



Supporting Expectant Moms with Diabetes

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Diabetes Management & Prevention Programs





Financial Disclosure

I have no relevant financial relationships with any commercial interests that create a conflict of interest to affect continuing education content.

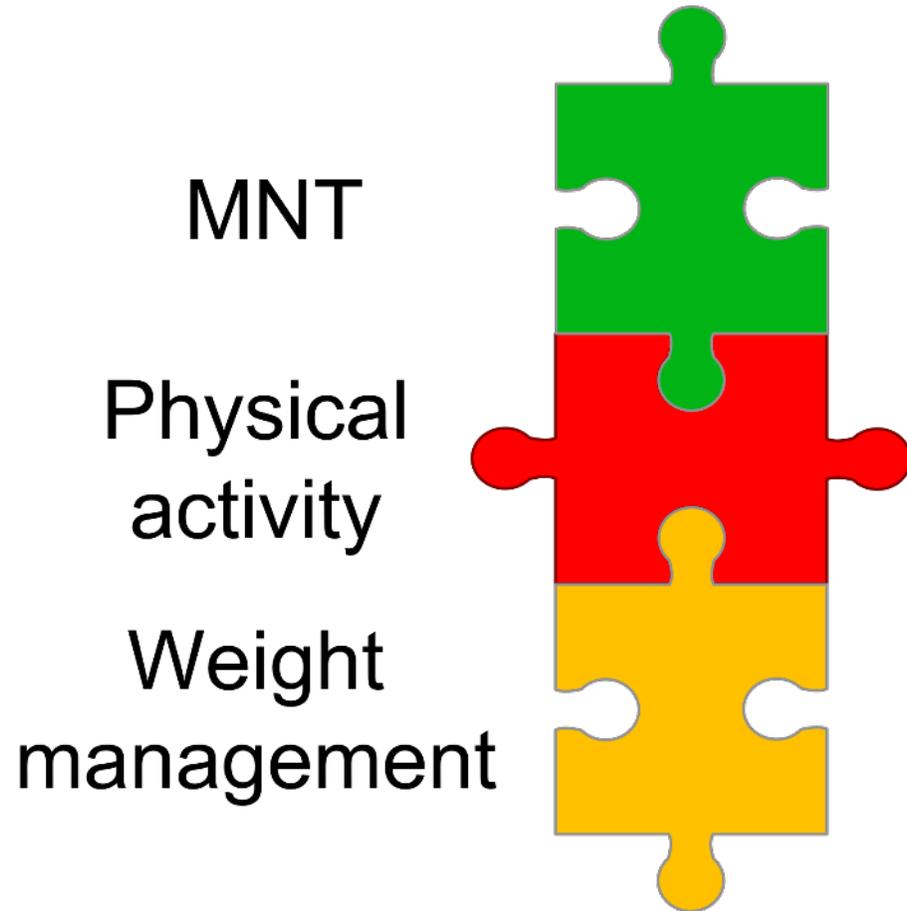
Objectives

At the conclusion of this presentation, participants will be able to:

1. Discuss strategies used in managing diabetes in pregnancy.
2. Develop a list of resources to use with women who have diabetes in pregnancy.



Lifestyle Management¹



70–85% of women with gestational diabetes (GDM) can control it with lifestyle modification alone

Medical Nutrition Therapy^{1,2}

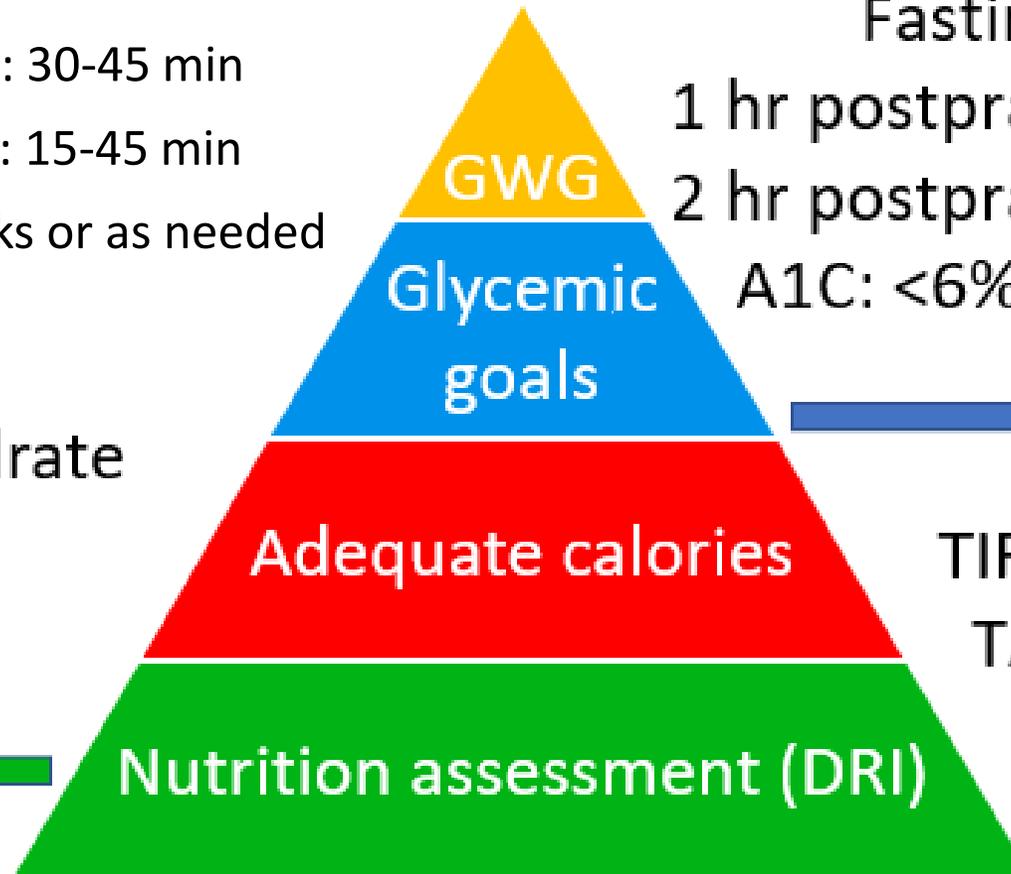
1st MNT visit: 60-90 min

2nd MNT visit within one week: 30-45 min

3rd MNT visit within 2-3 weeks: 15-45 min

Additional visits every 2-3 weeks or as needed for duration of pregnancy

- ≥175g carbohydrate
- ≥71g protein
- 28g fiber



Fasting: 70-95 mg/dL

1 hr postprandial: 110-140 mg/dL

2 hr postprandial: 100-120 mg/dL

A1C: <6% (or <7% as needed)

