

Diabetes Refresher

Head to Toe

Clinical Health Education

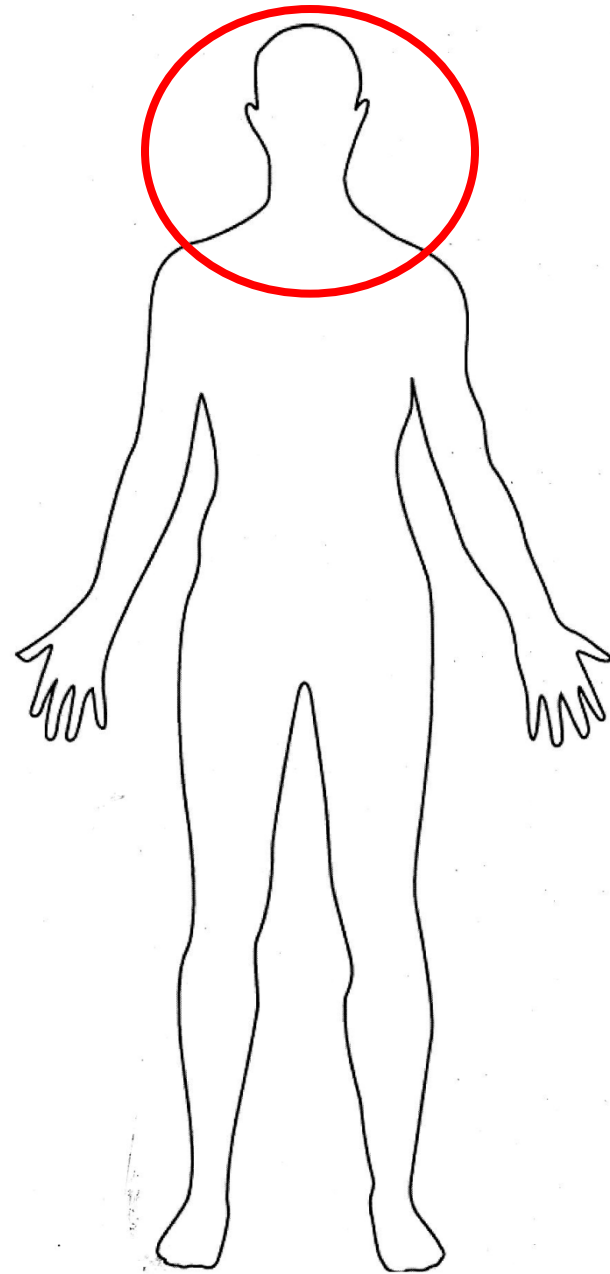


**What contributes to
diabetes complications?**

**What are you doing now to prevent
these complications?**

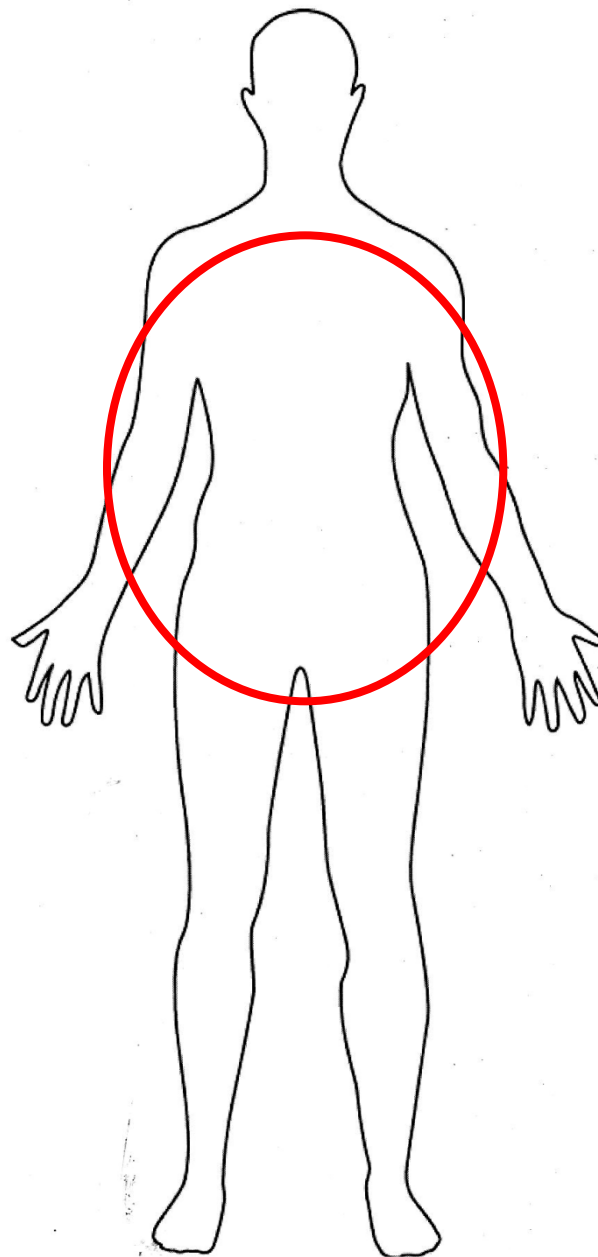
Head to Toe Risks

- **Brain (2-4 times higher risk for)**
 - Alzheimer's disease, Dementia, Stroke
 - Cognitive impairment (memory loss)
 - Depression/Mental Health
- **Eyes**
 - Diabetes - leading cause of blindness
 - Cataracts, Glaucoma, Retinopathy
 - Macular degeneration
- **Hearing loss is twice as likely to occur**
- **Mouth**
 - 1/3 have severe periodontal disease
 - Tooth loss, gum infections and inflammation



