Paediatric Haematology and Oncology

Food safety when your child is Neutropenic (Grade/stage 1)

Why is food safety important?
When your child is neutropenic the number of white blood cells (neutrophils) in their body is dramatically reduced. White blood cells normally help to fight organisms that cause infection, including food related infections. Being neutropenic puts the body at greater risk of infection from bacteria or fungus in foods. Chemotherapy and radiotherapy also can damage the gut lining which normally acts as a barrier against bacteria, further increasing the risk of food borne infections. These guidelines will help reduce the risk of infection by outlining foods to avoid.

When should a neutropenic food safety diet be followed?
When the blood neutrophil count is less than $0.1 \times 10^9$ /Litre.

How long should this diet be followed?
These guidelines should be started as soon as your doctor or nurse confirms that your child is neutropenic.

Once you are no longer neutropenic you can be less cautious about eating the foods mentioned in this leaflet but please monitor the neutrophil count carefully and if at risk of being neutropenic follow the food safety diet.

Food service on the ward
To help avoid food-related infections, we ask that:

- We do not encourage you to bring in homemade, takeaway or frozen food from outside the ward.
- If you wish to give your child foods brought in from outside the ward, they must be on the allowed food list and a food disclaimer form needs to be completed. Please ask a member of ward staff for this.
- If wishing to store brought in food, it must be correctly labelled and stored. Please ask a member of ward staff for instructions.
- Visitors may bring in snacks from the ‘allowed list’ (see below) or tinned food.
- No parents, visitors, patients or children should to enter the ward kitchen.
- Parents and visitors are welcome to go into the parent’s room to make drinks.
- No hot drinks must be taken out of the parent’s room. Covered mugs are available to purchase on the ward if you wish to take hot drinks into your child’s room.
Food safety

One of the easiest ways to avoid food related infections is to practice good food safety. Good food safety and hygiene is important for the entire family. Food must be stored, handled and cooked properly to avoid food poisoning. Here are some important points to remember when preparing food:

- Wash hands thoroughly in hot soapy water before and after handling food.
- Keep your kitchen clean. Wash all work surfaces, chopping boards and utensils in hot soapy water after use.
- Prepare and store raw and cooked food separately. Keep uncooked meat and fish at the bottom of the fridge in a covered container to avoid dripping or leaking into the fridge.
- Check the fridge and freezer temperatures - fridge temperatures should be 5°C or lower (check this regularly) and freezer temperatures should be set below minus 18°C.
- Check use by dates. Avoid buying foods at or near the ‘use by’ date and do not eat food after this date.
- Cook food well. Always follow the cooking instructions carefully. Avoid the use of microwaves for cooking foods; but they can be used for defrosting when followed by conventional cooking methods.
- Take chilled and frozen food home quickly and put it in the fridge or freezer immediately.
- Food can be reheated as long as it is piping hot throughout and consumed within 24 hours of cooking or defrosting. The only exception is reheating cooked rice. Rice which has been previously cooked must not be reheated. Only eat rice immediately after cooking whilst still hot.
- Keep canned food clean by washing the outside of cans and the can opener with hot soapy water before using (this includes cleaning the top of canned fizzy drinks before drinking straight from the can).
- Avoid damaged foods and buying foods in damaged containers and do not eat mouldy foods.
- Keep cold food cold and hot food hot.
- If in doubt - throw it out.

Other points to remember

- Buy small sizes of condiments, preservatives, sauces, margarine, etc. Once opened keep in the fridge and use within seven days. Use clean cutlery every time you use these products.
- Avoid salad bars, buffets and condiments from large containers especially when eating out.
- Avoid refreezing thawed foods.
- Avoid eating leftover food from another meal.
- Wash and peel fruit, vegetables and salads thoroughly.
When eating out

Choose freshly prepared foods from reputable outlets. Make sure food is piping hot and when served and cooked all the way through. If eating out choose Take-away or restaurant food that is cooked after being ordered rather than food that has been kept in a heated cabinet or on a hot plate. Avoid salad bars, street vendors, market stalls and ice cream vans.

The National Food Hygiene Rating Scheme is a useful tool to be able to check Take away, catering and restaurant outlet standards.

