yáng \not\equiv$ does not differentiate), ducks, geese, fish, and other 'seafood' animals, such as crayfish, shellfish, lobsters, and shrimp. With a few exceptions, most participants were willing to eat all of these animals. These animals were almost always referred to in relation to food, while some participants explicitly said that these animals were 'food animals' by nature.

In my view, I feel that animals like pigs and cattle are meant as food for humans.

我觉得就像什么猪啊牛啊什么的。感觉这些动物。在我的认知里面,我觉得就是作为人 类的食物来食用的。

There are some exceptions to this rule, for example, a food animal may occasionally be seen as a pet or a companion animal. Two participants mentioned that people may become attached to food animals that they have raised for many years, and another mentioned that lobsters would be treated differently if they were kept as pets.

I don't think that there are inherently 'higher' and 'lower' animals, perhaps it's only that we raise lobsters to be eaten. With dogs, lots of people raise them as pets, and treat them as members of the family. But if, for example, someone really wanted to raise a lobster as a pet, I believe that they wouldn't be able to just casually eat it, they would really value its life.

我觉得不是动物本身可能生命有高低吧,可能是养龙虾就是为了养殖它,然后就是帮做食材。然后狗的话很多人养它是为了当宠物嘛,当成家庭成员。但如果说真的有人想要养一只龙虾当宠物的话,相信它也不会随意去把它给吃掉。也会非常珍惜他的生命.

A grandparent told a similar story of someone who had raised a goose as a pet, and didn't have the heart to kill it. This indicates that there is some implicit understanding that the commonly-held perception of these animals as food is contextual and relational, rather than an essential fact about these animals in general.

Animals Sometimes Seen As Food

Some animals are perceived less commonly as food, either because views are divided, or because their status is seen as ambiguous by certain individuals. The examples given in the focus groups were: donkeys, horses, frogs, rabbits, snakes, doves, turtles, and wild boar. These animals are in a less clear category, sitting between pets/wild animals that shouldn't



be eaten, and 'normal' food animals. There is no consensus regarding their status and there appears to be variation according to age, geography, and individual preference.

Participants often expressed reservations about eating these less common animals. For example, some expressed shock at eating rabbit, horse, or frog meat.

I had a housemate who was from Xinjiang who was really generous and welcoming. He brought me a lot of rare, strange items, like horse meat. After telling me [what the meat was], I couldn't really accept it.

我有个室友是新疆人, 然后很好客的, 他给我带了一些很多稀奇怪的东西,像马肉, 跟我说了之后呢, 我不是很能接受。

In Chinese, there is a specific term for 'wild animals as food': 野味 yĕwèi; however, this food type was not consumed by most participants. Snakes were the most commonly mentioned 'strange' meat that participants reported avoiding. Only one participant reported that he enjoyed eating wild animals, including snakes. There was an awareness that these meats were eaten, particularly in some parts of South China, such as Hainan and Guangdong.

I'm a carnist, I'm not happy without meat. Basically, if an animal's meat can be eaten, I'll enjoy eating it. This might be because I'm from Guangdong – you can eat a lot of meat in Guangdong. Lots of strange meats, such as snake meat. There are lots of wild animals and lots of meat products that people don't usually consume. They're really tasty, and I enjoy eating them.

我是肉食主义,我就无肉不欢。基本上,能吃的肉基本都爱吃,可能又是因为广东的原因吧, 广东很多很多种肉可以吃,什么奇怪肉都有什么蛇肉啊,还有野味那种啊就很多。不是经常消费的那种肉都挺多,挺好吃的。而且我也爱吃。

Animals Rarely Seen As Food

Cats and dogs were generally rejected by participants as food, despite participants mentioning that these animals are occasionally eaten in China, or that they were more commonly eaten in the past. Many people, especially those that raised pets themselves, expressed a strong sentiment that dogs and cats should be protected as companion animals. Others stated that the idea of eating dogs and cats feels uncomfortable, or explicitly stated that they don't eat dog meat themselves.

Some strongly opposed eating these animals, seeing treatment of these animals for food as cruel. Some participants recalled news stories related to cruelty to stray dogs, for example, two participants mentioned that stray dogs are consumed as food. Participants associated this practice with negative sentiments, due to both hygiene and animal cruelty concerns.



These days, stories of cruelty to stray cats and dogs are all too commonplace. It really makes me shudder.

"现在虐待流浪猫,流浪狗的事情太常见了,确实是有点。嗯,让人觉得很寒心".

One participant mentioned having eaten dog meat in the past, while another said that they "don't eat much dog meat". This may be true but it's also possible that social desirability bias may have affected participants' responses with respect to consumption of dog meat, as dog meat consumption is becoming less socially acceptable, especially in urban areas, where most participants lived (Animals Asia, 2015).

I've eaten dog meat in the past, but now, since growing up, I've stopped eating it.

When I was a child in Shaanxi, I liked eating paomo (a stew with bread, broth and, typically, lamb or goat meat), and sometimes this dish was served with dog meat.

When I was small I didn't understand anything about this, and when my family took me to eat these dishes, I joined them. At the time I thought they were really tasty.

Now it makes me feel sick just passing shopfronts that sell dog meat. So now I don't eat dog meat, but I don't avoid any other meat products.

我之前之前吃过狗肉,但是现在就是。就。自从我长大之后,我就不是再去吃狗肉那种东西,小时候我们是陕西这边嘛,吃啥都喜欢吃泡馍,然后就有那种狗肉泡,小时候不知道就不太懂那些东西,然后家里人领着去,然后就吃了。当时也觉得挺好吃的,现在就是走到那个店门口都觉得难受,都觉得恶心,然后就再也不吃狗肉,其他的都没什么。

Animals With No Food Association

Unlike the previous category, where participants were aware that these animals are consumed as food, nationally protected animals, and animals used for experiments, leather, and medicinal products were not mentioned with relation to food by the participants.

Participants mentioned a number of protected species: pandas, Chinese sturgeon, bears, pangolins, and elephants. Although there is a history of these animals being consumed as meat, and their body parts (pangolin scales and elephant ivory) are still traded and used in Chinese medicine, or ornamentally (<u>USAID, 2018</u>), these animals were not mentioned in this way by the participants. Instead, these animals were generally mentioned in reference to news stories, as valuable animals in terms of ecology and conservation, or as animals particularly deserving of welfare.

Participants were sympathetic to animals used for experiments, and those used for fur and leather products. In particular, a student noted that chimpanzees were particularly close to humans genetically, and that sharing information about chimps in experiments could attract sympathy for animal welfare causes. Two groups also mentioned news stories related to mustelids (diāo 貂 refers to ferrets, polecats, and mink) and crocodiles, suggesting that treatment of these animals was particularly cruel. This was described by one participant as more ethically problematic than experimenting on lab mice:



Using mustelids for their fur and extracting bear bile are too extreme. But with lab mice, we raise them specifically for experiments. If we didn't use them for experiments... well, we obviously wouldn't be able to experiment on people.

貂皮和熊胆确实是太过分了。貂皮和熊胆那个倒是是挺极端的,但是如果说你像小白 鼠那种, 那你把它养出来就是搞实验的。那你不拿他搞实验,总不能拿人搞实验吧

Animal Protein Consumption

Hypotheses Regarding Animal Protein Consumption

In the previous report, we summarized animal advocates' perspectives on a variety of relevant topics, including how the Chinese public thinks about animal protein consumption. We wanted to validate advocates' beliefs and assumptions about this issue, and developed the following hypotheses regarding meat consumption and choice of products.

- 1. Reasons for and against reducing meat consumption will include:
 - a. Health (reducing meat for health reasons)
 - b. Lifestyle and status (reducing meat consumption as part of adopting a lifestyle perceived as higher status)
 - c. Status and wealth (not reducing meat consumption, due to the status benefits associated with consuming expensive meat products)
 - d. Foreign pressure or influence (reducing meat consumption because of the influence of foreign media, individuals or organizations)
 - e. Foreign pressure or influence (not reducing meat consumption, because foreign trends involve greater meat consumption)
- 2. Consumers who choose/would choose higher-welfare labels will be primarily driven by one or more of: health, lifestyle and status, food safety, status/wealth

We found that these hypotheses regarding meat consumption were generally not supported, with the exception of health.

Health was a driving factor, both for and against reducing meat consumption. Different meat products were associated with negative and positive health impacts, while the same meat product may be perceived as healthy or unhealthy depending on the consumer's age or health status.

Lifestyle and status were associated with some particular meat products, with different products associated with convenience meals, family meals, and meals eaten with friends. Neither lifestyle nor social status were suggested as reasons to reduce meat consumption; however, as participants may have been unwilling to mention that they eat a certain way to increase their social status, therefore we should not exclude this as a factor. Similarly, although wealth was also not explicitly mentioned as a reason for increased meat consumption, it was implied that richer consumers had access to a wider range of animal



products, and some lower-income participants mentioned price concerns regarding certain meat products.

In Phase 1 of this study, advocates mentioned that foreign influence, in particular opposition to foreign influence, was likely to play a role in meat consumption. For instance, several advocates cited growing resistance towards foreign groups and ideas in China, and were concerned that reducing meat consumption would be perceived as a foreign trend. Foreign products, actors, and nations were referred to many times by the participants in the study, and foreignness was generally framed in terms of institutions, aesthetics, ideas, and brands. Sometimes specific countries were mentioned, namely the United Kingdom, Australia, New Zealand, the United States, Japan, and Switzerland. No lower income countries were mentioned, and it is likely that the associations of foreignness in the study are associated with being rich, developed and, with the exception of Japan, Western.

In this study, although participants demonstrated some negative sentiment associated with foreign actors, foreign pressure was not mentioned at all in relation to general meat consumption, suggesting that neither increasing nor reducing meat consumption is significantly associated with foreign influence.

Animal Protein Preferences

This section explores the reasons for and against reducing meat consumption in more detail.

There was a range of preferences across "normal" animal products, with different food types being associated with different prices, flavors, and health impacts. The following section describes varying preferences across these products, from the most commonly mentioned animal products (chicken and pork), to less commonly mentioned, such as seafood.

Chicken was seen as a cheap and tasty protein source. It was also seen as relatively healthy, and was preferred by some participants over red meat for health and fitness reasons, such as weight loss, muscle growth, and lowering cholesterol.

When I was in my first three years of university, I worked out a lot and ate a lot of chicken, because chicken is better value for money. To put it bluntly, it's just a bit cheaper than other meat.

以前大一到大三健身的时候也经常吃鸡肉,因为鸡肉相对其他肉性价比比较高,说白 了就便宜一点

Pork is also commonly consumed, and the majority of participants mentioned consuming it. Unlike chicken, some participants mentioned shifting away from pork for various reasons, such as food safety and health:



People have been talking about the hormonally-treated (láizhū 莱猪) pork scandal in Taiwan, and people in Mainland China have been getting up in arms about pork. They felt that there were [food safety] problems with pork. I'm not claiming to know much about this, but my sense from watching the news is that pork is more likely to have safety issues, because there are more scandals involving pork than other meats... [I] avoid pork as much as possible, as long as there are other options.

之前不是经常看,说台湾那个莱猪的事儿,然后还有国内不是之前一直都有沸沸扬扬,所猪肉这大问题。感觉说猪肉出问题的。我不是说客观说就是从我主观看到那些新闻来说,感觉猪肉出问题的这个概率会更大一点,就是出现猪肉相关的这种舆论风暴会多一点比别的肉。 我会尽可能的规避 吃猪肉,但凡有更好的选择的话。

Beef was the third most mentioned meat, after chicken and pork. Some participants ate beef because they believe it has specific health benefits, such as for fitness and muscle growth, while others preferred beef for feeding their children. This is mainly because their children preferred the taste of beef.

Beef is high-protein, and I feel that pork has too much fat. After eating pork, both children and adults can easily get fat.

牛肉嘛,就是那个蛋白质含量比较多,而猪肉我觉得油脂太重了。然后的话就是小孩啊和大人吃了之后,容易会发胖啊之类的。

Lamb, mutton, or goat products are mentioned by some participants, and imported lamb was seen by some as particularly tasty. However, these products were avoided by several participants because of the strong flavor or odor. This flavor/odor is referred to as *Yáng shān wèi* 羊膻味 (gamy or muttony flavor/odor).

