If you are a vegetarian, owner of a vegetarian food business, or someone who works in a vegetarian food business, then this page is for you.

Food poisoning is not only associated with meat and meat products. The increasing range of foods now available to consumers, and the added demand for reduced reliance on chemical fertilizers and pesticides, means that every food handler at home and at work now has a major part to play in reducing the risks of food poisoning.

Are your ingredients safe?

High-risk foods, which require little or no further preparation or treatment, provide the ideal breading ground for various bacteria that can make one or a number of individuals ill. This may include a range of vegetarian ingredients. For example:

- Rice
- Tofu
- Sprouting beans
- Fresh fruits
- Vegetables
- Eggs
- Dairy products
- Lentils
- Herbs
- Melons and squash
- Lettuce
- Soft fruits
- Coconuts
- Fruit juices
- Nuts

All the above have been implicated with food poisoning outbreaks in the UK, Europe and America.

Food poisoning bacteria

Food poisoning bacteria that have been associated with vegetarian food items include examples such as:

- Salmonella: eggs, sprouting beans, coconuts.
- Bacillus cereus: rice, cereal products, cheese products.
- Clostridium botulinum: fresh yoghurt purees, tinned vegetables, honey.
- Clostridium perfringens: beans and raw unpeeled vegetables.
- E.coli: vegetable and salad crops in contact with raw sewage or untreated slurry, fresh, unpasteurised fruit juices.
- Listeria monocytogenes: soft cheeses, ice cream, vegetables.
- Staphylococcus aureus: dairy products, eggs.

The reasons? Mainly due to cross-contamination, inadequate chilling, improper cooking, and a lack of effective cleaning together with disinfection.
Cross-contamination

The growth in demand for organically produced food means those chemicals are no longer used for fertilizers or pesticides. Instead crops and produce may come in contact with:

- contaminated water,
- contaminated manure or sewage which are used for fertilizers
- faeces from birds and pests.

In a food premises and at home contamination may occur following direct or indirect contact with:

- pests and pets
- contaminated food contact surfaces
- items of equipment use for meat preparation
- other contaminated foods
- infected food handlers
- dirty hands

Do you own or work in a vegetarian food business?

If you own or work in a food business then you will need to comply with:

- Food Safety Act 1990
- EC Regulation 852/2004

In addition, you will need to:

- Prepare and implement a food safety management procedure based on Hazard Analysis Critical Control Points (HACCP)
- Ensure that you and your colleagues have received suitable food hygiene training and that the training is put into practice
- Understand the importance of temperature control and storage
- Follow suppliers instructions concerning storage, chilling, freezing, thawing, cooking and stock rotation
- Know about the correct use of cleaning agents and disinfectants
- Develop a food safety culture in the business

If you have a salad bar:

- Ensure that there is a sneeze screen
- Provide separate utensils for each type of salad
- Do not put salads on display too far in advance of opening
- Store at 8°C or below
- Remove any old salad items and their containers before replenishing
- Use pasteurised egg in mayonnaise
- Provide customers with clean plates if they require second helpings
- Remove and dispose of any unused salads within 2 hours of display

Read the Industry Guides to Good Hygiene Practice for the Food Safety (General Food Hygiene) Regulations 1995. Your local authority environmental health department will be able to provide you with further information about these and other matters relating to good food hygiene practice.

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**General advice for vegetarian food handling**

- Purchase food from reputable suppliers
- Discard food with old "use by dates"
- Keep raw foods away from food preparation areas
- Wash all fruit and vegetables under running water
- Peel vegetables and fruits where possible
- Read and follow instructions on packaging
- Remove excess water from foods
- Don't sample unpasteurised egg mixes such as cake mix with raw egg
- Purchase food as near to time of preparation as possible
- Cook foods to as near to time of service as possible
- Do not re-freeze thawed foods
- Keep hot food hot (above 63°C)
- Cool cooked foods in shallow containers (no more than 75 mm in depth)
- Keep cold food cold (below 1 to 5°C)
- Keep frozen foods below (-18°C)

In addition, hand washing before and after handling foods, work equipment, dustbins, touching hair, face and pets, etc is vital. Use warm water and a liquid soap. Hand washing will only be effective if it lasts for more than 20 seconds. Use a paper towel for hand drying.

If you have diarrhoea, vomiting, or infectious disease do not handle food. It is important that you reduce the risk of making others ill by contaminating food with whatever it is that you have that is making you ill. Food handlers in a food business must report to their supervisor if they have any of these symptoms. Domestic food handlers should stay away from food contact. Do not go back to handling food for others until you have medical clearance. Use a waterproof dressing if you have a cut or abrasions.


**Contact the Environmental Health team** [1]