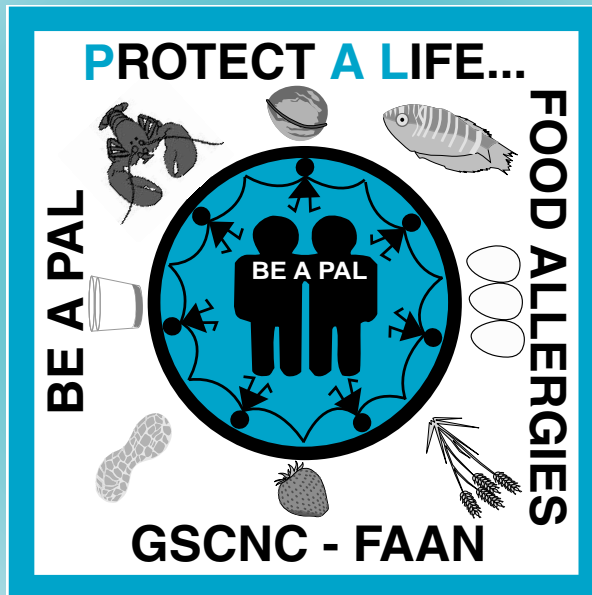


# Be a PAL Patch Program



**Girl Scouts®**  
Where Girls Grow Strong<sup>SM</sup>

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[www.foodallergy.org](http://www.foodallergy.org)

## Purpose

To enable you to better understand food allergies and to know the importance of helping an allergic individual avoid a risky situation.



### Do you know someone with food allergies?

Your best friend, perhaps? Maybe one of your parents, an aunt, your favorite teacher? One of the girls in your Girl Scout troop?

The odds are that if you don't already know someone affected by food allergies, you probably will. An estimated 6 to 7 million Americans have food allergies, and doctors report that food allergies are on the rise.

Food-induced anaphylaxis (a severe allergic reaction) accounts for approximately 30,000 emergency room visits a year. Between 100 and 200 people die each year from food-allergic reactions.

Food allergies aren't choosy. They don't affect only people with a certain color hair, people who live in a certain place, or people who are a certain age. Girls just like you have food allergies. And they need your help.

Most food-allergic reactions in children and teens happen when they are with their friends. That's where you come in—by learning about food allergies, you can help allergic individuals avoid risks, and you'll know what to do if a reaction should occur.

Sometimes children don't mention their food allergies to their friends because they are afraid of being teased. By earning the PAL patch, you're showing the world that food allergies are no laughing matter. But they don't need to rule your life, either. All they need is a little attention!

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## Be a PAL Patch Requirements

Junior Girl Scouts do any 5 of the first 9 requirements

Cadette Girl Scouts do any 7 of the first 15 requirements

Senior Girl Scouts do any 8 of the 20 requirements

- 1.** Read through this booklet to become familiar with food allergies. People who have food allergies have to avoid any trace of the food to which they are allergic. Imagine you are allergic to eggs and you know that even the smallest bite of a food that contains egg will make you really sick. Read the label of every food you eat. (See page 17 for a list of ways egg can appear on an ingredient statement.) How did you feel after doing this for a day? What types of situations did you have to look out for? How would you feel if you had to avoid egg all the time?
- 2.** What extra steps would you have to take in planning your next camping trip if one of the girls in your troop was allergic to milk? With a group, plan menus to ensure that she would be able to eat everything. List some milk-free alternatives to traditional camping foods, such as s'mores.
- 3.** What is the difference between a general family doctor and an allergist? What do allergists do? Make an advertisement for a children's allergist.
- 4.** Some schools have programs in place to help provide a safe environment for children with food allergies. For example, some schools assign peanut-free tables in the cafeteria; others don't allow eating in the classroom and don't allow food to be used in craft projects. Pretend you are a school principal. What plans would you put into place to help food-allergic students avoid a problem food? How would these plans affect all the other students in the school? Create a poster listing your plan and how it will help children with food allergies, and share it with your troop. Take a survey. How would everyone feel about following your plan? How would they feel about it if they were the food-allergic student?
- 5.** Many birthday parties involve food. Pretend that you are planning a party and you want to invite all of your friends, including one

who is allergic to eggs, and another who is allergic to peanuts and tree nuts. What foods, activities, and party favors will you plan to use so that all the guests can enjoy everything?