Head to Toe Risks

- **Heart Disease (2-4 times higher risk)**
 - Contributed to 68% of diabetes-related deaths for people 65 years or older (2004)
- **Gastroparesis**
 - A type of neuropathy (nerve damage) in which food is delayed from leaving the stomach, the intestines do not work normally and the digestion of food is slowed or stopped
- **Liver**
 - More than 50% have fatty liver disease which increases your risk for liver diseases like cirrhosis or liver cancer



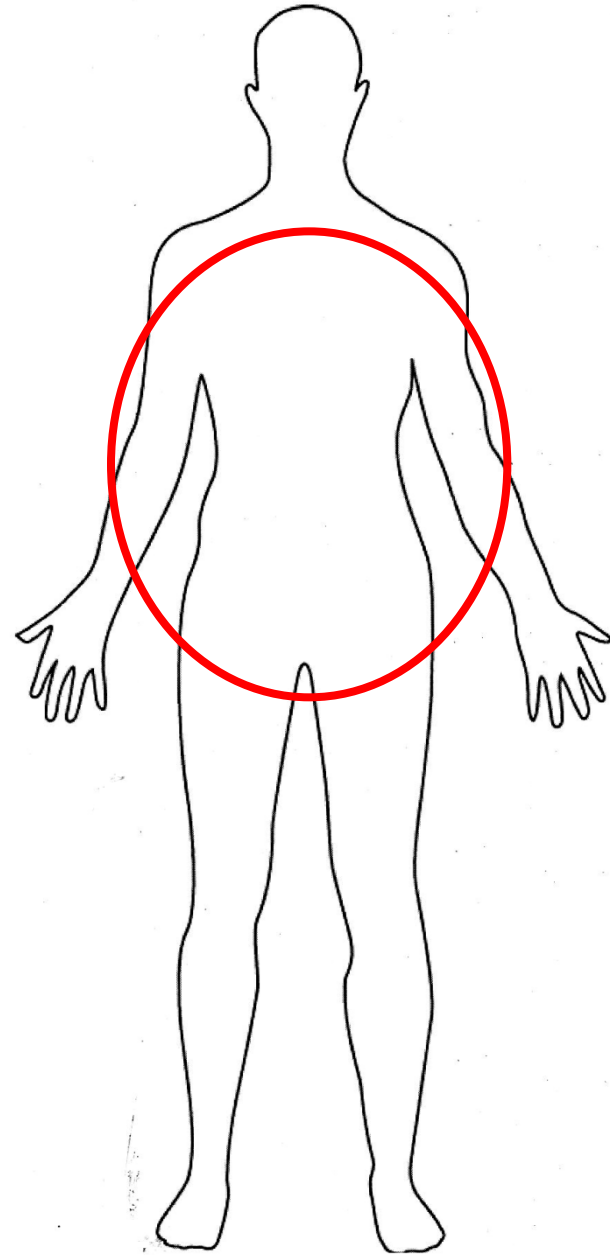
Head to Toe Risks

- **Kidneys**

- Diabetes - leading cause of kidney failure, accounting for 44% of new cases (2008)

