Methods

Previous researches of heated beef and pork have shown the importance of temperature and heating-time control in regard to the quality and flavor of a dish [1][2]. In our study, we utilized a newly-designed heating machine that are capable of conditioning the air-temperature inside its ferroalloy shell, so that we could track time-dependent behaviors of our chicken under different temperatures. In order to find a way to improve the flavor of the chicken, we tested the effects of three kinds of seasonings—namely salt, pepper powder and chili powder, which a survey two years ago showed to be the most favorite among all the seasonings [3]—while being added according to different quantities and proportions. We also employed an efficient bio-chemical method [4] to figure out the distribution of bacteria populations on each sample.

To deal with each chicken that had already been slaughtered in a standard manner recommended by previous studies conducted in France [5], we started by measuring its weight, and taking 1, 3 or 5 grams of salt, pepper powder or chili powder per kilo to spread uniformly over the chicken's skin. Then, the chicken was put into the heating machine. The air-temperature would be 100, 200, 300 or 400 degrees Celsius, and the chicken would be heated for 15, 30, 45 or 60 minutes. After that, we took out the chicken and cut several samples out of the chicken's head, breast, wings, stomach and legs to measure the distribution of bacteria populations on the heated chicken. And we finally sent our chicken to a group of volunteers, receiving their comments on the flavor of the chicken. Conventionally this kind of volunteers would be summoned wholly by chance [7][8]; on the contrary, we made sure that for each chicken this group of volunteers comprised exactly the same persons, getting rid of the impact of different personal tendencies in flavor preference, clearly revealed by one of our recent studies [9].

Table of References

[1] Author names, *Article Title*, *Journal Name*, Year, Pages.
[2] Author names, *Article Title*, *Journal Name*, Year, Pages.
[3] Author names, *Article Title*, *Journal Name*, Year, Pages.
[4] Author names, *Article Title*, *Journal Name*, Year, Pages.
[5] Author names, *Article Title*, *Journal Name*, Year, Pages.
[6] Author names, *Article Title*, *Journal Name*, Year, Pages.
[7] Author names, *Article Title*, *Journal Name*, Year, Pages.
[8] Author names, *Article Title*, *Journal Name*, Year, Pages.
[9] Author names, *Article Title*, *Journal Name*, Year, Pages.