

# FSI:

## Food Safety Investigation

### Kitchen Crimes



EVIDENCE: Forgot to  
wash hands after going  
to toilet

SUSPECTS:  
**BAD HABITS**

CLUES: not  
following  
the 4 Golden  
Rules of  
Food Safety



## Junior FSI squad casebook



Food  
Authority



[foodauthority.nsw.gov.au](http://foodauthority.nsw.gov.au)



**This is Lee and Zoe, they  
are Food Safety Inspectors.**

Their job is to inspect kitchens and make sure good hygiene and food safety practices are being used so that food is safe for you to eat and won't make you sick.



Food  
Authority



## LESSON #1



It's easy to forget that food can be dangerous and cause illness.

Food can grow bacteria which can make us sick if we do not store, prepare, cook and eat it correctly!



To join the **junior Food Safety Investigation squad**, aka **FSI squad**, you must learn the 4 Golden Rules of Food Safety. These rules help keep food safe to eat.

# The 4 Golden Rules of Food Safety

### KEEP IT COLD

- ☒ Keep the fridge below 5°C
- ☒ Defrost foods in the fridge
- ☒ Shop with a cooler bag



### KEEP IT HOT

- ☒ Cook foods to at least 60°C
- ☒ Reheat foods to at least 60°C
- ☒ Look for clear juices before serving chicken



### KEEP IT CLEAN

- ☒ Wash and dry hands thoroughly before preparing or eating any food
- ☒ Keep benches and equipment clean
- ☒ Separate raw and cooked food - use different cutting boards and knives



### CHECK THE LABEL

- ☒ Don't eat food past a 'use-by' date
- ☒ Follow storage and cooking instructions
- ☒ Be allergy aware

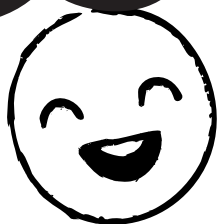


**FACT:** *Food Safety* is the term to describe the handling, preparing and storing of food in a way to best reduce the risk of becoming sick from food poisoning.

## ACTIVITY #1

### Code Cracker

Use the secret code alphabet to find the hidden message



A	B	C	D	E	F	G	H	I
J	K	L	M	N	O	P	Q	R
S	T	U	V	W	X	Y	Z	



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Solution: keep food safe - follow the golden rules

## OPEN CASE

### Food poisoning

Poor Barry and Sally are feeling sick after eating something yesterday.



**FSI Squad Mission:** Help uncover the kitchen crimes and bad food safety habits that may have made their tummies sick.



**FACT:** Food poisoning is when your body becomes sick, like vomiting or diarrhoea, that is caused by eating unsafe food. It is also sometimes called foodborne illness.