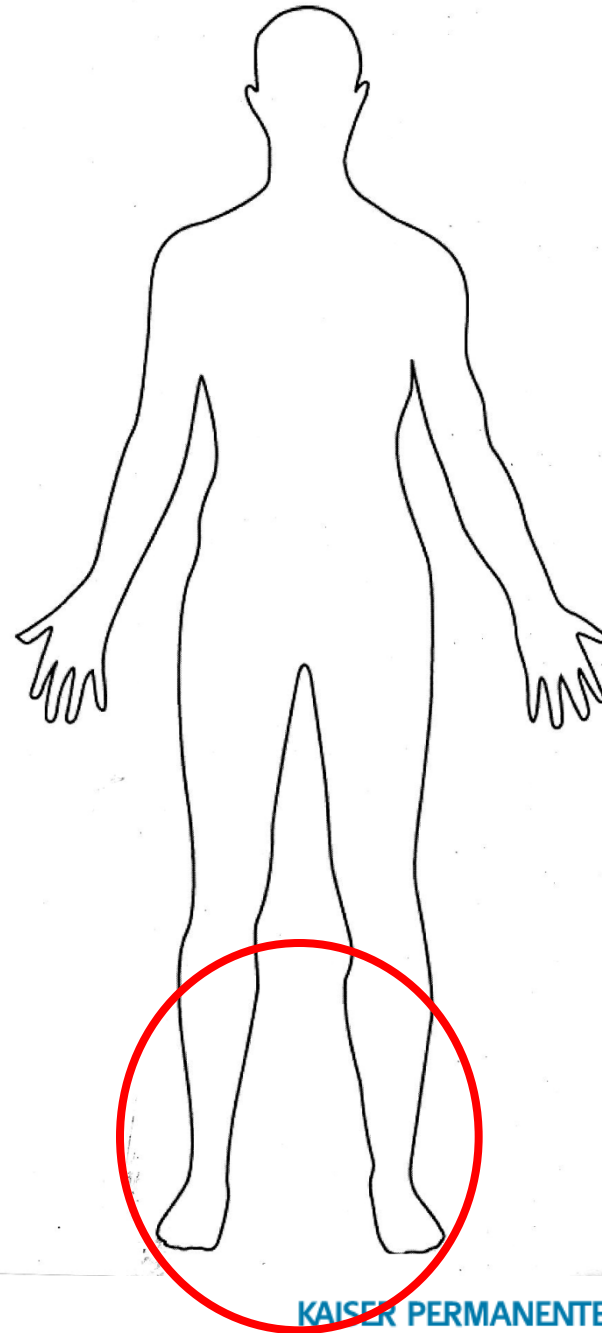
- **Sexual and Bladder Dysfunction**

- Sexual interest, pleasure and function can be effected by depression, anxiety and the stress of having diabetes
- High blood sugar can damage blood vessels and nerves resulting in erectile dysfunction, urinary incontinence (bladder leakage) and vaginal infections



Head to Toe Risks

- **Peripheral Vascular Disease (PVD/PAD)**
 - Blood vessels in the legs are narrowed or blocked by fatty deposits which decreases blood flow to your feet and legs
 - Affects 1 in 3 people with diabetes over the age of 50 and increases risk for heart attack and stroke
- **Neuropathy (nerve damage)**
 - Affects 60% to 70% of people with diabetes
- **Feet**
 - Having diabetes accounts for at least 60% of lower-limb amputations and 65,700 lower-limb amputations (2006)



Head to Toe Risks

- **Skin**

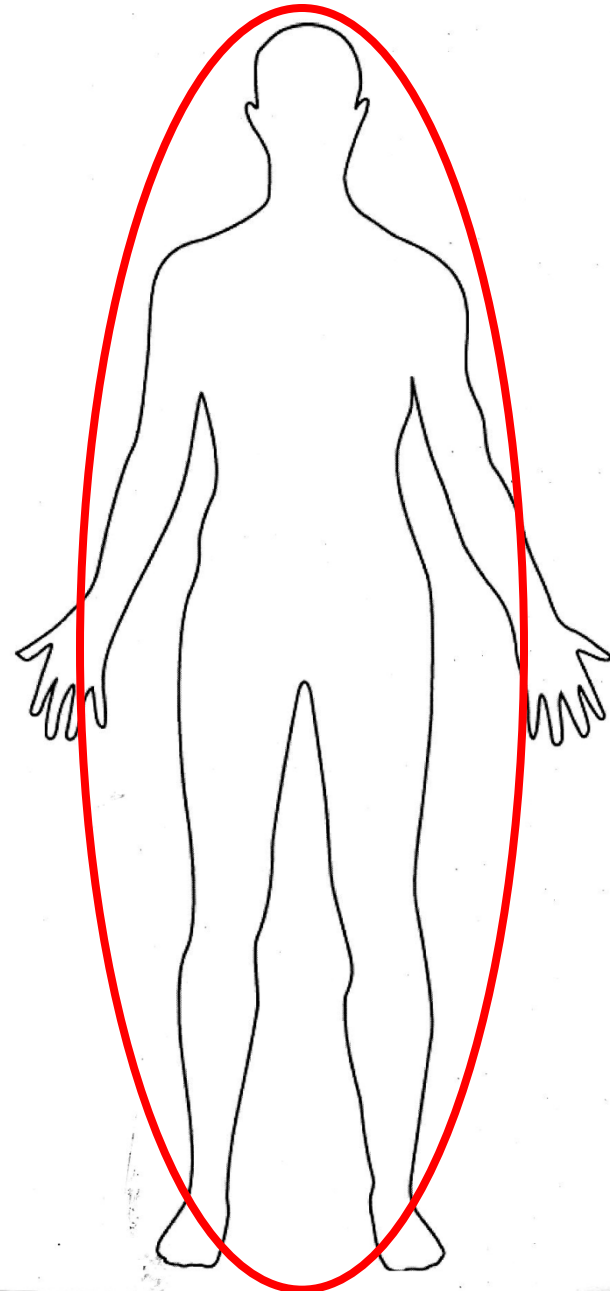
- Higher risk for developing bacterial infections, fungal infections, dry skin, boils, blisters and itching
- Difficult to heal from skin problems

