

“Dialogue” Video link

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Subtitle translation of the *Dialogue* in Beijing

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Anchorman: Well, thanks for your applause. Welcome to the *Dialogue*. I know many of you are trackers of *A Bite of China II* recently. Actually, as the common people, we focus not only on what we eat, but also on whether whatever we eat is safe. Today, we have invited three authoritative guests in food safety from China, the US and Europe. They are Patrick Wall, the former Chairman of European Food Safety Authority; Ren Zhushan, (Dr. Joseph Jen) the former Vice Minister of Agriculture, USA; and Chen Junshi, academician of the Chinese Academy of Engineering. Welcome! The public is always looking for the top killer in respect of food safety, which both many of our on-the-spot audience and I are wondering. So let's get to know the top killer in their mind.

Audience: For housewives like me, sanitation and safety of raw materials for meals are of the most concern.

Anchorman: So what is the top killer in your view? Raw materials?

Audience: Right (anchorman: unsafe raw materials), exactly. Raw materials are the top killer for food safety.

Audience 2: Residues of pesticides and veterinary drugs, I think, are of more concern for us. Additionally, some illegal additives, these might be quite unexpected.

Anchorman: Can you give an example of whatever once made you very angry.

Audience 2: Of course the milk, into which melamine is added.

Anchorman: This is a deep pain for many lovers of dairy products. OK, now we'd like to ask the three food safety experts a similar question: are these also the top killer in scientific research?

Chen Junshi: If it comes to harm to consumers' health, those, in my opinion, cannot be called the top killer. Pathogenic microorganism, bacteria and viruses, instead, are the top killer, which pollute what people eat and cause diarrhea or the so-called food-borne diseases. Every year, there are more than 100 million people suffering from such diseases.

Anchorman: Mr. Chen, what you said just now has somewhat shocked us. What about Mr. Ren? Do you agree with Mr. Chen?

Ren Zhushan: I am living in the US, but I cannot agree more with Mr. Chen. Most bacteria cause diarrhea at most, while melamine is something fatal.

Anchorman: Mr. Wall, I wonder how European public react if you put this question onto a poll.

Patrick Wall: In Europe Union, the biggest problems we have with food, which we believe, are related to people eating too much food. And the biggest public problem, I believe as a medical doctor, is obesity, not poisoning. But foodborne diseases caused by bacteria and viruses will also make people sick.

Anchorman: When we are concerned and worrying about food safety, we may hear of some rumors apart from facts and truths. So we'd like to invite you to decode these rumors. Next, we will get to the first one: will food additives influence our health?

Video: "Shoe sole" bread

Anchorman: Such a statement sounds like you eating such bread as if you were chewing a yoga mat or a shoe sole. So Mr. Chen, can you clear the air for us?

Chen Junshi: Food additives are so named that they have been approved by the government. Sometimes, food additives are abused to the extent that an additive is added into some this-additive-banned food or an excessive amount of an additive is added. There is no "shoe sole" bread in the US. Why are additives something approved by the government? And how the government examines and approves? Firstly, it is necessary to add additives in food; secondly, additives are safe.

Ren Zhushan: I never heard of this in the US. I mean, it was broadcast in news, but few took it seriously as it is a chemical agent useful instead of poisonous.

Anchorman: Americans show indifferent to or even accept with pleasure such additives, don't they? But in China, many of my friends become jittery at the mention of additives.

Ren Zhushan: For Americans, food additives are something great since they can make food nicer and more delicious. For example, bread with correct additives tastes better and softer. Food additives must be something helpful. However, I noticed that the Chinese newspapers in the US mentioned “shoe sole” bread. That’s quite interesting, because the report has given it another look quite different from what it was.

Anchorman: (This makes us wonder) what lies behind the fact that the Chinese and Americans react differently to the same event--lack of scientific knowledge, panic or something else?

Rao Pingfan: Why can additives cause such a great panic? We use “illegal” to describe the addition of melamine while this is called “adulteration” in English. We translated adulteration as illegal addition then. Once this phrase gets frequently used, merely addition sounds dreadful to the public. (Anchorman: Right.)

