A black dog is running on a sandy beach towards the camera. The dog is holding a bright yellow ball in its mouth and has a happy expression. The background shows the ocean with white-capped waves breaking onto the shore. In the distance, there are cliffs and some greenery under a clear sky. The overall scene is bright and sunny.

# The 8 Keys to Living a Healthy Life with Diabetes or Prediabetes

**Theresa Garnero  
APRN, BC-ADM, MSN, CDE  
Instructional Designer Specialist  
UCSF Family Health Care Nursing  
Founder of the Sweet People Club**

# Faculty

---



**Theresa Garnero APRN, BC-ADM, MSN, CDE**  
Instructional Designer Specialist  
UCSF Family Health Care Nursing

Author/illustrator/cartoonist:

- *Your First Year with Diabetes* ADA 2008, 2014
- *DIABETease: a lighter look at the serious subject of diabetes* 2004

Awards:

- *National Diabetes Educator of the Year* AADE, 2004-5

Disclosure:



Founder of the Sweet People Club, an online prediabetes course aimed at preventing or delaying type 2 diabetes

# The 8 “Keys”



## Do you know them all?

1. A review of the American Association of Diabetes Educators (AADE7) self-care behaviors + 1
2. Check your possible opportunities





# Which One Do You Focus On?

---

Too much to do.



# It Depends!

## Just Diagnosed? Annually? Change in Health?

---



# Islets of Humor

by Theresa Garnero



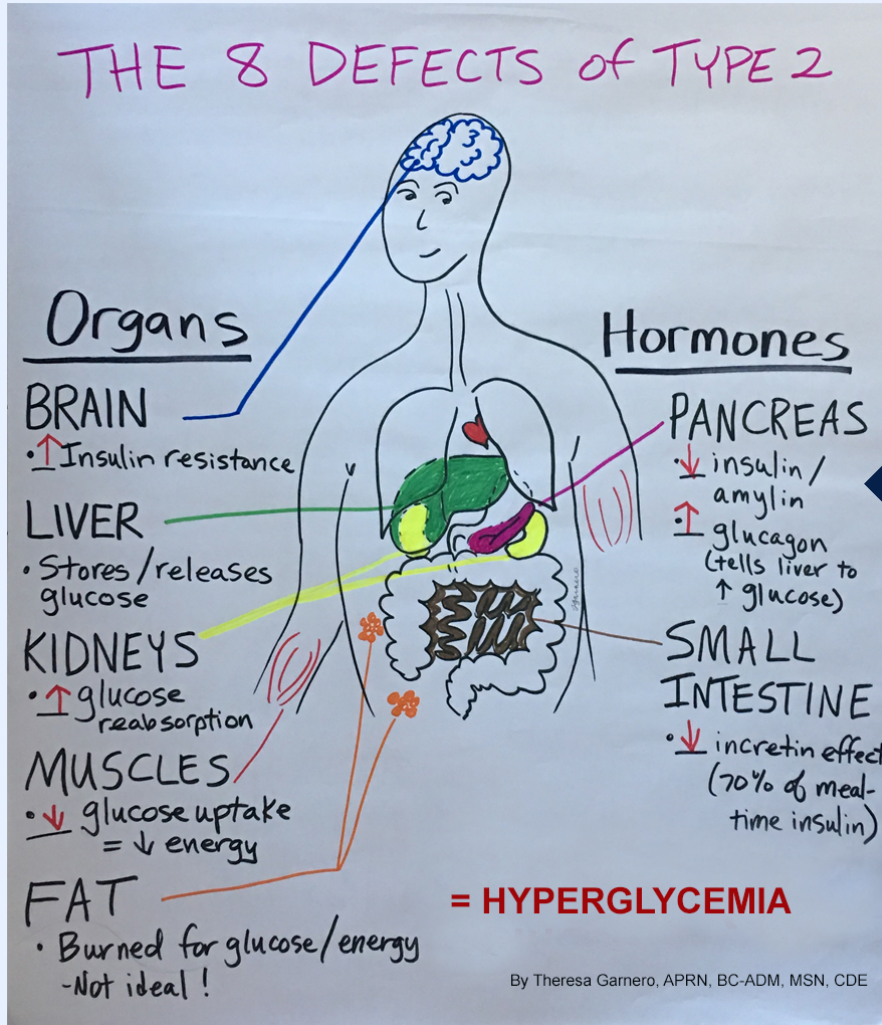
# Diabetes Self Management Educ. vs Metformin

