Healthy Eating & Lifestyles Program (HELP)

Medications, Sick Day & Travel Management

Made possible by:
Kōkua Kalihi Valley Comprehensive Family Services
&
the ‘Ulu Network

Developed by Sheryl R Yoshimura, RD
Lesson 3: Topics covered

Physical Activity/Exercise

Foot/Skin Care

Stress & Coping

Goal Setting & Action Planning
Action Plan

How did you do?

1. What?
2. How much
3. When?
4. How often
Thoughts and Feelings about taking Medications

- How do you feel about having to take diabetes medicine?
- What do you want to learn about your medicines today?
- What is your greatest concern/frustration about taking medicines?
- What is that hardest part about taking your medicines?
- What do you think would help you take your medicine the way it’s prescribed?
Today’s Topics

- Diabetes medications
- Sick Day Management
- Travel Management
- Goal Setting & Action Planning
Types of Medications

- Oral Agents
  - Sulfonylureas
  - Meglitinides
  - Biguanides
  - Alpha-glucosidase Inhibitors
  - Thiazolidinediones

- Insulin
Sulfonylureas

- Amaryl *(Glimepiride)* .........................take before meals
- DiaBeta or Micronase *(Glyburide)* ........take 30 mins before meals
- Glynase *(Glyburide-press tab)* ..........take 30 mins before meals
- Glucotrol *(Glipizide)* .........................before or with meals
- Glucotrol XL *(Glipizide)* ......................take with meals
<table>
<thead>
<tr>
<th>Body Parts it Works on</th>
<th>What does it do?</th>
<th>Side effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pancreas</td>
<td>Helps the pancreas make or release more insulin.</td>
<td>Lowers blood sugar by making the pancreas release more insulin right after the meal and then over many hours. Weight gain</td>
</tr>
</tbody>
</table>
Meglitinides

- **Prandin** *(Repaglinide)*........Take 5-15 mins before meals

- **Starlix** *(Nateglinide)*..........Take 5-30 mins before meals
# Meglitinides

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<td>Pancreas</td>
<td>Helps the pancreas put out insulin quickly</td>
<td>Lowers blood sugar immediately after the meal</td>
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Biguanides

- **Glucophage** (Metformin) ......................... Take with meals

- **Glucophage XR** (Metformin) ................. Take with meals

- **Glucovance** (Glyburide/Metformin) ...... Take with meals
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<td>Liver</td>
<td>Lowers blood sugar by stopping liver from making too much sugar</td>
<td>Drug interactions N/V, gas, diarrhea Metallic taste Loss of appetite No liver, kidney or heart disease Can decrease cholesterol Alcohol Contrast dye</td>
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</tbody>
</table>
Precose (Acarbose) ……………… Take with first bite of meal

Glyset (Miglitol) ……………… Take with first bite of meal
## Alpha-Glucosidase Inhibitors

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<td>Intestines</td>
<td>Helps slow the absorption of starches in foods you eat</td>
<td>GI distress, disappear after 6 mons Affects post-eating blood sugar If low sugar, use only milk or glucose tablets…NOT sucrose!</td>
</tr>
</tbody>
</table>
DPP-4 Inhibitors

- **Januvia** *(Sitagliptin phosphate)* ..... Take with or without meals

- **Onglyza** *(Saxagliptin)* ...................... Take with or without meals

- **Tradjenta** *(Linagliptin)* ..................... Take with or without meals
## DPP-4 Inhibitors

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<tr>
<td>Pancreas, Liver</td>
<td>Increase insulin production while decreasing sugar in the liver</td>
<td>Stuffy nose, Sore throat, Occasional diarrhea and stomach discomfort</td>
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</table>
Thiazolidinediones

- **Actos** *(Pioglitazone)* ............ Take with or without meals
- **Avandia** *(Rosiglitazone)* ..... Take with or without meals
# Thiazolidinediones

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<td>Muscle cells</td>
<td>Helps to make your body muscle cells more sensitive to its own insulin, so that insulin can work better</td>
<td>Lowers blood sugar, but no hypoglycemia (act on liver) Liver function tests required Edema Lowers cholesterol</td>
</tr>
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</table>
Fixed combinations

- **Metaglip** *(Metformin & Glipizide)*
- **Glucovance** *(Metformin & Glyburide)*
- **Avandamet** *(Metformin & Rosiglitazone)*
- **Actoplus Met** *(Actos & Metformin)*
- **Avandaryl** *(Avandia & Glimeperide)*
- **Duetac** *(Actos & Glimeperide)*
- **Janumet** *(Januvia & Metformin)*
- **Kombiglyze** *(Metformin & Onglyza)*
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<td>Helps pancreas make more insulin AND stops liver from making too much glucose.</td>
<td>Lowers blood sugar</td>
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Injectables

- *Exanatide (Byetta) & Liraglutide (Victosa)*

- stimulate the pancreas to release more insulin

- Injection only.