TIR 63-140 mg/dL: >70%

TAR >140 mg/dL: <25%

TBR <63 mg/dL: <4%

TBR <54 mg/dL: <1%

GWG Recommendations^{3, 4, 5}

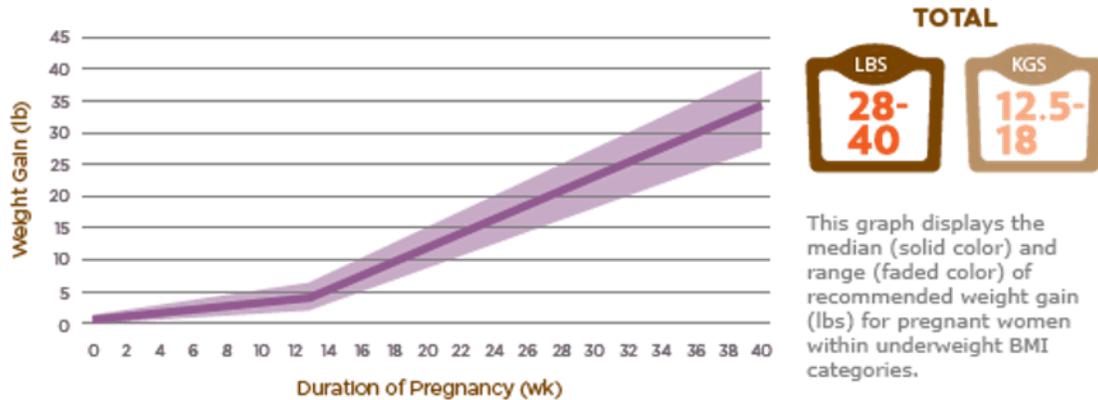
TABLE S-1 New Recommendations for Total and Rate of Weight Gain During Pregnancy, by Prepregnancy BMI

Pregpregnancy BMI	Total Weight Gain		Rates of Weight Gain [*] 2nd and 3rd Trimester		Twins
	Range in kg	Range in lbs	Mean (range) in kg/week	Mean (range) in lbs/week	
Underweight (< 18.5 kg/m ²)	12.5–18	28–40	0.51 (0.44–0.58)	1 (1–1.3)	50-62 lb ⁵
Normal weight (18.5–24.9 kg/m ²)	11.5–16	25–35	0.42 (0.35–0.50)	1 (0.8–1)	16.8-24.5 kg (37-54 lb)
Overweight (25.0–29.9 kg/m ²)	7–11.5 <u>2.7-6.4</u>	15–25 <u>6-14</u>	0.28 (0.23–0.33)	0.6 (0.5–0.7)	14.1-22.7 kg (31-50 lb)
Obese (≥ 30.0 kg/m ²)	5–9	11–20	0.22 (0.17–0.27)	0.5 (0.4–0.6)	11.3-19.1 kg (25-42 lb)

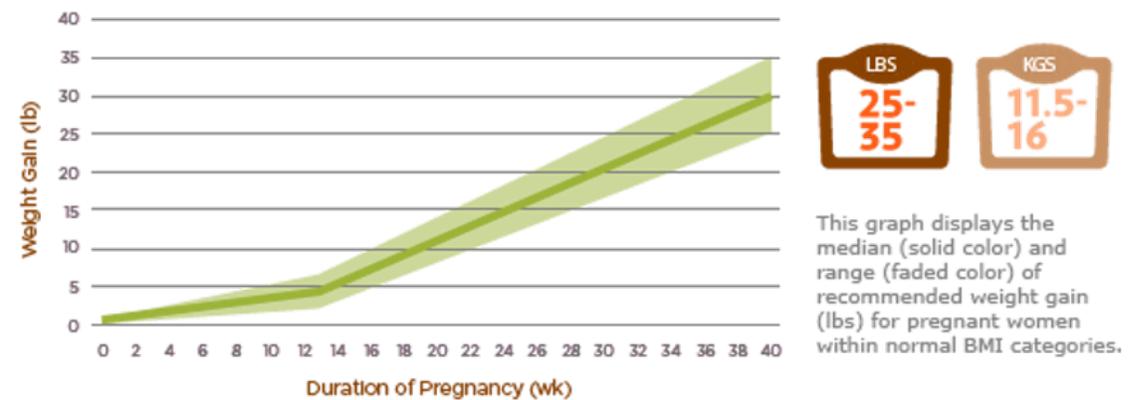
* Calculations assume a 0.5–2 kg (1.1–4.4 lbs) weight gain in the first trimester (based on [Siega-Riz et al., 1994](#); [Abrams et al., 1995](#); [Carmichael et al., 1997](#)).

GWG Recommendations⁶

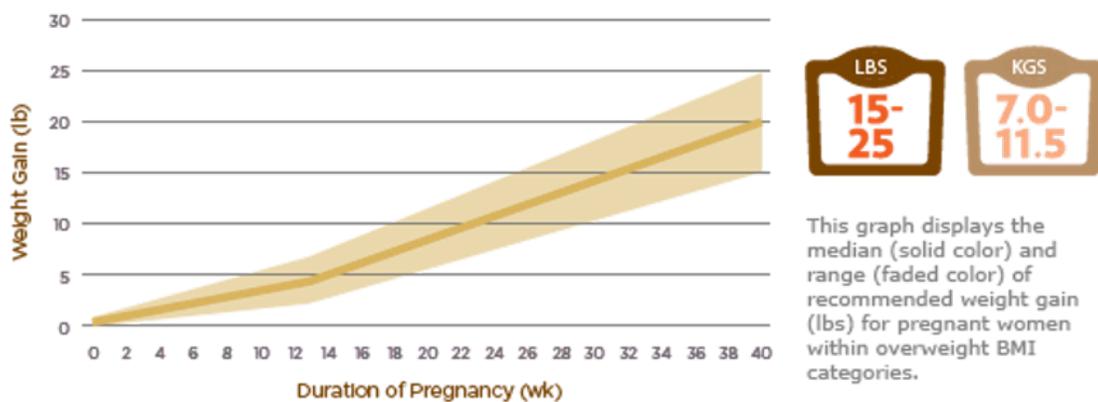
Recommended Pregnancy Weight Gain
for underweight mothers



