Promoting Patient Survival with Diabetes Survival Skills

“Need to know” skills for persons with diabetes

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WMC Diabetes Stewardship team
Objectives:

• Review & understand basic diabetes survival skills

• Develop a greater comfort level with fundamentals of carbohydrate counting, including which foods contain carbs & what constitutes a carb serving to be able to reinforce the basics with patients

• Identify strategies & resources for teaching patients essential Diabetes Survival Skills
Reluctance
A lot has changed…

~ 1922 - Leonard Thompson, 14 yo male
~ 1934 - SS introduced
~ 1970 – Experts identified danger / ineffectiveness of “SS”
~ 1997 – Experts proved danger / ineffectiveness of “SS only”
~ 2007 / 2008 – ADA/ AACE discourage use of “SS only”
~ 11/09/2018 – all of us renounce “SS only” regimen
Background

• **Diabetes**: chronic illness with serious short and long-term health consequences, often with a labor-intensive complex treatment regimen.

• Persons with diabetes as of 2015,
  • 9.4% of total US population
  • 12.2% of total US adult population ($\frac{1}{4}$ were unaware)
  • 25% of persons over age of 65
    (National Diabetes Statistic Report, 2017)

• Persons With Diabetes (PWD): hospitalized **3 times** more often
  (Moghissi, 2016)
DSME: Diabetes Self-Management Education

DSMS: Diabetes Self-Management Support

- **Facilitates** knowledge, skills, & motivation for **self-care**
- **Patient**-centered skills–based **empowerment**
- Culturally sensitive, **individualized**
- Incorporate **behavior strategies**
- Addresses **psychosocial issues**
DSME & DSMS result in…

- better **blood glucose control**
- better **weight management**
- improved **quality of life**
- healthier **coping**
- less **ER visits and admissions**
- **lower** health care costs

(Rodriguez, 2016)
Sadly…

- Less than 55% of all PWD ever receive DSME
- Less than 7% receive DSME in the 1st year of diagnosis

(Magee, 2016)
Number of Certified Diabetes Educators as of April 12, 2018

- In the US: 19,584
  - 49% Nurses
  - 41% Dieticians
  - 7% Pharmacists

- In Virginia: 476

- At Valley Health in Winchester only: 6
per JNC……

• Nurse education in **glycemic management** & teaching **diabetes self care survival skills** should be a **priority** in the hospital setting.

• Nurses/clinicians: in **prime position** to **educate patients** to perform diabetes self-care behaviors—teachable moments, such as checking BG, calculating an insulin dose, administering insulin
So…
1. Understanding the diagnosis of diabetes
2. HYPO & HYPERglycemia: definition, signs/symptoms, treatment & prevention
3. Self-monitoring of blood glucose (SMBG) and home BG targets
4. Exercise
5. Sick day guidelines
6. Guidelines for when to call diabetes provider and when to go to ER
7. Meal planning: carb counting, portions, relationship between carbs & BG
8. Diabetes medications: purpose, timing, dose, delivery method, disposal
9. Plan for diabetes education and office follow up after discharge

(Rodriguez, 2016)
1. Understanding the diagnosis of diabetes

**Glucose**
- Main source of energy, or fuel
- Comes from
  1. Food
  2. The body (like a glucose factory)

**Insulin**
- Helps cells use glucose
Type 2 Diabetes
Insulin doesn’t work AS well (insulin–resistance) & the body makes LESS of it
Glucose builds up in the blood, a condition called HYPERglycemia

1. **Dehydration** = fatigue

2. **Damage to blood vessels** = disease of heart, brain, kidneys, legs, eyes & nerves

3. Fat & muscle used as back up fuel source = muscle/fat loss.
Type 1 Diabetes
the pancreas makes no insulin
build-up of glucose in the blood, called HYPERglycemia

1. Dehydration = fatigue

2. Damage to blood vessels = disease of heart, brain, kidneys, legs, eyes & nerves

3. Fat & muscle used as back up fuel source = muscle & fat loss.

4. Blood stream overloaded with acid (DKA) which leads to cardiac arrest, unless treated with INSULIN, the antidote.
**DKA**