- Can cause nausea, vomiting, and suppression of appetite
Insulin

- **Action. . .**
  - Helps to keep blood sugar at a normal level

- **Side effects. . .**
  - Too much insulin $\rightarrow$ hypoglycemia
  - Too little insulin $\rightarrow$ hyperglycemia
Insulin Types

- **Rapid-acting** – Humalog, Novolog, Apidra
  - Start working in 10-15 minutes
- **Short-acting** – (Regular) Humulin R, Novolin R
  - Start working in about 30-45 minutes
- **Intermediate** – Humulin N, Novolin N
  - Start working in 1-2 hours
- **Long-acting** – Lantus, Levimir
  - Start working in .8 to 2 hrs
Insulin Use and Storage

- Know the symptoms of hypoglycemia
- Know how to treat hypoglycemia without overtreating your lows
- Always carry glucose tablets or hard candies with you.
- Keep in refrigerator
- Open insulin does not need to be refrigerated, can be out for 28 days.
Treatment for Hypoglycemia
Hypoglycemia Symptoms; What to do?

- Weakness
- Sweating
- Hunger
- Anxiety
- Trembling
- Fast heartbeat
- Irritability
- Inability to think clearly
- Headache
- Drowsiness
- Numbness & tingling around lips
- Confusion
- Coma
- Convulsions

- If 50-69 take 15 grams of carbohydrate (1 serving)
  - 1 cup Skim milk
  - ½ cup juice
  - 3 sugar packets

- If less than 50, take 30 grams of carbohydrate (2 carbohydrate servings)
Medication Tips

- Use a single pharmacy
- Update your medication lists
- Bring to your doctor’s appointment and have your doctor review your current medications
- Learn what your medications look and purpose of each medication
- Check with your doctor or pharmacist before buying over the counter medications.
Sick Day Rules

- NEVER stop taking medications
- Increase self-monitoring of blood glucose
- Increase fluid & monitor for dehydration
- Notify your doctor or go to ER when ill (e.g., fever higher than 101 °F or diarrhea & vomiting)
- Get your flu shot during flu season
- Urine ketone testing if blood sugar over 240
Travel Tips

- Plan ahead
- Check with airlines for any special requirements
- Bring “Diabetes ID”
- Foreign country advise
  - Immunizations
- If on insulin, discuss with your doctor for any dosage adjustments/timing for time zone changes
- Carry ALL DIABETES supplies with you at all times
- Bring extra supplies
Safety Precautions

- Diabetes ID: Medic Alert and card
- Carry some form of quick acting sugar
- Tell significant others... that you take diabetes medications
  - low blood sugar symptoms
  - how to help you treat a low blood sugar reaction
- Self monitor your blood sugar
How to take care of yourself when you get sick

- Medicine
- Food
- Liquids
How to take care of yourself when you get sick

- Blood Sugar Testing (check with doctor how often you should do it for)
- Weigh yourself everyday
- Check your temperature every morning & evening
Call your doctor or go to the ER if you. . .

- Feel sick to eat normally and are unable to keep food down for more than 6 hours
- Lose 5 pounds or more
- Have diarrhea and vomiting
- Temperature if over 101
- Blood sugar is lower than 70 or remains over 300
- Have ketones in your urine
- Have trouble breathing
- Feel sleepy or can’t think clearly
Action Plan Activity

1. Something YOU want to do
2. Achievable
3. Action-specific
4. Make a specific plan
   1. What?
   2. How much
   3. When?
   4. How often
5. Confidence level of 7 or more. On a scale of 0-10 (0 = not at all; 10 = very)
   1. How convinced are you that it’s important to make this change?
   2. How confident are you that you can make this change?
Set up for Nutrition Moment