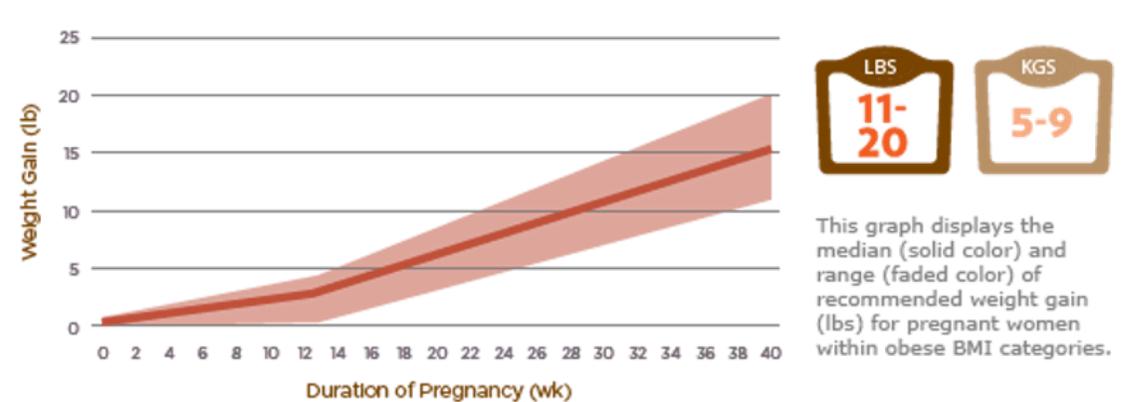
Recommended Pregnancy Weight Gain
for normal weight mothers



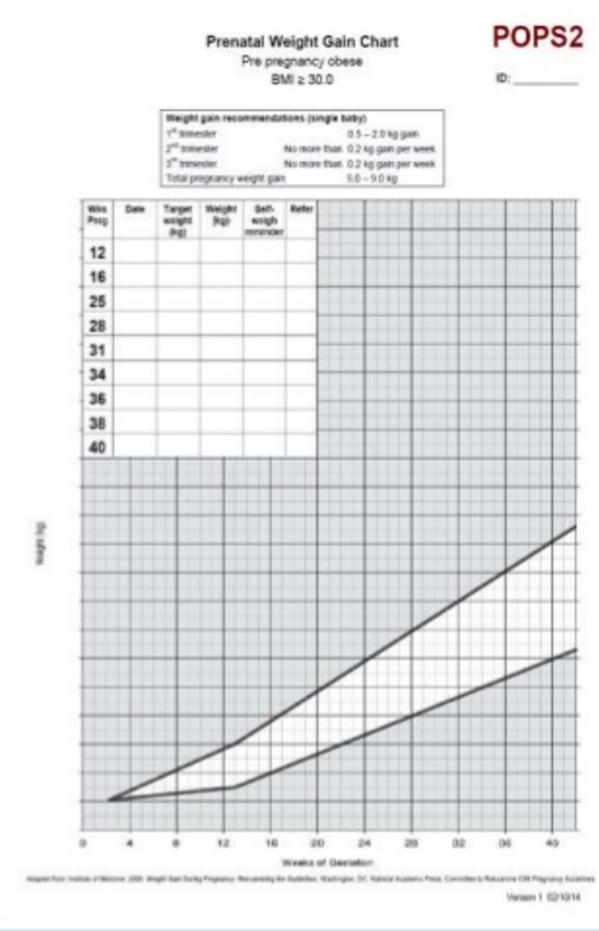
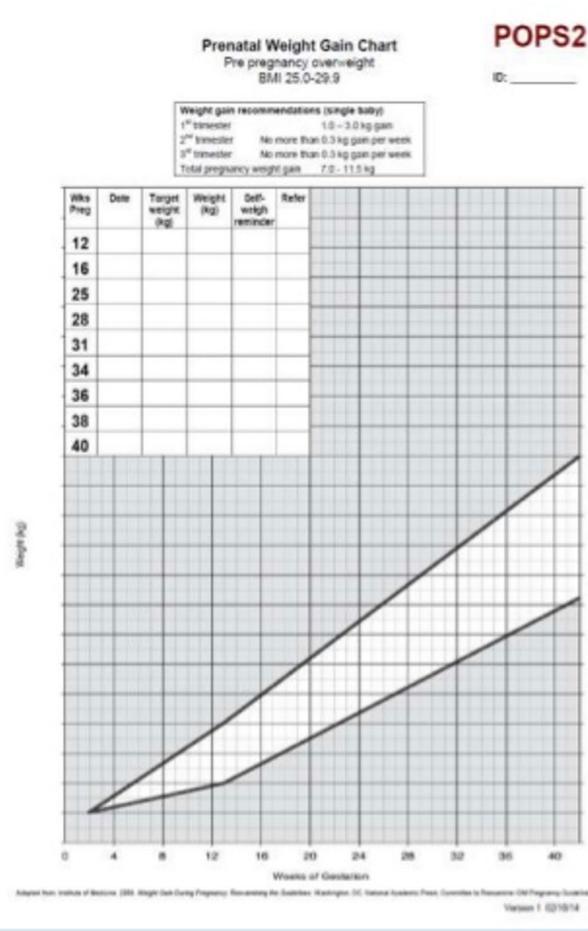
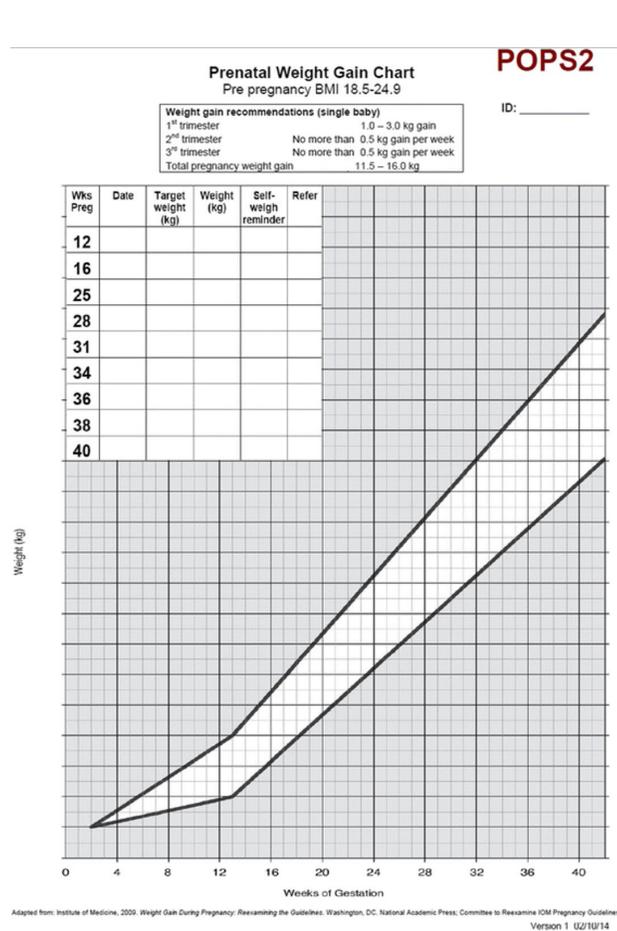
Recommended Pregnancy Weight Gain
for overweight mothers



