Optimizing Nutrition for Children with Cancer

OPACC Annual General Meeting, June 2017

Rivanna Stuhler, RD, Clinical Dietitian
Objectives

• Overview of basic nutrition in paediatric cancer
• Review of commonly faced nutritional challenges and how to address them
• Alternatives to oral nutrition – practical options
• Question time!
Questions to consider:

• What does food and nutrition mean to you
  – in general?
  – when caring for your child?

• What nutritional challenges have you faced/continue to face since your child’s diagnosis?

• Do you struggle to feed your child? If yes, how does this make you feel?
Why is nutrition important for a child with cancer?

• Continued growth and development
• Good nutrition can lead to:
  – Increased survival
  – Improved treatment tolerance
  – Fewer treatment delays
  – Increased capacity to fight off infection
  – Improved outcomes later in life
  – Higher quality of life
Barriers to provision of optimal nutrition during cancer therapy

• Treatment
  – Chemotherapy
  – Radiation
  – Immunotherapy
  – Other medication

• Changes to routine

• Loss of control (child and family)
General nutrition focus during cancer therapy

- Wide, varied diet based on Canada’s Food Guide
- Adequate amounts of
  - macronutrients (carbohydrate, protein, fat)
  - micronutrients (vitamins, minerals)
- Focus on micronutrients affected by treatment
- Symptom management
- Focus on healthy high protein/high energy foods to balance good days with more difficult
- “Hospital rules” vs. “home rules”
Nutrients of note

• Macronutrients:
  – Carbohydrates – major source of energy
  – Protein – importance in maintenance of lean body mass (aka muscle – the tissue that uses chemotherapy most efficiently)
  – Fat – energy source, important for skin/cushioning organs

• Micronutrients:
  – Calcium/Vitamin D – important in bone health. Extra required with steroid use
  – Potassium/magnesium/phosphate
    • Treatment may impact the ability of the kidneys to hold on to these minerals
    • Diet changes or supplements may be recommended
Are there any “bad” foods?

• NO!

• Trying to maintain balance is the goal....but not always possible

• Home and hospital rule sets are helpful
Are there any foods that may help/worsen side effects?

- YES!

- Common side effects of therapy:
  - Nausea/vomiting
  - Constipation
  - Diarrhea
  - Mucositis (mouth sores)
  - Dry mouth
  - Swallowing difficulties (dysphagia)
Nausea and vomiting

• Most common side effect of therapy
• Awareness, prevention, and early management is vital
• Avoid favourite foods when your child is nauseous
• Avoid heavy/fatty/fried/smelly foods
• Choose bland/starchy/crunchy/salty foods
• Focus on fluids
• Good mouth hygiene can help
• Work with your team to come up with an anti-emetic regimen that works
Constipation

• Extremely common
• Will affect appetite because of a constant feeling of fullness
• Focus on fluids and higher fibre foods
  – Whole grains, oatmeal, fruit, nuts, dried fruits etc.
• Some children require a medication regime to keep them regular
• Encourage movement!
Diarrhea

- Choose soluble fibre to help bulk up stool
- Oatmeal, potatoes, oat bran, bananas, applesauce, rice
- Avoid large volumes of juice or sweetened beverages
- Avoid large amounts of artificial sweetener (including sugar-free gum)
- Your child may require additional salt and potassium if the diarrhea is chronic
Mucositis

- Mucositis is extremely painful and may appear throughout the entire GI system
- **Pain control** is key
- Focus on fluids and soft, cold/cool foods
- Add sauce or spreads to foods to make them more “wet”
- Avoid acidic (like citrus), spicy, salty foods when mucositis is active
Dry Mouth

- Extremely common with medication, radiation
- May affect taste and desire to eat
- May make chewing and swallowing more difficult
- Offer moist foods, and foods with sauces/spreads
- Offer cold/frozen foods
- Encourage your child to sip on a fluid in between bites
- Tart/sour candy or gum may help stimulate saliva
- Consider commercial saliva products
Swallowing difficulties (Dysphagia)

- Requires an assessment from an Occupational Therapist
- Your OT and dietitian will work together to help create a safe plan for your child’s nutrition
Appetite changes

• Appetite changes or fluctuations are common

• To make up for the “bad” days, focus on healthy high protein/fat options on good eating days
  – High fat dairy products
  – Sauces/spreads
  – Nuts
  – Adding extra butter/oil/avocado/cream to regular food etc.

• Offer small, frequent meals and snacks

• If your child gets full easily and stays full for hours, speak to your team; they may have a solution

• Ask your child if he/she has any symptoms of GI reflux, and work with your team to treat it
Taste changes

• Usually related to chemotherapy

• Children may prefer strong flavours and textures – tart, salty, sour, tangy, crunchy – and juicy foods

• Metallic tasting meat? Use plastic cutlery or sauces

• Encourage new tastes as a family

• Oral supplement too sweet? Add a pinch of salt, or heat up

• Room temperature foods may be preferred
Fatigue

• An under-reported nutritional effect of therapy
• Treatment itself exhausts many children
• The act of eating may be too tiring
• Try:
  – Smaller portions on smaller plates
  – Healthy high calorie/protein/fat foods
  – Add extra calories where possible
  – Avoid carbonated drinks or snacks close to meals
Tyrannosaurus Dex/The Dexorcist

• Most children aren’t capable of controlling or understanding the effects of steroids
  – Rage
  – Sleep disturbances
  – Ravenous appetite and thirst

• Consider lower fat/calorie versions of foods/snacks

• Avoid sugary or salty foods or drinks

• Encourage water and “juicy” foods (cucumber, peppers, watermelon etc.)
Behaviour changes

• Extremely common

• Usually related to a lack of control felt by the child and drastic changes to routine

• Eating is something a child can control

• Experiencing battles at the table? Speak to your team!

• “Hospital” and “home” rules help
What do you mean by a “healthy high energy/protein” diet?

• Boosting calories doesn’t mean replacing healthy foods with high fat/calorie processed food or junk food

• Choose higher calorie/fat versions of healthy foods

• This helps avoid sibling rivalry or fights
  – Example: everyone gets vanilla yogourt, but your child with cancer gets full fat, and the others a lower fat version

• Add extra calories to your child’s serving only after cooking

• Continue to offer fruits and vegetables, even if your child chooses not to eat them

• If your child gets dessert, everyone else does too

• Family treats are important
I’ve tried everything....but my child won’t eat!

• Speak to your health care team about other options

• Oral supplements
  – Long term compliance is poor (taste fatigue)
  – Expensive

• Nasogastric (NG) feeding tubes
  – Can be a huge stress relief
  – Temporary solution
  – Easy to insert
  – Easy to manage at home
  – A way to provide nutrition, medication, and fluids without a fight
  – May help remind your child what full/hungry feels like
  – Most children adapt to tubes remarkably quickly
Self care

• Vital!

• Trying to take some time for yourself helps make you a better, healthier carer

• Far more difficult than anticipated

• Don’t be afraid to ask for help – people are glad to say yes
Thank you!
Questions?