<b>Scorecard: DSME vs Metformin</b>		
<b>Criteria</b>	<b>Benefits Rating</b>	
	<b>DSME</b>	<b>Metformin</b>
<b>Efficacy</b>	High ↓ A1C 1.1-1.3%	High ↓ A1C 1.1%
<b>Hypoglycemia risk</b>	Low	Low
<b>Weight</b>	Neutral/Loss	Neutral/Loss
<b>Side effects</b>	None	GI
<b>Cost</b>	Low/Savings	Low
<b>Psychosocial benefits</b>	High	N/A

Margaret A. Powers Diab Care 2016;39:2101-2107



# Why You Often Need Medications



**With type 2,**  
8 known deficits.

**With prediabetes,**  
some of these deficits have begun. Metformin is used, but off label (not approved by FDA).

**With type 1,**  
lack of insulin and amylin;  
Can also have insulin resistance.



# Taking Medication

## 1. Increase on-time doses:

- ➔ - how to be more consistent?
- how many times a week or even a day do you miss a dose; why?
- get a pill reminder?
- ➔ - carry medications with you or have a second stash?
- take metformin with meals
- ➔ - take mealtime insulin within 10 minutes of eating
- take basal insulin within an hour of scheduled dose

## 2. Communicate: tell your healthcare provider about side effects or if it's not working out



## 3. Options to save money and time:



(ask pharmacist to synch your refills so you only have to make 1 trip / month or get 3-month supply for same co-pay)





# Healthy Coping

1. Reduce stress by \_\_\_\_\_
- ➔ 2. Strive for progress, not perfection (expect and plan for slip-ups)
3. Take breaks
- ➔ 4. Learn meditation
5. Get \_\_\_\_\_ hours of sleep
- ➔ 6. Ask your loved one for specific ways to be helpful
7. Listen to soothing music, take a bath, or have a cup of tea
8. Get out in nature
- ➔ 9. Learn how to say no to things you don't really want or need to do
10. Join a support group
11. Know what situations make you feel stressed and plan how to cope with them
- ➔ 12. See a mental health specialist as needed for \_\_\_\_\_ (diabetes burnout, addiction or depression)





# Healthy Eating

- ➔  See a Registered Dietitian for individualized care
- ➔  Be consistent with carb consumption
- ➔  Plan ahead (for the week, for the next day)
  - Broil, bake, grill or steam at least 80% of time
  - Look at online menus before going to a new place to eat
  - Ask for dressing/sauce/gravy/sour cream/butter on the side
  - Wait 5 minutes before getting a second helping
- ➔  Focus on being satisfied not stuffed
  - Go to the Farmer's Market (fresher, cheaper)
  - Eat breakfast at least \_\_\_\_\_ times a week
  - Carry snacks
  - Reduce portions or sweets by \_\_\_\_\_%
  - Substitute whole grains for white
- ➔  Hydrate with fun water (add lemon, lime, mint) instead of soda or juice
  - Ask a family or friend for help

Healthy  
Eating





# Being Active

- Find ways to be active: walk around whenever you talk on the phone
- Stand up every 30 minutes to do 2 minutes of activity (set a timer if at work; when watching TV, get up during commercials)
- Take the stairs instead of escalator or elevator when you can
- Be safe: hydrate, wear proper shoes, slow down or stop if you feel faint or very sick or your joints hurt
- Get feedback and track your steps (work up to 10,000/day)
- Get a walking buddy or use YouTube exercise videos
- Warm up and cool down for 5 minutes
- Mix up your routine, try something new
- Do strength training exercises every other day
- Try Tai Chi or yoga or a walk after dinner
- Get home exercise equipment for free on websites like freecycle
- Strive for 150-minutes moderate paced activity per week and do strength training every other day





# Monitoring

- ➔  Get A1C test every \_\_\_\_ (3 months for diabetes, yearly for prediabetes)
- ➔  Weigh yourself \_\_\_\_ (daily, or at least 1 time per week)
- ➔  Use a fitness and/or nutrition tracker
- Buy a home blood pressure monitor & use it
- Know your cholesterol levels
- ➔  Ask for and keep copies of your lab work

