

# ALcode: Automatic Allergy Determination Program Using Public Data

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Food allergies are an important health issue that is ubiquitous in the world. However, the way to determine if food contains allergens is to check the back of the food, which is difficult to find because there are so many small letters. It is also inconvenient when you have to buy several foods at once. In addition, it is even more difficult if you go abroad and buy food. Therefore, we designed a program to automatically determine allergies using public data and make it easier for that process to be done at the store checkout. The program consists of two. When a user takes food's barcode at the checkout counter, the POS(Point Of Sales) program receives allergy information of food through public data. The user application receives food allergy information from the POS program with a QR code, and compares it with user information to determine allergies. Finally, it shows the result of determining the allergy to the user at once. It can also be used in the same way overseas. In conclusion, our program solved all this problem. It is convenient because only one procedure is needed to determine all products. The results are also accurate because clear information such as barcodes and public data is used. And, there are no barriers between countries regarding allergy determination.