Wang Zhi’an: I think, this may owe to the nature-valued Chinese culture. Therefore, the Chinese prefer traditional, simple and primitive food combinations or processing. This can be proved by *A Bite of China*, which describes Chinese traditional food technologies and traditional gourmet. Traditional food, if weighed by modern industry, might not be safer than that produced with modern technologies. However, traditional food is marked as good in our cultural tradition, giving rise to the concept that all food produced through chemical process and in modern industry are undesirable.

Anchorman: In fact, there was an additive-related case in Shanghai three years ago. We can have a review of that case.

Video: tainted steamed buns

Anchorman: Can tartrazine be added? Is it poisonous?

Chen Junshi: Yes. Tartrazine is a legal pigment or colorant which is allowed by national standard since it is quite safe. Coloring is required by some food processing, such as beverage and biscuits. That’s why our country approves. Such a food additive has a certain range of application, which, however, cannot be used in steamed buns or flour. So when it comes to the said case, this is a fraud, an adulteration or a violation against the law.

Zheng Fengtian: Tainted steamed buns bring about much more than worries about whether they are poisonous or not. Actually, people worried about tainted steamed buns mainly because a lot of out-of-date buns were collected, reprocessed and put onto the market. Out-of-date buns are harmful, so it is not proper to generally say that tainted steamed buns are harmless to humans.

Anchorman: So that case involves something else.

Zheng Fengtian: That is exactly the worst aspect. Consumers are sick about the fact that out-of-date buns are reprocessed, relabeled and sold.

Zhang Lingyu: The first thing we have to make certain of is what additives are. They are lawful. Now that they are called (food) additives, they must pass safety assessment. And they are protected by the law and shall not be abused. The second thing of concern is why additives are necessary. Additives are used to improve quality, taste and nutrition of food. With no additives, we will be surrounded by unpalatable food, such as bread, biscuits, cakes and canned food. The only edible food is green vegetables. Thirdly, we have to mention legality. If 500mg additive is added into a kind food when such an addition is limited to 450mg at most, it is called excess and thus illegal; if an additive is added into a kind of this-additive-banned food, it is also illegal.

Anchorman: Well, how should illegal additives be regulated after all? I'm afraid the Europe might be the leader in this field.

Patrick Wall: Separate food additives with certain purposes from illegal activity, so illegal activity means we have to enhance regulation to protect the consumers and improve their confidence. Every country has greedy people and criminals, so does Europe. But the food police are doing their jobs, and you can't say China has more criminals than Europe.

Anchorman: So Mr. REN, are there such food police in the US? What roles do they play and are they powerful?

(Joseph Jen) Ren Zhushan: No, no food police, but there are inspectors from FDA (Food and Drug Administration), United States Department of Agriculture (USDA) and other relevant institutions, who are responsible for food safety, especially with meat and poultry. The USDA is quite strict on inspection.

Anchorman: How will they react if they find enterprises add illegal additives, such as melamine, clenbuterol and tony red we Chinese are familiar with, into food?

Ren Zhushan: The first thing is to recall, that is to say, all food products produced within last days or the latest month should be withdrawn from the market and the public will be announced of such an event. In worse cases, this would lead to the bankruptcy of the producer. It is likely that an old famous firm with decades of history would be forced to go bankrupt once such a case occurs. (Anchorman: it is the family ruined and all property lost punishment) Yes. In other words, such a case is grave. In the US, Ministry of Penalty, rather than regulators, should be responsible for cases similar to melamine. Persons involved should be prosecuted, brought to trial (Anchorman:

they should be sent to the court) or sent to the court. Americans are passionate for accusation in such an unreserved way that they show no fear to the background of the other party.

Anchorman: Right, Americans are strongly conscious of rights protection. I am wondering whether you three consider counterfeit food as a food safety issue.

Chen Junshi: Not so absolutely.

Anchorman: Well, what do you think, Mr. Ren?

Ren Zhushan: If it harms people's health, then it should become a food safety issue. In most cases, it is not.

Anchorman: Mr. Patrick Wall, what about you?

Patrick Wall: Mostly the food fraud is actually not a food safety issue. Consumers' interests have not been taken into consideration, because they've been defrauded, because they pay more for expensive fish, you get the cheap; you pay for mutton, and you get chicken, so people are not getting all the pay full. So the consumer protection agencies have to protect consumers' interests, which is separate from consumers' health.

Anchorman: Actually, this question confuses us as well. We have many similar cases around us.

