

## Good nutrition for children with cancer

### Why is good nutrition important?

Good nutrition is important during your child's treatment to ensure they can heal, grow and develop normally. Children that are well nourished can fight infections, cope with their treatment better and tend to spend less time in hospital. The following information provides tips on improving your child's dietary intake to maximise their nutrition during treatment.

### Does my child need a special diet?

Every child responds differently to treatment. Your child may go through stages where they need extra energy (calories/kilojoules) and high protein foods to maintain their weight and assist with growth, repair and muscle maintenance.

When your child is well, it is important to offer a range of healthy foods including fruits and vegetables, meat and meat alternatives (e.g. beef, chicken, fish, eggs, tofu and legumes), dairy foods and wholegrain breads and cereals. Encourage your child to eat regular family foods and participate in mealtime routines when they are well. Try not to bribe your child with sweets and treat foods as they may develop a preference for these foods during and after treatment, making it more difficult to achieve a healthy diet.

### High energy eating

Most children will experience poor appetite at some stage during their treatment. Some children will also have problems with slow growth or weight loss. During these times, it is important to have foods that are high in energy (kilojoules) as children can find it difficult to eat the large amounts of food required to maintain their weight. You may need to start your child's high energy diet as soon as their treatment starts.

### High protein eating

Protein is used by the body for growth, repair, energy and maintaining muscle. When children are sick, their protein needs increase. Foods that are high in protein include meat, dairy, legumes (beans and lentils), eggs, tofu, nuts and seeds. It is important to have some high protein foods every day. Your dietitian can provide you with some information about high protein and energy foods.

## **Supplements and nasogastric feeding**

Children often come to a stage during treatment when eating a high protein and energy diet is no longer enough to maintain good nutrition and weight. At this stage your dietitian may talk to you about including oral supplements in their diet or give you some recipes for high energy drinks. These nourishing fluids help increase your child's nutrition in addition to their food.

You might have seen some of the other patients with nasogastric tubes. Nasogastric feeds provide extra nutrition when children are unable to eat or drink enough to maintain good nutrition over a longer period. Nasogastric feeding is a common part of treatment. It is typical for children to feel anxious about insertion, but support can be given via the Dietitian and the Occupational Therapist. It is suggested that families should aim to have discussions with children about the benefits of good nutrition and try to refrain from using a NGT as a threat (for poor eating), as this can increase your child's anxiety.

## **Side effects of treatment**

Side effects of treatments and medications can impact on your child's experience of eating, or their ability to eat enough to maintain their weight.

Try and eat with your child. Listed below are some of the common side effects and some tips to help maintain nutrition during these times.

## **Nausea and vomiting**

- Children often dislike the foods eaten while having treatments, so keep favourite foods to a minimum until your child is well.
- Small, frequent snacks are usually easier to tolerate. Not eating can make nausea worse.
- Try dry salty foods such as vegemite on toast, crackers, noodles, plain boiled vegetables (salt can be added to taste) and plain potato chips.
- Offer food in very small amounts (e.g. ½ slice of vegemite toast) often throughout the day.
- Avoid leaving food in front of your child for more than 10 minutes. It may help to keep foods out of sight; avoid eating in front of your child, remove food from bench tops and tray tables in hospital and change the channel if a cooking program is on.

- Smells of cooking foods can make nausea worse. Try to keep your child away from the kitchen, serve foods cold or cook in the microwave to reduce smells.
- Fluid intake is important. Try water, Hydralyte™, cordial, flat lemonade, ginger ale or ice blocks. Your dietitian can advise on supplements that are suitable for your child. Serve drinks cold and drink through a straw if smells are worsening nausea.
- Try and keep fatty, rich or spicy foods to a minimum.

### **Mouth sores**

- Eat soft, bland foods that don't require a lot of chewing e.g. custard, jelly, ice cream, macaroni cheese, mashed potato and noodles.
- Cold or lukewarm foods may be preferred.
- Avoid frozen foods until mouth sores heal.
- Avoid acidic (e.g. oranges, tomatoes, pineapple) and spicy foods.
- Drink cool fluids and milkshakes/thick shakes through a straw to by pass sores.
- Good mouth care is important; follow the directions of your healthcare team.

### **Taste changes**

Medications and treatments can affect taste buds, so foods may taste different to your child. To overcome these changes, children often crave salty foods and extra flavouring.

- Offer salty snacks e.g. salt and vinegar chips, cheese flavoured chips, crackers.
- Experiment with new foods and flavours. Children may go through phases where they prefer the same foods.