- 6.** If a friend is having a food-allergic reaction, actions as simple as recognizing symptoms and seeking medical treatment immediately can make a BIG difference. Make a poster listing all of the common symptoms of an allergic reaction, and outlining what you should do if a friend is having an allergic reaction. Share your poster with your troop.
- 7.** Sometimes kids with food allergies will get teased or harassed by other students. How would you feel if you were being teased just because you couldn't eat some of the same foods as everyone else? With a group, discuss ways you could help someone who is getting teased because of her food allergy.
- 8.** Plan a "food allergy party" to share what you've learned with another Girl Scout troop. Give a presentation to educate others about food allergies. Be sure to list the symptoms of an allergic reaction, and emphasize the seriousness of food allergies. Prepare and serve treats that are free of some of the most common food allergens, such as milk, eggs, wheat, peanuts, tree nuts, or soy. Make ingredient labels for all foods and post them next to each item. Ask people if they can taste the difference between a food that has an allergen in it and one that doesn't.
- 9.** Sometimes recipes contain surprise ingredients. For example, did you know that peanut butter is sometimes used to thicken chili or that walnuts are sometimes added to blue cheese dressing? Read some cookbooks or recipe pages of a magazine. Did you find any ingredient surprises? Find and share an example of where milk, eggs, peanuts, or tree nuts have been used in a recipe that you would not expect?
- 10.** Put on a play. Script a situation where a food-allergic friend is having a reaction. Act out some things that others could do to help this person. Share your play with other troops or your community. If possible, videotape your play.
- 11.** Since mild food-allergic reactions can even be caused by kissing a person who recently ate the offending food, it's important for

teens to explain their food allergies to their dates. Pretend that you are allergic to peanuts, and role-play how you would explain your food allergies to a new date. How would your discussion differ if he was someone you had just met or if he was a long-time friend of yours? When during the course of your date would you discuss your allergy? Would you talk about it even if your plans did not include eating?

- 12.** Invite a local allergist to speak to your troop. (Call 800-822-ASMA for the name of an allergist in your area.) Ask the speaker to talk about the major concerns of people with food allergies, the diagnostic process, and what advice is given to patients who have just been diagnosed with a food allergy. What other types of careers deal with food allergy? How do people get into the food allergy field? What education is necessary to become an allergist? What are the pros and cons of working in this field?
- 13.** Develop and administer a survey to members of your school or your service unit to gauge the level of food allergy awareness in your area. Analyze and share your results by creating charts or posters. Include food allergy facts and ways to help a food-allergic individual. (See page 13 for ideas.) With permission, post them in your community, such as in a grocery store or a library.
- 14.** Many people who have food allergies, especially those with multiple food allergies, visit a dietitian to ensure that their diet is nutritionally balanced. Interview a dietitian to find out how a diet is analyzed. What substitutions does he or she suggest to people allergic to the most common food allergens?
- 15.** The Internet can be a great resource for people with food allergies, since many national chains and fast food restaurants post menus and ingredient statements on their websites. Pretend that you have a peanut allergy and visit the website of your favorite fast-food restaurant to see what foods you would still be able to eat. Were you surprised at any foods that contained peanuts?
- 16.** Examine how food-allergic people are portrayed in movies, books, television shows, and other media. Determine how this portrayal affects the public perception of living with food allergies. Find at least three examples of characters with food allergies. How well do

you think they were depicted? How would you revise those characters to make them more realistic?

- 17.** Many food labels list “artificial flavors” or “natural flavors” on the ingredient statement, yet these flavors can contain food proteins to which individuals are allergic. Pretend that you are allergic to soy. Find an ingredient label that lists natural or artificial flavors, and, with permission, call the food manufacturer to ask if soy protein is present in any of those flavorings. How was your experience calling the manufacturer? Would you have felt differently if the answer to your question meant the difference between having a serious reaction or continuing with your day?
- 18.** Cooking without certain foods can sometimes be tricky. An example is people who are allergic to wheat. Select a recipe and adapt it to be wheat-free. You may need to try several different combinations of non-wheat flours before you find one that works. (Check out the allergy-free cooking tips on page 15). Try the adapted recipe. How did it taste?
- 19.** Watch how someone prepares food at home. See if you can identify ingredients that may cause a problem for someone with a food allergy, and pinpoint where cross-contamination occurs. Note some things you could do to help make the kitchen safer for people with food allergies.
- 20.** Some allergists concentrate on research in food allergies, as opposed to primarily treating patients. Read about the latest food allergy research at [www.foodallergy.org](http://www.foodallergy.org). Which kind of allergist career interests you more?