**INSULIN** is the **ONLY** TREATMENT that can **STOP & /or PREVENT** DKA acid overload (more specifically, **BASAL** is the key)

**Scenario:**

A person with T1D has fasting **HYPOglycemia** (58 mg/dL) and Lantus 24 units (**BASAL insulin**) is due now

**Treatment:**

1. Hold Lantus?
2. Correct the hypoglycemia with 15 gm rapid-acting carb and give (reduced dose of) Lantus?

**NEVER EVER** **hold** **BASAL insulin** for persons with T1D
<table>
<thead>
<tr>
<th></th>
<th>T1D</th>
<th>T2D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heritable / genetic</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Makes own insulin</td>
<td>No</td>
<td>Yes, but makes less &amp; insulin less effective</td>
</tr>
<tr>
<td>Insulin - dependent</td>
<td>Yes</td>
<td>Very likely within 10 years of diagnosis</td>
</tr>
<tr>
<td>HYPERglycemia -triggered dehydration, vascular disease &amp; fat/muscle loss</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>DKA, if BASAL insulin is HELD or discontinued</td>
<td>Yes</td>
<td>Rarely– only some, related to acute stress or illness</td>
</tr>
</tbody>
</table>
2. HYPOglycemia: definition, signs/symptoms, & treatment

**Type 1 Diabetes & Type 2 Diabetes**

**HYPOglycemia:** Low Blood Sugar, 70 mg/dL or less

**Symptoms:** shaky, sweating, dizzy, hungry, headache, nervous, irritable, light-headed, heart racing, “feel bad”

For symptoms above, check blood glucose (BG)...

**Treatment:**
1. For BG 70 mg/dL or less, eat 15 grams (gm) rapid-acting carbohydrate (carb) RESCUE, ie 4 oz juice
2. Recheck BG in 15 minutes
3. For BG 70 mg/dL or less, eat 15 gm rapid-acting carb RESCUE again. Recheck BG in 15 minutes.
4. Repeat treatment up to 3 times till BG over 70 mg/dL
5. For BG still 70 mg/dL or less after 3 treatments, CALL 911 and re-treat while waiting OR just keep treating w/15 gm carb RESCUE + BG recheck 15 min
6. Once BG over 70 mg/dL, eat meal OR 15 gm carb + protein snack, ie 8 oz milk or ½ PB sandwich
7. Instruct support persons how to inject Glucagon for HYPOglycemia with erratic behavior, seizure, coma
2. HYPOglycemia PREVENTION

Type 1 Diabetes

Prevent HYPOglycemia:
- Don’t skip meals and take insulin as prescribed.
- Make insulin dose adjustments promptly, as needed.
- Check BG 4 times per day; more if exercising or ill.
- If bedtime BG less than 100 mg/dL, have a 15 gm carb + protein snack.
- Ask provider about decreasing insulin before exercise.
- Always carry a 15 gm rapid-acting carb RESCUE.
- Teach support persons signs of low BG & how to help.
- Talk to diabetes provider before consuming alcohol.
- Call diabetes provider for advice / next available appt.
  - For any unexplained BG 70 mg/dL or less.
  - For BG 70 mg/dL or less, occurring 2 or more times/week.
  - For any BG < 54 mg/dL.

Type 2 Diabetes

Prevent HYPOglycemia:
- Don’t skip meals. Take diabetes medicine, as prescribed.
- Check BG, as instructed; more if exercising, or ill.
- If bedtime BG less than 100 mg/dL, consider having a 15 gm carb + protein snack.
- Consider decreasing insulin dose before exercise.
- Always carry a 15 gm carb RESCUE, 4 glucose tablets.
- Teach support persons signs of low BG & how to help.
- Talk to diabetes provider before consuming alcohol.
- Call diabetes provider for advice / next available appt:
  - For any unexplained BG 70 mg/dL or less.
  - For BG 70 mg/dL or less, occurring 2 or more times/week.
  - For any BG < 54 mg/dL.
2. HYPERglycemia: definition, signs/symptoms & treatment

Type 1 Diabetes

HYPERglycemia: High Blood Sugar, greater than 180 mg/dL
Symptoms: extreme tiredness and thirst, frequent urination, nausea, hunger, irritable, headache, stomach pain, blurry vision, confusion
For symptoms above, check blood glucose (BG)...