## Blood Glucose and Ketones

- Check blood sugar \_\_\_\_\_ times each day  
(When? Before or 2 hour after meals? \_\_\_\_\_)
- Record results and bring to appointments
- Upgrade diabetes technology to make it easier
- ➔  For those with type 1, check ketones when glucose is above 250 mg/dL or as advised  
(blood ketone monitoring is more accurate than urine ketones)





# Problem Solving

- ➔  Have a “Plan B” for changes in routine, like holidays or sick days, travel, extreme weather, or injuries
- ➔  Make sure medications and supplies don’t run out
  - Try to be first on the list for any planned surgeries
- ➔  Talk with provider about unresolved pain
  - Include diabetes wellness supplies in disaster kit

## Blood Glucose & Insulin or Injectables

- Do you need to carry glucose tablets? Know the “Rule of 15”?
- Check blood sugar when feeling low or high
- ➔  Think about other causes of wacky sugars (pain, stress, illness, alcohol, pot, expired insulin/strips)
  - Expect increased sugar with steroid injections
  - Have a pre-exercise snack if on insulin (including before a romantic interlude)
- ➔  Rotate injection sites

**Problem Solving**





# Reducing Risks

- Floss teeth daily and get a dental cleaning 2 times per year
- Have a complete physical exam once a year
- Get dilated eye exam upon diagnosis and every 2 years
- Get a flu shot every year, and ask about pneumonia and Hepatitis B vaccines
- Have kidney health checked annually (urine albumin, eGFR)
- Get a lipid panel every 1-2 years based on risk
- Protect feet by wearing shoes and slippers
- Make a plan to quit or reduce \_\_\_\_ (smoking or vaping, exposure to 2<sup>nd</sup> hand smoke, alcohol, illegal drugs)

## If taking insulin

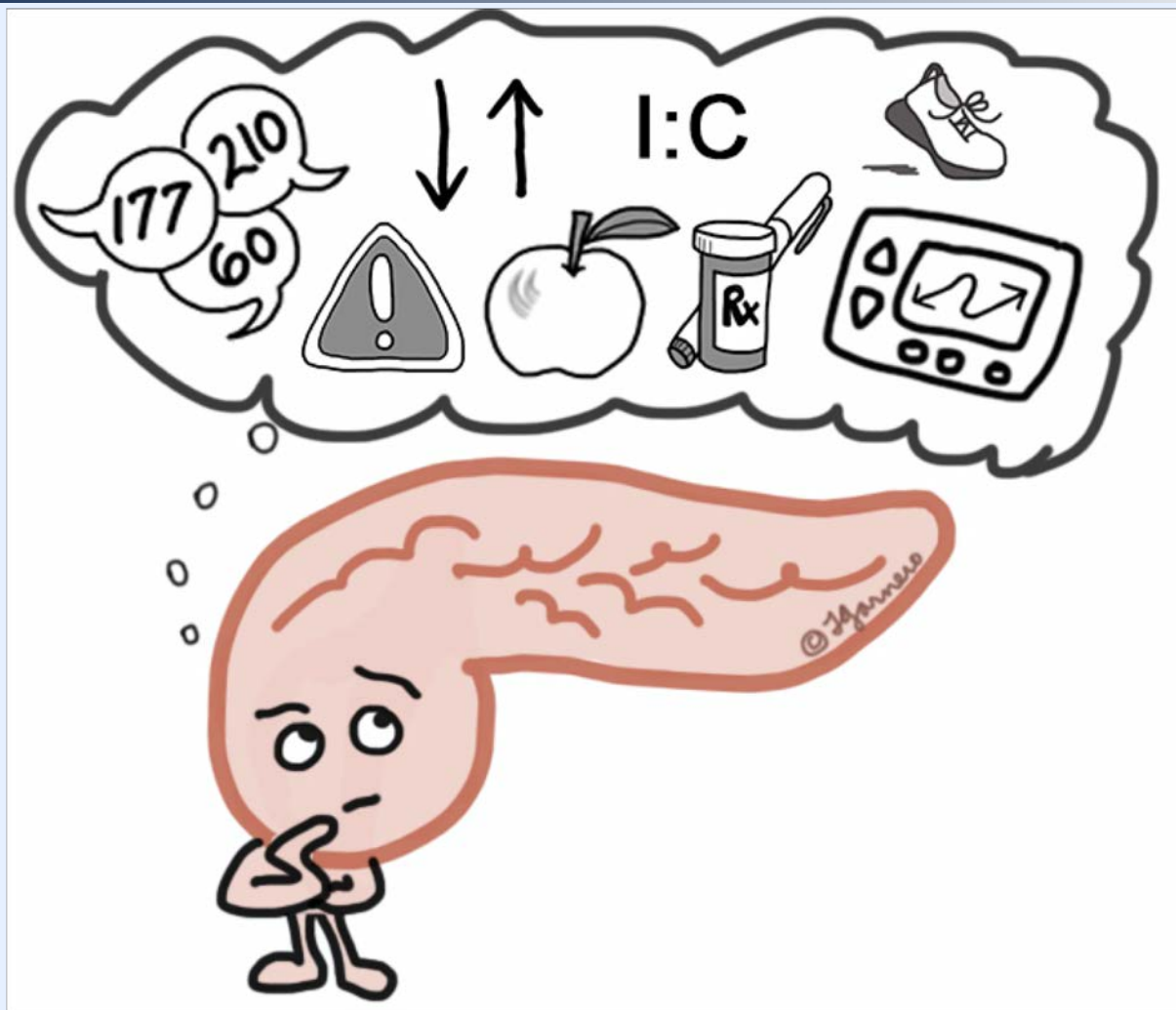
- Wear medical identification jewelry
- Teach family/friend/teacher how to use Glucagon (used to rescue you from a severe low blood sugar)