Recommended Pregnancy Weight Gain
for obese mothers



GWG Recommendations



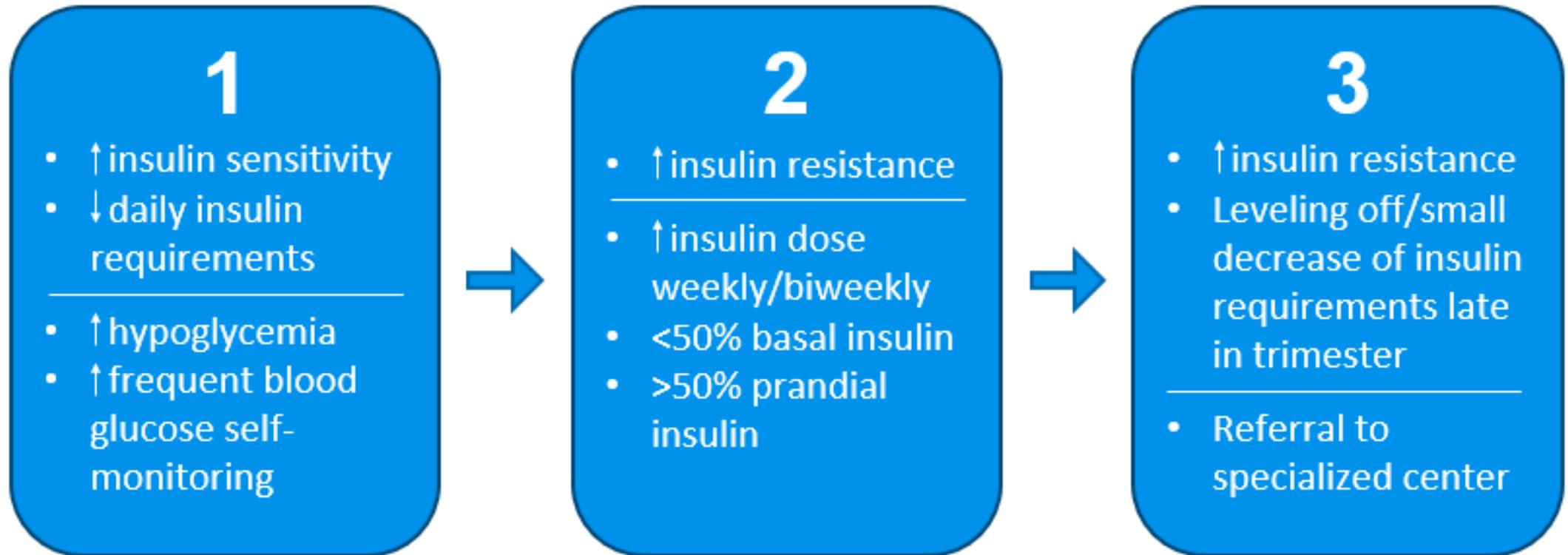
Physical Activity⁷

30-60 minutes of moderate-intensity exercise at least 3-4 times per week at up to 80% of age-predicted MHR

<ul style="list-style-type: none">• Walking• Dancing	Safe	<ul style="list-style-type: none">• Contact sports (or other activities) with a high risk of abdominal trauma or imbalance• Scuba diving
<ul style="list-style-type: none">• Stationary cycling• Aerobic exercises• Resistance exercises• Stretching exercises• Hydrotherapy, water aerobics		<ul style="list-style-type: none">• Hot yoga• Hot pilates Unsafe