Treatment: D - I - N - E - R (K)
1. For BG over 180 mg/dL ...
   a) Drink 8-16 oz water OR caffeine + sugar-free beverage every hour till BG < 180 mg/dL (unless fluid restriction)
   b) Insulin. If prescribed, give CORRECTION dose of rapid-acting insulin every 3 hours, until BG 180 mg/dL or less (MUST be 3 hours between doses)
   c) No carbs till BG 180 mg/dL or less
      ** For SICK DAY, no carbs until BG less than 400 mg/dL
   d) Exercise; walk 10-30 min, unless urine ketones present
      ** For BGs over 300 mg/dL, exercise, then check BG in 15 min to be sure BG is dropping
   e) Recheck BG every 3 hours, until BG 180 mg/dL or less

2. Ketones: For BG over 180 mg/dL after 6 hours of above treatment or 2 unexplained BGs over 300 mg/dL in 6 hours
   a) FOLLOW D - I - N - E - R steps above
   b) Check urine ketones every 3 hours, until BG 180 mg/dL or less and urine ketones are NEG
      - ketones NEG - SMALL: See provider in within 7 days
      - ketones MOD - LG: Call or see diabetes provider NOW
      - ketones VERY LG: Give CORRECTION insulin dose above & go to the emergency room

Type 2 Diabetes

HYPERglycemia: High Blood Sugar, greater than 180 mg/dL
Symptoms: extreme tiredness/thirst, frequent urination, nausea, hunger, irritable, headache, stomach pain, blurry vision, confusion
For symptoms above, check blood glucose (BG)...

Treatment: D - I - N - E - R
1. For BG over 180 mg/dL ...
   a) Drink 8-16 oz water OR caffeine + sugar-free beverage every hour until BG < 180 mg/dL (unless fluid restriction)
   b) Insulin. If prescribed, give a CORRECTION dose of rapid-acting insulin every 3 hours, until BG 180 mg/dL or less (MUST be 3 hours between doses)
   c) No carbs till BG 180 mg/dL or less
   d) Exercise; walk 10 - 30 minutes, unless seriously ill
   e) Recheck BG every 3 hours, until BG 180 mg/dL or less

2. For BG over 180 after 6 hours of treatment above...
   a) BG 181 - 400 mg/dL, call/see diabetes provider within 7 days
   b) BG over 400 mg/dL, see diabetes provider NOW or go to the emergency room
## 2. HYPERglycemia PREVENTION

<table>
<thead>
<tr>
<th>Type 1 Diabetes</th>
<th>Type 2 Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prevent Hyperglycemia:</strong></td>
<td><strong>Prevent Hyperglycemia:</strong></td>
</tr>
<tr>
<td>• Check BG 4 times per day, more if BG over 180 mg/dL, ill, or after extra carbs</td>
<td>• Check BG one – four times per day, as instructed</td>
</tr>
<tr>
<td>• Take insulin as prescribed</td>
<td>• Check BG more often when BG is over 180 mg/dL, after eating extra carbs, or feeling ill</td>
</tr>
<tr>
<td>• See provider every 3 months.</td>
<td>• Take diabetes medications, as prescribed</td>
</tr>
<tr>
<td>• Exercise regularly; take a brief walk after every meal</td>
<td>• Exercise regularly; take a brief walk after every meal</td>
</tr>
<tr>
<td>• Eat MORE whole grains, beans, veggies, and low carb fruits (cantaloupe, honeydew melon, kiwi, peaches and strawberries)</td>
<td>• See diabetes provider regularly, every 3 months</td>
</tr>
<tr>
<td>• Eat LESS simple carbs (soda, sweets, white bread, etc)</td>
<td>• Eat MORE whole grains, beans, veggies, and low carb fruits (cantaloupe, honeydew melon, kiwi, peaches and strawberries)</td>
</tr>
<tr>
<td></td>
<td>• Eat LESS simple carbs (soda, sweets, white bread, etc)</td>
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</tbody>
</table>
### 3. Blood glucose self monitoring

