Models of Nutrition in Clinical Practice

C.Trapp    J.Kahn    D.Armstrong    G.Davis    N.Cooper
Overview

1. Consider ways that health care professionals promote nutrition as a first-line therapy in different practice settings.
2. Describe strategies to promote adherence to dietary changes.
3. Explore reimbursement options for nutrition-focused interventions.
Nutrition in Primary Care

Caroline Trapp, NP, BC-ADM, CDE, FAANP
Diabetes Nurse Practitioner
Premier Internists
Primary Care

• Nurse Practitioner [“nurs prak-tish-uh-ner”]
• Diabetes Educator
  – Newly diagnosed
  – Poorly controlled
  – New issue
  – Pre-diabetes
  – Update
• Referrals from within and outside of practice
Timeline to Nutrition Focus

1994

1998

2005

Farmacy

PCRM
Where the magic happens

Your comfort zone
“The Talk”

What not to do:
• Forget to gain support from colleagues
• Advise without listening
• Make people wrong

Sample conversation
• “Would you like to know how many of my patients have (avoided the need for insulin)?”
• Provide resources
• Be sure to discuss hypoglycemia
Promoting Adherence (“3 R’s”)

• Relationship, Relationship, Relationship
  – problem solving; be positive, not punitive; follow-up appointments; include family

• Re-Educate
  – offer classes, refer to classes

• Resources
  – lending library, web-resources, bibliotherapy, videotheraphy
RX

DVD: Forks Over Knives
TEDx Talk: pcrm.org/diabetes
Books: McDougall Quick & Easy; Barnard Program to Reverse Diabetes; Engine 2 Diet; The Love Powered Diet; The China Study/Whole 21DayKickstart.org
FFL classes.org

C. Trapp, NP
Reimbursement
Counseling

• A discussion with a patient and/or family concerning one or more of the following areas:
  – Diagnostic results, impressions, and/or recommended diagnostic studies
  – Prognosis
  – Risks and benefits of treatment options
  – Instructions for treatment options
  – Risk-factor reduction
  – Patient and family education
Evaluation & Management Codes

• >50% of visit spent providing counseling and education
• Based on total, face to face “time spent”
• MD or Mid-Level Provider
  – 99212 = 10 minutes
  – 99213 = 15 minutes
  – 99214 = 25 minutes
  – 99215 = 40 minutes
Billing Based on Time

• Document start time, end time, and # of minutes spent providing counseling/education

• Document the topic(s) covered
  – “ADA Clinical Targets/PCRM Diet guidelines discussed at length. Pt. goal(s) for behavior change, potential barriers, and ideas to overcome barriers reviewed together. F/U visit with log book: 1 month. Visit time: 1:00 PM – 1:25 p.m. Counseling: 15 minutes.’

http://medicaleconomics.modernmedicine.com/print/373952
http://www.aafp.org/fpm/2006/0200/p34.html
Models for Nutrition in Clinical Practice: Cardiology

Joel Kahn MD, FACC
Clinical Professor of Medicine
Author, The Holistic Heart Book
Health Care Professionals Can Promote Plant Based Nutrition
Get A Billboard!


Joel Kahn, M.D.
Vegan 10 years

VegMichigan.org
Lecture, TV

Your Fork Will Determine Your Fate

Wednesday April 2, 7-8pm

Cardiologist, Dr. Joel Kahn, graduate of U of M School of Medicine will discuss the impact of diet and health.

No matter what your genetic makeup, Dr. Kahn will review how your diet and what you put on the end of your fork can make or disease live.