- **Immune system**

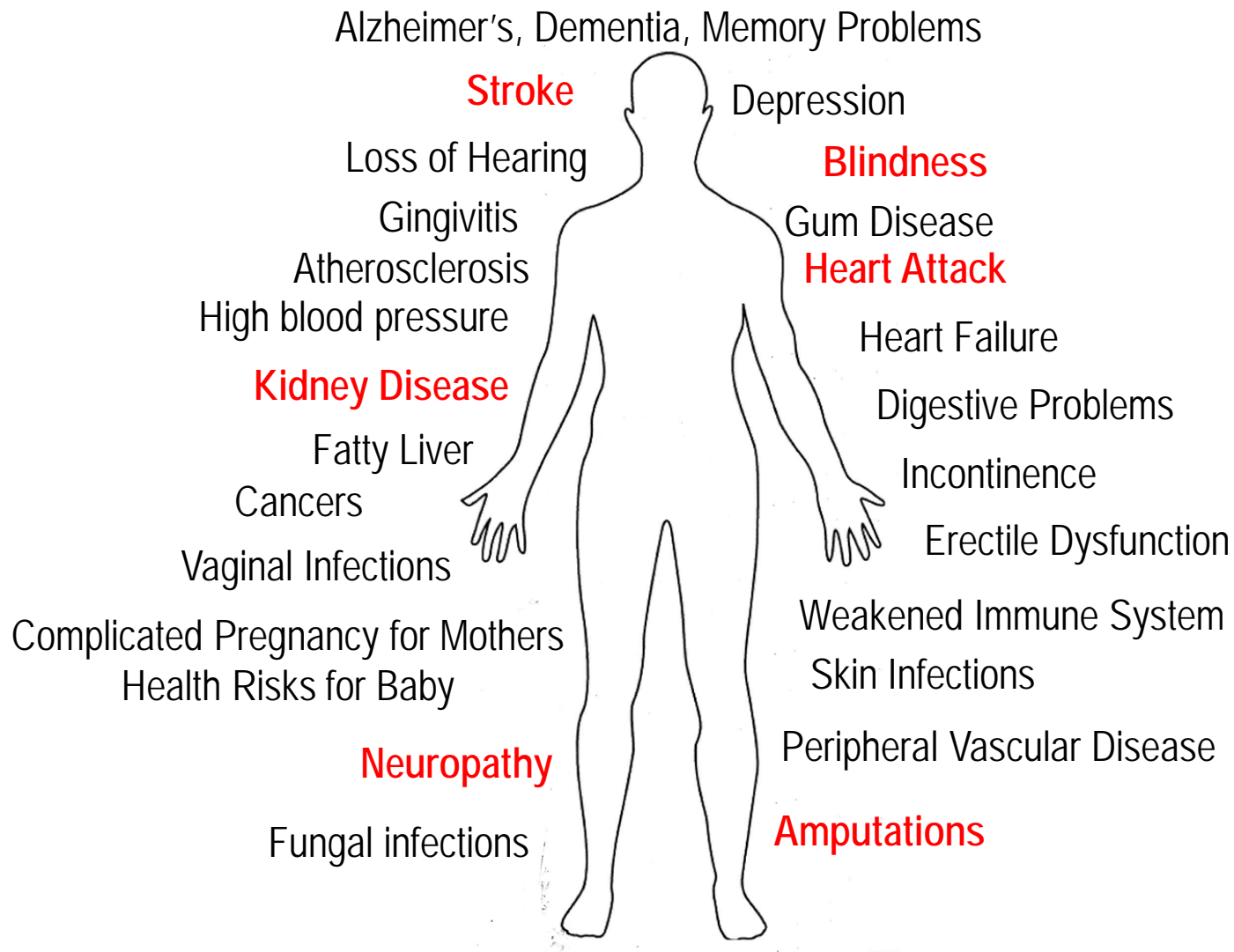
- Increases risk of death from pneumonia or influenza
- Difficult to fight bacterial infections

- **Cancers**

- Increased risk for non-Hodgkin's lymphoma, and colorectal, prostate, endometrial, liver, breast, and renal cell cancers