Because I feel that lamb has a very muttony flavor, I can't stand it.

因为我觉得羊肉有一股很膻的味道。我是没办法接受。

Fish and seafood were mentioned by multiple participants. Like chicken, fish is often chosen for health reasons; it is "good for the brain" and "low-fat". Similar to lamb/goat, one participant rarely ate fish because of the strong 'fishy' taste or odor (yúxīngwèi 鱼腥味).

I work out, but fish is cooked with too strong of a fishy taste, so I rarely eat fish. But fish is good for you, because it's low in fat and makes you less likely to put on weight.

我也有健身, 但是那个鱼肉的话因为做的有点腥,所以呢很少吃鱼肉,但是这个鱼肉确实比较好,因为它这个含脂肪量比较低,不容易长脂肪

Many participants at eegs regularly, and they were broadly seen as a healthy part of a diet. Boiled eggs were commonly mentioned as a breakfast food, and eggs were also mentioned as part of fried vegetable dishes. They are often consumed daily; for example, one middle



income participant said that he tried to make sure that he always ate "at least one or two eggs in a day".

I always drink hot milk before bed and have an egg in the morning.

有的, 基本每天晚上睡之前都会热牛奶啊。鸡蛋基本每天早上早餐都有一只这样子

Similarly, milk and yogurt are the only commonly mentioned dairy products, and are frequently mentioned as something eaten at home. One participant mentions "always having milk in the fridge". They are seen as healthy additions to a diet, in particular for children. Cheese was only mentioned once, by one mother who specified that it was 'hard cheese, not processed cheese'. Except for Western fast food and pizza chains, cheese is rare in China, and higher-quality hard cheese is generally only available in specialist shops or international supermarkets (Marketing to China, 2021).

In our house we've always drunk milk, and we've had milk and yogurt in the fridge since I was in primary school.

我们家从小基本上牛奶都没断过,然后从我上小学。三年级开始,我们家牛奶酸奶基本 上冰箱里一直都有。

Influences On Consumption

Health

Health concerns were mentioned frequently in response to questions about meat consumption. Most participants saw meat consumption as generally healthy and natural, and some made claims that meat is essential for health.

I feel that [meat] is part of what a human body needs, and every time I eat a meal without meat, I feel it's missing something, and I lose my appetite.

我感觉这应该是属于一个人体所必需的一个东西吧,然后就是每顿饭不吃点肉感觉, 吃着不香, 没食欲

...our bodies need meat. I have gallstones, and if I don't eat meat, I produce more bile, and the gall stone grows. So I don't have any other option, I can only reduce meat or avoid it for a few days a month.

我们是身体需要。我自己本身就有胆结石,如果我自己再不吃肉,那个胆汁就会更高, 然后胆结石就更大。就没有办法,我只能说少吃肉或者是他们说的那种,一个月可能一 到两天三天的样子。

Many participants gave health reasons for specific meat choices, with several themes emerging.



The life-stage of the consumer was seen as a major contributing factor to the healthfulness of food products. For example, meat, and animal products more generally, were considered essential for childhood growth. Children were viewed as needing dairy, eggs, and meat to grow stronger and taller, and to aid their cognitive development during early childhood and puberty. Some mothers mentioned selecting particular animal products, namely beef and seafood, because they believed they had specific benefits for children's growth.

Seafood is high in calcium, and low in fat. Deep sea fish, such as salmon or cod, contain high levels of DH and DHA [omega-3 fatty acids], so I give them to my kids two or three times a week. We also switch between different types of seafood, including deep-sea fish, shrimp, and other fish.

因为我觉得海鲜它钙含量高,然后脂肪含量低,然后像深海鱼的话,我们这边也能满足像三文鱼啊,鳕鱼什么的。它那个含DH含量DHA含量特别高嘛,所以小孩子的话我们一周都会给他吃两三次深海鱼,然后像虾呀,鱼呀,我们都会换不同种类的来吃

By contrast, elderly people, including both those participating in the focus groups (grandparents) and elderly relatives mentioned by the younger participants, reported shifting their consumption away from meat. Some participants mentioned older people reducing general animal consumption, while two mentioned reducing red meat. Although it wasn't always clearly expressed why older people should consume less red meat, some mentioned a connection between red meat and blood pressure, blood lipids, cholesterol, and other related health issues.

I think white meat is healthier. Because people in my family are getting older, and they need to be careful about some of their health indicators. White meat is suitable for people with the three highs (high blood pressure, high blood lipids, and high blood sugar).

我觉得白肉就是健康点哦,因为家里人他们年纪比较大,就要注意一些健康的指标,那 白肉来说对三高比较高人的是比较适合吃。

My mother-in-law eats very little meat, very little red meat especially, but she eats some fish.

我丈母娘肉吃得很少吃呢, 也吃...她红肉吃得很少, 基本上是吃鱼的多一点。

Other health concerns, both general and specific, led to some non-elderly participants reducing general meat consumption. One participant mentioned reducing meat consumption following a health check-up, while another mentioned reducing consumption of meat, especially red meat, after an operation.



I'm currently reducing my meat consumption. I used to eat meat every day, but my doctor recently recommended during a yearly check-up that I limit my meat consumption. I thought I should trust the doctor's perspective, so now I'm reducing how much meat I eat, and I'm doing more exercise for the sake of my health.

肉类的话我摄入量现在在减少,以前的话每天都有吃,但是我也是每年去做体检,我觉得这个方面医生建议还是要控制,那么从医生角度,我觉得是对的,所以说现在的话就是量减少,然后增加锻炼。就是从健康角度来讲。

Some meats were generally considered healthier than others; for example, participants mentioned switching to white meat, fish, and lean meats for health reasons. Beef was sometimes preferred as a lower-fat, higher-protein product than pork. Seafood was also considered healthy, due to low-fat and high-micronutrient content. A few participants referred to micronutrients, such as calcium, lecithin, amino acids, and omega-3 fatty acids (DHA) as vital components of a healthy diet that can be found in animal products.

Protein in particular was described as important for general health, and for muscle-building, by some participants. One participant mentioned a transition from fatty meat to lean meat when he became interested in health and fitness, and certain meats were associated with muscle growth and weight loss.

I believe there's a difference [between pork and beef]. I sometimes work out, and I will eat beef because it's lower in fat. People who work out all mainly eat chicken breast, beef, and other meat that has basically no fat.

区别的话我个人觉得,也因为我自己有时候也健身,吃牛肉的话因为它脂肪含量低。健身的人都是以吃鸡胸肉,牛肉,以及那些低脂肪基本都是没什么脂肪的肉为主。

There was also a belief that too many carbohydrates can have negative health impacts, and cause weight gain. Some participants mentioned consuming meat-based meals to reduce carbohydrate consumption, which also had the added benefit of reducing fatigue. One father mentioned that he couldn't rely on carbs for his work, making meat necessary for his functioning. This suggests that meat is seen as the main alternative to carbohydrate-based meals, and that negative associations with excessive carbohydrate consumption can push people towards eating more animal products.

If you expend a lot of energy, I don't think you can just rely on carbs to sustain yourself. Carbs aren't enough, so meat is a necessity.

你消耗那么大你靠碳水来去支持的话, 我觉得可能不是太够。所以我觉得肉是一种必需品

Some participants expressed a belief that animal products can contain substances that may be harmful for human health, in particular, "toxins" produced during animal slaughter. For example, multiple participants mentioned that toxins may be released by animals that are



slaughtered in conditions of fear and distress. Participants also noted that less fresh products, such as crayfish/lobsters that are eaten long after being killed, can also produce harmful substances.

I've heard that when animals are being slaughtered, if they get scared, their bodies will release toxins. If people eat their meat after this, it's not very good for their health.

但我听到说过就是动物在宰杀的时候,如果它受到惊吓的话,它是身体会释放出毒素, 如果人类吃的话,对身体就不会特别的好。

Some of the products used in animal agriculture were also seen as harmful to human health. Participants mentioned concern about antibiotic use in animals, and about veterinary supplements used to promote growth of lean meat, known collectively in China as 瘦肉精 (shòu ròu jīng) or 'lean meat essence'. These products were mentioned negatively in the focus groups, and one participant mentioned a court case related to banning these products in Taiwan.

While many participants mentioned general food safety concerns, some raised other more specific concerns. One participant mentioned seafood being tainted by toxic waste and nuclear waste (from Fukushima), while another mentioned that some animals, such as frogs for human consumption, were raised in gutters. Zoonotic diseases were occasionally mentioned, in relation to wild animals and stray animals—importantly, no participants mentioned them in relation to farmed animals.

Social Context, Tradition, And Customs

Some participants framed their meat consumption in terms of eating differently depending on specific social contexts, as well as traditions and customary eating habits. Some participants, especially those unmarried or living away from their families, were more likely to eat alone, and mentioned ordering individual meals for themselves. These meals generally involved only small amounts of meat, for example, noodle dishes, dishes consisting of rice and a meat, vegetable, or fish topping (gàifàn 盖饭) and meat-filled buns (bāozi 包子) were mentioned by participants. However, communal and family meals were also frequently mentioned. In China, these generally involve multiple shared vegetable or meat dishes placed in the center of the table, while everyone at the table has their own bowl of rice and a pair of chopsticks that they use to place the vegetable or meat products onto their rice (Zhang, 2020). In general, the more people there are, the broader the variety of dishes.

Several participants in the focus groups mentioned eating more food generally, and more meat dishes, on these social occasions. As one host is generally responsible for preparing or ordering food, they are conscientious of ordering a wide variety of foods, including different meat dishes, so that everyone can have something they like. Only preparing or ordering vegetarian food can be seen as stingy, as vegetarian dishes are generally cheaper than meat dishes. This coincides with a result from our Phase 1 report, where a participant working for an NGO mentioned feeling obliged to order meat when meeting with stakeholders. One participant from the group interviews mentioned that:



When we go out to eat, there's always more meat. If you invite friends to eat with you and only order vegetarian dishes, people will think you're pretty stingy.

出去吃的时候肉肯定多,一个是我觉得跟朋友一起吃饭,如果都是素菜的话,好像如果说你请客的话像人家会,如果说都素菜,他觉得你挺抠门的。

Food and meat consumption in social settings may include some nuances that are distinctive to the Chinese context. While eating more in social settings was more frequently mentioned than limiting food consumption, one participant mentioned eating less with people she was less familiar with.

If I went for a meal with people I'm not too close to, like at a university society event with a lot of people. I definitely wouldn't feel as comfortable as I would with close friends, and I wouldn't order too much meat. I'd eat until I was 70% full.

如果是那种关系一般的, 比如说社团什么之类的。那种人又比较多, 那种聚餐的话就肯定就没有跟很熟的朋友那么放得开就, 就不会点太多肉, 七分饱吧。

While this may simply indicate a preference for spending more time with close friends, the explanation for this phenomena may be culturally specific. Group meals in China traditionally comprise a host-guest relationship, where the host pays for a meal to express their generosity, or out of a sense of duty. When eating with strangers, the host generally encourages guests to eat, but guests may be concerned about incurring a social debt (qiàn rénqíng 欠人情) if they eat too much expensive food. With close friends, social debts are less relevant, and people are able to enjoy eating more freely in this context. Another component may be that 'overeating' on the host's dime may seem uncultured or desperate, especially in social contexts with less familiar people. People may assume that eating a lot of meat and other expensive food products suggests that the guest cannot afford these foods, and is taking advantage of the host's hospitality to eat as much as possible.

Participants also mentioned influencing others' eating habits during social eating occasionsone participant mentioned someone being encouraged by family members to eat more meat or animal proteins.

Other people try to persuade [my mother] to eat more meat. [They say:] How can you not eat meat? How can you not even eat eggs?

别人老劝她,别人老说她,你怎么能不吃肉呢?你怎么连鸡蛋都不吃呢?

There are also cultural factors influencing diet in China. All of the participants were urban, ethnic Han, therefore some of the differences between rural and urban, and minority/Han were not captured in the study; however, some regional differences were captured. For example, people in coastal areas ate more seafood, and only northern participants mentioned eating donkey meat. Although there are many well-known differences between



regional cuisines and eating habits (Zhu et al. 2013), these were not emphasized by our participants. As previously noted, one student mentioned eating wild animals, because it was common and traditional in Guangdong.