<table>
<thead>
<tr>
<th></th>
<th>Type 2 Diabetes on no meds</th>
<th>Type 2 Diabetes on a Sulfonylurea</th>
<th>Type 2 Diabetes on BASAL or 70/30 insulin</th>
<th>Type 1 or Type 2 Diabetes on multiple daily injections of INSULIN or the pump</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fasting BG</strong></td>
<td></td>
<td>1 - 4 times per week</td>
<td>Daily</td>
<td>Daily</td>
</tr>
<tr>
<td></td>
<td>1 - 4 times per week</td>
<td>1 - 4 times per week</td>
<td>Once daily</td>
<td>3 times per day before each meal &amp; bedtime AND as needed</td>
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<tr>
<td></td>
<td>Q 2 – 3 weeks</td>
<td>Q 2 – 3 weeks</td>
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<tr>
<td></td>
<td>More often if sick</td>
<td>More often if sick</td>
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<tr>
<td><strong>Non-fasting BG</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>before lunch, dinner</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>or bed</td>
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<td></td>
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<tr>
<td></td>
<td>1 - 4 times per week</td>
<td>1 - 4 times per week</td>
<td>Once daily</td>
<td></td>
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<tr>
<td></td>
<td>Q 2 – 3 weeks</td>
<td>Q 2 – 3 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>More often if sick</td>
<td>More often if sick</td>
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</tr>
</tbody>
</table>
3. Home BG targets

**GENERAL BG Goals**

(vary by age and illness)

- Hemoglobin A1C ...................... less than 7.0%
- BG fasting or pre-meal .......... 100 to 140 mg/dL
- BG 2 hours after meal .......... 180 mg/dL or less
4. Exercise

Exercise decreases
- CV risk (by 30%)
- Insulin resistance
- Inflammatory markers
- Triglycerides
- Blood pressure

Physical activity
Adults: 30 minutes per day, 5 days per week
  *i.e. walk 10 min after meals*
Children: 60 minutes per day, 3 days per week
(ADA, 2018)
4. Exercise (get active and stay active)

“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”
5. Sick Day Guidelines

**Type 1 Diabetes**

*Guidelines for SICK DAYS, or feeling unwell*
- fever, excess fatigue, headache, sore throat, sinus drainage, cough, stomach upset, urinary burning, etc.

- Don’t HOLD BASAL insulin due to illness. BEFORE illness occurs, ask diabetes provider if insulin doses will need to be changed when ill.
- Before taking over-the-counter meds that may increase BG, discuss with diabetes provider.
- Drink 8-16 oz water or sugar/caffeine-free beverage (diet ginger-ale or crystal light) every hour.
- Eat or drink 45 gm carbs every 3 hours (12 oz regular ginger-ale OR ½ cup apple sauce + 2 sl toast)
  - No carbs if BG over 400 mg/dL.
- Check BG and urine ketones every 3 hours:
  - BG over 180 mg/dL & ketones NEG-LG: USE the HYPERglycemia treatment plan
  - BG 180 mg/dL or less & ketones MOD-VRY LG: USE HYPERglycemia treatment plan & call provider NOW
  - BG over 180mg/dL & ketones VERY LG: GO to the ER

**Type 2 Diabetes**

*Guidelines for SICK DAYS, or feeling ill*
- fever, headache, sore throat, sinus drainage, cough, stomach upset, urinary burning, excess fatigue, etc.