Video: Incident of counterfeit mutton and horse meat

Chen Junshi: Food safety (issue) is defined, according to the WHO, as that food bearing hazardous and noxious substances causes harms to people's health. The two keywords, such as hazardous and noxious substances and harm to health, should coexist. Horsemeat or tartrazine in counterfeited maize buns is not hazardous or noxious, so the two cases are examples of adulteration. But there is no absoluteness, and that's why I believe it MIGHT BE a food safety issue. For example, industrial methanol was once used to produce white spirit and caused blindness or death. This was a true incident. Someone was even given a sentence or executed by shooting. Though this is a counterfeit, but it is also related to food safety. For the government at present, anything having an impact on consumers' trust in food consumption is within the scope of administration.

Anchorman: After the horsemeat incident was exposed in so many European countries, including Sweden, Britain and France, Mr. Patrick, did the general public consider it as related to food safety? Did everyone react violently to this incident?

Patrick Wall: Well, the horsemeat is a special one, because it caused a lot of anger among the general public. Because in many countries among the 28 countries, horses are not considered as a food animal but pets used for recreation and sports, so people don't normally eat horse. They were angry, because that they told they were buying beef, and they loved horses. So the public were very angry. They were angry with the regulators for not reacting in time and they were angry with the industry for cheating them. And it undermined consumers' confidence in the whole food safety and food control system. Penalties have to be properly taken to prevent people from committing the crime. But we have exactly the same problem as you have. The sector actually has its own self-regulation association. Because whenever there is a food fraud event, the particular sector, say, the whole beef sector was given a bad name. Good companies suffer, as well as the bad companies.

Anchorman: In today's China, China Food and Drug Administration (CFDA) is regulating food safety, which bears great expectations from the public. It is said this could change the former situation of bull management. Do you think so?

Chen Junshi: We had more than 14 ministries and commissions involved in regulation of food safety. Now, Ministry of Agriculture and CFDA are the main regulators. The two get such a long "food chain" divided, with agriculture under the control of Ministry of Agriculture and the rest in the charge of CFDA. This is for certain a progress. But we should notice that there is still a long way to go before substantial changes occur.

Xu Zhuojun: Are hidden peril or weak links in low illegal costs for Chinese enterprises somewhat improved? Or has the government made some institutional or policy reform or established new systems?

Chen Junshi: It costs much less for Chinese enterprises to go against the law. *Food Safety Law of the People's Republic of China* enacted in 2009 is under amendment. As far as I know, penalties get intensified in this amendment draft. I believe it is at least a progress no matter how much the penalties are intensified.

Anchorman: Then to what extent do you suggest the illegal cost be improved?

Xu Zhuojun: Many enterprises in the US go bankrupt due to some accident. The bankruptcy, I think, is not only arising from fines, but also loss of trust from the general public and subsequently saying no to such food enterprises. In China, however, the fact is that there are few choices for the public. (Anchorman: and sometimes we forget whatever we have suffered and still choose the enterprise which made us suffer and hate) exactly, especially dairy products, if every dairy enterprise is found with problems, I will be granted no choice. It is the problem of social environment rather than the public. (Anchorman: you are such a rational consumer, since many

consumers will get angry and express their refusal to this enterprise and determination of throwing it into bankruptcy by persuading other consumers in this case.) Because such an absolute attitude in China will place me in a situation where no food is available to me on the market. (Anchorman: Chinese consumers are so poor that we have so few choices.)

Zhang Lingyu: It is impossible to control relying just on technical supervision bureaus and food safety authorities. Control by industry association is popular abroad and industries are therefore self-disciplined. For example, safe food association is not controlled by any superior institution and protects its own reputation by excluding permanently an enterprise involved in adulteration from the member list. (Anchorman: so the enterprise is no longer allowed to be a member no matter how much membership dues it provides). The Third Plenary Session of the 18th Central Committee of the Chinese Communist Party mentioned self discipline of industries but it progresses slowly as there are so many requirements on joining an association. Actually, nongovernmental procedures will make it easier.

Ren Zhushan: Safety is guaranteed in production process, not by regulation. Prevention instead of regulation should be focused for future food safety. The US enacted *Food Safety Act* in 1903, which is always effective and suffers no major changes. Recently, it has released a new act highlighting intensive prevention rather than active regulation, which requires factories to be equipped with food safety plans. Every factory is required to provide their plans for review and inspection every one or two years, on how to guarantee safety, and daily records which are to be inspected at a frequency specified. The law aims to assist production industry with prevention and alleviate regulation.