Useful wed links: To search for a food outlets hygiene rating: [http://ratings.food.gov.uk/authority-search](http://ratings.food.gov.uk/authority-search)

For further information on the rating scheme: [http://www.food.gov.uk/multimedia/pdfs/enforcement/fhrsconsumerguide.pdf](http://www.food.gov.uk/multimedia/pdfs/enforcement/fhrsconsumerguide.pdf)

When neutropenic only choose to eat from outlets with a high food hygiene rating of 4 or 5.

Nutritional supplement drinks

If you are advised by your Dietitian to take nutritional supplements, these can be stored unopened at room temperature. Once opened these drinks should be stored as followed:
- Unrefrigerated in your child’s room up to 4 hours
- And when at home, refrigerated for up to 24hrs

High risk foods

The following table shows foods that often contain organisms which can cause food related infections. They should be avoided if you become Neutropenic. Alongside are alternatives that are safe to eat.

<table>
<thead>
<tr>
<th>Avoid</th>
<th>Alternatives</th>
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</thead>
<tbody>
<tr>
<td>All unpasteurised dairy products e.g milk sold on local farms.</td>
<td>Any pasteurised milk/milk products, soya milk, Jersey milk or UHT milk.</td>
</tr>
<tr>
<td>Soft cheeses made with unpasteurised milk e.g. Brie, Camembert, goat’s cheese, feta, parmesan and ripened/blue veined cheeses like Stilton, Danish blue and any salad dressings containing such cheeses.</td>
<td>Cheeses made with pasteurised milk and processed cheese like Dairylea, Kraft, and Philadelphia. Pasteurised parmesan and mozzarella. Paneer made with pasteurised milk. Vacuum-packed, pasteurised and hard cheese e.g. cheddar, edam.</td>
</tr>
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### Avoid

<table>
<thead>
<tr>
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<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw and lightly cooked shellfish, cold seafood (prawns, mussels, crab)</td>
<td>Hot well-cooked shellfish such as prawn curry</td>
</tr>
<tr>
<td>Raw/under cooked meat, poultry, fish like meat which is still pink such as sushi, caviar and oysters. Cured/smoked meats e.g. Parma ham, salami.</td>
<td>Well cooked meat, poultry, and fish. Vacuum packed cold meats and poultry such as turkey or ham, stored below 5°C and eaten following manufacturer’s instructions. Tinned meat and fish. Ready to eat smoked fish from a vacuum packet is allowed, if consumed immediately from a freshly opened new packet.</td>
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<tr>
<td>Raw or undercooked eggs such as omelettes, boiled or scrambled eggs with a 'runny' yolk. Any dressing or products containing raw egg such as home/restaurant made mayonnaise, hollandaise/béarnaise sauce, Caesar salad dressing, ice-cream, mousse, eggnog, home / restaurant made meringue.</td>
<td>Hard boiled eggs, shop bought mayonnaise and other products made with pasteurised egg.</td>
</tr>
<tr>
<td>Probiotic or bio products such as probiotic-containing supplements and drinks e.g. Actimel, Yakult, probiotic tablets/capsules.</td>
<td>Any product that does not describe itself as &quot;bio or probiotic” this includes: Live, Plain, fruit or natural yogurts</td>
</tr>
<tr>
<td>All meat and veg pâtés, fish paste, fresh or cold deli meats and poultry from delicatessen counters.</td>
<td>Pasteurised paté and paste in tins or jars that do not need to be refrigerated until opened.</td>
</tr>
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### When treatment has finished

If your child has finished all their chemotherapy and their white cell count has fully recovered, it is safe to reintroduce the “high risk” foods.

If your child is now receiving maintenance chemotherapy (oral chemotherapy) e.g. for leukaemia, this should not make them neutropenic, so it should be safe to reintroduce high risk foods. However, there are occasions when your child may still become neutropenic if, for example their maintenance chemotherapy dose is high or they are unwell. In these situations it would be safer to avoid the high risk foods.
Your dietitian is………………………………

If you require any further information or wish to comment on this leaflet, please contact:

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We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats: If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.

Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

Document history
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Contact number 01223 216655
Publish/Review date February 2017/February 2020
File name Food_safety_when_you_are_neutropenic_(Grade / Stage 1).doc
Version number/Ref 3/PIN1717 /Doc ID 100243