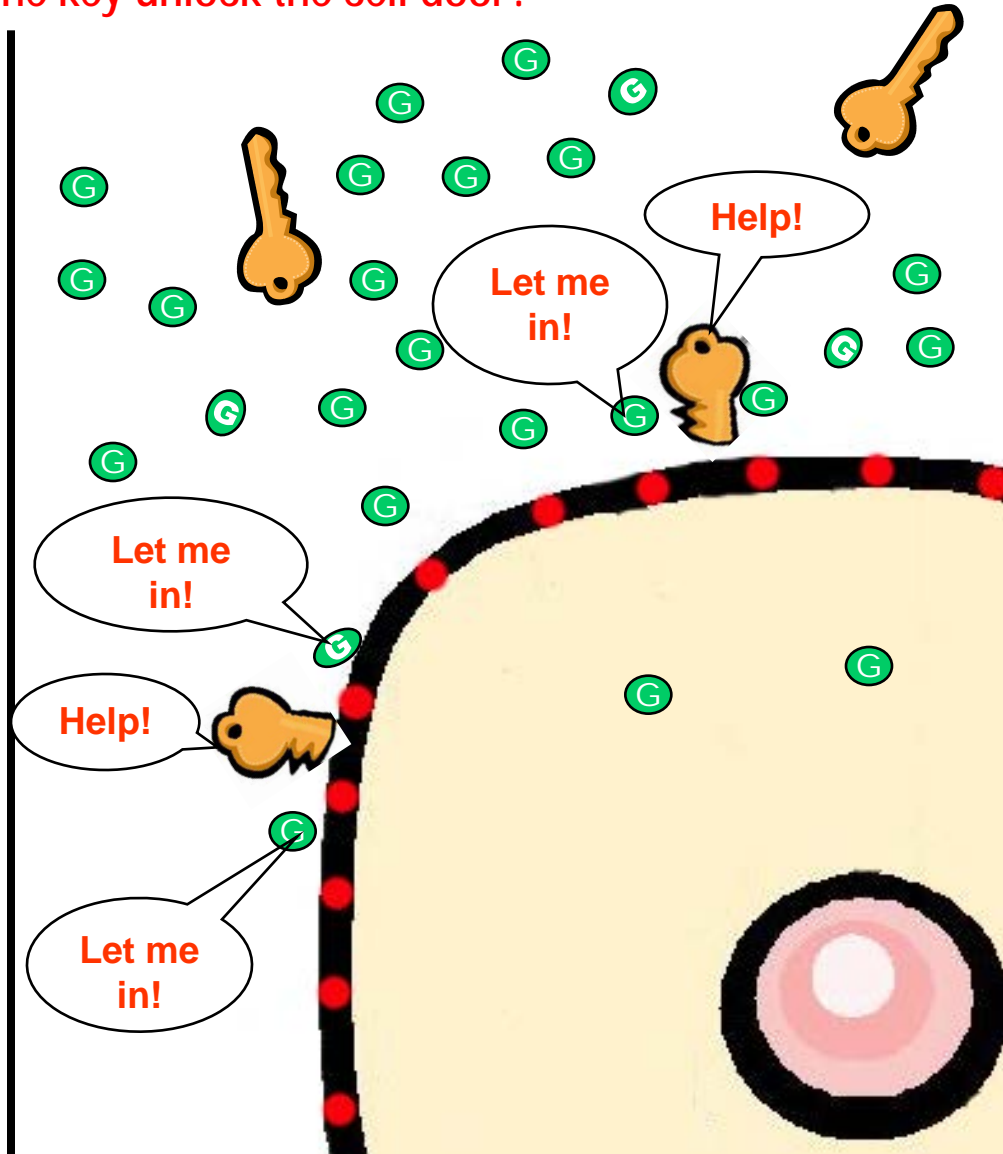
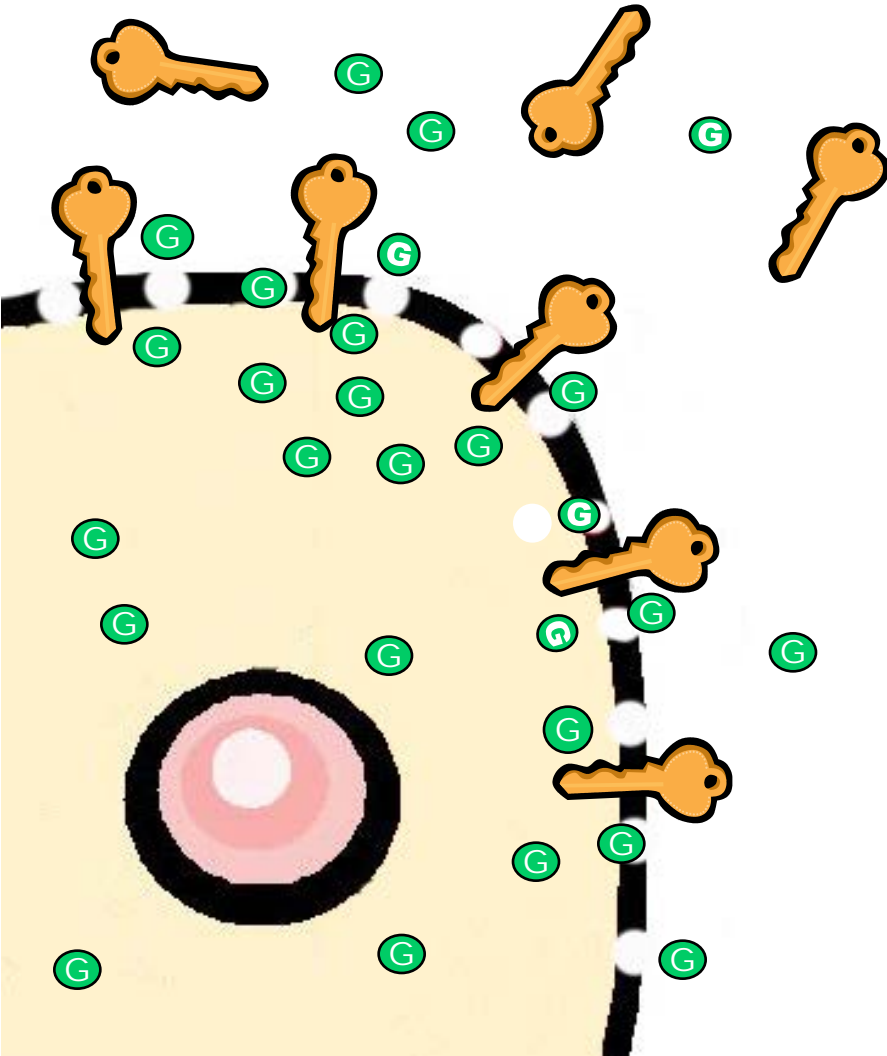
Why are these associated with diabetes?