Rao Pingfan: Food safety accidents give the public an impression that enterprises aim at making money regardless of people's health. But few of such enterprises could live long. In fact, enterprises are internally driven by food safety, based on which they will gain loyalty from the public. So all regulatory measures should be taken to make such a drive more powerful (Anchorman: that is, to activate such an internal mechanism) and sensitive instead of replacing the drive. All replacement will find no way out at last.

Anchorman: In fact, our knowledge about food safety always cannot catch up with the latest change. For example, when we had just got a general idea about food additives, GM has emerged. Are all GM food not safe? What's the truth and misunderstanding about GM food on earth? Let's listen to some audience on the scene if they have any questions about GM.

Audience: Hello, everyone. We just mentioned that many food in our daily life have potential carcinogen such as pickled food or fried food. So we are especially keen to know if GM food also have potential carcinogen.

Anchorman: Well, let's ask for Mr. Chen.

Chen Junshi: It depends on the safety.

Anchorman: You mentioned about the safety. I want to know that if you eat some GM food now?

Chen Junshi: If in China, it would be soybean oil. My family eat soybean oil. Besides, I like eating papaya, and most papaya in China now is GM food.

Anchorman: Will you worry about the safety when you eat them?

Chen Junshi: Of course not. If you go to America, you will have more opportunities to eat GM food than in China.

Audience: The proportion using GM material to produce cooking oil determines the variety of oil. Let's take soybean oil for example. The GM soybean would account for 80%~90 % among the raw material for soybean oil. (Anchorman: 90%?) Yes, I'm afraid that in China it would be up to 80% at least while in America, the proportion would be much higher.

Anchorman: I have heard a rumor about America. Let's look at the screen.

(Screen): Rumor has it that American supermarkets are filled with GM food.

Anchorman: Mr. Ren, could you please help us to verify? I've heard that American supermarkets are filled with GM food. Mr. Ren, according to your shopping experience, is it true?

Ren Zhushan: Yes, it's true.

Anchorman: Really? What kind of GM products do they have?

Ren Zhushan: If we say soybean oil or corn oil in America, most of them are GM food. It's an issue about definition. If the food just has 0.001% of GM material, then you say it's GM food. Then everything would be GM food without exception. (It means the proportion would be rather high in America.) Even though we say food with 0.1% of GM material can be called GM food, then the proportion of GM food would be around 70%~80% among all the food. Because Americans like to eat desserts, cookies and salad oil, all of which would contain GM materials.

Anchorman: Then what's the most accessible GM food in American Supermarkets?

Ren Zhushan: It must be oil. (Still oil, right?) Yes, I agree with you. Both soybean oil and corn oil are GM food.

Anchorman: Will the America civilians worry about its safety?

Ren Zhushan: They won't. (Anchorman: no worries?) When I was the vice-minister of Ministry of Agriculture, I worked on pushing forward the research about the basic gene. At that time, scientists around the world spared much effort on extracting the human genome, i.e. DNA (it's called DNA profile, right?) Yes, profile. So once I went to America, I was intended to figure out the profile of animals and plants. The concept of GM is brand-new in America 30 years ago, just like the situation in China now. I would take a simple example. People said that GM would be harmful for the environment at that time. Not only common people, but also scientists, the environmental scientists use GM food to feed a butterfly. They asserted that the butterfly would be extinct for sure. However, GM in America was industrialized in the 1980s. That kind of butterfly still exists ten years or twenty years later. So after 20 years, will people believe that GM food would cause people to die? So it's just a time problem. We need time to accept GM.

Anchorman: If there's an approximate percentage, can you tell us how much Americans will eat GM food every day?

Ren Zhushan: I guess it would be over 90%.

Anchorman: The next rumor would relate to Mr. Patrick Wall. We will go to European market to have a look. How about their views about GM food on earth?

(Screen) European people never eat GM food.