## CRIME SCENE #1

# The Kitchen



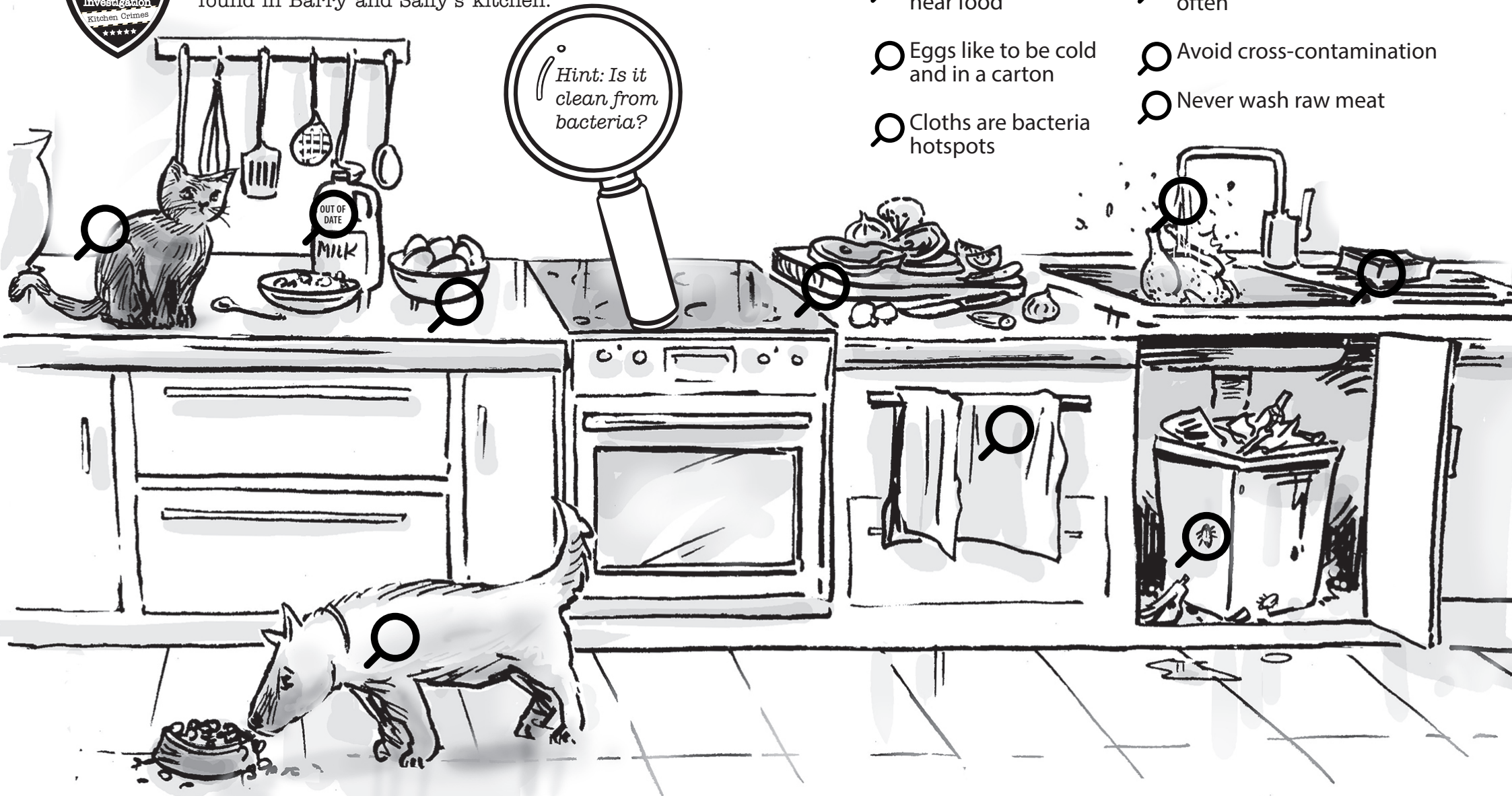
**FSI Squad Mission:** Use your detective skills and circle the 9 food safety crimes found in Barry and Sally's kitchen.

Hint: Is it clean from bacteria?

**FACT:** *Cross-contamination* is when raw meat and ready-to-eat food is mixed together. Stop this crime by using different coloured chopping boards to separate and keep them clean

### Clues:

- ☐ Check the label
- ☐ Pet's don't belong near food
- ☐ Keep clean and empty often
- ☐ Eggs like to be cold and in a carton
- ☐ Avoid cross-contamination
- ☐ Cloths are bacteria hotspots
- ☐ Never wash raw meat





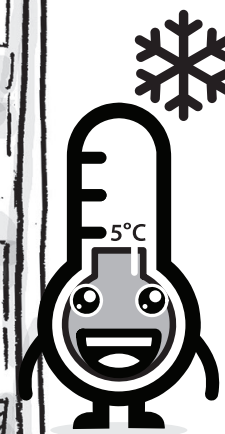
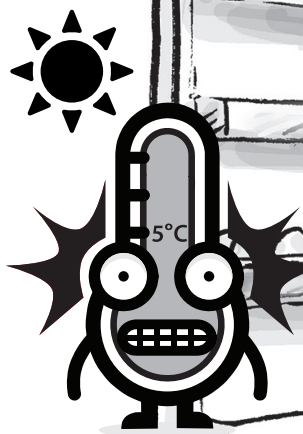
## CRIME SCENE #2

# The Fridge



**FSI Squad Mission:** Identify the fridge that has become a crime scene. Draw a line to show which fridge is good and which one is the baddie.

Hint: Which fridge is in the danger zone? Which one is storing food safely?



**FACT:** *Temperature Danger Zone* is when food that should be kept cold is exposed to temperatures between 5°C to 60°C. Food poisoning bacteria grows quickly in the 'danger zone'.