Some participants associated eating habits with Chinese national identity. One father mentioned that, in China, "food is culture," and he contrasted this with a perceived disconnect between food and culture outside of China.

What's the biggest difference between us and foreigners? What we eat is our culture, but what foreigners eat isn't culture. What they eat isn't important, what we eat is really important.

我们跟老外我觉得最大的不同是什么?我们吃是我们的文化,这个跟老外人家吃不是文化。人家吃什么不重要,我们吃什么很重要。

Finally, religion was an influence on the meat consumption of some participants, and two mentioned religious reasons for reducing meat consumption. One mentioned that a Buddhist family member had reduced their meat consumption for religious reasons, and one grandparent with a Hui Muslim son-in-law explained that he didn't eat pork at home since the man married his daughter. No other participants mentioned that they were religious, so it's unlikely that religion influenced their diet. However, Buddhism is commonly practiced in China, with an estimated 18% of Chinese people identifying as Buddhists (Pew Research, 2012), and this sample may not have captured the true extent of religious meat reduction among Buddhists (Tseng, 2017).

Terminology For Taste, Sensation, and Enjoyment

While the satisfaction and pleasure from eating animal products may be prevalent across countries and cultures, the specific terms used by Chinese consumers to describe these feelings and experiences may be relevant for marketers of high-welfare and alternative protein products.

Many people expressed enjoyment from certain kinds of meat, and many mentioned finding specific kinds of meat particularly enjoyable. Some expressed this in terms of happiness, while others used distinctive Chinese terms to describe the enjoyable taste or mouthfeel sensations. For example, the concept of xiāng (香) or xiāngwèi (香味) was commonly brought up, and can be confusing for non-Chinese speakers. The term xiāng (香), often translated as "fragrant," refers to either a good smell or a distinctive taste, which doesn't have a direct translation to English.

The texture of meat products was also seen as very important. Mouthfeel ($k\check{o}ug\check{a}n$ 口感) is a more common word in Chinese than the English equivalent, and it is often mentioned in relation to meat products. People used positive terms to describe soft, melt-in-the-mouth meat products, while using more negative terms to describe dry, hard meat products (see table below).

Many groups refer to meat as more filling than vegetarian food and seafood. Feeling full is seen as an enjoyable sensation, and filling food is seen as better for weight loss. There were



a few distinct phrases: dǐng bǎo 顶饱, bǎofùgǎn 饱腹感, and kǒufùgǎn 口腹感 used to describe fullness, and all of these terms are positively valenced. Some food was also associated with positive bodily sensations, for example, eating lamb/goat was seen as 'warming' in winter.

Some participants mentioned disliking the taste of certain meat products, and framed this dislike in distinctive ways. Many participants found some kinds of meat (lamb, seafood) particularly unpleasant, and used the Chinese terms for (slightly) rotten, tainted or gamy: (xīngwèi 腥味; sāowèi 骚味; shānwèi 膻味). A few participants mentioned friends/acquaintances that don't eat any meat because they don't like the taste/odor of meat more generally, and used this term (xīngwèi 腥味). Chinese cuisine often tries to hide the meaty and fishy flavors of animal products (qùxīng 去腥), especially lamb and fish (Zhong and Lü, 2017), and some participants mentioned their aversion to these stronger tasting meat products.

Table 1. Table of Phrases Used to Describe Eating Sensations, Taste, and Mouthfeel

Chinese	English Translation
增加多巴胺	Meat increases dopamine
好吃带来愉快啊!	If food is tasty, this makes you happy!
我买海鲜是为了吃的鲜味	I eat seafood so that I can taste the freshness
油呲呲呲的那种口感	That kind of juicy, oily mouthfeel (positive)
口感很顺滑	A melt-in-the mouth feeling (for meat)
我不太喜欢吃猪肉的口感,我觉得它比较的 柴和硬	I don't really like the mouthfeel of pork, it's quite dry (Chái 柴, literally 'like firewood') and tough
多吃肉比较顶饱	If you eat a lot of meat you really feel full
那我觉得吃肉的话其实嗯。就是比较有饱腹 感, 就比较不容易长胖	I feel that eating meat makes you feel full, and makes it more difficult to get fat
香味不一样	The 'fragrant' (<i>xi</i> ā <i>ng</i>) taste makes the difference
吃着很香	It tastes really 'fragrant' (<i>xi</i> ā <i>ng</i>)



Purchase Considerations

"Quality" Is What Matters, But Animal Welfare May Benefit

Participants frequently stated that they wanted quality meat for taste and safety reasons, and that this affected their purchasing decisions.

Several participants mentioned that low-quality meat lacks flavor, has a less pleasant fragrance, and is associated with safety concerns. Many currently available animal products, especially those bought in regular markets and supermarkets, or consumed in restaurants, were described as 'lacking meat flavor' (méiyŏu ròuwèi 没有肉味) or, for milk, lacking the milk flavor/fragrance (méiyŏu nǎixiāngwèi 没有奶香味) that milk should have. These products were compared unfavorably to various high-quality products, foreign products, and the food eaten in the past.

A father believed that today's pork wasn't as tasty as when he was a child, as did one grandfather who had lived in villages in his youth. He attributed the good taste of the meat in the village to the fact that the animals were allowed to roam freely, giving the following description of meat products in the past:

The chickens, ducks and pigs raised in the villages were all allowed to run around the mountains freely. The pork we used to eat was really tasty, but these days pigs raised in enclosures definitely have worse living conditions -- they can't see the sun, for example.

在乡里在农村里,他们喂的鸡呀鸭呀猪啊,都是放到外面自由的在山上跑的那个猪,以 前的那个猪肉就很好吃。现在这个圈养肯定条件差一些。他又晒不到太阳什么的

Some participants voiced concerns about antibiotics and hormones. Additionally, another concern mentioned was injecting water into meat to increase the weight, so that it could be sold for a higher price. Some participants also had strong impressions of recent scandals (local, national, and global) that affected their perception of the quality and safety of current meat products. For instance, participants mentioned scandals that involved higher-quality meat being secretly replaced with meat products from other species that are associated with lower-quality meat, such as horses, rats and stray cats.

Sometimes, when I order beef or lamb from a takeaway or at a restaurant, I notice that it doesn't really seem like beef or lamb. It seems more like the meat from another animal that has been made to taste like beef or lamb. Later my mother told me that if you buy meat that doesn't have any flavor, for example in beef noodle dishes, it may actually be horse meat. Also, when you get frozen kebabs for barbecuing, the "lamb" kebabs are often actually made from chicken.

有时候我吃买回来一些肉或者去外边吃的一些羊牛肉。就觉得它味道不像牛肉或羊肉 ,像是其他动物的肉,然后经过加工,弄成假牛肉,假羊肉。后来我妈说这买到的,没啥



味道, 那些牛肉粉可能是马肉. 还有呢,就是那些。冰冻的。那种。那种拿来做烧烤那种一串串那种。羊肉串其实。就很多就是鸡肉做的。

How Do Consumers Gauge Quality?

Chinese consumers used a range of characteristics and heuristics to identify a product's quality, though some had concerns about this and how/where to find quality products.

Several types of products were considered to be higher quality. One is $(t\check{u} \pm)$, and translates literally into "earth" or "soil," but can be more accurately translated as 'village-raised'. For example, 'village-raised pork' $(t\check{u}zh\bar{u}r\grave{o}u \pm in)$ and 'village-raised chickens' $(t\check{u}j\bar{l} \pm in)$ were frequently mentioned, and were perceived as higher quality products. Organic $(y\check{o}uj\bar{l} \pm in)$ and green $(l\hat{u}s\grave{e} \pm in)$ products are also mentioned in relation to these meats. These terms were not used for fish or sheep/goat products.

Imported products were also generally seen as higher quality; in particular, dairy, beef, and lamb from Australia and New Zealand were mentioned as common choices, as were dairy products from Hokkaido, Japan. Although most participants bought mainly Chinese meat products, one father stated that he only bought foreign-produced products and didn't trust domestic brands. Although most views of foreign products were positive, one participant briefly mentioned a Taiwanese referendum over importing meat from the U.S. that has been produced using the feed additive ractopamine, a kind of 'lean meat essence' (shòuròujīng; 瘦肉精) product that has been banned in China (FSIS, 2022), suggesting that not all foreign meat is seen as healthy.

In Australia and New Zealand, the milk is high quality, but why is our milk not as good? Our cows eat more straw, so the quality is different.

所以说你像那个新西兰澳大利亚这么他们牛奶他们品质就高嘛,那我们的牛奶为什么就是一点呢?我们吃的那个干草多啊,对啊,质量就不一样。

There are certain premium product lines and brands that were seen as being particularly high quality, while other products were seen as inferior. For example, multiple brands of milk were viewed as superior to others: Yili Premium (伊利金典), Lanshan (蓝山), and Telunsu (特仑苏) were all mentioned, and sometimes this perception of quality is supported by a perception of better flavor. However, one person mentioned that they expected a premium brand to be good, but was surprised to find that the quality wasn't that high. Another suspected that the higher and lower grade milk products might come from the same cows.

I get Yili Premium, I drink that a lot, and I've been drinking it for a while. I used to drink normal milk, but it doesn't have that milk flavor/fragrance, and Yili Premium has a better mouthfeel and more nutrients.



牛奶的话那个伊利金典,我现在就喝这个喝了很多,最后现在一直喝的这个。原来是普通牛奶,但是它的奶香味。你跟那个口感各方面我觉得营养这个要高一些,而且口感很好

Maybe it's all a gimmick from the companies... Telunsu is more expensive than regular Yili and Mengniu milk, but maybe it's just that they advertise well, with good slogans. They make people feel high-class or higher status, but the only difference is that they're given different labels. [The milk] comes from the same cow. People are just paying for the labels, that's how I see it.

可能这还是商家的一个噱头吧,就跟牛奶似的,特仑苏就是比普通的,这个伊利蒙牛卖的贵。但是呢,那个喷文书可能广告做的好,然后再加上给人挺高端大气上档次的。他的这个品牌特仑苏区别于一般牛奶,但是呢可能这两个牛奶都是从一头牛身上挤出来的,但只是贴了一个不同的商标给他有一个就是贴了一个标签,大家为这个标签买单了。这是我的理解。

Aside from milk, three premium product lines were mentioned: Zhengda (正大) and Shanmu (山姆) for general products, and Deqingyuan (德青源) for eggs. Although they didn't specify the brand, one participant mentioned high quality eggs produced with a Japan-China joint venture that could be eaten raw, unlike domestically produced eggs, which many Chinese consumers believe cannot be eaten raw (Mineni.com.cn, 2019).

Although the marketing for premium products, such as Telunsu milk, often implies that the animals involved are raised in certain ways, there are other premium products that explicitly state the method of production. For example, insect-fed chicken eggs (chóngzidàn 虫子蛋), grass-fed chicken eggs (cǎodàn 草蛋), and grass-fed beef/milk products are mentioned; one participant mentioned that China now has more of these products available. Free-range (sǎnyǎng 散养) products were also mentioned. These products are generally mentioned positively.

I've bought [high welfare products], for example, there are eggs that come from free-range chickens, and free-range pigs. Although these pigs or chicken products are much more expensive, I proactively buy these products, or organic products, for my child's health.

我买过。 比如说有鸡蛋啊,然后一些,比如说散养鸡啊,或者散养的猪。就家猪或者家鸡虽然价格会高很多,但是为了就是小孩子健康,我们都会去主动去买散养的,或者有机的食品。

The breed of animal and particular cuts of meat were occasionally mentioned as indicators of quality. One high-income participant mentioned that China now had a breed of white chicken considered higher-quality, which was previously not produced in China. Black pigs were also considered to be tastier breeds. In terms of cuts of meat, one participant (from the lower-income group) mentioned that he didn't know about certain cuts of meat, like rib-eye



and filet until recently, but that he had since become fond of them. Others mentioned organ meat, with some participants choosing liver and other organ meat for health reasons.