# Food Allergy Basics

## What is a food allergy?

A food allergy involves an interaction between a food and the immune system. Although a food, such as soy, is harmless to most people, an allergic person's immune system misinterprets the protein in the foods as being harmful and creates antibodies to fight off that food.

Each time the allergic person eats that food, the body's immune system launches an attack by releasing histamine and other powerful chemicals. The release of these chemicals causes the symptoms of an allergic reaction.

## What is the difference between an allergy and an intolerance?

Many people think that food allergy and food intolerance mean the same thing, but they do not. A food intolerance is an adverse food-induced reaction that does not involve the immune system.

Lactose intolerance is one example of a food intolerance. A person with lactose intolerance lacks an enzyme that is needed to digest milk sugar. When the person digests milk products, symptoms such as gas, bloating, and abdominal pain may occur.

With a food allergy, the immune system identifies a food as being an enemy, and when the allergic person eats that food, the immune system tries to "fight off" the enemy. Symptoms can range from mild to severe.

## How common are food allergies?

Food allergies affect 5 percent of children and 2 percent of adults in the United States, or approximately 6 to 7 million Americans.

## Alison's story

(age 16, allergic to milk and eggs)

I've had severe allergies to milk and eggs all my life, but that has never stopped me from doing what I wanted to do. There have been many times when I've been able to participate in activities thanks to some very special people.

Every summer, my Girl Scout troop goes on a backpacking or canoeing trip. When I found out about these trips, I wanted to go. It sounded like lots of fun. We tried out lots of prepackaged, dehydrated foods before the trip. The foods that were safe for me to eat were the ones we planned to take on the trip.

I had tons of fun all week long and I had no trouble with my food allergies. The trips were tons of fun, and since I had no trouble with meals, it was easy to go on the third trip this past summer.

I'm sure that I will continue to go on trips with these leaders because they are tons of fun to be with, and they are wonderful people.



## What foods cause most allergic reactions?

Six foods account for 90 percent of the allergic reactions in children—milk, eggs, peanuts, tree nuts (such as walnuts, pecans, almonds, and cashews), soy, and wheat. In adults, the most common causes of food allergies are peanuts, tree nuts, fish, and shellfish (including shrimp, crab, and lobster).

### Andrea's story

(age 12, allergic to peanuts)

I had a bite of a candy bar that had peanuts in it. My mother took it off my tongue before I even swallowed it and the memory of the ten seconds of that bite will last the rest of my life. The swelling, labored breathing, projectile vomiting, and welts.

My mother said my eyes rolled to the back of my head and I passed out. I was so little. My mother was screaming and crying. I remember that, too. My mother's tears.

## What are common symptoms of an allergic reaction?

An allergic reaction to food can involve the skin, respiratory tract, gastrointestinal tract, and cardiovascular system. While symptoms vary from one person to another, the following are common symptoms of an allergic reaction:

### Skin symptoms

- hives
- swelling
- itchy, red rash
- eczema flare-up

### Gastrointestinal symptoms

- cramps
- nausea
- vomiting
- diarrhea

### Cardiovascular symptoms

- reduced blood pressure
- lightheadedness
- increased heart rate
- shock

### Respiratory symptoms

- itchy, watery eyes
- runny nose
- stuffy nose
- sneezing
- coughing
- itching or swelling of lips, tongue, throat
- change in voice
- difficulty swallowing
- tightness of chest
- wheezing
- shortness of breath
- repetitive throat clearing

## What is anaphylaxis?

Anaphylaxis is a sudden, severe allergic reaction that involves various areas of the body simultaneously. In extreme cases, it can cause death. Some people call this type of reaction a general reaction or allergic shock.

## What are the symptoms of an anaphylactic reaction?

Most people who have had an anaphylactic reaction say they had the feeling as it came on that something terrible was going to happen.

