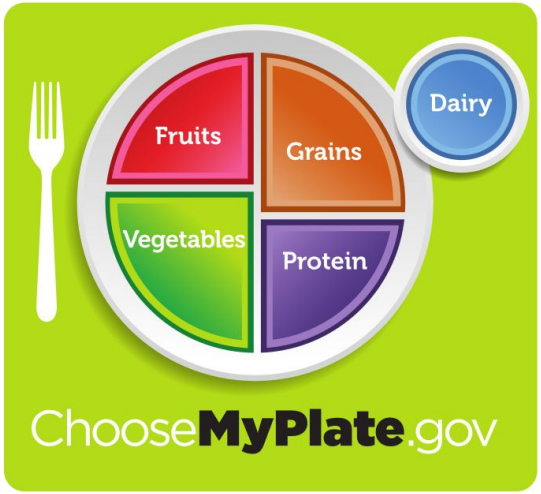
Nutrition Management



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BEST CHILDREN'S HOSPITALS U.S.News & WORLD REPORT RANKED IN 10 SPECIALTIES 2015-16

MAGNET RECOGNIZED AMERICAN NURSES CREDENTIALING CENTER

Carbohydrate counting

- Must count grams to determine insulin dose
- Ratio = amount of carbs per unit of insulin
  - ie. 1:15 -1 unit short acting insulin for every 15 grams
- Insulin needs to be given BEFORE eating
- Accuracy is IMPORTANT

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What Foods Contain Carbohydrate?

High in carbohydrate

- Breads, Cereals, Grains, Starchy Veggies, Beans
- Fruit, juices
- Milk/Yogurt
- Sweets

Low in carbohydrate

- Non-starchy vegetables
- Meat/Proteins
- Fats
- Free Foods

Remember to count them all both high and low!

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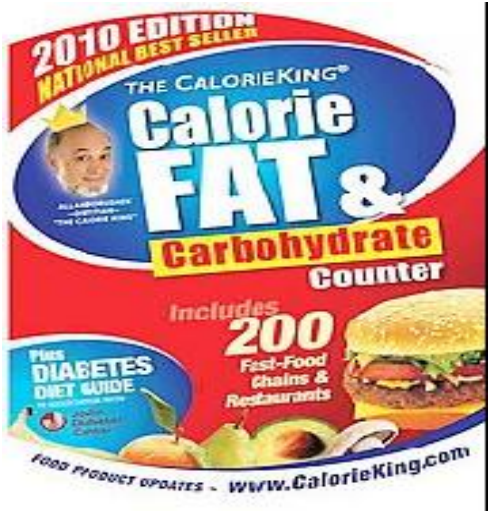
Where Can I Find Carbohydrate Information?



- School District website
- Food Service Director
- Food Labels
- ‘Calorie King’ book
- Websites
- Phone applications

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School Lunch

• Chicken nuggets (4)	10gm
• Honey mustard (1)	7gm
• Potato smiles (4)	16gm
• Steamed broccoli	2gm
• Fresh baby carrots	6gm
• Pears	20gm
• Chocolate milk	26gm
TOTAL	87 grams

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Calculating Insulin Dose

1) Student decides what they will eat/ won't eat
2) Use resource to count carbohydrates
3) Use ratio to calculate dose (or enter carbs into pump)
   - If 1:15, 87/15 = 5.8 units
   - If ratio is 1:12, 87/12 = 7.25 units
4) If on MDI round to nearest whole unit (ie 6 and 7)

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Scenario 1

- Johnny was given 4 units short acting insulin for a 60 gram meal but reports to you that he didn't eat his potatoes. His Pre- lunch BG was 102.

What should be done???

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What is the best answer?

1) Give him apple juice immediately
2) Offer him a carton of milk or slice of bread
3) Check his BG immediately
4) Nothing

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Physical activity

- Effects on BG varies
- Increased intensity ie. soccer usually will decrease BG
- Increased competiveness may increase BG
- Some may experience delayed hypoglycemia- as much as 12-24 hours after activity
- Children with PE/recess before lunch are at greater risk for hypoglycemia

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Rule of Thumb

- AVOID physical activity with moderate or large ketones
- May need carbs without insulin for every 30 minutes of vigorous activity
- Check BG before and after activity to determine strategy for glucose control

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Scenario 2

Sara is frequently coming to nurse's office after PE class with BG less than 70

What should you do?

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What is the best answer?

1) Snack before PE

2) Change previous meal ratio

3) If on pump - Change basal rate, use temporary basal, or disconnect pump

4) All of the above

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Recommendations

- First treat the low
  - 15 grams fast acting carb and re-check BG in 15 minutes
- Notify parents that this is a pattern

What are strategies to prevent these lows?

Snack before PE

Temporary basal rate

Change meal ratios

Disconnect pump

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Frequently Asked Questions

- How many carbohydrates should my kids have per day?
  - Minimum of 130gm/day, but the number can vary
  - More than a number we encourage healthy eating
- Is it possible to consume too few carbohydrates?
  - Yes. Carbohydrates are needed to fuel your brain and are important for growth.
- Should we be restricting carbohydrates to control high blood glucose?
  - Never withhold a meal or snack because glucose is high
  - Dose for the carbohydrates in the meal/snack + add a correction dose of insulin for the high blood glucose

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Carbohydrate Daily Amounts

- Is there a minimum required?
  - *130 grams per day at least*
  - *½ of calorie needs*
  - *Needs vary: age, growth spurts, activity level, puberty*
- Carbs should NOT be restricted, but do encourage healthy eating

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Healthy Eating

- Eat a variety of foods
- Eat healthy sources of carbohydrates
  - Whole grains
  - Fruits and vegetables
- Eat a **RAINBOW** of **fruits** and **vegetables** each day!
  - Each color contains different nutrients
  - Choose whole fruit instead of juice
- Drink water more often
- Eat a healthy breakfast every day