There were slightly diverging opinions on the best places to buy meat products. One grandparent mentioned that buying directly from the farm improved quality, while one father thought that buying from large, international supermarkets (Costco) as opposed to local markets was a better guarantee of quality. One participant mentioned that products sold in supermarkets or chain stores have been through the relevant health and safety authorities, so people feel more comfortable buying these products. Regional food types were also mentioned, and understandably, eating seafood in coastal towns was seen as better than inland cities.

Finally, while fresh products were generally preferred, some methods of processing were seen as positive, such as pasteurized milk. As milk is generally UHT (Ultra-High Temperature) processed in China, pasteurized milk is more of a high-end product. Also, there was some mention of how carcasses are treated directly after slaughter affecting the final product. Meat such as pork is conventionally chilled after slaughter in developed countries, but this is not necessarily the case in China, where it may still be sold directly as 'warm meat', which causes lactate to build up in the muscle meat and the pH to drop, making the meat more acidic (The Guardian, 2020). This process of chilling is referred to as acid removal (páisuān 排酸) by participants.

You can't always guarantee the quality of meat. Although the government should be monitoring this, I trust some particular brands. I believe that their methods of cooling and processing meat make the flavor a bit better, so I buy their products more often.

我对它的质量不是太敢保证,虽然说都有政府在监管这块,但是我还是更相信有品牌。 而且更相信可能它的一些,猪肉经排酸或者一些处理的话味道会好一点,就是我会买 的更多一点。

Welfare Can Imply Quality

Although free-range and village-raised animal products were sometimes directly associated with better flavor, these purchases were generally made for the sake of improved flavor and quality rather than out of concern for farmed animal welfare. Several people stated that these products were tastier when compared to mass produced products.

In Changsha we can often find village-raised pork. People in villages produce it, and they raise their own pigs... It's a lot more expensive than the commercially reared pork you find in the supermarkets; and we'll sometimes buy it.

猪肉嘛也有这个,嗯,我们这样我们长沙这边嘛,有时候就是这个土猪肉啊,农村里就 是乡下人搞来的自家养的那个猪就贵一些。他就比这个超市卖的那些什么饲养的猪肉 就要贵很多,我们也会买一些



The quality difference concerning higher welfare products was also expressed in terms of safety and appearance; for example, one grandparent mentioned that the yolk of higher welfare eggs was a darker shade of yellow, and had a better, stronger flavor.

As previously mentioned, several people believed that animals that die in pain and fear (e.g., through inhumane slaughter practices), will release harmful toxins.

Other Considerations

Apart from quality, a range of other considerations were mentioned—for example, convenience. Fish was considered inconvenient for parents to feed to their children, because of small fishbones (which tend not to be removed before cooking/purchase in China), and preparing certain types of seafood was described as inconvenient. Some food formats were also viewed as more convenient, such as Western fast food products and dishes with rice, meat, and vegetables in one bowl (gàifàn 盖饭).

Value for money was also considered a relevant factor, and price is commonly mentioned in relation to meat choices. In addition to choosing cheaper varieties of the same meat, a student also mentioned choosing chicken over beef, despite preferring the taste of beef, due to the price. A father mentioned that village-raised pork was particularly expensive, and that he didn't generally buy village-raised products, despite the taste being slightly better. No explicit questions were asked about what kind of premium customers would be willing to pay, but one father mentioned that he would only pay a 20-50% premium for more nutritious products, but not higher.

If you put a [high welfare] label on the product, and the price is 1.2, 1.3 or 1.5 times the original price, that's okay, but if you put that label on and the price rises by an abnormal amount, why bother [paying that much]?

如果你贴了这个标志,你只有1.2倍,1.3倍或者1.5倍,我就算了,你这个东西一贴,你 这价格不是一般的涨。 那我何必呢?

Finally, there is a desire for novelty, and many participants mentioned trying or being willing to try different meat products, such as higher welfare products. However, not all trials led to continued purchase of this product. One participant said that she had tried high-welfare milk, but it didn't taste very good, so she didn't continue to consume it.

Perceptions Of "Animal Welfare" (Dòngwù fúlì 动物福利)

"Animal welfare," translated as dòngwù fúlì 动物福利, is not a commonly-used term in China, and, unsurprisingly, the concept was unfamiliar to many participants. Prior to the writing of this report, we had also developed a set of hypotheses to test, which were based on beliefs held by animal advocates in our previous report.



Hypotheses Regarding Animal Welfare

In the previous report, we summarized animal advocates' perspectives on how the Chinese public thinks about animal welfare. We pre-registered the following hypotheses regarding views of animal welfare for this study:

- 1. Consumers will be more positive toward animal welfare when it is defined in terms of the Five Freedoms (with a focus on physical health, emotional health, and natural behavior) compared to when it was presented using the term dòngwù fúlì 动物福利, which has been described as sounding closer to social benefits than basic needs.
- 2. Consumers will not accept much personal responsibility for animal welfare.

To test these hypotheses, we first asked the participants about their thoughts on the term animal welfare (dòngwù fúlì 动物福利), then they were shown a video explaining the concept in terms of the Five Freedoms (freedom from hunger and thirst, freedom from discomfort, freedom from pain, injury, or disease, freedom to express normal behavior, and freedom from fear and distress). We found the two hypotheses related to consumer attitudes towards animal welfare to be mostly accurate. As expected, there was some initial confusion related to the term dòngwù fúlì 动物福利 from multiple groups, and consumers were more positive towards the Five Freedoms framing of animal welfare, as represented in the first video.

The idea that consumers should accept responsibility for their purchases was also mentioned by some groups and individuals, but not others. However, no participants completely dismissed the idea of personal responsibility.

We now go into the details of our key findings below.

Uninfluenced Perceptions Of Animal Welfare

Before being introduced to the concept in the video, only a few participants had heard of the concept of animal welfare explicitly, and most were unable to describe it accurately. However, upon hearing the term, many participants made relatively accurate assumptions about what animal welfare referred to. Several participants correctly identified key characteristics of animal welfare, such as improved living conditions, better treatment, living environment, and some differentiated animal welfare thinking from ideas related to vegetarianism and ending animal farming.

[Animal welfare refers to] letting animals have better lives. Practitioners of animal welfare might be volunteers, they might focus on protecting animals and letting them live better lives in the time that they have. As I understand it, they don't necessarily oppose killing or eating animals- they aren't necessarily vegetarians.

让动物活得好一点。就是可能如果有从事动物福利方面的人的话。这部分人或者说他 这部分志愿者,他们可能致力于保护动物,让动物在所谓有生之年。能够活得好一点。 也许他们可能啊,我的理解啊,也许他们可能并不反对杀动物或者说吃动物, 也许不是 素食主义。



[Animal welfare refers to] better treatment in slaughterhouses.

在屠宰场里面的待遇好一点

[Animal welfare refers to] treating animals as fairly as possible, having concern for their quality of life, their environment.

尽量平等的去对待动物,然后对它们的生活质量,生活环境也有所关心

Some participants had much more in-depth understandings of animal welfare. This was partly due to professional experience: one participant had experience in animal rearing and was aware of welfare concerns related to automatization of slaughter practices, while another had previously worked for an international NGO, and was aware that welfare was connected to environmental factors, humane treatment, and feeding practices. Some were also aware of potential trade-offs between increased welfare and profitability.

I think I understand [the concept]: normal chickens are kept in cages. They aren't able to move, which allows them to get fat more quickly. But with animal welfare, they would be able to run around, exercise, lay eggs where they want...Caged hens in a small space get fat very quickly, and their eggs are collected directly, but if they are raised in an open space, someone has to collect the eggs, which requires extra labor costs. The costs of the land may also be higher.

我可能知道,是不是正常鸡它只能关在鸡笼里嘛,为了让它胖,它就不运动嘛,但是动物福利可能是它可以自己去跑,自己去运动。自己在那里面下蛋。不会说像鸡笼里,它就只有这么小一块空间,然后它不能动,它就肥的特别快,然后它下了蛋就直接出来,但是它如果在田野里的他如果再有一块地上跑的话,那蛋你还要去捡嘛,也费更多的人工,然后还有这一块地的费用。

However, there were also many misunderstandings and expressions of confusion in response to the term. As with the term 'welfare' in English, *fúli* 福利 in Chinese can refer to services provided by the state to workers or the unemployed; it also refers to non-monetary employee benefits. There may also be distinctive connotations of welfare connected to China's socialist history. Those unfamiliar with the term seem to have inferred that it was connected to other definitions of welfare.

Although not necessarily incorrect, some participants also thought of welfare as giving animals more than a basic standard of care. This may involve 'luxury' or 'excessive' treatment of animals, like providing massages and music to make animals happier. This interpretation may also reflect the participants' impressions of how animals are raised in China; some participants believed that animals are kept in appropriate conditions in China, and few mentioned awareness of welfare concerns within the Chinese food system.



There's a way of slaughtering pigs in Germany, which can improve meat quality. They let the pig listen to music and give it a massage, then they gradually release a gas [to kill the pig].

德国有一种就是杀猪的方式,就是也可能会让这个肉质量更加好就可能会让那个猪就 是听音乐,然后给它按摩。然后就慢慢的去释放那个一种气体

We already have the technical and management skills to give animals a comfortable living environment, to guarantee they [are able to] express their natural behaviors, and avoid harmful stimulation. I feel that, considering large-scale, intensively raised meat animal production, we don't really need to give [these animals] excessive welfare.

我们已经现在的技术还有管理已经可以做到让...那些动物。有适宜的环境,还有能保证他的 天性,发挥免受恶性刺激的。就我觉得。如果是嗯拿来消费使用的那些大规模的。养殖的那 些肉。的那些动物。就。就不是很有必要要。他们享受到超规格的待遇

Several individuals had a relatively accurate understanding, but assumed that pets and companion animals were the focus of animal welfare, rather than farmed animals. Another interesting misunderstanding was that it related to rewards for animal owners or those who helped protected animals.

If someone wants to kill a protected animal, and if someone sees this person, I can report this person to the government, and the government will give me welfare (a reward).

如果谁要杀了这个动物是保护动物的话。我假如要看见这人,谁要杀这个动物的话, 国家。我举报了这人了,或怎么着的国家会给我福利是这意思

I think it might be, for example, when people raise cats or dogs, and they will allow me to immunize the pet for free and reduce the cost of my pet insurance. And if I adopt an animal, they will give me vouchers to spend on things, etc.

我觉得会不会就是比如说我自己养猫养狗,会每年给我就是免费打打针,会给我的宠物上保险会减免。然后就是领养的这种,如果我领养一个动物,然后会就给我消费券什么的。

This indicates that the term may create a few common misunderstandings, in particular the idea that it involves 'welfare payments' to individuals.

Advocate-Influenced Perceptions Of Animal Welfare

This section explains the views on animal welfare that were expressed after participants were exposed to different media. The first example was a short video defining animal welfare using a framing based on the Five Freedoms concept. The rest of the examples were article excerpts about: "voting with your wallet" (i.e. buying higher welfare products in order to



express approval or disapproval of a given animal-rearing practice); recent animal sentience laws related to crustaceans in the West, with information on how to stun lobsters before consumption and a dog being deliberately killed by an explosion for the sake of a film; and finally, how Confucius' beliefs may be related to animal welfare.

Associations With Other Concepts

After being shown the media, participants associated animal welfare with numerous related concepts that they had some familiarity with.

Many participants identified with the idea of protecting animals from excessive cruelty. Throughout the discussion, several interviewees mentioned excessive and unnecessary cruelty to various animal species as something to be avoided. Multiple groups and individuals were upset by the idea of cruelty to dogs and cats, killing whales for food, cruelty to circus animals (elephants), animal experiments, bear bile extraction, and exploitation of fur animals.

The idea of humane slaughter was mentioned by some participants after exposure to the media pieces. For example, there was an awareness that traditional slaughter methods, primarily using knives to slit the throat of an animal, were being replaced by boltguns and similar methods (Sixth Tone, 2016). Participants considered this to be an improvement, making slaughter more humane.

After being exposed to a video explaining the Five Freedoms concept, certain ideas associated with the Five Freedoms resonated with the participants. For example, improving the living environment on farm animals is very frequently mentioned approvingly:

I really approve of this video- it's saying that we should improve the living environment for animals.

我其实也挺赞同这个的,就是让动物有更好的这种生存环境。

After the first video, the natural habits of animals were mentioned frequently, and the concept seemed to resonate.