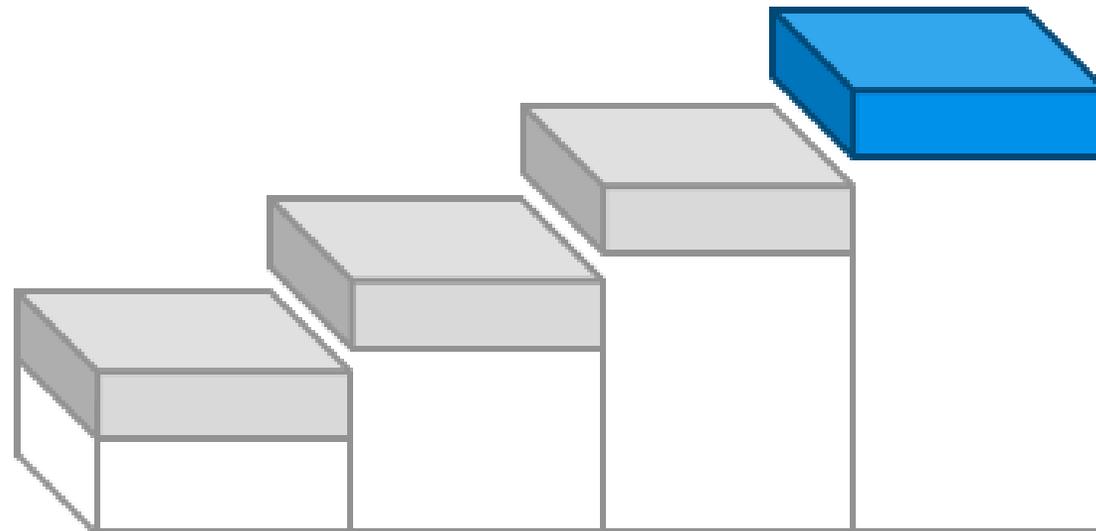


Insulin Management¹

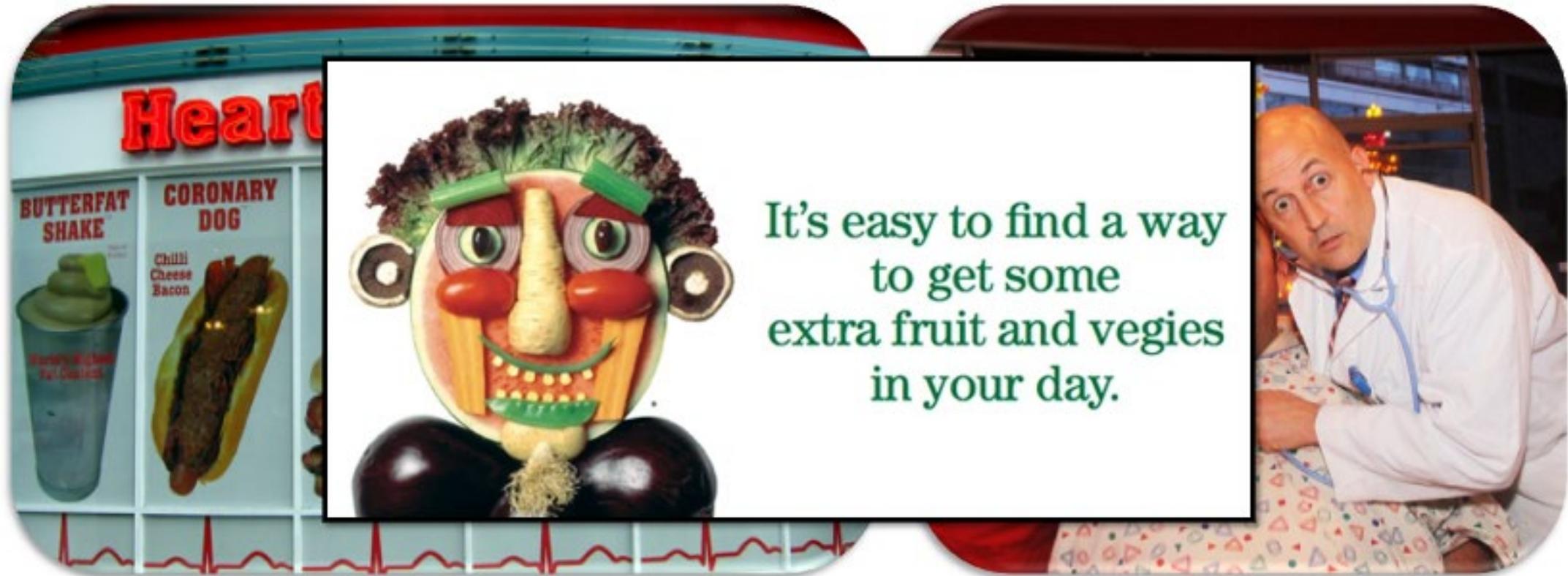


Mark Twain

“Habit is habit, and not to be flung out of the window by any man, but coaxed downstairs a step at a time.”



Why Can/Can't They Change?

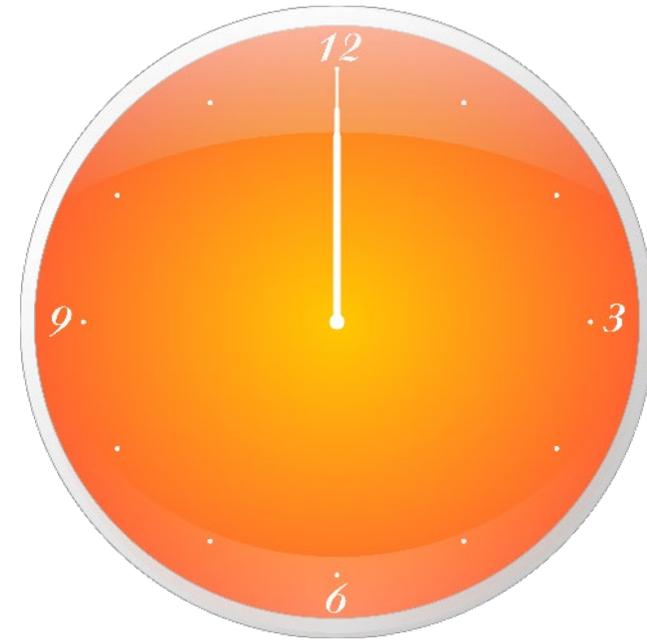


Time to Chat

What are some of the barriers to a healthy lifestyle in the environments in which your clients have grown up or currently live?



What Can/Can't We Change?



Successful Counseling



Praise

- Positive reinforcement
- Promote change talk
- Must be genuine
- What does she value?
- What motivates her?



Praise (con't)

*Avoid
outcomes*

Weight

Glycemic #s

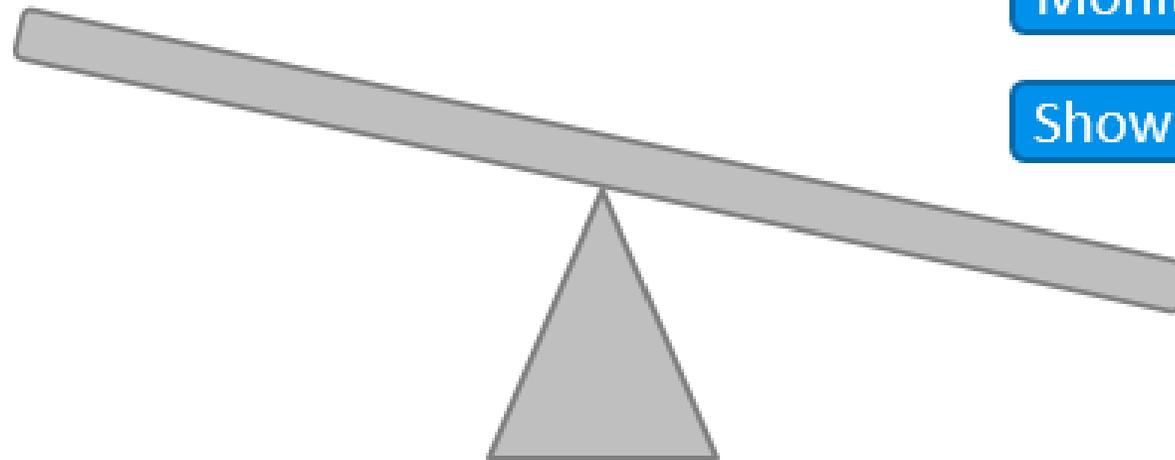
*Reinforce
efforts*

Diet

Activity

Monitoring

Showing up



Praise (more)

Paula has GDM and is in the second trimester of her pregnancy. She has not been prescribed medication but was asked to test her blood glucose levels in the morning (fasting) and two hours after each meal and to bring her log to each appointment. She did not bring her log to her first appointment and confessed that she often forgets to test anyway.

What Genuine Praise Would You Offer?

	Fasting	2 hours after breakfast	2 hours after lunch	2 hours after dinner	Notes
Monday	109		122	115	
Tuesday		106		152	Missed walk after dinner
Wednesday	126	121	131	120	
Thursday	113	128	179	247	Sick
Friday	159			150	Sick
Saturday	127				
Sunday	119	121		140	

Five A's⁸

	Definition	Examples
Ask	Physician asks their patient about weight, nutrition, and/or exercise.	<p>“Do you exercise?”</p> <p>“Tell me what you typically eat for breakfast?”</p>
Advise	Physician provides the patient with clear, strong advice.	<p>“You need to get 30 minutes of exercise a day, 5 days a week.”</p> <p>“I think you need to lose about 20 pounds.”</p> <p>“Because of your diabetes, it is important for you to exercise.”</p>
Assess	Physician verbally assesses patient’s readiness to change.	<p>“Is losing weight something you want to do in the near future?”</p> <p>“Do you see yourself getting more exercise in the coming months?”</p>
Assist	Physician provides brief counseling of self-help materials.	<p>“How much do you want to lose weight?”</p> <p>“What might get in the way of your plan to exercise three times a week?”</p> <p>“Have you tried a very low carbohydrate diet before?”</p> <p>“How are you feeling about being able to make this change?”</p> <p>“Is your family supportive of your attempts to eat better?”</p>
Arrange	Physician arranges for a follow-up with physicians or nutritionist.	<p>“Why don’t you call me in 2 weeks to let me know how the weight loss plan is going?”</p> <p>“I will schedule an appointment for you to see our nutritionist.”</p>

OARS (1)

Resist the righting reflex!

