The Need to Address Diabetes & Food Insecurity

The Epidemic of Diabetes:
• 26 million Americans currently diagnosed with diabetes
• 79 million considered prediabetic
• Cost of diabetes was $245 billion in 2012

Research Shows:
• Individuals who live with food insecurity are more likely to experience chronic disease, including diabetes
• For those with diabetes, food insecure individuals have worse glycemic control than those with ready access to healthy foods
Cycle of Food Insecurity & Chronic Disease: Diabetes

- Depression
- Poor sleep quality
- Fatigue
- Decreased physical activity

Feeding America Diabetes Initiative: Breaking the Cycle

- $3M Bristol-Myers Squibb Foundation investment
- 3-year project to create bi-directional collaborations between food banks and community health care partners 2011-2014
  - Corpus Christi Food Bank, TX
  - Mid-Ohio Food Bank, Columbus, OH
  - Redwood Empire Food Bank, Santa Rosa, CA
- Connect food insecure clients living with type 2 diabetes with:
  - Diabetes-appropriate food
  - Nutrition & health education
  - A medical home
Details of Pantry Program

• Qualifications:
  – HbA1C ≥6.5 if no meds
  – Taking diabetes meds or on insulin
• To enroll:
  – Complete 25-30 minute survey with participant
• Once enrolled:
  – Will receive wellness box once a month until 6th box
• After the 6th box:
  – complete post-survey, take HbA1c
**Client’s blood sugar:** ________. If ≥ 140 (random) or ≥ 120 (fasting), check HbA1c.

- **Has a doctor ever told you that you have diabetes?**
  - ❑ Yes
  - ❑ No

- **Are you on insulin or other medication for diabetes?**
  - ❑ Yes
  - ❑ No

**Client’s HbA1c:** ________

**MARK CORRECT HbA1c**

- ❑ HbA1c less than 5.7
- ❑ HbA1c 5.7-6.4
- ❑ HbA1c 6.5 or greater

- **Your risk for diabetes is low.**
- **You may be at high risk for diabetes.**
- **Your HbA1c value indicates that you may have diabetes. Do you have a doctor or a clinic where you regularly go to get medical care?**
  - ❑ Yes
  - ❑ No

**MAY I REFER YOU TO A CLINIC WHERE YOU CAN GET LOW-COST MEDICAL CARE?**

- ❑ Yes
  - **New diagnosis, referred to new PCP**
  - **New diagnosis, declined PCP referral**
- ❑ No
  - **New diagnosis, referred back to existing PCP**

**TURN FORM OVER**

**Participant ID:** __ __ __ __ __

**GOOD. WE RECOMMEND VISITING YOUR DOCTOR OR CLINIC AND LETTING THEM KNOW YOU MAY HAVE DIABETES.**

**Staff Initials:**

**END SURVEY**

**REDWOOD EMPIRE FOOD BANK**

**BUILDING PARTNERSHIPS TO END HUNGER**
Sample Survey Questions

• Food Insecurity: The food that (I/we) bought just didn’t last, and (I/we) didn’t have money to get more.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?

• Dietary Intake: In the last four weeks how often did you eat any fresh fruit, canned fruit, or fruit in smoothies? Don’t count juice.

• Depression: During the past month, have you often been bothered by feeling down, depressed, or hopeless?

• Coping Strategies: In the last 12 months, how often did you take less medicine than you were supposed to because you could not afford to buy more?

• Self-Efficacy How confident do you feel that you can follow your diet when you have to prepare or share food with other people who do not have diabetes? Scale 1-10
Resources for Clients

• Handout with A1C description and what is recommended
• List of low cost or free medical or dental clinics in the area
• Referral when needed to medical or dental clinic
• Diabetes education classes
• Assistance finding meter and other testing supplies at participants lowest cost. Assistance with specially fitted orthopedic shoes
Diabetes Project Food Distributions

- Non-perishable items in food boxes
- Additional fresh produce and other perishables such as dairy and meat
- Education materials and diabetes resources
Diabetes Appropriate Food Boxes

Start by choosing

• Unrefined and whole grain products
• Fresh fruits and vegetables
• Canned fruits in juice
• High fiber foods
• Low fat dairy products

Always keep the client in mind and ask them about the items

• Is the food culturally sensitive?
• Does the client need recipes?
Healthy Food Box & Produce
## Cost of Diabetes Wellness Box