I approve [of the video], because it's talking about paying attention to the natural habits of animals and making them happier.

我比较认同,因为他讲的更多是对于动物,注重它一些自身的一些习性,让它快乐的

The other concepts, such as emotion and stress, physical issues such as diet, hunger, and thirst, as well as health and pain, were mentioned less frequently. However, groups approved of animals needing fewer antibiotics and being raised in a more natural environment, perhaps due to health concerns associated with excessive antibiotic use, which were also mentioned.



Moral Status Of Animals

Although participants rarely explained it in detail, the moral status of animals was frequently referred to throughout the discussions. Most participants saw animals having some kind of intrinsic moral status, which they described in several common ways.

Some participants framed the argument in terms of natural rights, for example an "equal right to welfare". One argues that we should treat animals like 'lives, rather than just livestock' (shēngmìng ér búshì chùshēng 生命而不是畜生). Note that two concepts of life were used by participants: a moral or spiritual concept of life (shēngmìng 生命) that implies something to be valued, versus a biological concept of life (shēngwù 生物) that does not imply any particular value. For example; one participant said that both lobsters and dogs are shēngwù (生物), but dismisses lobster welfare as unreasonable—like most participants, as discussed below. This is an important distinction for animal welfare groups to be aware of.

I believe that we should value every life animal. Animals are like humans, they have life (shēngmìng 生命) and a soul; they're not just a piece of meat on the dinner table.

我觉得应该珍爱每一个生命吧,就是动物,它也是一个跟人一样,就是有生命,有灵性的一个动物,而不是说单单桌上的一块肉。

The sentience of animals and ability to suffer was raised explicitly by a few participants, and dogs and farmed animals are generally viewed as sentient. People disagreed on lobsters' sentience and ability to feel pain: it was described by one participant as 'science fiction', while some participants believed that they probably could feel pain.

Regardless, animal sentience and consciousness was seen as something beyond the realms of everyday consideration by the participants. A common phrase from the well-known Chinese philosopher Zhuang Zi—"You are not a fish, so how can you understand the happiness of a fish" (Zi fēi yú ān zhī yú zhī lè- 子非鱼安知鱼之乐)—was used by two participants to represent the idea that we have a fundamental uncertainty of the preferences (or even the sentience) of animals.

Notably, people who implied that animals had sentience and the ability to suffer used the term *gǎnzhī* 感知 (implying 'the ability to feel'), rather than *yìshí* 意识 (implying 'a subjective consciousness').

I believe that animals have the ability to feel, this is probably beyond doubt. While we may not exactly be able to communicate, when you stroke a cat, you still know that it has feelings. In fact, other animals like pigs and chickens also have the ability to feel, but ultimately, they are made to be used by humans.

其实我觉得动物是有感知的,这个应该是没有问题的。其实我们不管跟动物就是算不上交流, 但是比如说小猫咪你摸它一下呀,或者说撸猫啊,其实还是有一些感知, 甚至说就是包括猪啊鸡啊都是有感知的,但是最终呢,它还是为人类所用



There may also be spiritual or religious understandings of the value of an animal, but these were not stressed in the discussions. Traditional ideas of having a 'soul' or a 'spirit' are not mentioned in detail, but one participant mentions animals having *língxìng* (灵性), which implies a spiritually valuable existence, akin to a soul (*línghún* 灵魂).

Brain complexity was mentioned by one participant as conferring greater moral status and thus deservingness of welfare, as was having the 'same color of blood' as humans. Both of these ideas suggest that connections and similarity to humans may make the concept of animal welfare more acceptable. Consideration of brain complexity in particular indicates that some participants may consider the rational implications of an animal's ability to suffer.

Monkeys are more closely related to humans, and they can express emotions, so I can't tolerate the image [of eating raw monkey brain]- it's too gruesome. But seafood animals often don't have red blood, no blood is spilled, so I feel that I find it easier to cope with the idea of eating seafood.

因为可能猴子跟我们人类会比较相近一些,然后也会表达。我觉得那个画面我就不能忍。然后也比较血腥。像海鲜类的它不是什么红血的,就没有什么血流出来的。我觉得就没有看到那个画面,可能就心里面。比较能够接受一些

Perceptions Of The Human-Animal Relationship

As well as their intrinsic moral status, different aspects of relationships between humans and animals may shape how animals' moral value is perceived, and how humans justify treating animals in different ways. While many participants believed that the concepts of farmed animal welfare were unimportant or unrelated to humans, several of the focus groups stressed the connections between humans and animals, and linked human to animal welfare: specifically by arguing that better animal welfare can benefit human welfare.

In addition to improved meat quality, some spoke of other tangible benefits, such as better hygiene conditions for humans.

If you treat pets and stray cats and dogs better, you can also reduce their harm to humans.

那些宠物那些流浪猫,流浪狗。你给他好的待遇就可以减少他对人类的一些伤害啊之类的。

Companion animals, such as dogs, were universally accepted by participants as deserving welfare, mainly because of their relations to humans. Participants described dogs as "the friends of people" (gǒu shì rénlèi de hǎo péngyou 狗是人类的好朋友) and said that they "understand our humanity" (gǒu shì tōng rénxìng de 狗是通人性的). In contrast, an animal without this connection to humans may be dismissed as being 'part of the food chain.' Certain animals, such as those seen as pests, are particularly dismissed.



I think that, in theory, all animals should have animal welfare, because they all play a role in the whole natural ecosystem. But I personally feel that we can compare these [farm or companion] animals to pests, or some dirty animals, like cockroaches or rats. [For these animals] I think it's better if we don't give them welfare.

我觉得应该所有的动物都是应该可以享有动物福利的,照道理来说,因为它们都是在 大自然整个生态链当中扮演着一定角色的。但是我个人来说的话,我觉得像害虫啊,或 者跟一些比较脏乱差的一些联系在一起的,比如像蟑螂啊,老鼠啊,我觉得它们还是不 要有的比较好。

One student said that only animals that humans had extensive contact with were deserving of welfare, therefore the value of animals is related to the extent to which they encounter humans. Another concept in the human-animal relationship is reciprocity, one participant argued that animals that do things for humans should be given welfare. This can even be the case for non-charismatic animals; one father argued that bees should be given some welfare, because they produce honey for humans:

I think that if some animals improve welfare for us humans, like bees, I think they should [be afforded welfare]. Because they produce honey, they are an important part of our lives. But some birds are only there for us to admire their beauty. What would be the difference to us if they existed or not?

我觉得是呀。或者说有些动物可以为咱们人类谋福利的,比如说蜜蜂。 我觉得可以。因为它制造蜜糖嘛,它是我们生活中的一个,我觉得很重要的一个组成部分,但是某一些 鸟类。实际仅仅有观赏价值的,有这一鸟类跟没有这些鸟类,它的区别在哪里?

These quotes illustrate a theme: that the relationship between humans and animals is defined by animals' perceived purpose. For instance, participants mentioned that while pets are 'meant to' accompany humans, farmed animals are 'meant to be eaten', therefore shouldn't receive too much concern. Wild animals were a special case, while some implied that they have less value, due to their lack of connection with humans, others mentioned that some animals have an 'ecological purpose': for example, one participant saw whales as "living fossils" and therefore having particular value.

Some participants felt that treating animals well before killing and eating them felt contradictory. This could indicate that welfare is unnecessary, because animals intended for human consumption are 'going to die anyway'. However, this sentiment could also suggest that taking the step of viewing animals as morally valuable creatures would mean that we should reduce consumption of animals, rather than trying to increase their welfare.

One concern I have with the video is that I feel that we only rear animals because, in the end, we want to eat them. If we give them welfare, then, to put it harshly, it feels a bit hypocritical. I feel it might be better to get us to reduce consumption instead.



刚才看视频之前的疑惑就是感觉如果说我们养它们的目的就是最终就要吃它们,给他们做这些福利的内容,我觉得是有一点,就是说的难听一点,感觉有点伪善。我觉得可能更好的是从我们这一端去降低消费

Caring For Animals As Part Of "Being Good"

Some participants viewed providing animal welfare as an aspect of morally good behavior, though there are different conceptions of what it means to be or do good.

Firstly, individual responsibility is one lens through which morally good actions were framed. For example, acting according to duty and reciprocity was emphasized by participants. Participants believe that people should be responsible for their pets, and express disapproval of people who raise pet animals irresponsibly.

When asked about responsibilities, a mother suggested that people should be responsible for not buying animal leather and products that have been tested on animals, as well as reducing meat consumption. By contrast, another mother reported feeling a little ashamed for eating so much meat, as she was becoming aware of the poor conditions for animals.

On the other hand, some took a more macro view, seeing animal welfare as a responsibility for society or humanity. A grandparent said that protecting farmed animals was the civic duty of all citizens. While some participants thought that China already had high welfare standards, several stated that more needed to be done and that there was a group or individual responsibility to improve this. For example, a grandparent acknowledged poor environmental standards on farms. Other participants also mentioned that children needed to be educated in this area.

The broader framing of animal welfare as a moral responsibility for humanity was also mentioned. The related concepts of humaneness and humanity (*réndào* 人道 and *rénxìng* 人性) are frequently raised by participants, with the implication that better treatment of animals is a positive reflection of humanity, and that mistreatment of animals is inhumane.

This dog was a hero, I think [treating the dog this way] is destructive to our humanity.

这只狗是一个功勋犬,这样子我觉得本身是一种对人性的泯灭了

...using cruel methods to obtain some material gain, deliberately harming animals, such as forcing cows to produce too much milk and not giving any to the calf. I feel these are really inhumane things to do.

用一些很残忍的手段去获取一些利益,去伤害那些动物就,比如说恶意的什么,像让那个牛多产奶啊,不给小牛吃,这种我觉得这可能就是很不人道的一件事情。

In contrast, empathy and compassion are also viewed as positive traits and caring for animals was consistently framed in a positive way.



One article made the connection between traditional Confucian values and animal welfare. Confucian morality has played an important role in Chinese society and morals for centuries (Stanford, 2008), so responses to this article may indicate how animal welfare can relate to a more traditional Chinese moral framework. Most participants approved of this article, but some groups found it misleading, believing that it was unreasonable to extrapolate from the Confucius quote (To fish with rod and line, but not a net; to not throw spears at bird nests- Zi diào ér bù gāng, yì bù shè sù, 子钓而不纲, 弋不射宿) to animal welfare. Instead, participants connected Confucius' ideas to other modern concepts, such as sustainability, ecological balance (shēngtài pínghéng 生态平衡), and the 'scientific outlook on development' (kēxué fāzhǎn guān 科学发展观) -- the slogan of the former party chairman, Hu Jintao.

Participants reacted positively to modern and traditional ideas of ecology and sustainability, but they did not necessarily connect these ideas to welfare concerns. For instance, a high income participant thought that we should consider sustainability and 'species welfare', rather than a 'narrower' conception of animal welfare that ignores ecological considerations. This suggests greater concern towards conservation, ecological threats, and species loss, and less concern about the welfare and suffering of individual animals. This viewpoint also echoes some of the views shared by advocates in the Phase 1 stage of this study. One advocate believed that supporting high-welfare, ecological agriculture that takes into account the positive effects certain agricultural practices, such as steppe herding, can have upon the natural environment, is a promising area to expand into.

We can't overfish if fish are to survive into the future. Just like we overfished yellow croakers... and tapertail anchovy in the Yangtze River. [The fishermen] didn't care about which fish they caught, they just used nets to dredge up the fish, and didn't leave any small fish to reproduce. I feel that we should think about sustainable development and animal welfare- animal welfare should actually be a kind of "species welfare," a broader idea of welfare. [What we're discussing] is a more narrow understanding of welfare focused on individual animals.

鱼不能过度的捕捞,以后它还会继续生存下去。就像咱们以前把这些大黄鱼几乎就灭绝了,还有长江的刀鱼。就是不管什么大鱼全都拉上来就没有留一些小鱼,让它继续生长下去,也没有留一部分,大家就觉得好就全部捞了。我觉得这应该是对从生物的可持续发展来说的,也包含动物的福利,但这个动物福利其实应该是一个种群的福利。宽泛的福利就是说咱们通常说的,这个应该是一个很狭隘的福利,就是对于个体来说的。

There was also social framing of moral choices related to animal welfare, for example in terms of positive societal behavior, being civilized and making societal progress. Many participants mentioned the idea of progress relating to animal welfare, using the 'barbaric-civilized' dichotomy to refer to improved modern methods of animal rearing. For example, in response to a story of stealing dogs to kill for food, one father states:



It's shocking, it's already 2022 and we still have this kind of news? I'm shocked! And I also find it a bit shameful.