How Insulin Functions

Lack of Insulin and Insulin Resistance

Name 3 ways to reduce insulin resistance.
What can you do to help the key unlock the cell door?



How can you reduce insulin resistance?

■ Reduce Inflammation

- Lose belly fat (see *Weight Management Resource* listing)
- Focus on unprocessed, plant-based foods
- Exercise regularly
- Manage stress and depression
- Sleep well

Control Your Blood Sugar

- **M**onitor “What does my blood sugar tell me?”
- **M**eals “Do I need support to make healthy food choices?”
- **M**otion “How can I be active today?”
- **M**edication “Am I taking medications as prescribed?”
- **M**ood “How is my mood effecting my diabetes?”
- **M**otivation “Am I motivated to care for myself?”

Which **M** are your ready to work on today?

Why do you monitor your blood sugar?

Why?	How Often?	When?
<ul style="list-style-type: none">■ Learn how your body responds to food, activity, stress, and medication■ Maintain your healthy focus■ Make sure your glucose is not too high or too low	<ul style="list-style-type: none">■ As directed by your provider or at least once a day■ Alternate times of day (breakfast, lunch, dinner, bedtime)	<ul style="list-style-type: none">■ Before Meals: 70-130■ 2 hrs. after meals: less than 180■ At bedtime: 100-140■ Record your results!

Hypoglycemia-Treating Low Blood Sugar

Eat Sugar	Wait 15 minutes	Next Steps
<ul style="list-style-type: none">■ If blood sugar is less than 70, take 15 grams of fast acting sugar■ If less than 50, take 30 grams■ 4 oz. fruit juice/soda, 8 oz. milk, 4 glucose tablets, 4 sugar packets or 1Tbsp. honey/syrup	<ul style="list-style-type: none">■ Rest for 15 minutes, then recheck■ If still less than 70, take another 15 grams of sugar■ If still low after 3 tries, call Kaiser Advice Line or go to the nearest emergency room	<ul style="list-style-type: none">■ Eat a substantial snack or meal with carbohydrate■ Apple with nuts■ Yogurt with fruit■ Plate Method (balanced) meal

How can you create healthy eating habits?