### Clues:

- ☐ Ideal temperature between 0°C - 5°C
- ☐ Eggs stored in their carton and on a shelf
- ☐ Raw meat covered and on bottom shelf
- ☐ Pan stored once the steam stopped
- ☐ Fresh vegetables with air to breathe
- ☐ 'Use by' date is still ok. Enjoy your milk!



## CRIME SCENE #3

# Check Smart - Check the Label



**FSI Squad Mission:** Follow the clues on the labels to find out if the food is safe to eat.



### Food allergy is a serious issue!







It's important to carefully check food labels before eating if you have a food allergy or intolerance, or you are shopping for someone who does.

The Usual Suspect allergens are:

- shellfish
- eggs
- fish
- cow's milk
- peanuts
- soybeans
- tree nuts
- sesame seeds
- gluten
- lupin
- wheat

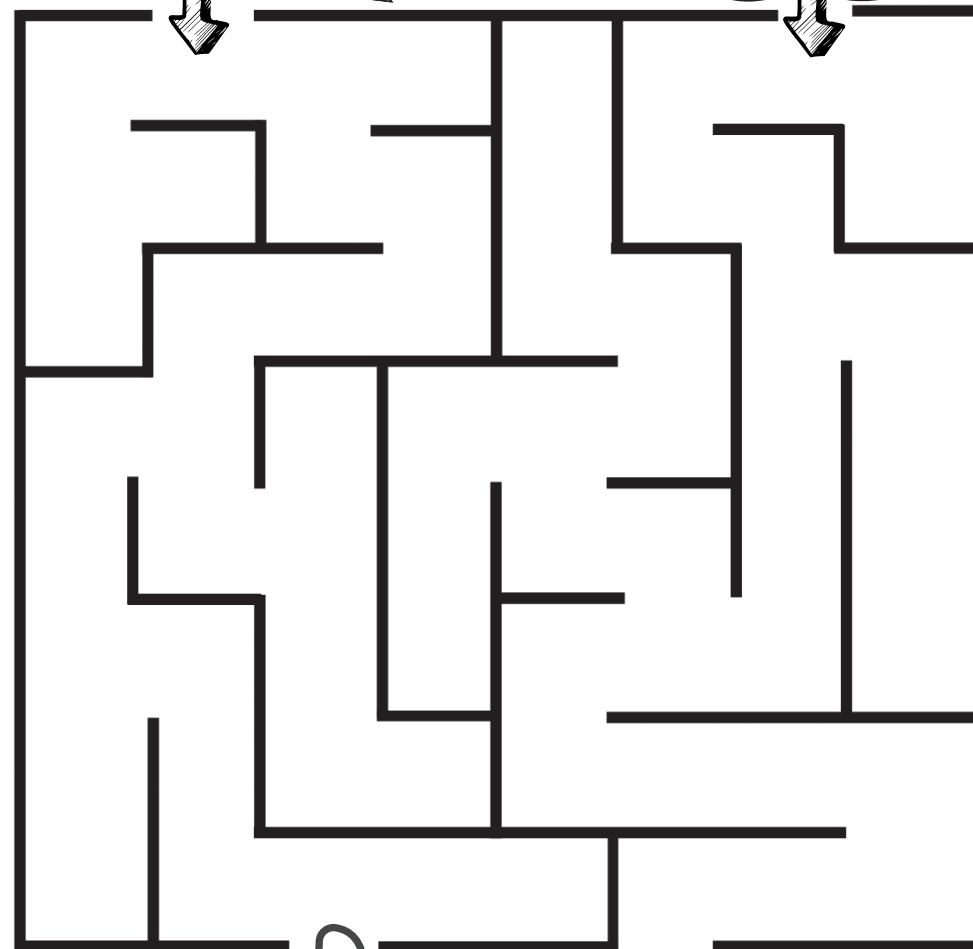
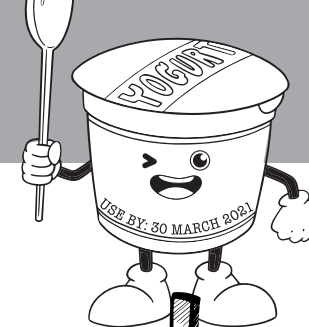
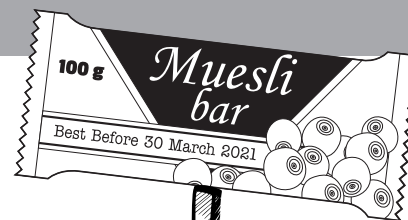
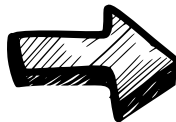
#### Ingredient Label Sudoku

Every line, row & four-square box must have only one of the four allergens. Can you fill the rest?