Other symptoms include:

tingling sensation, itching, metallic taste in mouth

hives

sensation of warmth

asthma symptoms

swelling of the mouth and throat

difficulty breathing

vomiting

diarrhea

cramping

drop in blood pressure

loss of consciousness

These symptoms can appear immediately, or may develop over hours.

## What is it like to have a food-allergic reaction?

Some reactions are mild, and only result in hives or gastrointestinal problems (such as cramping, diarrhea, and vomiting). Other reactions are very serious, and can be life-threatening. Regardless of the level of a reaction, however, it is always scary.

Some kids get embarrassed when they realize they are having a reaction. They try to quietly take care of the situation, or hope that by ignoring it, their reaction will just go away. Others feel themselves getting sick and go to the bathroom alone, trying not to make a scene. This is very dangerous, because if the reaction progresses more quickly

## Jessica's story

(age 15, allergic to milk)

I don't remember too much about the day of the accident, except that my mom and I were going to go and see the movie *While You Were Sleeping*.

This is what I remember. I was very excited about going to the movie, and as I was getting ready my mom said, "Finish your milk." (What she meant was the kind of milk I could drink, and I knew that.)

So, being the obedient daughter that I am, I walked into the kitchen, but to my surprise, I found not one, but two identical glasses that both had a milk-like substance in them. (One contained my soy milk; the other had real milk in it.) Not really thinking, I grabbed the glass closest to me and drank. A few seconds later, I began to feel my throat close, and I began to panic.

After that, I don't remember too much except being scared. The next thing I remember is waking up in a hospital with my family and friends around me. I had been in the intensive care unit on a ventilator for two days. It was a few more days before I could leave the hospital.

than expected, the allergic person could lose consciousness and be unable to help herself.

If you think a friend might be having a reaction, it's important to act quickly. Don't wait to see if the reaction will worsen. If your friend has a history of severe reactions, get help immediately (for example, call 911).

### Can someone die from anaphylaxis?

Yes, anaphylactic reactions can be fatal. That's why it is so important to act quickly to try to stop the reaction. The difference between acting fast and waiting to see if the symptoms will go away can mean life or death. Fortunately, anaphylactic reactions are only rarely fatal and most people survive them.

### How does someone avoid having a reaction?

Since there is no cure or preventative medication available for food allergy, strict avoidance of the food in question is the only way for someone with food allergies to avoid having a reaction. Food-allergic people must learn the scientific and technical names for foods, read the ingredient statements on every food they eat, and avoid products that contain the offending food.

Most people who have experienced food-allergic reactions knew about the food they were allergic to and unknowingly ate that food in a product they thought was safe. How does this happen? In some cases the person didn't think to check the label because the food was an unlikely source for their allergen. For example, soy is sometimes added to hamburger patties! In other cases, the food itself does not contain the allergen, but it becomes contaminated.

Cross-contamination occurs when the proteins from various foods mix. Oftentimes this happens during the cooking process (for example, when a cookie sheet used to bake nut-containing cookies is then used to bake nut-free cookies without being cleaned between uses) or the serving process (for example, when the knife used to spread peanut butter is then dipped in the jelly jar).



## Lisa's story

(age 16, allergic to milk)

I can remember one time recently that a friend was of great help in ending a situation that could have been disastrous.

I was on a trip with three other girls from my dance studio. My mom made taco salad one night. We were all starving after a long day of dance class, but I made sure to serve myself first to avoid cross contamination. After we had all had our first serving, most of us went back for seconds. As I was absentmindedly putting more chips on my plate, another girl saw some cheese in the chips bag. She quickly showed me what she saw.

I felt kind of stupid for not paying attention to what I was doing, but I was so grateful that she was aware of my food allergies. She saved me from having a reaction that could have been fatal.

So, as you can see, friends can be a great help with your allergies. They can help look out for you and see things that you don't notice. I hope that all of you have friends like mine, who have helped me through the years.

## Cooking Creatively

People with food allergies will often make the majority of their food at home to minimize their risk of having a reaction from cross-contamination or mislabeled foods. Allergy-free cooking can be a bit of a challenge, but with a little creativity and some determination, you can soon be whipping up treats so delicious that no one will believe they're allergy-free!

### Milk-free cooking:

Milk is one of the easiest ingredients to substitute for in baking. For a cup of milk, substitute a cup of water, fruit juice, rice milk, or soy milk.