- Before taking over-the-counter meds that may increase BG, discuss with diabetes provider.
- Before illness occurs, ask diabetes provider if change in diabetes medications will be needed when ill.
- Drink 8-16 oz water or sugar/caffeine-free beverage (diet ginger ale or crystal light) every hour.
- Check BG every 3 to 6 hours.
- Use HYPOglycemia & HYPERglycemia treatment plan.
- If prescribed, give insulin to “correct” HYPERglycemia.
6. When to call diabetes provider and when to go to the ER

**Type 1 Diabetes** & **Type 2 Diabetes**

**Consider calling diabetes provider if:**
- BG over 180mg/dL after treating HYPERglycemia for 6-12 hours
- prescribed steroids
- fasting for a medical test
- unsure of dose or how to take diabetes medicine

**Consider seeking EMERGENCY care for...**
- Persistent vomiting or diarrhea greater than 6 hours
- BG greater than 400 mg/dL
- New or severe symptom that may need immediate medical attention, such as chest pain, cough, shortness of breath, abdominal pain, urinary changes, severe headache, dizziness, weakness, numbness, fever, speech or vision changes, swelling or redness
7. Carb counting, portions, & the relationship between carbs & BG

**Type 1 & Type 2 Diabetes**

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**Controlling Carbohydrate (Carb) Intake**

- **Carbohydrates** (food that turns into glucose)
  - Found in milk products, beans, grains (cereal, pasta, bread), rice, starchy vegetables, fruit, soda, juice, syrup, sugar, sweets & prepared foods (pizza/fried chicken)
  - Number of "grams of carbohydrates" or "carb servings"
  - A "carb serving" is a portion of food with 15 gm of carbohydrates (½ cup potatoes, ½ cup cooked rice or pasta)

- **Read food labels** (Free online: *My Fitness Pal, Calorie King*)
  - Find the "Total Carbohydrate" grams per serving
  - If it is around 15 gm, then that is 1 carb serving. If it is around 30 grams then it is 2 carb servings and so on
  - Check the serving size at top of the label to see how many carb servings you will eat

**TIPS to HELP control carb intake, BG, & diabetes**

- Eat meals often to prevent HYPOglycemia from diabetes med
- Avoid juice, sweet tea & soda, unless treating HYPOglycemia
- Eat maximum of 4 carb servings per meal (2 - 4 carb servings per meal is sufficient for most adults to control weight & BG)
- Eat the same number of carb servings per meal
- Use the plate method (an alternative to carb counting)
  - ½ plate non-starchy veggies: salad, spinach, broccoli
  - ½ plate carbohydrates: grains or starchy vegetables
  - ½ plate protein: lean meat, chicken, fish, egg, nuts, cheese
7. Carbs and carb counting

Managing diabetes can feel like a full time job.
7. Carbohydrate Intake and glucose response

- Glucose intake with **Insufficient** insulin to move meal glucose into cells

- Glucose intake with **sufficient** insulin to move meal glucose into cells
8. Diabetes **medications**: purpose, timing, dose, delivery method, disposal

### Type 1 Diabetes

&

### Type 2 Diabetes

<table>
<thead>
<tr>
<th>Medication Type</th>
<th>Insulin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insulin</strong></td>
<td>Long-acting (24 hour Lantus®) &amp; <strong>intermediate-acting</strong> (12 hour NPH)</td>
</tr>
<tr>
<td><strong>Basal</strong></td>
<td>Provides a constant, small amount of insulin to get glucose into cells.</td>
</tr>
<tr>
<td><strong>Rapid-acting</strong></td>
<td>Novolog® &amp; short-acting (Regular) insulin for injection</td>
</tr>
<tr>
<td><strong>Correction</strong></td>
<td>Given before meals to get glucose from food into cells</td>
</tr>
</tbody>
</table>