Reducing Risks





# Thinking Like a Pancreas





# Adding Humor – It's Good for You!

There's nothing funny about having diabetes or prediabetes: it's stressful! Using laughter helps you to cope *and* helps your body's biochemistry.

## Many benefits of laughter:

- Increases endorphins (“the feel good” hormones)
- Lowers glucose and A1C (~0.3%) and blood pressure (~10 points)
- Increases “good” HDL cholesterol by 26%
- Lowers harmful C-reactive proteins by 66% (biomarker of inflammation thought to be associated with heart disease)
- Assoc. w/lower rates of cardiovascular disease
- Used as a weight loss therapy
- Makes you more fun to be around?
- Probably gets you better care



Hayashi, K., Kawachi, I., Ohira, T., Kondo, K., Shirai, K., & Kondo, N. (2016). Laughter is the Best Medicine? A Cross-Sectional Study of Cardiovascular Disease Among Older Japanese Adults. *Journal of Epidemiology*, 26(10), 546-552. doi:10.2188/jea.je20150196

[Mirthful laughter, as adjunct therapy in diabetic care, increases HDL cholesterol and attenuates inflammatory cytokines and C-RP and possible CVD risk](#)

Lee S Berk and Stanley Tan. *The FASEB Journal* 2009 23:1\_supplement, 990.1-990.1



