

Counting Carbs & Nutrition

For reference on the IRACH diabetes internet page, in no particular order, organized by category.

Reading food

- Serving size
- Total Carbohydrate:
 - * Sugar
 - * Dietary Fiber
 - * Starch
- Fat
 - Choose foods lower in fat especially saturated and trans fat
- Fiber
 - Choose foods that are higher in fiber
 - >2g/serving is considered a good fiber serving

Nutrition Facts	
Serving Size 1 oz. (28g/About 21 pieces)	
Servings Per Container About 2	
Amount Per Serving	
Calories 170	Calories from Fat 110
% Daily Value*	
Total Fat 11g	17%
Saturated Fat 1.5g	8%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 250mg	10%
Total Carbohydrate 14g	5%
Dietary Fiber less than 1g	2%
Sugars 0g	
Protein 2g	
Vitamin A 2%	• Vitamin C 0%
Calcium 0%	• Iron 4%
Vitamin E 6%	• Thiamin 4%
Riboflavin 2%	• Niacin 4%
Vitamin B₆ 2%	• Phosphorus 2%
* Percent Daily Values are based on a diet of other people's misdeeds.	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9	• Carbohydrate 4 • Protein 4

How Much Carbohydrate Do I Need Per Meal/Day?

Men need about:

4-5 carbohydrate choices
(60-75 gram) at each meal



Breakfast

2 slices whole grain toast	2 carb choices
1 teaspoon light margarine	
1 small orange	1 carb choice
1 egg omelet with spinach and mushrooms	
1 cup skim milk	1 carb choice

Lunch

1 sandwich	2 carb choices
1 small fruit	1 carb choice
1 cups veggies	
1 cup skim milk	1 carb choice

Dinner

1 piece of chicken	
1 cup pasta	3 carb choices
½ cup red sauce with meat	1 carb choice
1 Cup of broccoli	
1 Slice of garlic bread	1 carb choice

Women need about:

3-4 carbohydrate choices
(45-60 gram) at each meal



Breakfast

2 slices whole grain toast	2 carb choices
1 teaspoon light margarine	
1 small orange	1 carb choice
1 egg omelet with spinach and mushrooms	

Lunch

1 sandwich	2 carb choices
1 small fruit	1 carb choice
1-2 cups veggies	0-1 carb choice

Dinner

1 piece of chicken	
1 cup winter squash	1 carb choices
1 small fruit	1 carb choice
1-2 cups broccoli	
1 cup skim milk	1 carb choice

Carbohydrate Counting

- Provides a flexible way to control blood sugars
- 2 ways to count:
 - Carbohydrate servings
 - Carbohydrate grams: specific number of grams of carbohydrate per meal or snack
- One serving = 15 grams carbohydrate

EXERCISE

Interested in Losing Weight?

- Start out **slowly** – set **reasonable goals!**
 - Begin with 10 minutes of activity a day.
 - Add a few minutes onto your workout each week.
 - Work up to 30 minute of activity daily.
- Activity can be **spread out** during the day. It doesn't have to be all in one session!
- Weight loss *improves your ability* to keep your blood sugar in *target range*.

Target Heart Rate

Age	Target Heart Rate Zone 50-75%	Average Maximum Heart Rate 100%
20-30 years	98-146 beats per min.	195
31-40 years	93-138 beats per min.	185
41-50 years	88-131 beats per min.	175
51-60 years	83-123 beats per min.	165
61+ years	78-116 beats per min.	155

Keeping exercise safe

- Before you start an exercise program, get a **checkup**.
- Always **warm up** and **cool down**.
- If on diabetes medicine, **check your blood sugar before** and **after** you exercise.



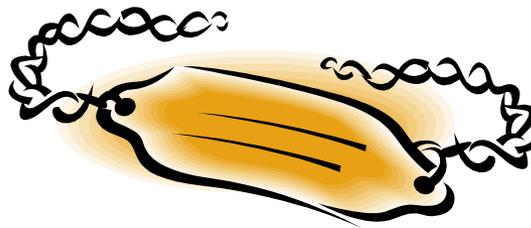
Keeping exercise safe

- If the blood sugar is **less than 100 mg/dl** or it's been **more than 90 minutes since you've eaten**, eat a **snack** before exercising.
- Do not exercise if there are **ketones in your urine**.



Keeping exercise safe

- Carry an “**emergency food**” with you.
- Always wear **diabetes identification**.
- Don’t exercise in **extreme weather**.



Keeping exercise safe

- Wear exercise **shoes** that fit well.
- **Check your feet** right after you exercise.
- Certain medicines may make you unable to feel a low blood sugar. Know if you are on these.