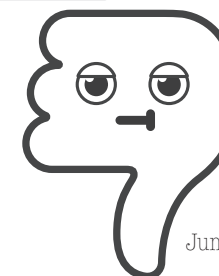
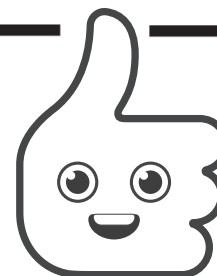
			
			
			

### CRIME BUSTER

If food looks, smells and tastes ok it does not mean it is safe to eat. Never eat food past the 'use by' date and follow the storage instructions on the packaging.



'Best Before' = Not 100% Quality. Ok to eat. Food has just lost colour, flavour or texture.



'Use by' = Food safety risk. Do not eat. No longer safe and will make you sick.

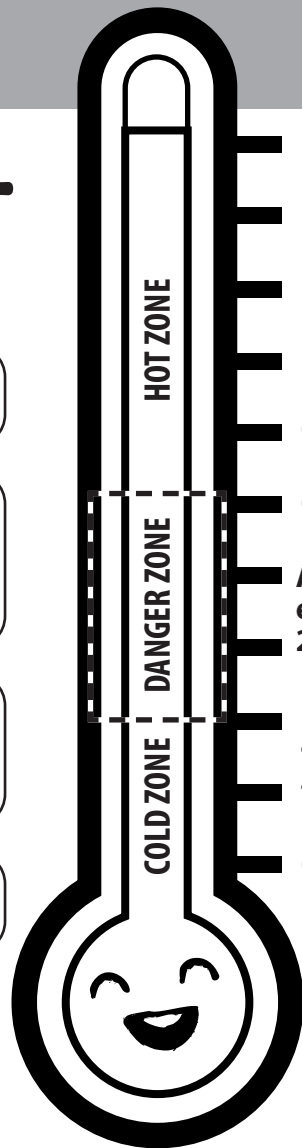
## CRIME SCENE #4

# Cook Smart - Keep it Hot



### FSI Squad Mission:

Draw a line to the temperature on the thermometer that these meals should be cooked or reheated at to be free from harmful bacteria.



77°C Meat well done  
75°C Reheat food  
74°C Poultry  
71°C Meat medium  
63°C Meat medium rare  
60°C  
↑ Avoid eating after 2 hours  
5°C  
↓ Thaw in fridge between 0-5°C  
0°C

## CRIME BUSTER

Heat can destroy bacteria. Cooking meat to the proper temperature is the way to avoid food poisoning.

**Tip:** Cook minced meat, sausages and poultry right through to the centre. Pink should not be visible and juices should run clear.

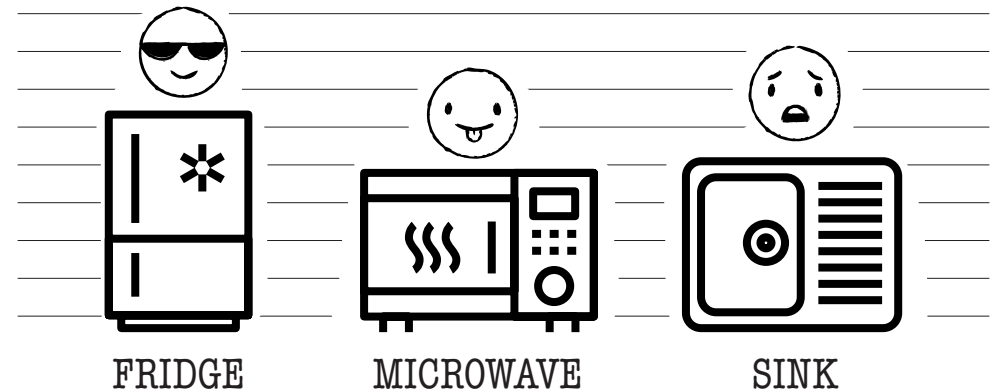
## CRIME SCENE #5

# Defrost Smart - Keep it Cold



**FSI Squad Mission:** Meat needs care when defrosting to avoid bacteria growing in the Danger Zone. Circle the suspect that should not be used to defrost meat.