对震撼的为什么, 现在中国都2022年, 还有这种新闻?就觉得有点震惊!还有一点点的丢脸。

This implies that participants believe that improved welfare, at least for some animals, is a sign of societal progress. However, one mother offered an opposing view of progress, implying that humans treated animals more humanely in the past, when animals were reared in more natural conditions. She compared this unfavorably to the inhumane conditions on modern factory farming.

I feel that China is now quite developed. Before, we all herded sheep/goats, raised chickens at home, kept pigs and had a small village economy. Now all this is done at animal rearing facilities; although they've set up these facilities, we've lost a sort of respect for animals. When we used to herd sheep, this gave the animals a basic level of happiness and respect. I feel that this development [starting to consider welfare] is a good thing.

我感觉现在是我们国家发展的比较好嘛。以前呢,我们都是放养,像自己家养鸡啊,养点猪这种小农经济到现在都是作为养殖场来生产,但是它虽然做了养殖场,但是却丢失掉一部分动物的尊严,像这个就是想回归到最初我们。放养动物的形式给他们一些生存基本的快乐和尊严,这样的话我觉得这是一个发展的,一个好事。

Is It Reasonable To Give Animals Welfare?

This section explores the question of whether the participants think that ideas around animal welfare make logical sense and align with their sense of reason.

In response to the first article, most participants agreed that "voting with your wallet" is reasonable. Most groups agreed that using economic forces to promote animal welfare is a positive trend, and several people gave examples of buying higher quality products, some of which they connected to better welfare. The general sentiment was that you have to pay for quality. Paying a bit more for less antibiotic use was popular; however, some opposed the idea that you should need to pay extra for healthy food, which may reflect dislike of the idea that only rich people can afford healthy products.

There's one thing I don't understand. China has a problem with food safety issues, why should consumers have to pay more for safe food products? I think this is a problem.

但是我有一点不理解, 就是我觉得这个是中国食品安全有问题, 为什么就是消费者要增加费用来购买安全的食品, 我觉得这是一个问题。



The article explaining welfare and sentience for lobsters was largely seen as unreasonable. A mother implied that the method of killing lobsters suggested in the article was a superficial gesture to make the consumer feel less guilty or provide a sense of ritual. Many other participants responded simply to the article as 'ridiculous', 'petty' and 'going too far'. It was strongly implied that lobster welfare shouldn't be a priority; for example, a grandparent said that the people concerned about lobster welfare had too much free time on their hands. The idea of stunning smaller crustaceans also seemed ridiculous; one group questioned having to stun every shrimp or crayfish before eating, as people tend to eat many of them in one sitting.

However, a few participants agreed with improving treatment of lobsters, one participant understood the process of using electric stunners to reduce their pain:

I saw this news a while ago. I feel that if you freeze the animals, and kill them instantly with an electric current, they won't feel pain. They die instantly, and don't feel anything. It's only a few milliseconds, I still very much approve.

我之前很长时间看看过这个新闻。我就觉得他可以通过冷冻的话,电击的话也是瞬间 ,他感觉不到疼。瞬间电死了感觉不到,但是他那种毫秒级别的时间,所以说我还是很 认同的.

In terms of farmed animal welfare more generally, there was a concern that it could harm human welfare or productivity. As one middle income participant put it:

[With farmed animal welfare], if you're really going to keep pushing it, then you need to make sure you're pushing it in the right way. You can't keep adding to people's operational burden.

你的东西如果说真的要往下推,那这个往下推的方法要合适。不能是这种一味的增加 别人的操作负担。

Some suggested that the ideas of animal welfare put forward in the article excerpts were too broad and demanding to be implemented, especially in China. Others thought that they were too demanding to be implemented immediately, but that a gradual, staged approach could be appropriate.

I feel like the field of animal welfare isn't suitable for China at the moment. It's a bit too much for now; it's too broad. I don't think we need to be concerned about cattle right now.

这个动物福利的行业我个人觉得啊,暂时中国来说还不太适用吧,因为这个东西确实 那个有点。有点多了, 现在来说。他所涉及的范围太广了。太广了,那牛啊,这东西我 觉得暂时还不是我们去考虑的。



I feel that, apart from ensuring the animal's physical wellbeing, the other two components of welfare (mental wellbeing and natural living) are really hard to achieve. If we managed to achieve these, it would increase the costs of meat production by a lot. But if we trim it down to just ensuring the animal's physical wellbeing, the costs will be acceptable. So we need to take it a step at a time.

我就觉得...除了身体康宁之外,另外两个确实挺难做到的,就是另外两个如果做到的话。会给这个肉的成本就是提高很多。但是如果仅仅是说砍下能做到身体康宁那成本还好。就是一步一步来

Some dismissed the concerns for farmed animal welfare as artificial or connected with the vested interests of activists or food producers. In particular, an individual from the fathers group was particularly critical of food producers and celebrity activists.

There were mixed opinions regarding whether animal welfare was perceived as a foreign concept, and whether it was negatively received because of this. Prior to reading the lobster article, which described the animal sentience laws in the UK and Switzerland, there were few references to foreign influence. However, the lobster article provoked criticisms of foreign actors and views, both in relation to lobster welfare and more generally. For example, one grandparent associated concerns for lobster welfare with negative perceptions of Western ideas, claiming that Westerners like to do things for show or as a publicity stunt (zuòxiù 作 秀). This suggests that, while animal welfare is not necessarily viewed as a foreign import, it is not always viewed as a local concept either.

Farmed animal welfare was a strange or surreal concept to some. As mentioned earlier, somebody thought that the concept of animals' ability to feel empathy was very 'science-fiction' (fēicháng kēhuàn 非常科幻). People also raised concerns over "extreme" implications if animal welfare is taken more seriously, implying that if we start caring about farm animals or strays, we might have to start caring about insects and pests -- with the latter implied as an absurd concept.

Of course animals should all have welfare, but would you give a mosquito welfare? No, people are always going to try to kill them.... When you see stray cats and dogs by the road, it provokes your sympathy, and you want to protect them. But if all of society protected strays, and developed sympathies for them, then one day we'll also have to protect 'stray mosquitos'.

当然每一个动物都值得有自己的福利。但是啊,那事实上你会给蚊子福利吗?你肯定人人就是都要把它拍死。...像人在路边看到一个流浪猫,流浪狗就会动恻隐之心,觉得为什么,保护它。那如果整个社会都保护流浪动物,就是会动这个恻隐之心的话,我们当然要保护流浪蚊子



Practical Concerns With Welfare Improvements In China

Participants had practical concerns about means of improving farmed animal welfare even if they thought the ideas were generally reasonable. These were particularly related to the current situation in China. Some saw more opportunities for improved animal welfare compared to the past, whereas others thought that animal welfare was inherently difficult to improve in China, due to national characteristics. This was also reflected in the Phase 1 report, where advocates raised both challenges and new opportunities for promoting animal welfare in China.

One oft-mentioned concern was the ability to select high welfare products that are actually what they say they are. Participants reported that there had been major trust issues connected to animal products in the recent past, but some now have more faith in the ability of Chinese regulators to set objective product standards.

We can now obtain a lot of information through many channels. As well, we have the regulating authorities, so I trust [current products] more.

我们现在信息获取。获得的渠道其实是相当相当多的嘛。另外呢,就是说我们的监管 部门,那我觉得也是比较放心的。

However, this view was not held by everyone and some participants remained cynical about product labels. Several participants mentioned a lack of trust. One father, who was particularly cynical about these issues, mentioned completely avoiding foods with green/organic labels due to lack of trust, preferring to purchase foreign products.

Whenever I see those [green, organic] labels, I don't buy [the product]. That's my consumption habit, if I see the label, I don't buy it. I only buy imported food. If it says 'green' or 'environmentally friendly' I don't buy it, I feel it's an intelligence tax [i.e. only fools would pay extra].

看到这个标签我就不买。我的消费习惯就是看到我就不买, 我只买进口的 。... 至于它贴绿色啊,环保这些我都不看,看到这个我就不买,因为我认为这都是智商税。

Similarly, some people noticed no real difference in quality between high and low welfare meat—and as noted in a previous section, quality was often seen to go hand-in-hand with higher-welfare products. These people thought that claims that a product is high welfare might just be used as a misleading label to attract consumers and make them feel better about themselves.

This lack of trust was not just associated with products, but also with advocates. A participant in the high income group had heard reports making them suspicious of welfare charities. Some people were also suspicious of celebrities supporting these causes, assuming they had financial reasons to appear on farmed animal welfare videos.



Participants also argued that achieving higher standards of farmed animal welfare would be less practical in China due to the country's lower level of development. While most participants approved of the standards of welfare proposed in the video, some also suggested that certain kinds of high welfare requirements, particularly those mentioned in the lobster article, were only suitable for rich or developed countries.

It doesn't really suit our national situation. I feel that this is more suitable for those developed countries with welfare states, and high living standards.

不太符合咱们国家国情。我觉得这比较符合那种高福利,高待遇的发达国家

One father mentioned that many Chinese people are still unable to eat enough meat because of poverty, implying that therefore animal welfare concerns are not a priority, or are irrelevant to their lives. Another mentioned that China was still at a lower stage of social development, and that people are therefore unable to understand farmed animal welfare concepts.

There are lots of kids on the streets, who can't even afford to eat. Our society hasn't reached the stage where everyone is able to satisfy their material needs. If they suddenly had to spend a huge amount of effort, human and material resources, as well as municipal funding, to worry about whether a lobster experiences pain at death... Even my cat can't get properly euthanised when it gets ill, so I don't care whether a lobster can be euthanized

街上有很多人家的小孩,甚至连饭都吃不上,我们社会没有听讲,到那个能让所有人都物质都能满足的阶段,居然他还要花这么大的精力,人力,物力,还有市政府的财力去关心一只龙虾,死的时候痛不痛,他都要死了,他活的过得开心点吧,好了,死就死了,我的猫就算生病我都不能够正确的得到安乐死,我不在乎我吃龙虾也没有安乐死

Social class and income differences within China were also mentioned in relation to farmed animal welfare and consumer behavior. The participants were generally from the richer areas of China, but some were aware that poorer, more remote regions had very different attitudes to animals and welfare, and one lower-income person stressed that most people wouldn't be able to buy high welfare products. A father mentioned that, "if you tell a poor person from Yunnan that they can't eat dogs, they wouldn't understand your thinking". (Yunnan is a province with a high proportion of lower income, rural, and minority areas (UNICEF, 2017)). The same participant stressed that animal welfare can be seen as an elite interest, and made the claim that he wouldn't think about humane treatment of lobsters unless he was earning Swiss wages.

Another participant mentioned that the large size and diversity of China, in terms of wealth and ethnic disparities, can make it more difficult to implement farmed animal welfare policies. This may be the case for both consumption and production of higher welfare products. For example, one middle income participant argued that some places would need more supervision to implement stricter farmed animal welfare policies, while supervision would be impossible in other places.



Participants in some groups (fathers and students) were aware of the economic realities of higher welfare animal practices. Some made the argument more generally, like a student who claimed that "guaranteeing the happiness of all animals is unfeasible," while others were more specific about particular realities concerning animal treatment. A father argued, unlike participants who opposed antibiotic use for health or welfare reasons, that antibiotics were unavoidable in the current situation, due to the risk of disease and the need for greater concentrations of farmed animals.

Attitude Shifts Among Participants

Although many views remained stable throughout the focus groups, several participants explicitly mentioned that they changed their minds or became more aware of animal welfare issues over the course of the conversations. Some also claimed that they would be willing to change their behavior in the future. While the latter claim should be treated with more skepticism, these findings at least suggest that these participants were progressing to the contemplation stage that precedes behavior change (see Bryant et al., 2021).