General Diabetes Info:

Hyperglycemia

Hypoglycemia

15-15 Rule

Emergency Foods

Target Blood Glucose Levels

- Blood sugar: a measure of the glucose in your blood stream.
 - Before Meals.....Goal = 70 -130 mg/dl
 - 1-2 hours after meal.....Goal = 180 mg/dl
- A1C: an average measure of blood glucose over the last 3 months.
 - blood sugar test result should be 6-7% to be considered compliant with therapy.

Hypoglycemia: Low Blood Sugar

- Blood sugar below 70 mg/dl

Signs & Symptoms:

- Weakness
- Rapid heart beat
- Shakiness
- Irritability or anxiety
- Blurred vision
- Hunger
- Headache
- Sweating (clammy)
- Light-headedness



Emergency Foods

- Juice
- Hard candy
 - 5 pieces of Lifesavers = 15 grams
- Glucose tablets
 - 3 tablets = 15 grams
- Sugar packets
 - 3 packets = 15 grams



If you aren't expecting to eat for another 1-2 hours, eat a snack of $\frac{1}{2}$ peanut butter or meat sandwich.

15-15 Rule

- If your blood sugar is low, eat or drink 15 grams of fast-acting carbohydrate (hard candy, juice, etc).
- Check your sugar in 15 minutes.
- If no improvement (>70 mg/dl), eat or drink another 15 grams of fast-acting carbohydrate.
- This process should be done only TWICE, if blood sugar is still <70 mg/dl, SEEK medical attention.

Treating Hypoglycemia

- Test your blood sugar right away if you can.
- If you can't test, treat as if you are low.
- Eat or drink one “emergency food”.
- Test blood sugar in 15 minutes. If still low, eat or drink 15 grams carbohydrate.

Hyperglycemia: High Blood Sugar

Signs & Symptoms:

- Frequent urination
- Blurred vision
- Fatigue or low energy
- Increased thirst
- Increased hunger
- Dry, itchy skin
- Slow-healing wounds



Treating Hyperglycemia

- Check blood sugar more often.
- If on insulin and sugar is > 300 mg/dl, seek medical advice.
- Drink extra water.



Treating Hyperglycemia

- Exercise
 - Make sure you test first for ketones (dipstick, if available). If you have ketones, don't exercise!
- Make a plan for when to call your doctor if your sugar is high



Sick day care

Medications and Testing

- Always take your medication, even if you can't eat.
- Type 1 and Type 2: Test blood sugar as directed by your provider.
- If it's more than 300 mg/dl, check urine or blood for ketones (dipstick, if available) or seek medical advice.

Call the Doctor if:

- You are too sick to eat and you can't keep liquids down for 4 hours.
- You are not able to eat solid foods for more than 1 day.
- You have a fever of 101 Fahrenheit or greater.



Call the Doctor if:

- You have severe diarrhea or diarrhea that lasts more than 6 hours.
- Your blood sugar stays over 300 mg/dl for 2 tests in a row
- You have several low blood sugars in a row (<70 mg/dl).

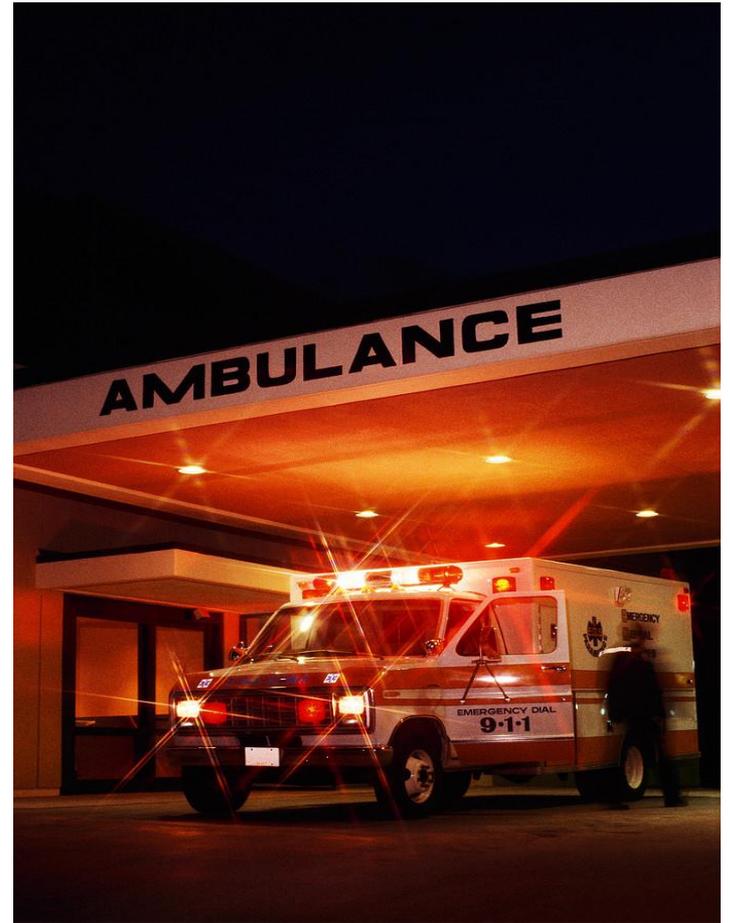
Call the Doctor if:

