

# Allergy Prevention Aspect of Nutrafit

## Introduction:

A food allergy is an abnormal response to a food triggered by your body's immune system. This is a common reaction that can become deadly if it causes anaphylaxis. In severe cases it can lead to death. Owen Carey, a teenager celebrating his 18th Birthday at a local restaurant, died because of eating a buttermilk chicken fry. He had a severe milk allergy. Even after letting the shop owner know about the allergy issue, the shop owner did not notify the family about the allergens in the food. This is one of many tragic cases of allergy attacks. In a place like campus dining, it's very important to be aware of food allergies because of the diversity of the food menu and ingredients. In this research, we are going to explore food allergies more closely, the apps that are on the market for food allergies and the importance of allergy awareness.

## (1)

An allergy is a normal reaction of the body to keep its homeostasis and defense stronger. However, a severe allergic reaction is called anaphylaxis. Symptoms include itching, swelling in the mouth, vomiting, or diarrhea. Not all of these symptoms are life-threatening. But in severe cases, the situation can become worse and can lead to death. Anaphylactic shock can occur because of many reasons. But most prevalent cases occur because of food-induced allergies. This is called food anaphylaxis. In the article, " Food-Induced Anaphylaxis: Role of

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Hidden Allergens and Cofactors”, the author mentioned that the outcome and the severity of the anaphylaxis differs significantly between young children and adults. The anaphylaxis depends on the dose of the allergens that have entered the body, as well as the kind of food allergens getting into the body. From the study made by Guillaume Pouessel and Paul J. Turne, we know that a systematic review of fatal anaphylaxis found that peanut and tree nuts are the most common triggers, implicated in up to 87% of deaths (2). But for milk and eggs, the risk of anaphylaxis is reduced. Even though these foods have high allergen ingredients, the population who have peanuts and nuts allergy is in more danger than the previous population. Despite that the rate of the allergy attacks are still increasing. The reason for that can be the increase of the diversity of food options and mixed spices as well as the weakness of the human immune system. The best way to deal with an allergy is to prevent it. According to one *Healthline* article, to prevent an allergic reaction, the patient with allergy should read the label of the food and ask the food provider for the ingredients (Anna Schaefer).

## (2)

Today most people depend on their smartphone for getting information. People use different smart apps to maintain anything from their daily schedule to lifestyle. However, there are still not enough smart apps that contain an adequate amount of information about allergens. From the study made by Mimi L. K. Tang, we learned that the prevalence of food allergies has increased in many westernised countries (cite page number). This trend is not specific to t

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westernized countries. According to the study the global prevalence of food allergies is also increasing. There are only a very few apps that actually exist to help people with the allergy. From the hyper-clinical health site *Verywell Health*, we found that there are six apps that work with people's allergy risks. One of the apps among them is ContentChecked. This app scans the product barcode to tell the user if the product has any of the big eight allergens. This is a paid app. The next app named MyFoodFacts is also similar to the previous app. Third on that list is the AllergyEats. This app has an option called "find near me" to find a restaurant based on the allergy-friendly rating. Of the other apps, the particular traits that are different is to list own allergens and some that provide flags for the items that contain allergens. All these apps are important for consumers with allergies. However, those apps missed one important factor, which is the connection between the food provider and the consumers. This is one of the important aspects that our app will have to raise awareness against allergies.

### (3)

As we have mentioned earlier the prevalence of food allergies, the situation is more dire than it looks. According to the study made by Mimi L. K. Tang, the age groups that have the highest rates of mortality by anaphylaxis shock from food allergies are older people and teenagers (cite page number). People of these age groups are more interested in eating outside and exploring their food choices. Also, people from these age groups go to high school or college. Therefore, it is very important to raise awareness against allergies. Among the student group, college students have a higher risk of getting allergy attacks because of their eating habits and the choices of where they eat. Campus dining is one of the important places where the awareness of allergies is most needed. A good connection between the food provider and

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the consumer is very important to raise allergy awareness. If we go back and review the largest age group for allergy attacks, we can find that most of them actually use the smartphone the most. Therefore, we need some sort of smart app that can resolve the bridge between the food producer and the food consumers. Then we can have more allergy-friendly places and the mortality because of the allergy attack will decrease.

## **Conclusion:**

Allergy is a smaller issue in the vast population of the western countries. However, this is increasing at a very rapid rate. Therefore, coming up with a solution for eating out is very important. The use of technology is the best way to prevent allergic reactions. The various versions of smartphone apps that actually exist also have a shortcoming of lack of communications. If an app can provide support for both the food producer and food consumer, then the whole experience will be more meaningful

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