- O Open-ended questions
- A Affirmations
- R Reflective listening
- S Summary points



OARS (2)

When asked what concerns she wanted to add to the agenda, Paula said she wants to talk about how to control her blood sugars. You begin addressing her concern with:

“What do you think will help you achieve the blood sugars you want?”

Paula: “I don’t know. Walking seems to work pretty well, but sometimes my sugars are still high. I know you taught me about how to eat healthy, but it feels like too much to take on. Taking time to walk is already a challenge. I don’t know how to fit in the meal changes.”

OARS (3)

Counselor reflects: **“I think what you are saying is that you can’t see a way to find time to address the changes needed to improve your eating. Is that correct?”**

Paula: **“Yes, I guess it is, but I know it’s important for my baby. I just feel overwhelmed by all that I have to do.”**



OARS (4)

Counselor: **“What are the things that you would like to see change with your eating?”**

Paula: “Well, I know I need to watch my carbs, but the foods I’m used to eating are usually high in carbs. I need to plan meals that have low-carb foods, too. **I would also like to eat out less.**”



OARS (5)

Counselor: **“Here is what I’ve heard so far. You have made positive changes in your physical activity** and think eating healthier is the next step you should take. On one hand, you’re concerned about the time that will take, but on the other hand, it’s important to you because you want the best for your baby. You want to plan low-carb foods into your meals and eat out less. **Is there anything you want to add, or correct?**”

Current Routine



Stimulus Control

- Identify triggers associated with non-adherence
 - Help her address the issue before it happens
- People do not live in isolation
- Create safe spaces

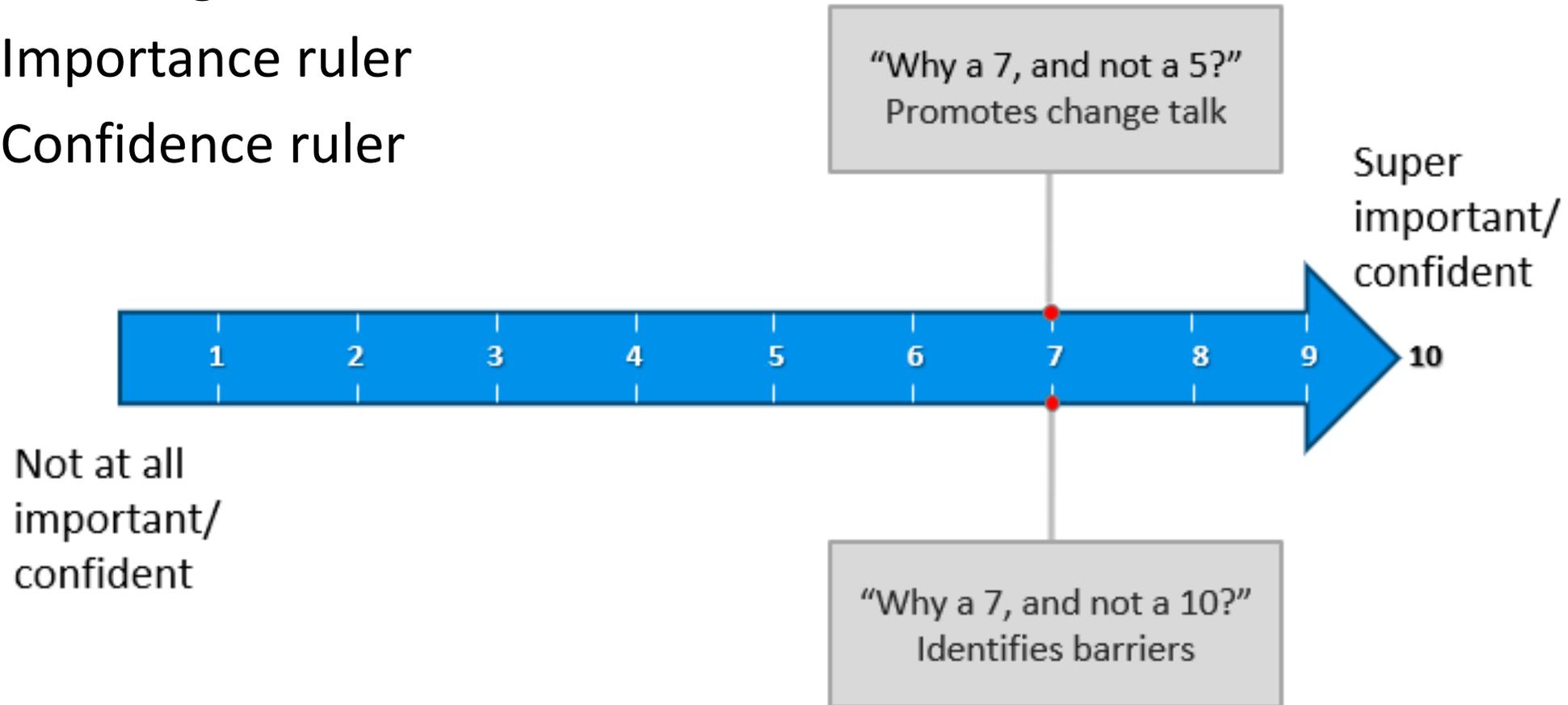


Current Routine (con't)