Patrick Wall: That is the rumor. Rumor is rumor. It's not true. GM is just a tool that scientists have. When people say GM is good or bad, that's like saying if science good or bad. I'm a medical doctor, so I think GM has created vaccines and new medicines. Consumers have no problem with new medicines and new vaccines. We have known that some consumers in European are anti-GM indeed. They are anti-GM for a variety of reasons. First, they don't see any benefit for themselves. They see benefit for farmers, and benefit for big companies, but no obvious benefit for themselves. So if the products would give a direct benefit, would you like GM food that would stop you from getting a cancer? Would you like GM food that would stop you from getting a heart disease? Would you like GM food that would make you more beautiful? It's a yes for plenty of people. So I think it's just because there's no direct benefit for the consumers, so they don't like GM food. But we have strict standard and process to assess GM in the EU. It's stricter than anywhere else. It takes about 18 months for product to go to the approved process. During this period, many

companies are angry. They say it's too slow. But we have to go slowly because we have to earn consumers' confidence.

Anchorman: In the video we just saw, the mom said currently we are not able to tell the side effect of GM food. How about two generations later? So how to dispel this kind of concerns or worries?

Ren Zhushan: I think this kind of worry is endless just like someone said. Why you just concern about the side effect 2 generations later? Why don't you ask if the side effect would show up 20 or 200 generations later? Nobody knows if human beings will still exist in the world after 200 generations, right? So I think people after 20 generations should concern about this problem, not us. So at present, people don't have to be too worried about its safety. (Anchorman: That's to say, people of our generation shall be reassured to eat GM food?) I mean our generation and next generation don't have to worry about its safety. The GM food has been in American market for more than 28 years. It's longer than a generation. Someone asked me what the problem you most care about is. I said I worry about that people would stop the technical research about GM out of objection. I guess the damage will be immeasurable for human beings in the future. The resource of arable land and fresh water is limited while the population is increasing continuously. GM could make barren land arable. For those arid lands without the source of freshwater, traditional methods are helpful. However, maybe the GM plant could be irrigated by seawater. As we know, two thirds of the water in the world is seawater, and the rest one third is fresh water. From scientific point of view, GM will be the human's savior in the future.

Anchorman: Do you four (opposite Ren Zhushan) agree with Mr. Ren? It is safe?

Zhang Lingyu: I'm not sure, (Anchorman: you cannot make a conclusion?) no, I cannot, (Anchorman: neither have you ever made any experiments?). But it is easy to solve this problem—market selection, as is adopted by America. GM soybean oil is clearly labeled on the US market for consumers to make a choice.

Zheng Fengtian: I suggest being prudent to try any GM staple food grain. While there are a lot of disputes over GM, some researchers work on GM rice and hurry to promote it, and that's why I say NO to GM staple food grain. But I am not against GM soybean oil because both Americans and Chinese eat such oil, and at a much lower frequency than staple food grain. (Anchorman: you consider it comparatively safer as people eat much less, do you?) We should be prudent about anything we eat daily. But I do not care about something, say, pawpaw, which we do not eat everyday or even at most once a year. (Anchorman: so you will be pissed if the rice and buns on your table are GM). Yes, off course. (Anchorman: so if it is the pawpaw, you can have a try). It is dreadful that some researchers in our country work on GM at every move. Consumers consider GM products horrible as there are too many food safety accidents, and therefore turn their back to avoid any risks.

Anchorman: So we can eat safely, right? Well, what about Mr. Rao?

Rao Pingfan: I prefer such a saying as improved rice. If you change a character via traditional breeding, genes at more than 24 loci get changed often, which you would not know then. As for GM, genes at one locus are changed. If you do not mind genetic changes at over 24 loci, why should you fear those at one part? It doesn't make any sense.

Wang Zhi'an: In modern society, we fear anything unknown to us due to knowledge barrier. We become jittery at the mention of GM food because we are not familiar with it. Personally, I do not prefer the translation of GM. It is not that proper. If GM is translated as genetic improvement, it will sound like bad genes being improved; while translation as GM raises the question of where genes are transferred. (Anchorman: what about incorrect "transfer"). Additionally, GM is not definitely stated about whether genes of plants or people who eat GM plants are transferred, with the latter, if happens, quite awful. (Anchorman: your genes are transferred away), yes. So if the translation of genetic improvement was selected at the very beginning, there might not be such a question.

Chen Junshi: We should treat all GM products fairly. One or two genes of a plant are modified in the process of genetic modification, with one gene changed for GM soybean and at most two genes changed for GM rice which is greatly opposed by Prof. Zheng. However, what about our traditional hybrid rice? (Anchorman: how many genes get changed?) I have no clue and no one has.