### SUSPECT DEFROSTER



FRIDGE

MICROWAVE

SINK



**TIP:** Keep your fridge below 5°C. Don't overcrowd the fridge shelves and shut the fridge door!



Store your leftovers in the fridge as soon as possible, within 2 hours.



## CRIME SCENE #6

# Prep Smart - don't shower raw meat

Never wash raw meat, like steak and chicken, before cooking. Water from washing can splash and spread bacteria onto benches, sponges and ready-to-eat food. Yuck!



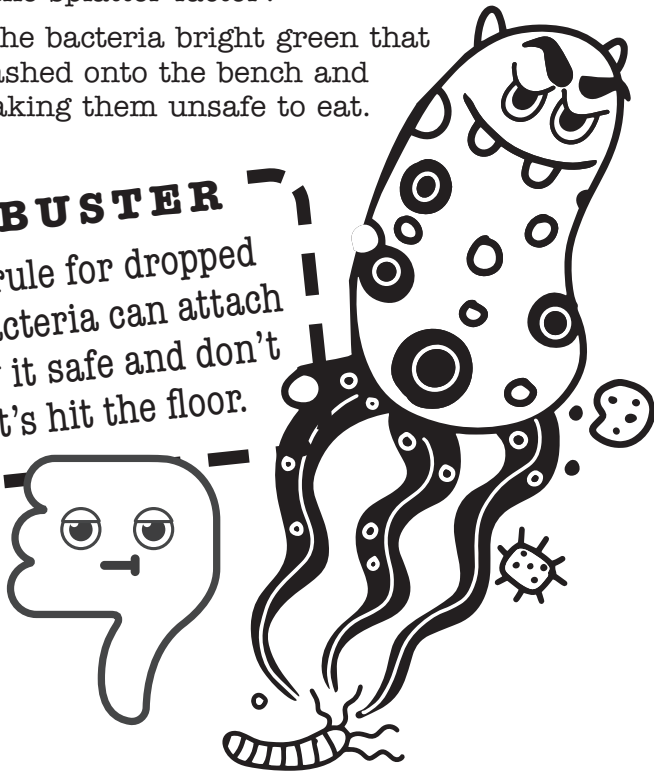
### FSI Squad Mission:

What's the splatter factor?

Colour the bacteria bright green that has splashed onto the bench and food, making them unsafe to eat.

### CRIME BUSTER

The 5 second rule for dropped food is false. Bacteria can attach quickly so play it safe and don't eat food that's hit the floor.





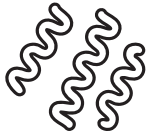
## LESSON #2

# Up close to Baddies

Most food poisoning is caused by baddies (like viruses, bacteria and toxins) in or on food that has not been stored, prepared or cooked correctly.

### FACT FILES

#### Common food poisoning



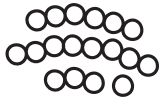
**Bacteria:** *Campylobacter*

Found: in grooves on chopping boards from raw chicken meat



**Bacteria:** *Salmonella*

Found: uncooked egg or deli meat sandwiches stored in hot lunch boxes, and raw egg whites



**Bacteria:** *Listeria*

Found: the seal of your fridge door



**Viral:** *Norovirus*

Found: unwashed hands of a sick person



**Toxin:** *Bacillus cereus*

Found: cooked rice not refrigerated

**TIP:** Heat won't kill toxins. It's important to cool leftover cooked rice quickly and store in the fridge asap. Only reheat rice once, then throw away the leftover.

Food poisoning symptoms are not fun and can include fever, pains in the tummy, vomiting, diarrhoea and really bad headaches

## Lab Forensics

FSI officers often send food samples to scientists in labs to test for baddies that have caused serious food poisoning.