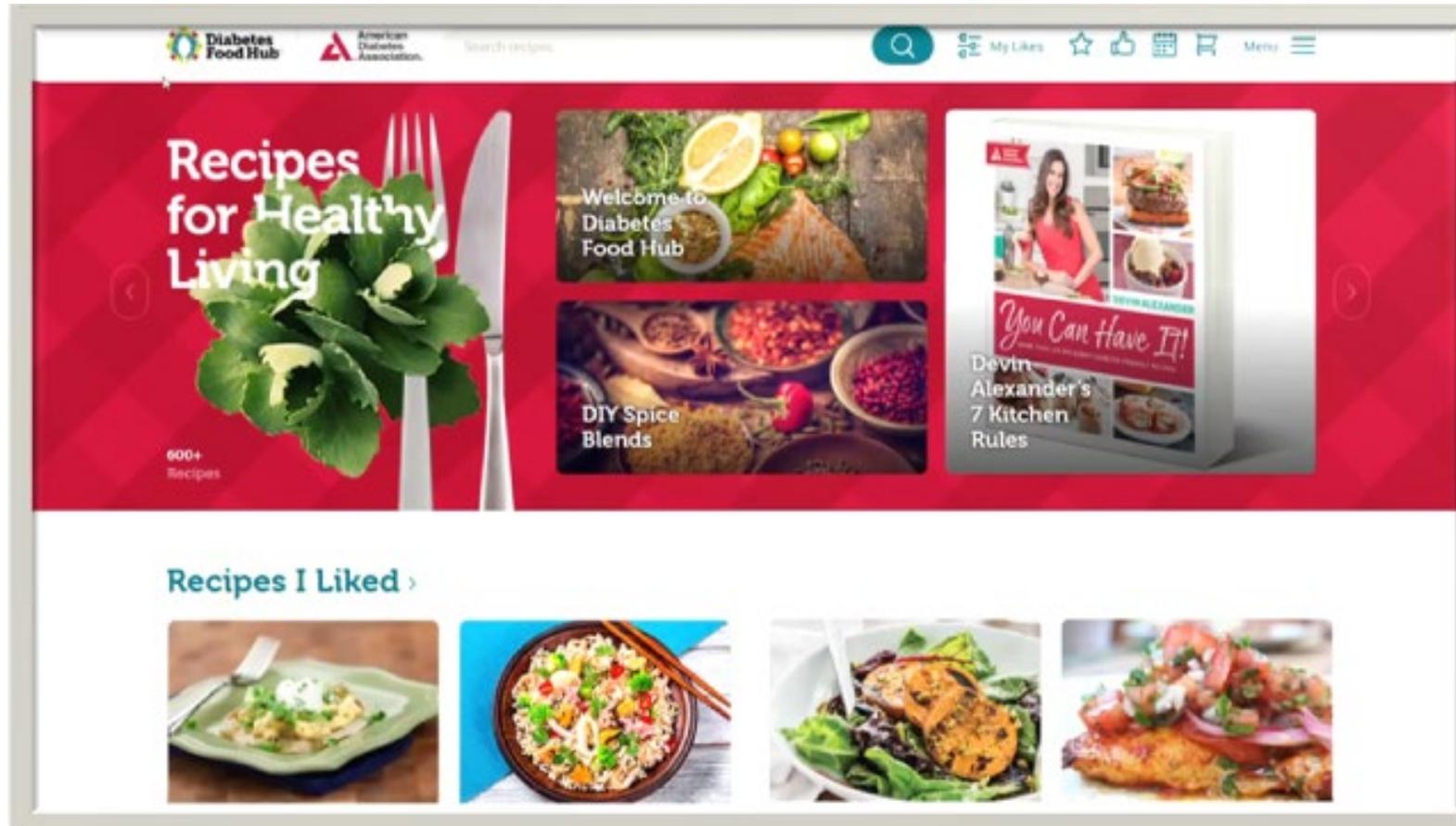


Goal Setting & MI Rulers

- SMART goals
- Importance ruler
- Confidence ruler



ADA Diabetes Food Hub: <https://www.diabetesfoodhub.org/>



University of Nebraska-Lincoln Food and Nutrition Resources:

<https://food.unl.edu/free-food-nutrition-fitness-and-food-safety-educational-powerpoints-and-handouts>



Preparing Freezer Meals At Home

1. Saves money
2. Incorporates family favorites
3. Allows control over ingredients
4. Allows control the amount and portion sizes
5. Provides knowledge of nutritional info
6. Saves time

Do Not Be Intimidated

- Start small
- Get comfortable with the idea
- Cook things you know your family likes
- Try a few dishes
- Build on your skills
- Not everything has to be a casserole

What Can You Freeze?

- Answer: almost anything
 - Beware of cream sauces, mayo
 - Raw meat vs. cooked meat
 - Quality ingredients
 - Baked Goods

<https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education>

Have I Convinced You Yet?

- Prepare to different stages of completion
 - Brown large batch of ground beef and freeze in one-pound servings for quick meals.
 - Chop several onions and freeze in one cup servings.
 - Making meatloaf? Make an extra and freeze it.
 - Double a favorite recipe and freeze one.

Recipe Demonstration

Slow Cooker Chipotle Burritos

- 2 lbs. boneless, skinless chicken breasts
- 1 16 oz. jar of salsa
- 1 teaspoon chili powder
- 1 teaspoon dried oregano
- 1 onion, chopped
- 1 canned chipotle pepper in adobo sauce*, chopped
- 1 can black beans, drained and rinsed
- 1 can whole kernel corn
- Flour or corn tortillas
- Optional toppings: Pico de Gallo, shredded lettuce, sour cream, shredded cheese, black olives, avocado, etc.

DIRECTIONS:

- Place chicken in a 3 or 4-quart crock pot. Combine the salsa, chili powder, oregano, chipotle pepper, corn and beans. Stir for a few seconds until well mixed and pour over meat. Cover and cook on low for 6-8 hours. Shred meat with 2 forks. Serve on tortillas with toppings of your choice.

FREEZING DIRECTIONS:

- Place chicken in gallon freezer bag. Combine the salsa, chili powder, oregano, and chipotle pepper. Blend for a few seconds until well mixed and pour over meat. Add beans and corn. Seal and place flat in freezer. When ready to use, place bag in refrigerator to thaw. After ingredients have thawed, place in crockpot and follow directions above.

*Since this recipe only uses 1 chipotle pepper, I like to freeze the remaining peppers from the can in ice cube trays (1 pepper per cube). Once frozen, I store them in a zip-top bag in the freezer and use as needed in recipes.

Easy Preparation

- When ready to prepare, thaw night before in refrigerator.
- Throw in the slow cooker the next morning on low.
- Shred when you get home and serve with tortillas, sour cream, and cheese.
- Can freeze the rest for later use also.

Three Cheese Lasagna Roll-ups

- 20 lasagna noodles, whole
- 32 ounces ricotta cheese
- 2 large eggs
- 1 cup shredded Parmesan cheese
- ½ teaspoon salt
- 1 teaspoon pepper
- ½ cup fresh spinach, chopped
- 1 tablespoon fresh basil, minced
- 1-2 cups mozzarella cheese, grated*
- Pasta sauce*

* Indicates ingredient won't be used until cooking time

Makes 20 rollups

“What Would You Like to Try?”