**May cause:** Hypoglycemia & weight gain, Illness, Hypo or Hyperglycemia? Call or see provider.

### Other Insulins, Diabetics Medications, and Precautions

<table>
<thead>
<tr>
<th>Medication Type</th>
<th>Insulin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biguanides</strong></td>
<td>Metformin</td>
</tr>
<tr>
<td><strong>DPP-4 inhibitors</strong></td>
<td>Januvia, Onglyza, Tradjenta, Nesina</td>
</tr>
<tr>
<td><strong>GLP-1 Receptor agonists</strong></td>
<td>Bydureon, Victoza, Trulicity</td>
</tr>
<tr>
<td><strong>SGLT-2 inhibitors</strong></td>
<td>Invokana, Farxiga, Jardiance</td>
</tr>
<tr>
<td><strong>Sulfonylureas</strong></td>
<td>Glyburide, Glipizide, Glimepiride</td>
</tr>
<tr>
<td><strong>Thiazolidinediones</strong></td>
<td>Actos, Avandia</td>
</tr>
</tbody>
</table>

**Acts as basal, nutritional & correction**

**May cause:** wt gain, Hypoglycemia

**HYPO or HYPERglycemia? Illness? Pump failure? Call or see provider.**

**Diabetes, illness or dehydration? Call or see provider.**

**Abdominal pain, flu-like symptoms? Call or see provider.**

**Abdominal pain? Call or see provider.**

**Abdominal pain? Call or see provider.**

**Not eating or vomiting? Call or see provider.**

**Swelling, short of breath, fracture? Call or see provider.**

**Insulin works better**

**May cause:** weight gain, osteoporosis, heart failure
9. Plan for diabetes education & office follow up, AFTER discharge

- Encourage / arrange prompt follow up, ideally within 1 week or call
- Advocate for supply refill prescriptions
- Make sure your patient understands the diabetes plan

1. **TRESIBA U-100 (GREEN):** Inject 45 units once per day, at 4 pm.

2. **NOVOLOG (ORANGE label):** Inject 3 times per day before meals. (see correction chart below)
   (Do NOT give "CORRECTION" units, if your last dose of Novolog was less than 3 hours ago.)
   (Do NOT give "NUTRITIONAL" units, if you are NOT going to EAT the meal OR if your meal has NO carb servings.)

<table>
<thead>
<tr>
<th>NUTRITIONAL NOVOLOG</th>
<th>CORRECTION NOVOLOG</th>
<th>TOTAL UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Breakfast</td>
<td>20 units (see below) units</td>
<td>total units</td>
</tr>
<tr>
<td>Before Lunch</td>
<td>18 units (see below) units</td>
<td>total units</td>
</tr>
<tr>
<td>Before Dinner</td>
<td>17 units (see below) units</td>
<td>total units</td>
</tr>
</tbody>
</table>

Novolog (ORANGE) High Dose Correction Scale

<table>
<thead>
<tr>
<th>BG mg/dL</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;70</td>
</tr>
<tr>
<td>70-149</td>
</tr>
<tr>
<td>150-200</td>
</tr>
<tr>
<td>201-250</td>
</tr>
<tr>
<td>251-300</td>
</tr>
<tr>
<td>301-350</td>
</tr>
<tr>
<td>351-400</td>
</tr>
<tr>
<td>401-450</td>
</tr>
<tr>
<td>&gt;451</td>
</tr>
</tbody>
</table>

Units of Novolog (ORANGE) Treat & recheck

<table>
<thead>
<tr>
<th>&lt;70</th>
<th>70-149</th>
<th>150-200</th>
<th>201-250</th>
<th>251-300</th>
<th>301-350</th>
<th>351-400</th>
<th>401-450</th>
<th>&gt;451</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>10</td>
<td>12</td>
<td>14</td>
<td>Give 16 units &amp; call your diabetes care provider.</td>
<td></td>
</tr>
</tbody>
</table>

For example: If your blood glucose before lunch is 243 mg/dL, you would give 15 units (NUTRITIONAL) + 4 units (CORRECTION) = a total of 19 units of Novolog before lunch.

3. Metformin 500 mg: Take 1 pill twice daily, for 1 week, then take 1 pill with breakfast and 2 pills with dinner for 1 week, then take 2 pills twice per day. If stomach upset or loose stools occurs, decrease dose.