Some groups were more willing to buy welfare products, others said they would be willing to spread the ideas to others. Others became more curious about the ideas in the discussion, saying that they would look more into the issues discussed in the session. For example, a middle income participant said that she would pay more attention to the area following the focus group:

I might not have more empathy, but I think I may start paying more attention, and I'll be aware of what the concept of animal welfare is. In my everyday life, I may pay more attention to meat quality, and how the animal lived before that, so I think I will elevate my thinking in this area.

我觉得可能会更加关注一下,就不可能会更有同理心吧,对动物然后也知道就是说一个正常就动物福利,这个概念是什么,然后可能在日常的生活中可能也会注意这个是 肉质,它的这个质量,然后它之前动物是怎么生存的,就我觉得这方面的概念会有提升。

After the discussion, one participant decided that they would only buy meat products from known brands (pǐnpái de ròu 品牌的肉) that they were comfortable with, because they think that these products can guarantee a good standard of feedstock and environment for the animals. This was an interesting update in views, as none of the media sources shown to the participants mentioned the higher quality, or better welfare standards, of branded versus unbranded produce in China. It seems likely that the social influence of fellow group members has played a role here, and may be important for advocates and researchers to explore further.

Some groups seemed particularly open to changing their minds. One grandparent mentioned that he had become aware that fish may have feelings and that he may not be



able to kill fish in the future. Many lower income participants also changed their minds: one mentioned that he would no longer think of meat consumption as 'part of the food chain' and would think about the lives of farm animals.

Hypotheses Regarding Messaging

In addition to hypotheses regarding meat consumption and animal welfare beliefs, the previous report also described advocates' beliefs regarding the type of messaging that would be effective to a Chinese audience. This gave us another set of hypotheses to test, which were as follows:

- 1. The following aspects of a message about animal welfare will be described as positive or influential:
 - a. Science and evidence
 - b. Actionable advice
 - c. Focus on or comparison to charismatic species (e.g., companion animals/pets)
 - d. Emotional appeal
 - e. Philosophy or religion
- 2. The following aspects of a message about animal welfare will be described as negative or non-influential:
 - a. Foreign involvement (e.g., Western message source)
 - b. Non-charismatic species (e.g., aquatic animals)

The first hypothesis was partly supported. The use of science and evidence in messaging was not generally stressed by participants. One of the articles shown to participants was framed in a scientific way, and offered advice on how to stun a lobster before consumption. This article was dismissed by most participants; however, some participants reported that they would consider the practice.

If there is scientific evidence that we can let [the lobster] feel less pain, you could at least try [stunning before cooking].

如果说有科学依据,可以让它能少痛苦一点,就是你也可以试试。

A few participants who rejected, or were not concerned about, lobster welfare were still willing to try an actionable method of higher-welfare consumption (stunning before cooking). One father mentioned that he would be willing to try this stunning method as a shared activity to teach his child, and another participant thought that the process would create a sense of ritual. Thus, actionable advice could be a promising approach, though customized framing for the target audience may be critical to uptake.

I think I might try [the method of stunning lobsters], because it creates a sense of ritual. And in the process, I might remember what we've looked at today, and will develop a sense of respect towards the life (shēngmìng 生命) of the lobster.



我觉得我可能会试一下。因为会有一种仪式感。然后就是在这个过程当中,可能会想起 今天的这些内容,然后会对这些龙虾的生命有产生一些敬畏感

A focus on charismatic species in messaging may have been influential, as many participants expressed strong concern for the dog. As previously mentioned, however, participants felt sympathetic with the dog due to strong connections that a dog, especially a military dog, has with humans. There was no evidence that concern for the dog could be leveraged to create concern for less charismatic animals, as it did not noticeably increase concern for the lobster in any group. Groups were quick to dismiss and ridicule the idea of lobster welfare.

[The dog example] and the lobster example are really two extremes.

看到这个跟龙虾相比确实是两个极端

The lobster article is obviously nonsense, not worth talking about.

龙虾那个就明显就很扯淡嘛,就没什么好讨论的

Participants had mixed reactions to emotional appeals, which were especially prominent in the final video. Most groups were moved by the messages, but some individuals (one father in particular) dismissed them.

Connections to traditional Chinese philosophy were generally well-received, but people did not connect these ideas to animal welfare, while religion wasn't really mentioned.

The second hypothesis, referring to negatively received messages, was generally supported by the evidence: messages focusing on non-charismatic species, namely lobsters in this case, were clearly received negatively by participants. The foreign framing of the lobster article was also negatively received by some participants. Although foreign involvement was seldom explicitly criticized, the example of animal sentience laws and lobster welfare in the UK and Switzerland was generally unpopular, and many implied that the Chinese situation is different from those in foreign (likely developed) countries.



Designing Interventions

Assumptions Regarding Interventions

As well as <u>hypotheses</u> explicitly mentioned prior to starting this study, we also wanted to test a number of assumptions and ideas that arose from our Phase 1 report, namely around target audiences, channels that could be used to design an intervention and message sources.

- Target audiences: middle class living in big cities, young people in general and students in particular are promising; while older and poorer populations should be avoided
- Channels and campaigns: various ideas of persuasive and persuasion-adjacent, online and offline campaigns may be effective
- Message sources: working with celebrities, Key Opinion Leaders (KOLs), scientific experts and academics may be effective

We tested how promising a target audience could be based on the content of the eight different demographic groups. We tested the message sources by displaying a video with several different speakers from different backgrounds, and asking specific questions about which they would find the most persuasive. At the later stage of the interviews, the facilitator asked explicit questions about which channels could be used to share information related to animal welfare.

The assumptions regarding demographics, such as targeting urban middle class people, young people in general, and avoiding older and poorer populations, were not necessarily supported by our findings. In particular, older people were surprisingly open to messaging regarding animal welfare. Older people are more health-conscious and more aware of quality differences in food. Lower-income groups were not necessarily more likely to reject the ideas than higher-income groups. However, it should be noted that the groups did not include the poorest segments of the Chinese population, and the oldest participant was 71.

On message sources, we validated and identified several classes of influencers, as well as specific examples for some of them. While participants had mixed responses to certain celebrities and Key Opinion Leaders (KOLs), some groups, such as scientific experts and academics, especially academics from China's respected agricultural universities, were generally respected. We also obtained new information regarding channels and campaigns — a range of persuasion-adjacent events were recommended, such as events in supermarkets, community activities and presentations by respected doctors.



Choosing Your Audience

As previously mentioned, we interviewed eight different focus groups with a total of 40 individuals, and therefore we are able to gain some tentative insights into distinctive perceptions of farmed animal welfare within each demographic group. However, bear in mind that these findings may not generalize well, given that they are based on a single focus group representing each demographic group. For more details, see the <u>Caveats and Limitations</u> section.

Despite this, many of the key insights related to certain groups provide initial evidence on the role of income, age, and gender on views towards farmed animal welfare. Some notable groups are described below.

Highly Receptive

The **grandparents** group, composed of five individuals from the age of 52 to 71, were a group that was particularly receptive to animal welfare ideas. Part of this was connected to personal experiences in rural areas earlier in their lives, where they had direct contact with farmed animals. As previously mentioned, some recall that in the past, livestock were raised less intensively, animals were treated better, and animal products tasted better than products today.

Several of the grandparents were already purchasing, or expressed willingness to pay for, higher quality meat (potentially higher welfare) products, for a few reasons. They appeared to be particularly concerned about taste, and were very convinced by the idea that increased welfare affects taste positively. They didn't have a high level of trust for meat purchased in regular markets (outside of urban areas, the majority of meat in China is sold in traditional markets (Si et al. 2018), and they prefer shopping in supermarkets. Some of them indicated that they would be more willing to pay for quality products — one grandparent argued that, as people have limited lifespans, they may as well avoid lower quality products, and eat better products while they can.

Word-of-mouth or interactions within communities may be especially strong within the grandparent demographic. Multiple participants attended neighborhood seminars or lectures on health topics, and they expressed enthusiasm about sharing information with other people in their social group. They also demonstrated a high willingness to change their minds, and seemed deeply affected by the messaging as a whole.

Despite their concern for animal welfare, the grandparent group doubted that these ideas are widely held within China, and did not believe that normal Chinese people (bǎixìng 百姓) would be interested in animal welfare.



I don't think animal welfare means much for normal Chinese people. Why's that? Because they only care about whether the environment is good or bad. If you want to talk about the impact on/for animals, you'll need to provide a much more detailed picture of the situation, and it's best if it's explained with images.

推广这个动物福利,其实从百姓这里意义不是很大,因为什么道理呢?因为动物福利呢?...他们仅仅知道对环境的好坏,对动物的这个受影响程度怎么样,所以说,还是从 画面. 再去去图文并茂地解说一下比较好一点

The **mothers** group, composed of four married mothers from the age of 26 to 35, were also more interested in animal welfare issues. They demonstrated high levels of empathy towards animals, for example, one states that:

When a calf can't drink its mothers milk, and they take the calf away, then they take the milk to feed humans, this left a strong impression on me. I think it's really cruel... because I'm a mother myself.

这个东西有些小奶牛没有奶吃,直接把小奶牛拖走,然后就是为了给人类供应奶那个是让我确实觉得非常印象深刻的。...我会觉得非常的残忍。...因为自己也是当母亲的嘛。

Before they were exposed to any of the media sources, they mentioned their empathy towards animals used for fur, animals used for experimentation, and farmed animals. They were concerned about the animals living happy lives and having 'happy deaths' before consumption. It should be noted, however, that while mothers showed a distinctive level of concern towards charismatic animals, they had less concern for lobsters.

Their most obvious concern was for their childrens' health, which greatly impacts their consumption behavior. They repeatedly mentioned health and nutrient concerns around dietary choices, especially for their children, and when welfare was mentioned in the discussion, they were convinced by the idea that better welfare would lead to higher quality products. For example, one mother was concerned about hormone use and antibiotic use in farm animals affecting her children.

I'd always choose healthier foods, I avoid those foods with hormones, like chickens that grow in 30 days, like the wings in KFC and Wallace, because they're not healthy. Now many children are becoming more obese and having early puberty. I think that we should, to the best of our ability, prevent this from happening to ourselves.

我会选择一些比较健康的食品。像那种激素类的像激素鸡啊什么30天里面速成的像肯德基里面的鸡翅啊华莱士什么的。我觉得这些我都会少吃。因为不健康,因为现在很多小学生嗯都有那种肥胖症或者是过早发育的那种倾向嘛,我觉得嗯这一块的话,我们如果说能够尽量能够避免再发生在我们自己身上的话,还会尽量。



This group was socially active, and they took part in a number of social activities involving health, and also activities involving food. This suggests that there may be multiple social opportunities to spread ideas about farmed animal welfare, and potential product launches.

However, the reader should bear in mind that some of the responses may have been influenced by social desirability bias and appearing high status; for example, expressing a high level of concern about their children's health and purchasing higher-quality products may be exaggerated to signal desirable traits.

Moderately Receptive

The **highest income** groups, with monthly incomes of over 30,000 Yuan (\$4,500 USD) were more sympathetic to animal welfare causes, and several reported being influenced by the articles and videos shown to them. They were also more willing to purchase high quality, more expensive products for health reasons, and therefore could be potential early consumers of alternative protein or higher welfare products (as these products are generally more expensive than conventional meat).

Students showed a high level of interest in the topic. They tended to be more analytical than other groups, and generally attempted to use rational arguments to justify their opinions. Students generally took the arguments seriously, and occasionally attempted to rebut or resist them. Students also tended to have less personal income, often choosing the cheapest food products available, and therefore they were more concerned about prices and economic realities. Therefore, while students might be more open to ideas of animal welfare, economic concerns may prevent them from purchasing higher welfare products.

Less Receptive

The **fathers** group was particularly opposed to the messaging. However, this group was probably influenced by one very outspoken participant who was very opposed to the messaging. The other participants agreed with him on most issues but we can't be sure how much of that agreement arose from social pressure.

The fathers generally had a different approach to healthy food for children than the mothers -- one father was dismissive of health concerns, saying that he only needed to give his child an egg, some bread, and some fruit for the child to be healthy, and that Chinese people don't generally have nutritional deficiencies.

We suspect that this group is unlikely to be representative of all fathers, or men in the 35-50 age group in general, but it does give an insight into the kind of people who would be most opposed to farmed animal welfare messages, the group dynamics that can contribute to this, and the main reasons for criticism.