Zheng Fengtian: Do not demonize hybrid rice. I know it very much. Hybrid rice is wild and goes through natural selection. When it comes to genetic modification, for example, injecting an insect-resistant gene into a plant gene, the injected gene is a foreign gene; but for hybrid rice, since there is an affinity between two rice varieties, the two varieties go through natural evolution for many years and there are many similarities between the two (Anchorman: so there is a natural wide gap between the two genes), right, gap between species (Anchorman: we like something purely natural). Yes, evolution. (Anchorman: but (for GM) foreign matters are added with external force and artificially, am I right?) Right. So I do not agree on demonization of hybrid rice, which is a misunderstanding. It seems that someone is married to a machine if a Bt protein for insects is injected into a rice gene. Therefore, GM food and hybrid rice are two entirely different things.

Anchorman: OK, this is a very vivid metaphor.

Chen Junshi: It cannot be denied that both hybridization and GM technology result in genetic changes. As was mentioned by Mr. Wang Zhi'an about the name, I wrote to Ministry of Agriculture three years ago and suggested changing the name. The term of genetic modification came from the word "Transgenic", the prefix of which meant to change. Now it is not used

internationally any more. GM food means food produced with modern biotechnology, which sounds more appropriate. (Anchorman: it sounds not that horrible). But the Ministry did not take my advice as it believed that changing the name at a time when the public misunderstood such products looked like (Anchorman: cover-up and the like?).

Anchorman: Well, that is common and natural. I'd like to show you a photo from FDA of salmon and suspected GM salmon.

Ren Zhushan: As an American, I'm sure about one thing that I will believe FDA if FDA affirms the salmon is safe.

Anchorman: Are such fish available in the US supermarkets?

Ren Zhushan: I'm not sure, since there is no label indicating whether the fish are GM or not. Not all food are required to bear such a label in the US, (Anchorman: the general public have no such demand); and for the public, as I said, they care little about this.

Peter Ben: Picture of the GM fish you've mentioned is a very good example of the very thorough and scientific process that the approval of these new products is ongoing. This GM fish was developed 15 years ago by a company, and it is still in the process of being approved by the US FDA. It's not yet approved by the US FDA. In the process, they are assessing more than 35,000 comments from associations, individuals, scientific communities and researchers, before approving this type of products.

Foreign audience 1: Just recently we have two states, the state of Connecticut and Maine, have passed the law to require GM labeling, so as to inform the consumer of GM information.

Foreign audience 2: There were 2 states that tried to pass laws and did make it with close, California and Washington, (but the FDA doesn't have requirement) Now, and there is a bill in congress that's gonna to overturn these states' rights for doing this, and it's gonna to go up to the supreme court because it's a supreme court issue.

Anchorman: We'd like to know whether you two (American fellows) will choose to eat GM food in daily life, including the fish we saw just now, which might be found in the supermarket.

Foreign audience 2: In the United States, about 80% of the foods we eat have the GM ingredients in them. The most common two or three main ingredients are GM soybeans, corn, and sugarbeet.

Foreign audience 1: If you want products in the United States that are essentially without GM, you have to buy organic foods. That's why some US consumers look for organic foods. But I have to tell you that organic foods are at least two to three times the price, and not everyone can afford it.

Audience: I am a reporter as well. A few days ago, I interviewed the Ministry of Agriculture, Forestry and Fisheries of Japan about GM. Since rice is the staple food of China and Japan and the latter values nature as well, I asked whether Japan was ready to turn rice into a GM. The reply is that they are doing researches on GM, however, in transferring pollen of cedarwood into rice so as to grow medicative rice since 20% of the Japanese suffer pollen allergy. Additionally, I also asked whether they would consider GM rice, which is a hotspot in China. Then, they told me that they studied GM rice on output increase, but they would not use GM rice directly for food; instead, they studied the genes that impacted output, after which they could achieve output increase by other breeding means. So I'm curious that why China, as a country facing the same or even not that severe food safety problems as Japan, is so urgent in producing GM staple food.

Chen Junshi: Japan also has demands in GM as same as other countries, but their demands are relatively smaller than China who has to supply grains for 1300 million people.