### Egg-free cooking:

Eggs are in almost every baked good recipe you'll find. They are used to hold ingredients together, to add moisture, or as a leavening agent (making the batter rise enough to cook). You can use any one of the following to replace each egg in baked goods (note that these substitutes only work for recipes with one, two, or three eggs).

- » 1 tsp. baking powder, 1 T. liquid, 1 T. vinegar
- » 1 tsp. yeast dissolved in 1/4 cup warm water
- » 1 T. apricot puree
- » 1 1/2 T. water, 1 1/2 T. oil, 1 tsp. baking powder
- » 1 packet gelatin, 2 T. warm water (do not mix until ready to use)

### Wheat-free cooking:

Baking without wheat is often the most challenging allergy-free cooking. The flavor and texture of baked products is sometimes a little different without gluten (found in the protein of grains such as wheat). Combining several flours may make the finished product hold together more and taste better.

Use any of the following for a thickening agent instead of 1 T. wheat flour:

- » 1 1/2 tsp. cornstarch
- » 1 1/2 tsp. potato starch
- » 1 1/2 tsp. arrowroot starch
- » 1 T. white or brown rice flour
- » 2 tsp. quick-cooking tapioca
- » 1 1/2 tsp. sweet rice flour

## Wheat-free all-purpose flour mixture

1 cup cornstarch                      2 cups soy flour  
2 cups rice flour                      3 cups potato starch flour

Use this mix in place of wheat flour in a recipe. Use slightly more flour mixture than the recipe calls for. Reduce oven temperature by approximately 25 degrees and bake a little longer than is called for. Store any unused mixture in the refrigerator or the soy will become strong.

## How to Read a Label for a Milk-Free Diet



### Avoid foods that contain any of these ingredients:

artificial butter flavor  
butter, butter fat, butter oil  
buttermilk  
casein  
caseinates (ammonium caseinate, calcium caseinate, magnesium caseinate, potassium caseinate, sodium caseinate)  
cheese  
cream  
cottage cheese  
curds  
custard  
Ghee  
Half & Half®  
hydrolysates (casein, milk protein, protein, whey, whey protein)  
hydrolyzed milk protein  
lactalbumin, lactalbumin phosphate  
lactoglobulin  
lactulose  
milk (derivative, powder, protein, solids, malted, condensed, evaporated, dry, whole, low-fat,

milkfat, non-fat, skimmed, and goat's milk)  
nougat  
pudding  
rennet casein  
sour cream, sour cream solids  
sour milk solids  
whey (in all forms including sweet, delactosed, protein concentrate)  
yogurt

### May contain milk protein:

chocolate  
flavorings (including natural and artificial)  
lactose  
luncheon meat, hotdogs, sausages  
high protein flour  
margarine  
non-dairy products  
Simplese®

- » "D" on a label next to "K" or "U" indicates presence of milk protein.
- » Deli slicers are frequently used to cut both meat and cheese products.

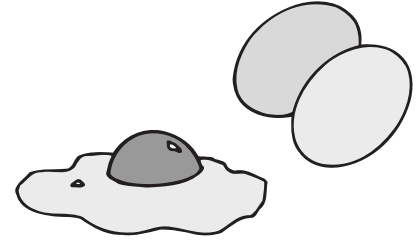
**Avoid foods that contain any of these ingredients:**

albumin  
egg (white, yolk, dried, powdered, solids)  
egg substitutes  
eggnog  
globulin  
livetin  
lysozyme (used in Europe)  
mayonnaise  
meringue  
ovalbumin

ovomucin  
ovomucoid  
ovovitellin  
Simplese®  
surimi

**Note:** A shiny glaze or yellow baked goods may indicate the presence of eggs. Lecithin, marshmallows, marzipan, natural and artificial flavorings, and pasta may contain eggs.