Channels

General

Towards the end of the discussion, participants were asked through which channels or platforms they shared or received information about topics related to animal welfare or related issues, such as environmental issues.

Online platforms were commonly mentioned: Douyin (TikTok) was mentioned most often, while Weibo, Bilibili and WeChat were also mentioned by various groups. Other apps/platforms (Zhihu, Xigua, Sina news, Xiaohongshu, YouTube) were mentioned less frequently. One mentioned a medical platform: dxy.com. Mothers in particular used WeChat to share information about various topics, such as local events they wished to attend.

Many participants mentioned television, in particular TV documentaries. Television watching correlates with age, and the grandparents group watched more television than the other groups (Statista, 2021).

Influencers

The final video shown to the participants involved eight different speakers with different backgrounds. The speakers initially described the harsh reality of factory farming, and their comments were interspersed with video footage of cruelty on factory farms. Reactions to each of these speakers differed according to their social roles and personalities. We have combined reactions to the video speakers with other comments that were made about influencers in other parts of the focus groups.

A teenage girl spoke on the video, and her contribution was received positively in most groups, in particular the low income and mothers group. Although her condemnation of factory farming was seen by one individual as "extreme," her perceived innocence and honesty were seen as persuasive.

[When she spoke] I felt that she was in the simplest and most naive phase of her life, therefore her viewpoint was the most persuasive and contagious. When we look at animal welfare, we realize that these animals can feel pain, and I imagine that animals are quite kind-hearted and simple -- they aren't fighting or scheming for power. I feel that the image of a child is close to the animals we want to protect, and I'm more willing to help them.

让我感觉可能会在生命最单纯和懵懂的一个状态下会更有感染力和感召力,因为其实 我们对待动物福利这个事情的话,就是因为那些动物,它会有感知疼痛或者是它会有 那种我们。想象出来的就可能动物,可能比较善良,比较单纯,就没有说威力纷争或者 是有勾心斗角这些事情我觉得它可能是这样一个状态,我们愿意去保护它,然后觉得 那个孩子的形象的话会比较贴近于动物形就动物福利保护的这样一个形象。



Celebrities garnered more of a mixed reaction. Several people liked Han Lei (韩磊), a famous singer, saying that he left a strong impression and some groups (such as grandparents) appreciated seeing someone they recognised. However, one middle income participant explicitly mentioned that he didn't like celebrities, preferring to listen to people who'd actually worked in the field. The unmarried groups and students were also skeptical about the sincerity of the celebrities in the video, and expressed concerns that they may have been paid to participate.

Several celebrities not featured in the videos were mentioned as potentially influential. The famous singer and actress Faye Wong (王菲) (who is a Buddhist), the actress Sun Li (孙俪) (who is a famous dog owner), the singer Wang Junkai (王俊凯) (who has been a UN Environment National Goodwill Ambassador), and the singer Han Hong (韩红) were all mentioned. Many people recalled former NBA star Yao Ming's (姚明) campaign against shark fin consumption, and some mentioned Jackie Chan (who had a campaign to reduce wild animal consumption). Domestic celebrities were generally preferred over international celebrities, while a mother suggested that younger generations would prefer internet influencers.

Organization leaders, including a CEO of a major company, and the manager of an NGO who took part in the video, were generally perceived positively. The NGO leader was respected for her expertise and experience. One person said that the CEO seemed responsible, and that he was potentially taking a risk for his principles in speaking out for animal welfare, which made him more credible. A mother also noted that the CEO was more powerful, therefore could have a high potential impact. However, one person in the fathers groups suggested that a CEO was unlikely to be trustworthy.

Although scientists, technical experts and academics weren't referred to explicitly in the video, they were mentioned by some groups (the lower and middle income groups, and the fathers) as trustworthy figures. Many participants had opinions of which universities were respected in this field, and academics from the Chinese Academy of Sciences, The South China Agricultural University, Tsinghua University, and The China Agricultural University were mentioned as particularly respected institutions. Yuan Longping (the agricultural scientist behind hybrid rice development) was mentioned as the kind of person whose views would be most respected. Multiple participants mentioned that experts, scientists, and academics were generally reliable. Some expressed a preference for Chinese scientists, while others said that they would find foreign scientists reasonable as well. One father mentioned famous doctors (*mingyī* 名医) being particularly trustworthy regarding health issues. This is a distinctive characteristic in China, where doctors are often highly trusted minor celebrities (Hancock, 2019).

The video included a People's Representative (réndà dàibiǎo 人大代表), a high level government official in China. Participants spoke positively about his participation in the video, and some participants said that they took the video more seriously because of that. A father said that the People's Representative should represent the views of the populace, therefore his support would indicate that animal welfare may be less of a niche or elite



concern. Local government officials may also be perceived positively; for example, one participant suggested that a local village head would be seen as trustworthy.

There were no farmers or people working in the agricultural industry represented in the videos, but farmers were mentioned as important stakeholders. A student argues that:

"I'd like to hear what views the animal farmers have towards [farmed animal welfare issues]. Would they think that this is something excessive?"

我就想听听那些养殖户们对这个有什么观观点。他们会不会觉得觉得这个是脱裤子放屁的事?

When foreigners were mentioned, the participants had mixed views on their relevance and importance. Some participants mentioned a preference for Chinese influencers, and one unmarried person mentioned that foreigners might have some prejudices towards China, and may not understand the Chinese situation. However, some participants reported indifference to whether an influencer was foreign or not, and one grandparent said that he viewed foreign farmers' associations as more trustworthy than domestic ones.

Questions were raised by a small number of participants about some of the speakers being 'fake', indicating the importance of being perceived as sincere and authentic.

When and Where to Spread FAW Messages

We asked participants what social activities they generally attended, which activities they would be interested in attending, and which activities might be used for spreading messages related to farmed animal welfare. Although some participants mentioned that events had been canceled due to COVID, most were still able to list several activities they had taken part in before or after COVID. Although not all of these events or activities were mentioned as being suitable for animal welfare messaging, they could all be promising to explore.

Examples Of Activities That People Had Attended

Many participants took part in charity activities, such as volunteering. Some participants attended charity related events such as sponsored running events (fun runs, 10k runs) for low-carbon, environmentally friendly living. Another common example was community volunteering, or environmental activities themed around topics such as anti-food waste campaigns, tree planting, or waste sorting/recycling. Exploring the networks around these volunteering activities could inform strategies for promoting awareness about farmed animal welfare or related issues.

Community events (shèqū huódòng 社区活动) are seen as down-to-earth ways of communicating with normal people. Many participants attended community events related to particular health ailments, or more general health related events. In particular mothers and grandparents mentioned these events, which could also be leveraged to promote healthy



plant-based lifestyles. For example, some people attended discussion events for people with high blood pressure. Others attended support events for diabetes sufferers (called "sugar control group meetings" kòng táng qún huì 控糖群会"). Lectures and seminars from famous doctors and other health experts were also mentioned.

Those with children had a preference for events that their children could be involved in, such as zoo visits.

Some attended specific consumer events, such as events arranged by fruit manufacturers where people eat mangoes in a communal setting within an urban or suburban community. Events such as this could be used to promote plant-based products.

Ideas/Recommendations By Participants

Finally, participants suggested a number of activities that might increase awareness of animal welfare issues. One recommended encouraging farm visits to raise awareness and helping children to learn about animals used for food; the grandparents mentioned a company called *Aisheng* (爱生), which took people around their farms to prove their high standards, and mentioned that this would increase peoples' trust in high welfare farming. Some participants suggested supermarkets as places for messaging or events related to different product types, and for farmed animal welfare more generally. Participants also recommended placing adverts on social media platforms, and on subway stations in big cities.



CONCLUSIONS

Understanding Chinese consumers' attitudes towards animal welfare, meat consumption, and various related concepts is essential for the sustainable growth of the animal welfare movement, and the growth of the alternative protein industry in China. This report highlights the perspectives of various demographic groups towards these issues, and their responses to certain messaging.

Some of the findings in this report diverged from those in the Phase 1 report, which suggests that the assumptions held by advocates working in China are not fully reflected in the actual attitudes and behaviors of Chinese consumers. Most notably, animal welfare was not generally perceived as a foreign concept, foreign influence was not reported as a major factor influencing dietary behaviors, and opposition to foreign influence was only stressed following a message that highlighted foreign actors. Another important discrepancy is that many participants expressed a greater sense of personal responsibility towards animal protection than expected.

This reinforces the importance of conducting consumer research and testing potential interventions (e.g., campaign materials) to ensure that strategy and programs are designed based on the characteristics of the target population. Further, it is possible that voices and views amplified through social media may not accurately reflect those of the general population, and may especially neglect particular sub-groups. Advocates may have limited exposure to certain demographic groups, ideas, and narratives during their work, which may lead to missing out on both potential risks and opportunities for impact.

This report captures many opportunities and challenges of animal protection work in China. Although there was not a strong understanding of animal welfare concepts prior to the discussion, most individuals quickly developed an accurate understanding of the concepts, and mostly expressed some interest in the concept. Importantly, there was a willingness to purchase higher-welfare products, even if health and food safety were more significant drivers of this willingness than the welfare of the animals. Finally, many participants reported that they had changed their mind regarding animal welfare issues during the group discussions, and may change their purchasing behavior in the future, indicating that messaging interventions and discussion groups could be worth exploring as interventions for belief and behavior change in China.

The report also captured some strategies that may be effective in animal welfare messaging. Focusing on the health, food safety, taste, and quality benefits of higher welfare, plant-based diets, or alternative protein products could be effective strategies to promote changes in consumption behaviors. Highlighting specific aspects of health, such as supporting child growth or helping with certain medical conditions, may be particularly effective for targeting certain consumer groups.

Localizing the relevant concepts is likely to be an important strategy to improve support for animal welfare in China. The article related to lobster welfare referring to a foreign context



was negatively received, and this association between ideas perceived as ridiculous (lobster welfare) and foreignness provoked negative impressions of foreign actors as privileged, extreme, and unconnected to the situation in China. However, prior to this, animal welfare concepts were interpreted in a localized way by participants, connecting to participants' awareness of the situation in China, memories of better treatment of animals in the past, positive relationships between humans and animals, and culturally significant concepts such as harmony and reciprocity. Focusing on these aspects of the animal-human relationship, may be important in building support for the animal welfare movement and increasing concern for farmed animals.

Caveats and Limitations

As with all studies, this one has a few caveats and limitations to bear in mind.

Most notably, the opinions conveyed throughout this report are subject to many common issues related to group interviews and focus group discussions. In particular, social desirability bias may have made participants more likely to express certain viewpoints, as they were all speaking in front of a group of their peers and an interviewer. However, awareness of the viewpoints that are perceived as socially desirable may be as informative as gauging the 'real' viewpoints. In countries like China, where there are some limitations on free expression, some viewpoints may also have been censored.

Although we selected different demographic groups based on gender, income, and familial situation, the sample was not fully representative. Due to the method of sampling, there was a skew towards middle-class urban professionals, therefore we were unable to capture the views of the poorest in China. In particular, rural residents and domestic migrant workers, who compose over half of the population (Stanford, 2020), were not adequately represented, nor were ethnic minorities, who make up around 9% of China's population (Stats.gov.cn. 2021). Although we selected a lower-income group to capture a greater variety of views, these may have earned as much as 12,000 Yuan (\$1789 USD) per month; while the median post-tax income in China is 2,500 yuan per month (Stats.gov.cn, 2021). We also did not include any participants under 18 or over 75.

There may have been limited generalizability, as the sample sizes per demographic were very small and the social dynamics of each focus group context were distinctive. Certain individuals with strong views and dominant personalities may have influenced certain discussions; this was especially true with the fathers group, where one opinionated individual seemed to shift the tone of the discussion in a far more critical direction.

Finally, the responses of participants may have been influenced by specific features of the materials that we shared, which we did not attempt to analyze or control for. For example, the writing or narrating style, visuals, sound, or media type may have influenced the participants' reactions. Because of this, it is possible that content employing similar



strategies may elicit different reactions based on these features. We decided that it was more valuable to use content that was already being distributed in China, rather than selecting or creating targeted materials to identify specific questions.