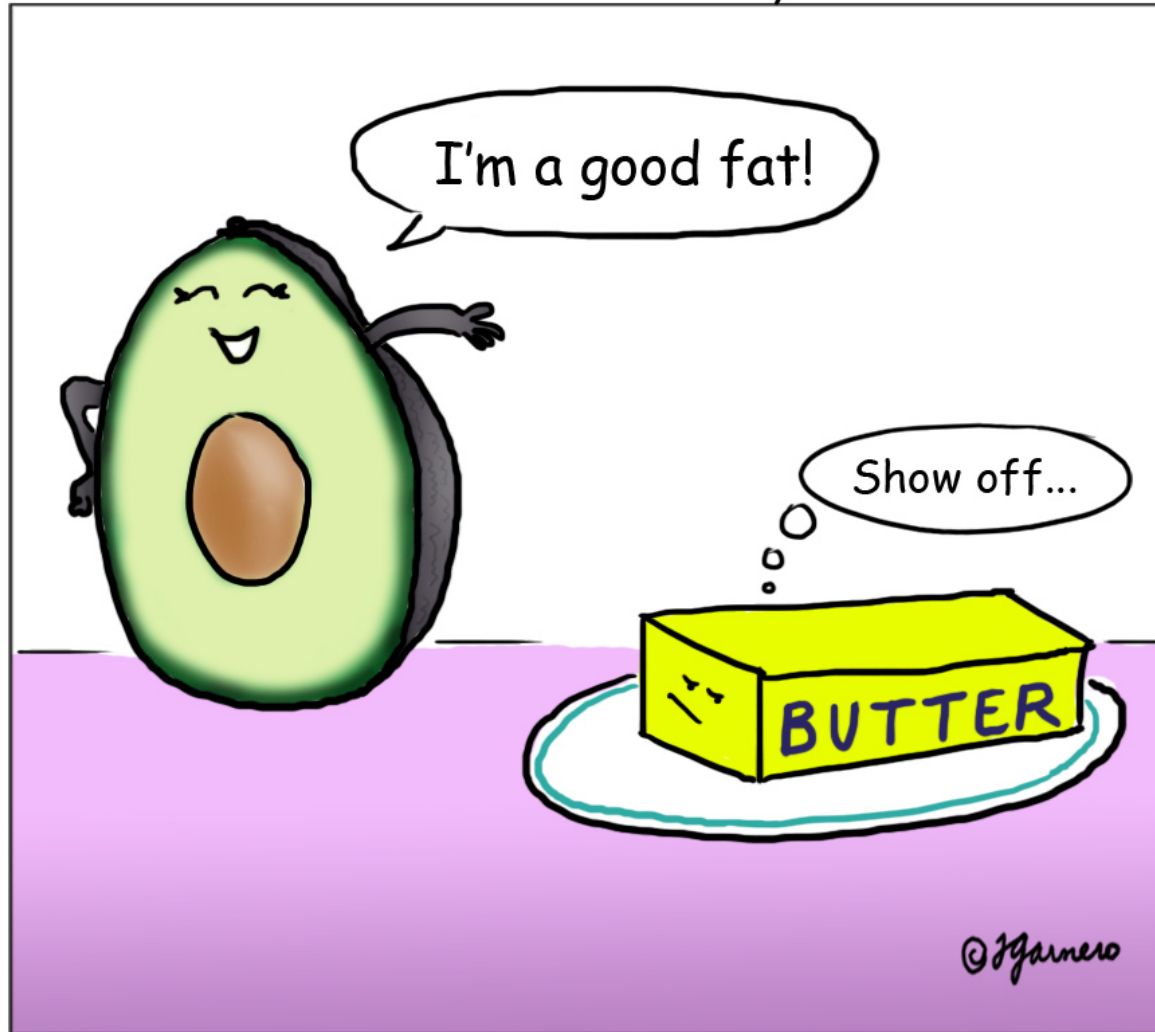
# Adding Humor

- Keep your humor antennae up – look for it
- Assess what amuses you; do more of that
- Laugh every day (learn to laugh at yourself or the situation)
  - Allow yourself to be silly
- Smile and laugh intentionally (first thing in morning, when stressed)
  - Focus on the positive
  - Find at least one funny thing today
  - Watch funny animal videos or a comedy show
  - Do something a little goofy or lighthearted
- Accept the diagnosis, but not the negatively-portrayed prognosis
  - Look for funny signs
  - Enjoy some cartoons



# Islets of Humor™

By Theresa Garnero



# How to Find an Diab Educ/Prevention Program

---

## For diabetes

- Recognized Education Program (**ADA**)

<http://professional.diabetes.org/diabetes-education>

- Diabetes Education Accreditation Program, American Association of Diabetes Educators (**AADE**)

<http://diabeteseducator.org> and click on DEAP

## For prediabetes:

- Center for Disease Control and Prevention (in-person, some online, most require insurance)

[https://nccd.cdc.gov/DDT\\_DPRP/Registry.aspx](https://nccd.cdc.gov/DDT_DPRP/Registry.aspx)

- Sweet People Club (all online, self-pay, only program with all video and podcast format, goes beyond 1 year) [sweetpeopleclub.com](http://sweetpeopleclub.com)

Get free Show Me What to Eat Guides

<http://bit.ly/sweetpeopleclub>



# Find Time to Do What Brings You Joy!

---



# Find Your Best Path