- You lose 5 pounds or more in a week.
- You have ketones in your urine.
- You experience changes in vision.



Call 911 if:

- You have trouble breathing.
- You feel more sleepy than usual or you're not thinking clearly.
- You experience chest pain.
- You experience numbness/tingling in your arms or hands, trouble walking and/or stumbling.
- 15-15 Rule (done twice), did not work.



Sick Day Foods and Drink (10-15 grams Carbohydrates)

- 1/2 cup regular soft drink or fruit juice

- 1 cup Gatorade

- 1 cup milk

- 1 cup soup

- 1/2 cup regular gelatin



- 1 popsicle (1/2 twin bar)

- 1/4 cup sherbet

- 1/2 cup ice cream

- 1 slice of bread or toast

- 6 saltine crackers

Sick Day Foods

- Applesauce—unsweetened..... 1/2 cup
- Applesauce—sweetened..... 1/4 cup
- Bread or toast..... 1 slice
- Ice cream or sherbet..... 1/4 - 1/2 cup
- Sugar free pudding..... 1/2 cup
- Regular Jell-o..... 1/2 cup



Sick Day Foods (cont'd)

- Graham crackers..... 3
- Vanilla wafers or small crackers..... 6
- Cooked cereal 1/2 cup
- Small baked potato..... 1
- Yogurt..... 6 ounces

Sick Day Drinks

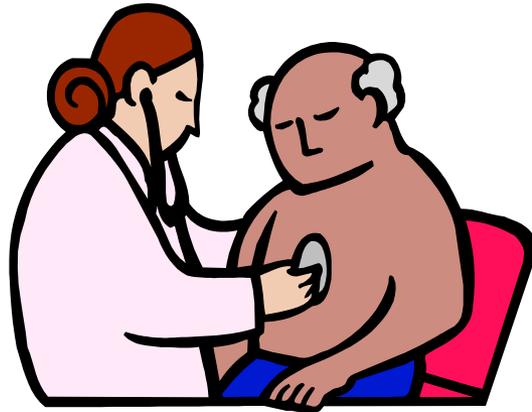
- Caffeine free pop..... 1/2 cup
- Corn syrup, honey..... 1 Tbsp
- Cranberry/grape/apple juice..... 1/2 cup
- Regular Gatorade..... 1/2 cup
- Water..... as tolerated



Traveling with Diabetes

Prior to your trip

- Get a check up shortly before your trip.
- If traveling to another country , bring a letter from your doctor about your medical supplies.
- ALWAYS wear a “MEDICAL ALERT” bracelet.
- If immunizations are needed, get it 30 days prior.



Bring ALL your Supplies

- Medications (amount required for the trip plus one week).
- Monitoring supplies (if you are on a insulin pump take vial insulin in case of failure of pump).
- Use insulated thermos for storage of insulin.
- Insulin vial must have pharmacy printed label which identifies the medication.



In Transit

- Avoid dehydration by drinking adequate fluids.
- Maintain some degree of activity by walking the cabin on longer travel.
- Bring your own snacks to avoid hypoglycemia.



Air Travel

- Boarding with capped lancets are acceptable .
- Glucose monitor must have manufacturers name embossed on it.
- Insulin pumps supplies are ok.
- Don't forget test strips.



Let's go to the Beach!

- Bring first aid kit.
- Wear protective footwear at all times.
- Use sunscreen on arms, legs, shoulders, etc.
- Sunbathing can cause hypoglycemia.
- Sweating causes hypoglycemia.
- Keep insulin and glucose test strips out of the sun.
- Stay hydrated.



Changes in Time Zones

- East to west in USA (time can be lengthen up to three hours).
- West to East in USA(time can be decreased up to 3 hours).
- Reestablish routine schedule on first full day at destination . Wake up on new time.
- Proceed with usual meal, insulin and medication.



Additional Travel Information

- CDC Travelers Hotline (800)311-3435
- Travel Assistance International
- The Diabetes Travelers Newsletter
PO BOX 8223 RW
Stanford , CT 06906