Help the lab identify the 5 baddies and colour them:



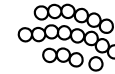
### Lab ID chart



*Campylobacter* - purple



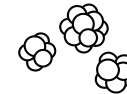
*Salmonella* - blue



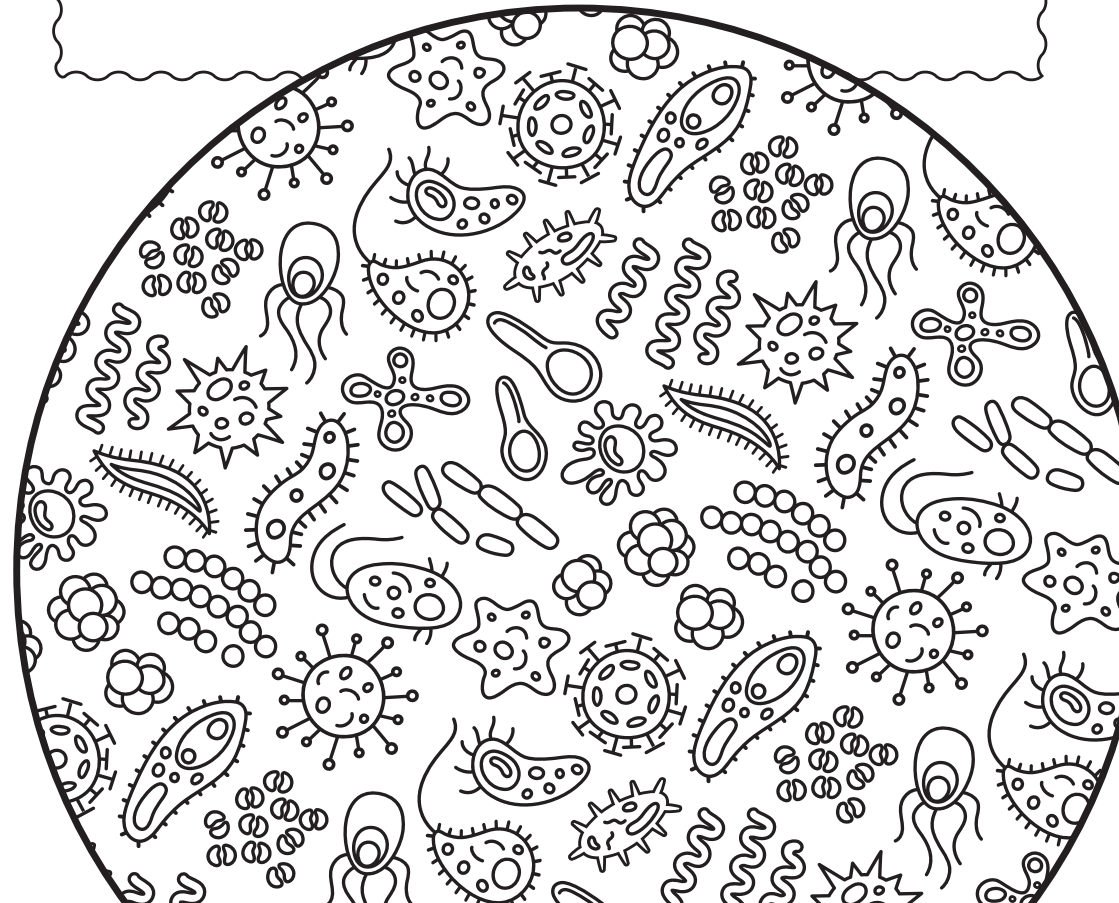
*Listeria* - green



*Norovirus* - orange



*Bacillus cereus* - yellow



# Scores on doors

Look out for the 'Scores on Doors' stars when you're next eating out at your local restaurants and shops.

The stars show results of regular inspections by FSI officers and how well the Golden Rules of Food Safety are followed.

Make good decisions where to eat to reduce food safety risks and illness from food. Enjoy your meal with greater confidence.



= **Excellent level**



= **Very good with minor improvements needed**



= **Good general standard with non-critical improvements needed**



**No stars** = **No grade with major safety issues**


## ACTIVITY #2

# Star rate your home kitchen






**FSI Squad Mission:** Don't let your kitchen become a crime scene. How many stars does your kitchen score? Use your new Junior FSI skills to rate your kitchen and ask a parent or family member the following questions:

### Star rating checklist questions:

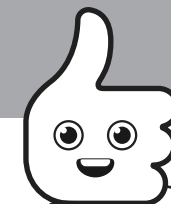
KEEP IT CLEAN 		Yes	No
1	Do you always wash your hands with soap before touching food?		
2	If you have pets, do they stay off the bench tops?		
3	Do you use different chopping boards for raw meats and vegetables?		
4	Do you frequently clean or replace sponges and dish cloths?		
5	Do you always wipe or clean the benches before preparing food?		
6	Do you keep the fridge clean from bits of food and spills on the shelves and in the drawers?		
7	Do you always store raw meat on a shelf below cooked / ready-to-eat food in the fridge?		
8	Do you always store eggs in the carton on a shelf and never in the fridge door?		
9	Do you know never to wash raw meats in the sink before cooking?		