Zheng Fengtian: It is believed that GM will be the only solution to food issues in future. Such wrong awareness is misled by GM researchers. In fact, there are various ways of grain production, and GM is only one of them. But many GM scientists spread the wrong idea that GM is the only way out. I think it may aggravate the situation. On the one hand, in fact there are various ways for food production. On the other hand, since you think that it is difficult to supervise 100 million small farmers in China, you must adopt strict approval procedures, and ensure the supervision in place before issuance of any approval.

Anchorman: OK, thanks.

Audience: In my view, we are not full aware of whether GM foods are harmful to health or not. It should take much time and a lot of researches to verify it. I think we keep researches on foods or in other words, keep continuous experiments, or devote our whole life in such experiments, (Anchorman: it sounds so tragic), and let people make their own decisions. Those who do not worry about it may choose GM foods without any concern, and those who worry about it may make decisions at their own discretion.

Anchorman: We actually have no need to be struggled with foods, haven't we?

Audience: Yes, if we prefer GM food, we should choose it without any concern.

Anchorman: The common people desire for zero risk of food security, because no one is willing to eat a food with its harms or benefits undetermined. This is why there are so many people interested in this topic.

(Screen) Is zero risk of food possible?

Anchorman: Do you think foods can be entirely risk-free, Mr. Chen?

Chen Junshi: Nothing not just foods can be entirely risk-free.

Chen Junshi: People consider food risks different from that of others. People do not worry about falling down of airplane nor traffic accidents because they think these risks are acceptable if they are not too big, but they think food risks are unacceptable.

Ren Zhushan: Personally, I have complaints about US food processing industry. It is at the beginning development stage of GM in the past two or three decades ago that the US food processing industry presented the term of zero risk, which was defined as zero risk of food. Zero risk was then widely spread, and it become impossible to remove such thought from people's minds.

Anchorman: The cruel reality tells us zero risk of food is only an extravagant hope. It is said that European regulations related to food safety are strictly formulated, nevertheless, food risks can still be found somehow.

(Short video) mad cow disease

Anchorman: Mr. Patrick Wall, do you remember any adjustment on food safety rules made by the EU?

Patrick Wall: The EU has completely reformed all of its legislations after the mad cow problem. We have learned the lessons that we have to turn to more tight control than ever before. Like China, we have a great variety of food than we ever had and people have more choice than they ever had for food. We appear to be more worried and it seems to be so strange. There cannot be zero risk, because safer examples as chicken, port and any raw meat can have germs, so it is important to handle it correctly and hygienically in the process of cooking, otherwise we may get sick, the risk is low but is not zero, and it is important that the food must be handled correctly and cooked properly, so we have a long road to educate the public about the zero risk.

Wang Zhi'an: Risk is everywhere in our life. What we can do is to make comparative risk assessment, that is, to make assessment on the relationship of risk and return. If the return

outweighs the risk, the thing is worth doing, but if the risk outweighs the return, we should make efforts to change it.

Anchorman: It involves how to balance the extent in communication, especially the extent to reveal risks. As far as I know, Mr. Patrick Wall once used a common figure to explain the barriers and approaches to communicate with the public about food safety.

Patrick Wall: I think the first is that scientists have the responsibilities for the vacuum information, because many scientists were quiet busy working in laboratories, and they have special scientific language that can only speak to other scientists, so they do not bother to talk to the public, and because of the vacuum information, people begin to inverse stories, like the media that like to say stories and sell frightened news to newspaper and TV. So the solution to the problem is to get the scientists to talk to the public and talk with the language that the public can understand, and we need a bridge to have the journalists and the scientist to explain science to the public. We should also take better measures in supervision and regulation, and take severe punishment to criminal offenders. Only in this way can we improve consumers' confidences in food and make them feel that the nation puts more concern on their interests than that of enterprises.

Anchorman: Food problem is a hot potato for any one country. From above discussion we can find that there is a big gap between people's expectation and scientists' rationality. We will seek a best solution to minimize such gap in the near future.

(Glimpse):

Now the big screen is displaying a list of commonly discussed questions about food safety, including whether substandard foods are harmful to health and whether possibly cancerogenic foods are surely to cause cancer. In fact, these deceptively simple questions will undergo a long process of verification for us to find out scientific conclusions. Therefore, in confront with food safety issue, what we should do is not only to distinguish rumor from truth, but to hold and maintain a scientific and rational attitude towards it.