### **Steroids**

A common side effect of steroid treatment is a large increase in appetite resulting in rapid weight gain. This may be distressing for both the parents and child. Your child may be very hungry and need several snacks during the day. Your child may also gain weight during steroid treatment. Some of this weight will be fluid that is lost when the steroids are stopped. Some weight gain may be beneficial if your child has recently lost weight or may lose weight with further treatment. If your child's weight is in the healthy range or if they are overweight, weight gain should be minimised.

- Children often crave high fat and salt foods with steroid treatment. Where possible, minimise their exposure to these foods. Keep healthy meals and snacks readily available.

- Offer high protein foods – these foods may help your child stay full for longer.
- Foods with a low Glycaemic Index (GI) such as pasta, wholegrain breads, noodles, and dairy products (e.g. milk, yoghurt, custard) may help your child stay full for longer. Ask your dietitian for more specific information on low GI foods.
- Avoid adding extra fats to meals – grill, bake and steam meat and vegetables.
- Avoid cordials, soft drinks and sugar lollies – these foods provide lots of extra calories but no nutrients.
- Try to distract your child with other activities such as playing games, reading and outdoor activities.
- Offer water in between snacks and meals to help fill your child up

### **Diarrhoea**

- Encourage small frequent meals throughout the day.
- Choose refined breads and cereals – white bread, white rice and pasta.
- Avoid fatty, rich and spicy foods.
- Dairy products can sometimes make diarrhoea worse. Choosing lactose free products may help. Speak to your dietitian before eliminating or changing dairy products.
- Offer your child plenty of fluids to replace those lost.
- If your child is on nasogastric feeds, your dietitian may need to change their formula, or provide additional fluid with their feed.

### **Constipation**

Constipation is a common side effect of chemotherapy and/or other drugs related to therapy. To prevent medical complications, always discuss concerns with your child's doctor. Medications such as *Movicol*® may be prescribed. Often changes to diet alone will not be enough to treat constipation, but there are some tips you can try:

- Offer plenty of fluids including water, milk, fruit juice, soup.
- Offer foods that are high in fibre including fruit and vegetables, wholegrain breads and cereals.
- Encourage some light physical activity such as walking or active play.

## Food Hygiene

Your child's immune system defences will be low as they go through treatment. Preparing and storing food safely is especially important when your child's counts are low.

- Always wash hands with soap and warm water, before and after preparing food or eating.
- Avoid food from the "Deli" – buy meats pre-packaged in the refrigerator section at the supermarket.
- Avoid salad bars and prepared salads and soft cheeses (e.g. camembert, uncooked ricotta, blue vein).
- Keep cold foods cold and hot foods hot!
- Never store cooked meat with raw meat. Do not use the same surface or knife to prepare raw foods and cooked foods.
- Thaw foods in the fridge and cook foods immediately after thawing.
- Ensure meats / eggs are well cooked.
- Wash fruit and vegetables well.
- Refrigerate 'leftovers' within two hours of preparation and eat within 24 hours.
- Choose takeaway foods wisely. Avoid foods when you are unsure when they have been cooked or prepared, or if they are not kept hot.

## Eating well after treatment

Some children need help returning to a normal diet after their treatment is finished. There are lots of reasons for this including taste changes, long term nasogastric feeding, medical procedures, 'fussy' eating before treatment, and / or physical difficulties with chewing and swallowing.

Infants who have not started on solids foods before treatment sometimes need help with foods because their feeding progress has been delayed.

After treatment, your child may need encouragement to return to a healthy diet including a range of fruits, vegetables, meats, dairy products and grainy breads and cereals. This is important to ensure normal growth and to teach them good eating habits for later in life. Your dietitian can provide more information about an appropriate diet for your child's age.

Speech pathologists work together with dietitians to support feeding for children during and after treatment. While dietitians primarily monitor growth and nutrition; speech pathologists look at the child's ability to eat, chew, swallow and manage a range of textures and tastes. The oncology speech pathologist is available to discuss concerns about your child's feeding and swallowing skills.

Usually, we wait until children have finished their active treatment to work on feeding. This gives children a chance to feel better and return to their normal diet by themselves first. If your child is having difficulty transitioning off their nasogastric feeds or is still eating a very limited diet after treatment, they may benefit from individual or group feeding therapy. Discuss your concerns with your doctor or dietitian who can refer to the oncology speech pathologist.

### **Suggested meal plan**

BREAKFAST
MORNING TEA
LUNCH
AFTERNOON TEA
DINNER
SUPPER

Things I can do to improve my child's nutrition:

1.

---

2.

---

3.

---

4.

---

**For further information contact your Dietitian:** \_\_\_\_\_