Eat Regularly

Eat 3 meals a day
Eat every 4 to 5 hours



Avoid Processed Foods

Limit fatty, sugary and
salty foods

Limit sweetened
beverages



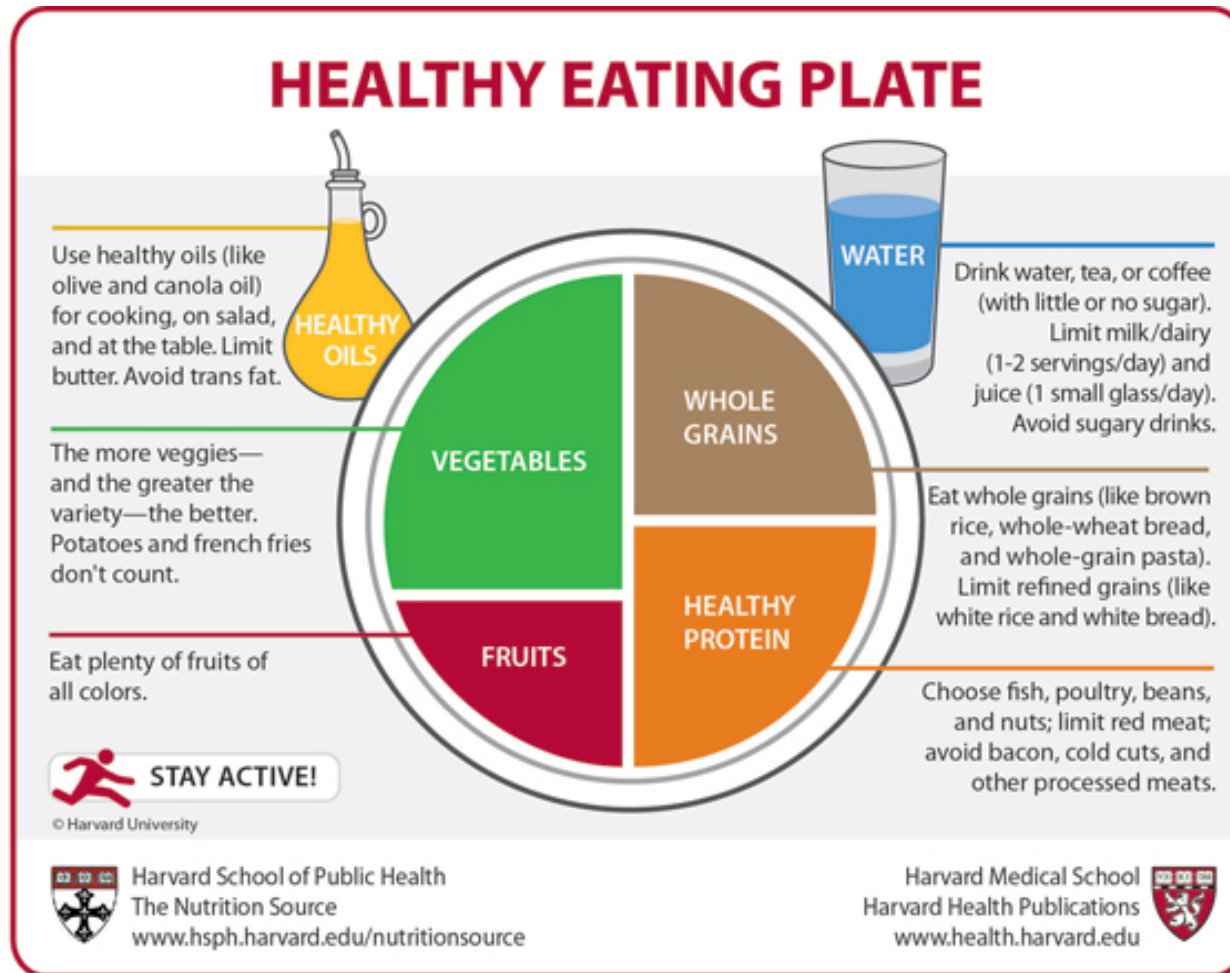
Eat a Variety

Eat whole,
unprocessed foods

Focus on plants

Healthy Eating Plate

See *Eating Well With Diabetes and Carbohydrate Basics* and *Food for Thought* tip sheets



Plant-Based Options

Choose plant-based milk instead of cow's milk

- soy, almond, rice, oat

Choose plant-based protein at meals instead of animal proteins

- beans, peas, lentils
- nuts, seeds, nut butters
- tofu and soy foods

Discuss individual dietary needs with your provider or registered dietitian

Motion

- Which exercise is the best?
 - Daily or most days a week
 - Aim for 30 minutes, non-stop movement
 - Have variety: cardiovascular, strength and flexibility
 - Start slowly and build up (exercise in your chair counts)
 - Exercise decreases insulin resistance and can help lower blood sugar up to 24 hours!



What are the benefits of regular exercise?

- Raises HDL, reduces LDL and triglycerides
- Helps lose or maintain weight
- Lowers blood pressure, blood sugar
- Strengthens heart, lungs, bones
- Improves flexibility, balance, posture
- Raises metabolism and energy level
- Improves memory and brain function
- Tones muscles
- Boosts self-esteem
- Boosts immune system
- Reduces emotional stress
- Improves blood circulation
- Reduces depression and anxiety
- Helps regulate hormones, sleep cycle
- Enhances sense of well-being

Reduced risk for Alzheimer's disease, cancers, dementia, depression, diabetes, heart attack, heart disease, high blood pressure and osteoporosis

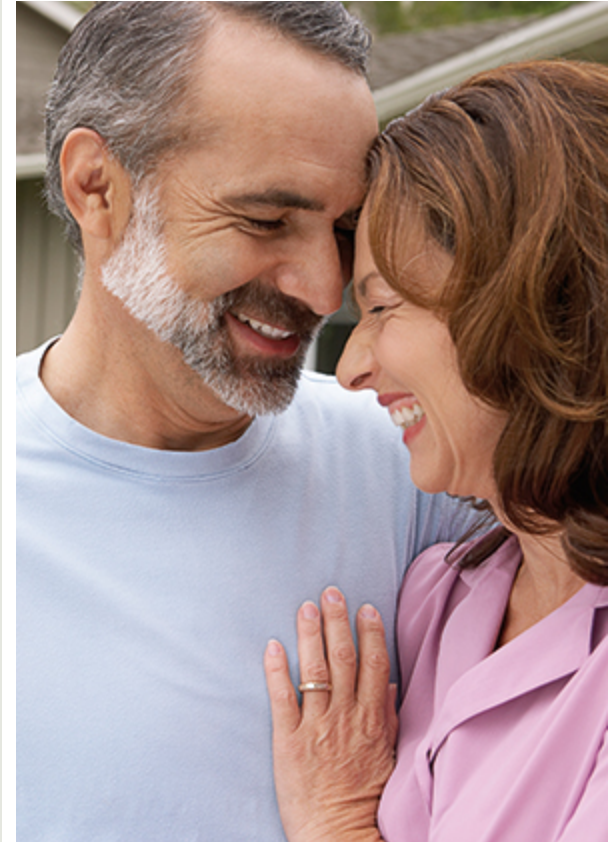
Medications

- Metformin (Glucophage®)
 - Keeps the liver from releasing too much glucose
 - May take with food
- Glipizide (Glucotrol®)
 - Helps the pancreas to make more insulin
 - Take 30 minutes before a meal
- Insulin
 - Helps the body get the blood sugar into the cells and out of the bloodstream

Medication Guidelines

Medications do **not** take the place of your habits

- Take your medication as prescribed
- Ask your doctor or a pharmacist about any questions you have
- Communicate with your doctor about side effects and over-the-counter medications
- Talk with your doctor before you stop or change medications
- Wear a medical alert bracelet or carry a wallet card for emergencies



How does stress or lack of sleep effect you?