Self-monitoring

- Consistently been shown to increase positive behavior changes
- Increases awareness
- Can provide important information
- Can help with patients that are stuck



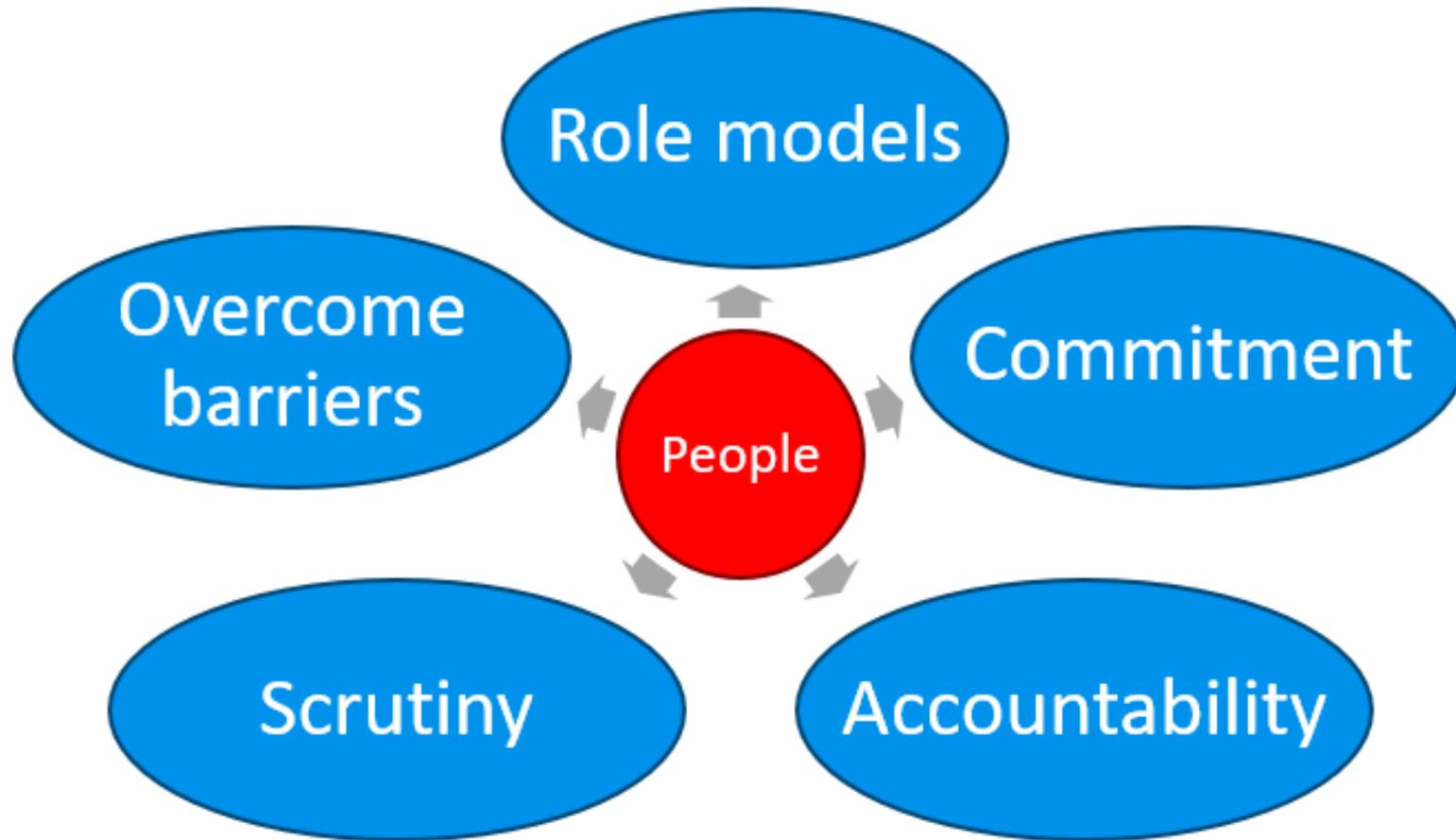
Resources

Website/App	Food intake	Physical activity	Weight	Social support
MyFitnessPal	Yes	Yes	Yes	Yes
Lose It!	Yes	Yes	Yes	Yes
FatSecret	Yes	Yes	Yes	Yes
Cronometer	Yes	Yes	Yes	
SparkPeople	Yes	Yes	Yes	Yes

<https://www.bestapp.com/best-calorie-counter-app/>

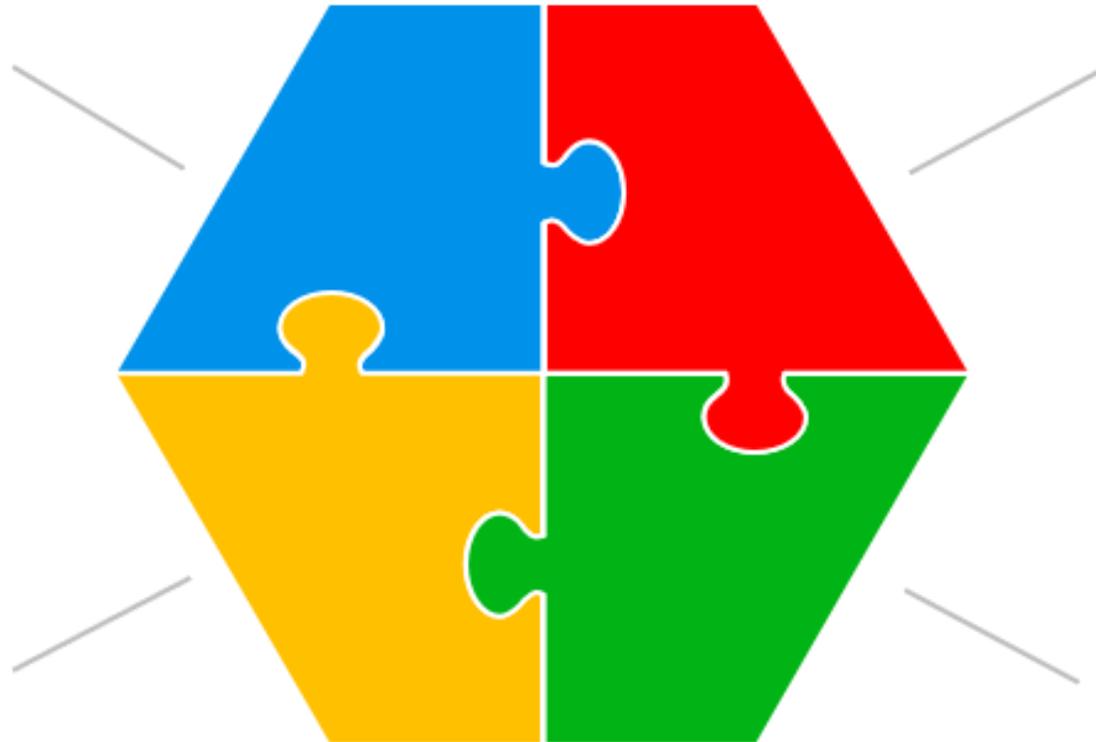
<https://www.verywellhealth.com/top-apps-for-diabetes-management-1087237>

Social Support



Lowering DM Risk¹

Postpartum weight loss, then weight maintenance



<240 minutes moderate-intensity aerobic exercise/week

Metformin

Healthy eating patterns

References

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Questions

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Motivational Interviewing and CBT: Combining Strategies for Maximum Effectiveness by Naar & Safren