<table>
<thead>
<tr>
<th>Items</th>
<th>Per Box</th>
<th># of cases</th>
<th>Total per case</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No salt added green beans</td>
<td>2</td>
<td>84</td>
<td>$3.50</td>
<td>$294.00</td>
</tr>
<tr>
<td>No salt added corn</td>
<td>1</td>
<td>42</td>
<td>$3.64</td>
<td>$152.88</td>
</tr>
<tr>
<td>Light peaches</td>
<td>1</td>
<td>42</td>
<td>$3.64</td>
<td>$152.88</td>
</tr>
<tr>
<td>Light mixed fruit</td>
<td>2</td>
<td>42</td>
<td>$3.64</td>
<td>$152.88</td>
</tr>
<tr>
<td>Peanut butter</td>
<td>1</td>
<td>84</td>
<td>$2.10</td>
<td>$176.40</td>
</tr>
<tr>
<td>Tuna</td>
<td>4</td>
<td>84</td>
<td>$32.00</td>
<td>$2,688.00</td>
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<tr>
<td>Oats (24 oz.)</td>
<td>1</td>
<td>192</td>
<td>$11.75</td>
<td>$2,256.00</td>
</tr>
<tr>
<td>No sugar added spaghetti sauce</td>
<td>1</td>
<td>108</td>
<td>$12.70</td>
<td>$1,371.60</td>
</tr>
<tr>
<td>Pinto beans (1lb. Bag)</td>
<td>1</td>
<td>42</td>
<td>$12.48</td>
<td>$524.16</td>
</tr>
<tr>
<td>Brown Rice (1lb. Bag)</td>
<td>1</td>
<td>54</td>
<td>$14.54</td>
<td>$785.16</td>
</tr>
<tr>
<td>Milk 1% (32 oz.)</td>
<td>2</td>
<td>167</td>
<td>$14.62</td>
<td>$2,441.54</td>
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<tr>
<td>Whole wheat pasta</td>
<td>1</td>
<td>90</td>
<td>$14.68</td>
<td>$1,321.20</td>
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<tr>
<td>diced tomatoes</td>
<td>1</td>
<td>51</td>
<td>$15.02</td>
<td>$766.02</td>
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<tr>
<td>Boxes</td>
<td>330</td>
<td></td>
<td>$0.37</td>
<td>$122.10</td>
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<td>Boxes</td>
<td>670</td>
<td></td>
<td>$0.69</td>
<td>$462.30</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$13,667.12</strong></td>
<td><strong>$13,667.12</strong></td>
</tr>
</tbody>
</table>
Educational Material

- **Box 1** Diabetes Overview
- **Box 2** Nutrition and Diabetes
- **Box 3** High’s, Low’s, Sick Days and Monitoring
- **Box 4** Diabetes and Exercise
- **Box 5** Preventing Complications & Dental Care
- **Box 6** Coping with Diabetes and Stress Management

and Summary of all topics
Bi-Directional Relationships

- Low cost and free clinics in the area
- Diabetes Education programs
- Hospital educators
Years 1 & 2: Overview

• 1,405 clients enrolled in the project across the 3 food bank sites
• 41 pantries and food bank distribution sites involved in client screening, food box distribution and/or diabetes education
• 20 local healthcare partners help food banks identify clients with diabetes living in food insecure households and refer to the programs

External Presentations:
• Bristol-Myers Squibb Foundation Grantee Summits, 2012 & 2013
• National Minority Quality Forum 2013
• American Diabetes Association Disparities Forum 2012
• American Public Health Association Conference 2013
• Featured in the BMS Foundation Annual Report 2013
Key Learnings and Preliminary Clients Outcomes

• There is demand for health screening & education at food distribution sites
• Clients with type 2 diabetes want healthier foods
• **Food as medicine** is having an impact on clients’ health status:
  – Improved blood sugar control
  – Decreases diabetes distress (burden from the disease)
  – Improved diabetes self-efficacy (ability to cope)
  – Reduce depressive symptoms
• Local health clinics are willing to partner with food banks
Final Year of the Project

- Screening and client enrollment concludes in late January 2014
- Anticipate 1,600 clients total
- Complete evaluation and submit findings for publication in peer-reviewed journals
- Share program models and resources with the Feeding America network via Hungernet, Feeding America webinars, and ACPN Conference October 2014
- Explore national partnership opportunities between food banks’ and local healthcare partners
- Explore scalable approach for replication across network particularly in communities with high rates of diabetes