- Stress promotes:
 - Increased blood sugar
 - High blood pressure and high cholesterol
 - Heart disease and weight gain
 - Depression, anxiety and more!
- Lack of sleep is a **major** stressor that increases weight gain, insulin resistance and the risk for developing diabetes.
- Studies find those who **sleep less than 6 hours per night for 1 week** have glucose levels in the prediabetes range, an increase in hunger, crave high-carbohydrate foods and have a decrease in fullness.



How are your mood, mental well-being and diabetes related?

- Having diabetes may increase your risk for mental health conditions like depression
 - Over time intermittent depression, anxiety or stress can interfere with self-care
 - Address mental health as one of your lifestyle changes
- “Have you lost interest in things you used to enjoy?” or “Do you sleep a lot more or less than usual?”
- Resources
 - Contact your medical provider
 - Access classes and online resources
 - Call the Behavioral Health/ Department of Psychiatry

Motivation

- How does motivation affect diabetes?
- How can we become motivated?
 - Action creates motivation
- If you feel resistant to making changes, it's normal.
 - Resistance to change is universal. Don't let it stop you.
 - Make the changes anyway and show resistance who's boss.

"Resistance is not out to get you personally. It doesn't know who you are and doesn't care. Resistance is a force of nature. It stunts us and makes us less than we are and were born to be."

Steven Pressfield, *The War of Art*

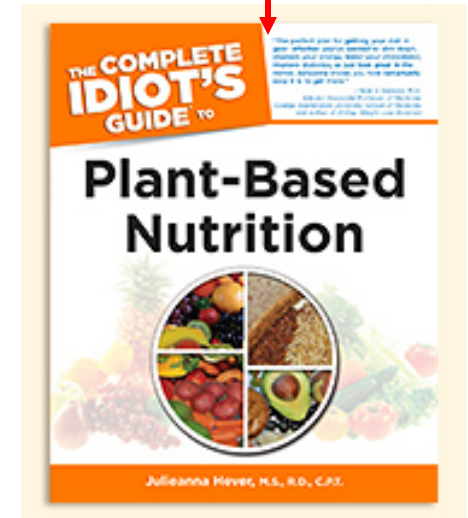
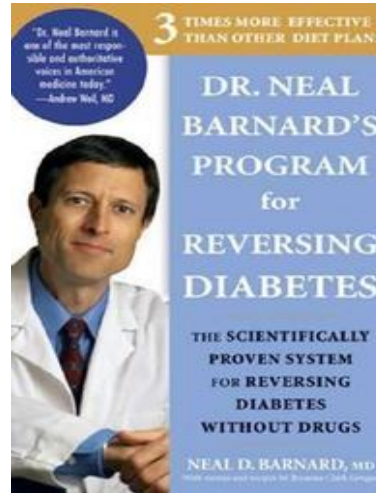
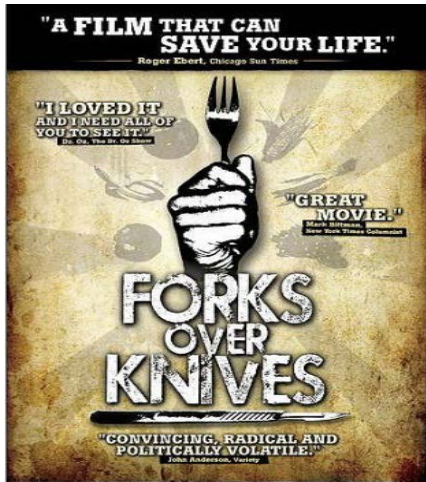
My SMART Plan

Telephone Wellness Coaching 1-866-251-4514

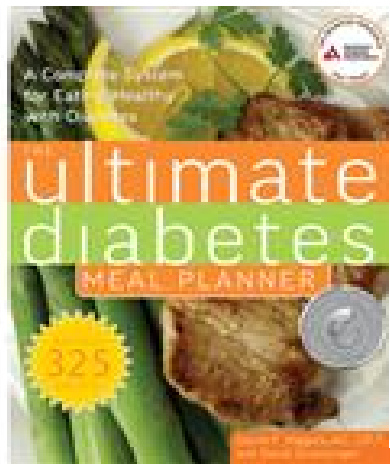
- **S**et a Behavioral Goal
 - Observable, measurable, short-term, achievable, challenging
- **M**onitor Your Progress
 - Tracking behavior changes behavior
- **A**rrange Your World for Success (home or work place)
 - List 3 ways to make the healthy choice easier
- **R**ecruit Support
 - Ask for the support you need
- **T**reat Yourself
 - Behavior that is rewarded is repeated

Resources: Film and Books

Currently for sale in Kaiser Health Promotion Centers \$15



Currently for sale in Kaiser Health Promotion Centers \$20



Currently for sale in Kaiser Pharmacy Centers \$6.95