## How To Read a Label for an Egg-Free Diet



**Avoid foods that contain any of these ingredients:**

beer nuts  
cold pressed, expelled, or extruded peanut oil  
ground nuts  
mixed nuts  
monkey nuts  
Nu-Nuts® flavored nuts  
nut pieces  
peanut  
peanut butter  
peanut flour

**May contain peanut protein:**

African, Chinese, Indonesian, Thai, and Vietnamese dishes  
baked goods (pastries, cookies, etc.)  
candy

chili  
chocolate (candies, candy bars)  
egg rolls  
marzipan  
natural and artificial flavorings  
nougat  
sunflower seeds

- » Artificial nuts can be peanuts that have been deflavored and reflavored with a nut, such as pecan or walnut. Mandelona nuts are peanuts soaked in almond flavoring.
- » Studies show that most allergic individuals can safely eat peanut oil (not cold pressed, expelled, or extruded peanut oil).
- » Arachis oil is peanut oil.
- » If you are allergic to peanuts, talk to your doctor. If prescribed, carry an EpiPen® at all times.

## How to Read a Label for a Peanut-Free Diet



## How to Read a Label for a Soy-Free Diet

Avoid foods that contain any of these ingredients:

edamame  
hydrolyzed soy protein  
miso  
shoyu sauce  
soy (albumin, flour, grits, nuts, milk, sprouts)  
soya  
soybean (granules, curd)  
soy protein (concentrate, isolate)  
soy sauce  
Tamari  
Tempeh

textured vegetable protein(TVP)  
tofu

*May contain soy protein:*

flavoring (including natural and artificial)  
vegetable broth  
vegetable gum  
vegetable starch

Studies show most soy allergic individuals may safely eat soy lecithin and soy oil.

## How to Read a Label for a Wheat-Free Diet

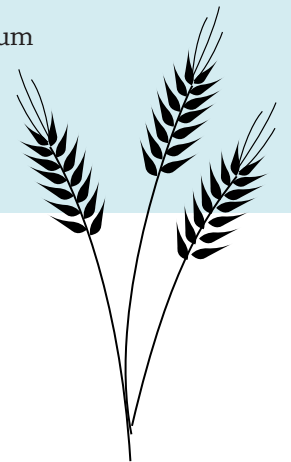
Avoid foods that contain any of these ingredients:

bran  
bread crumbs  
bulgur  
cereal extract  
couscous  
cracker meal  
durum, durum flour  
enriched flour  
farina  
flour (all-purpose, enriched, graham, high gluten, high protein, pastry, soft wheat)  
gluten  
hydrolyzed wheat protein  
kamut  
pasta  
seitan

semolina  
spelt  
vital gluten  
wheat (bran, germ, gluten, malt, starch)  
whole wheat berries  
whole wheat flour

*May contain wheat protein:*

flavoring (including natural and artificial)  
soy sauce  
starch (gelatinized, modified, modified food starch, vegetable)  
surimi  
vegetable gum



## How to Read a Label for a Tree Nut-Free Diet

Avoid foods that contain any of these ingredients:

almonds  
Brazil nuts  
caponata  
cashews  
chestnuts  
filbert/hazelnuts  
gianduja (a creamy mixture of chocolate and chopped toasted nuts found in premium or imported chocolate)  
hickory nuts  
macadamia nuts  
marzipan/almond paste  
nougat  
Nu-Nuts® artificial nuts  
nut butters i.e. cashew butter  
nut meal  
nut oil  
nut paste i.e. almond paste  
nut pieces  
pecans (Mashuga nuts)  
pesto  
pine nuts (pinyon nuts)  
pistachios  
walnuts

- » Artificial nuts can be peanuts that have been deflavored and re-flavored with a nut, such as pecan or walnut. Mamelona nuts are made from peanuts soaked in almond flavoring.
- » Mortadella may contain pistachios.
- » Filberts are also hazelnuts
- » Avoid natural extracts i.e. pure almond extract, use imitation or artificial flavored extracts.
- » Natural and artificial flavoring may contain tree nuts.
- » Tree nuts have been used in many foods including barbecue sauce, cereals, crackers and ice cream.



# Program Extenders

## Brownie Girl Scout Try-Its:

Make It, Eat It

Girl Scout Ways, #3

Eat Right, Stay Healthy

Safety Sense

Caring and Sharing, #4

Friends are Fun

Manners #7 (Respect people with Allergies)

Senses #5

## Junior Girl Scout Badges:

Cookie Connections

On My Way

Looking My Best #8

Caring for Children #8

Food Power

Outdoor Cook

Let's Get Cooking

## Cadette Senior Interest Projects:

Career Exploration

Child Care

Family Living

Travel

Creative Cooking

The Food Connection

Why in The World?

Backpacking Tech. #4

Camping SB #2