KEEP IT HOT 		Yes	No
10	Do you always use a meat thermometer to check the temperature when cooking meat and chicken?		
11	Do you always reheat leftovers until they are steaming hot and at least 60°C?		
12	Do you always cook mince or sausages until there's no pink left?		
KEEP IT COLD 			
13	Do you keep your fridge at or below 5°C, keeping it out of the 'danger zone'?		
14	Do you know not to defrost frozen food on the bench or sink?		
15	Do you know not to leave cooked food at room temperature for more than 2 hours?		
16	Do you always use cooler freezer bags or an esky when shopping?		
17	Do you cool down steaming food before putting into the fridge?		
CHECK THE LABEL 			
18	Do you know not to eat food past the 'Use by' date?		
19	Do you follow storage or cooking instructions on food labels?		
20	Do you know to check the label for food allergens?		



## Your Star Rating



You can't go wrong if you follow the 4 Golden rules of food safety!

If you answered:

**Yes** to all 20 questions

= ★★★★★

**Excellent.**

Well done and keep up the amazing food safety actions.

**No** to 1-5 questions

= ★★★★★

**Very good.**

You are doing a great job but just need to work on minor improvements.

**No** to 6-9 questions

= ★★★

**Good.**

You are almost there but need to improve your hygiene and food safety.

**No** to 10 or more questions = no grade.

**Hmm...**

hope you don't get sick. Don't forget to learn and follow the Golden Rules of Food Safety



Find out more



Food  
Authority

## Food safety is the top priority

Did you know the NSW Food Authority was started in 2004 to help make food safe, from the farm paddock to your plate?

The Food Authority makes sure food produced and sold is regulated and safe to be eaten, while providing up-to-date information and food safety tips for everyone.

To find out more you can connect with NSW Food Authority by



Visiting the website [www.foodauthority.nsw.gov.au](http://www.foodauthority.nsw.gov.au)



Following @nswfoodauthority on Facebook to get tips and food product recall information (ask a parent first please)

### FACT FILES

#### What is a food recall?

A food recall is the action taken to remove unsafe food from being sold off the shop shelf and being eaten to protect your health and safety.

The reason for recalls varies, but can be because of things such as bacteria found, foreign matter, labelling issue or undeclared allergen.

Always follow the instructions on the recall information provided by the NSW Food Authority to stay safe.



Keep your lunchbox safe for school. Freezer bag style lunch boxes are cool!

## 5 Steps to healthy hands

Follow the 5 steps for healthy hand washing before handling and eating food



1 Wash your hands with soap and warm running water.



2 Rub soap into your hands. Don't miss the tricky spots on the backs of your hands, between your fingers and under your nails.



3 Scrub your hands for at least 20 seconds – time yourself by humming the "Happy Birthday" song from beginning to end.



4 Rinse your hands under clean, warm, running water to remove all the soap.



5 Dry your hands using a clean towel (preferably paper) before preparing or eating food.

### Wash your hands BEFORE:



Touching food, cooking or eating

### Wash your hands AFTER:



Going to the toilet



Touching raw meat or eggs



Sneezing, coughing or blowing your nose



Touching rubbish, mess or chemicals



Touching animals or playing outside



Touching a cut or sore

# FSI:

Food Safety  
Investigation

**CASE CLOSED  
GUILTY - bad  
food safety habits**

## Kitchen Crimes

Well done for cracking the case!  
Thankfully Barry and Sally are  
feeling much better. Your keen  
investigation skills and knowledge  
of the Golden Rules of Food Safety  
will help you avoid food poisoning.



# FSI:

Food Safety  
Investigation

Kitchen Crimes



**Congratulations! You have  
passed your training. Welcome  
to the Junior FSI squad!**



**I'm trained in hygiene  
and food handling safety  
practices.**

*Golden Rules of Food Safety RULE!*

Your next mission (if you choose to accept):

- ☐ Star rate your family and friends kitchens.
- ☐ Investigate how 'cool' your class lunch boxes are.
- ☐ Discover the world of 'allergens' and who the usual suspects are.



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