4. The following diabetes medications have been discontinued: Januvia, Glimepiride, and Forxiga (per patient request for re-trial of insulin). Do not take these medications at this time. Follow up with your diabetes care provider to discuss IF and WHEN this medication will be restarted.

5. Test your blood glucose (BG) daily before meals & at bedtime. RECORD BLOOD GLUCOSE in your log.

6. Try to limit your carbohydrate servings to 4 servings per meal, and have just 1 or 2 carb serving before bed, in order to decrease weight gain, insulin demand, and rise in blood glucose after meals. Remember: one carbohydrate serving is 15 grams of carbohydrates.
An approach to teaching essential Diabetes Survival Skills

• Health education: culturally and age-appropriate
  • Focuses on patient issues rather than on an educational agenda or curriculum
  • Patient-identified educational need: comprehensive, social and economic support, focused, review, or unable/unwilling
  • 5 step behavioral change model: explore the problem, clarify feelings and meanings, develop plan for future, commit to action, experience and evaluate the plan (Funnell, 2007)

• Support growth in self-care behaviors: healthy eating, being active, monitoring, take meds, problem solve, reduce risk, & healthy coping

• More listening than talking
Meet the patient where they are…
Strategies for teaching Diabetes Survival Skills

• Our clinicians are busy. No time? One topic most familiar?
  Fit in a teachable moment, i.e. like when administering insulin?
  1. Ask/teach patient about insulin properties (rapid-acting, starts in 5 - 15 min)
  2. Purpose of insulin (prevent HYPERglycemia related to food consumption)
  3. Site rotation (arms, belly, legs, away from navel and scar tissue)
  4. Does patient have any questions?

• Encourage patients to practice new self-care skills as much as possible

• Use easy patient education resources to guide you (ie insulin pen instructions)

• Request a diabetes educator consult ASAP
Patient resources:
Support for patients living with diabetes

**Diabetes Resources: Local**

* **Diabetes Education Programs:** call 540-536-5108 for locations and contact number at VH hospitals. Classes, individual appointments, nutrition counseling, insulin pump and continuous glucose monitor training, gestational diabetes education, and Diabetes Prevention classes.

* **Diabetes Prevention Program:**
  - Front Royal: 540 636 0310
  - Winchester: 540 536 5142
  - Woodstock: 540 459 1252
  - Romney, WV: 304 822 2198

* **Support Groups:** contact Debbie for more information 540 – 5536-5108
  - Winchester Type 1 and Type 2 Diabetes Support groups meet monthly at 333 W. Cork St.
  - Families living with Type 1 Diabetes: 1st Sat. monthly 3-4:30pm; location will vary, contact t1dfamilies@yahoo.com to be added to the mailing list
  - Romney, WVA/Hampshire County: 4th Wed. monthly 1-2pm; Romney Senior Center, contact Val at 304-822-2198

**Free local programs**

* **Grocery Store Tours:** monthly; call 540-536-5106 to register or for more information
* **Free Retinal Eye exams** offered, contact Sylvia Canturk at 540-536-8090

**Online resources**

* American Diabetes Association [www.diabetes.org](http://www.diabetes.org) Recipes, type 1 & type 2 information, Facebook page
* Taking Control of Your Diabetes [www.tcoyd.org](http://www.tcoyd.org) Blog, online workshops, conferences for T1D & T2D
* JDRF [www.type1nation.org](http://www.type1nation.org) Community forums for those with type 1 diabetes, Facebook page
* [www.collegediabetesnetwork.org](http://www.collegediabetesnetwork.org) for those with type 1 diabetes, blog, Facebook page
* [www.diabeteslocal.org](http://www.diabeteslocal.org) Offers a listing of some local resources based on your zip code
* Facebook page: Adults with Type 1 Diabetes Support Group in Winchester, VA
Not a diabetes enthusiast yet?

How about starting with baby steps?
Works Cited


