Announcer: "Today is the first of a series, and it's about food poisoning."

Reporter: "With the rise in temperatures, the most dangerous time for food poisoning is approaching."

[on screen] Inspectors at the Tsukiji Fish Market, TokyoInspector: "Hello, now that summer is almost here, we'd like to check the safety of your shellfish and get some samples from you."

Vendor: "Sure, go ahead."

Reporter: "Market sanitation inspection officers are here at Tsukiji Market in Tokyo to check the sanitary conditions of the fresh shellfish."

Inspector: "I have some namamushi. One more sample. Let me take some trough shells."

Reporter: "A bacterium called Vibrio is one cause of food poisoning. It likes salty water and thrives in the shellfish regardless of its freshness. So these inspection officers visit the market periodically to take samples of shellfish and to check the sanitary conditions. Food poisoning makes you very sick."

[on screen] Ambulance

Reporter: "There were 37,561 cases of food poisoning in Japan in 1990. Food poisoning causes vomiting, diarrhea, exhaustion, high fever, and headache. It is said that once food poisoning occurs, restaurants suffer loss of business for the next 10 years. So, they are very careful about it at this time of year."

[on screen]

Inspector: "Bacteria called Vibrios live in ocean water. They attach themselves to fish and are taken to land in the catch. These are Salmonella. They can be found in the eggs and meat you purchase."

Reporter: "Other bacteria that cause food poisoning are Staphylococci and Colon bacilli. They are also found inside our bodies and can multiply if conditions are right."
[on screen] Five petri dishes: Top left: Salmonella Top right: Staphylococci

Center: Vibrios. Bottom left: Colon bacilli. Bottom right: Cereus

[on screen] Scene of people dining at a wedding reception

Reporter: "If the bacteria that cause food poisoning are hiding in the food, this kind of party will not be a very fun experience in a couple of more hours. However, there is no need to worry any more. Strong disinfectant water can now prevent food poisoning."

[onscreen] Nihonkaku

Reporter: "This is Nihonkaku, located in front of Higashi-Nakano Station in Tokyo. Here, wedding receptions for 14 couples can be held at the same time. The staff can serve up to 3600 people, preparing over two tons or food a day, including vegetables, meat and fish."

[on screen] Cooks inside the kitchen of Nihonkaku

Cook: "One hundred percent of the food brought into Nihonkaku has some kind of bacteria on it. So, we have to eliminate the bacteria entirely before we start to prepare the food."

[on screen] Water faucets in the kitchen at Nihonkaku, sixteen faucets with very strong

disinfectant water are set up. Raw meat, the cutting boards and everything else is washed with this water.

[on screen] Mr. Ryuichi Ishizuka, Director of the Cooking Dept. at Nihonkaku

Mr. Ryuichi Ishizuka: "We've been using this hyperoxidized water for washing for about seven months. The bacteria that cause food poisoning have been eliminated. We tried to get rid of these bacteria before, but we were not able to do so completely. Now, as long as we use this disinfectant water, we will be safe."

[on screen] Mr. Nomura of Nick World with two sets of petri dishes

Mr. Nomura: "The easiest way to find out whether there is bacteria or not is to culture them in agar. The colored petri dish contains Colon bacilli and the non-colored one another type of bacteria. A sample culture is taken from a woman' s hands before and after washing. Samples were also taken from the cutting boards and meat."

[on screen] Four petri dishes 24 hours later

Mr. Nomura: "These are the results of the bacteria culture 24 hours later. A big difference is seen.

Left: Hands before washing. Right: Hands after washing.

[on screen] Two petri dishes

Mr. Nomura: " This is the result of the cutting board surface before and after washing. There is absolutely no bacteria seen."

[on screen] Dr. Matsuo of Miura Electronics, the inventor of the machine.

Dr. Matsuo: "First, tap water comes in this way. In order to electrolyte the water easily, we add some salty water which makes it conduct electricity better. Then direct current is applied to the water, and that is how electrolysis is done. When you perform electrolysis on water by adding salt and direct current to it, you can create alkaline water on the negative side and hyperoxidized water at a pH of 2.7 or lower on the positive side. When bacteria come in touch with the hyperoxidized water, they die.Another condition that effects bacteria is the water's oxidation-reduction potential (ORP). The remaining chlorine and oxygen in the water also help to eradicate bacteria. In the kitchen at Nihonkaku, not even bacteria that causes food poisoning are present anymore."

[on screen] Six petri dishes From left: "Staphylococci, Vibrios and Colon bacilli."

Dr. Matsuo: Top: "Before treatment by hyperoxidized water."

Bottom three: "After treatment; you can see that these contain no bacteria."

[on screen] A man at the reception being interviewedMan: "Is it the water that does the disinfecting? I haven't seen the results of the water analysis, so I cannot really say anything."

Reporter: "Let's have you look at the world's first color laser microscope."

[on screen] Salmonella bacteria moving around

Reporter: "A drop of strongly oxidized (acidic) water is placed on the bacteria. The moment the water contacts the salmonella, they die."

[on screen] Salmonella

Right side: Before hyperoxidized water was added. Left: After hyperoxidized water was added.

[on screen] Reporter/cameraman drinking hyperoxidized water

Reporter: "Drinking this water causes no harm at all to the body. Very mysterious water."

Reporter: "Here at Nihonkaku, after the dishes are prepared and ready to serve, the food wagon is covered tightly with plastic wrap to prevent the invasion of bacteria and stored in the refrigerator until serving time."

[on screen] Doors opening to newly weds

Reporter: "Now the wedding reception is in full swing. We hear the sounds of families and friends clapping as they welcome the newly weds. It sounds like noise from the disinfectant water that prevents food poisoning."

Announcer A: "This is great! This is real?"

Announcer B: "Yes, it is real. Normally when we talk about water disinfectant, we are talking about chlorine. But, if you can disinfect water with only water, problems such as the stringent odor and harmful side effects will be solved."

Announcer A: "Tomorrow, we will report on water that is widely used for medical treatment."