Registration Required
NoviLibrary.org
248-349-0720

Cardiologist, Dr. Joel Kahn

TV Screen

Fruits and Vegetables
How The Food You Eat Changes Your Genes

BY DR. JOEL KAHN
APRIL 23, 2014 7:05 AM EDT

Why You Should Eat More Plants & Fewer Animals (Lessons From Finland)

BY DR. JOEL KAHN
APRIL 9, 2014 5:42 AM EDT
Books

Rethink Food
100+ Doctors Can't Be Wrong

Shushana Castle
Amy-Lee Goodman

Exsalus Health & Wellness Center
Keep It Simple, Keep It Whole
Your Guide to Optimum Health

Holistic Heart Book

Alexis Pauline, MD and Matthew Lazarowitz, MD
Have Fun, Be An Example
Put it all tastefully on social media
Put Everything On a Website

Prevention Avenue
This Way
Prevent Not Stent™
Change Your Life

The Doctor
Support Groups For Retention

ABOUT US

About our group

The “Plant Based Nutrition Support Group” was developed in the hope of reaching out to those individuals who have either already been diagnosed with, or are at risk of, developing heart disease. Our goal is to offer support to those following a plant based, low fat diet to optimize their course with cardiovascular disease.

6–9  Mongolian Grill – 6:00–8:30 p.m. we still have room for 6 more people (see web for additional info)
6–10 Walking club meets at 7:00 (see web for more info)
6–10 Whole Foods Nutritional Tour–West Bloomfield (All FILLED UP)
6–11 Volunteer Meeting – 6:30 p.m. Grove High School Staff Planning Room (see web for additional info)
6–12 Meijer Nutritional Tour at 10:00 a.m. we still have room for 3 more people (see web for additional info)
6–16 Whole Foods –Troy 6:30 p.m. we still have room for 6 more people.
6–17 Walking Club meets at 7:00 p.m.
6–18 Bangkok Cuisine – we still have room for 14 people (see web for additional info)
6–29 Clean Plate – we have room for 16 people (see web for additional info)
Plant-Based Nutrition and Diabetes in Practice
Dana Armstrong, RD, CDE
Diabetes & Nutrition Support Services
Salinas, California
Instruction & Education Provided

• Initial individual assessment
• Diabetes education class series
• Diabetes cooking class series
• Diet education – presented to all patients
  – Plant-based, low-fat, low glycemic index
  – Avoid animal products and added fats
  – Avoid use of refined, processed foods, including oils
  – Unrestricted portions, daily calories, carbohydrates
Maintaining the Motivation

• Decrease dose and/or elimination of medications
• Improved health measures
  – A1C, BP, Lipids
• Cooking classes
• Group support
## Patient Frustration

### Initial – Referral by PCP
- Wt/BMI: 168 lbs/30.7
- A1C: 10.3%
- Chol: 244 mg/dL
- TG: 258 mg/dL
- HDL: 46 mg/dL
- LDL: 146 mg/dL
- Meds:
  - Kombiglyze: 5/1000 bid
  - Metformin: 500 qd
  - Atorvastatin: 20 qd

### 3 Month f/u with Endo
- Wt/BMI: 155 lbs/28.3
- A1C: 6.2%
- Chol: 87 mg/dL
- TG: 127 mg/dL
- HDL: 40 mg/dL
- LDL: 22 mg/dL
- Meds: No change. “Let’s see where we are in 3 months.”
Billing for Services

- **MNT coding**
  - MD, NP, PA, RD
  - 97802/97803 (individual)
  - 97804 (group)

- **G codes**
  - AADE/ADA recognized programs
  - G0108 (individual)
  - G0109 (group)
Kathleen – Initial Appointment

Medical
• Type 1 – dx 1969 (12 yo)
• 57 years old
• Hypertension
• Hypercholesterolemia
• Hypothyroid
• Ht: 68”
• Wt: 293.8 lbs
• BMI: 44.7
• A1C: 7.0%

Referral
• Insulin pump management
• Weight loss

Reason for visit
• “I want to be healthier.”
• “I want less medication.”
• “I want to get my diabetes under better control and lose weight.”

lifestyle changes, lifesaving results™
A1C, Weight, BMI – 1 year

A1C
- 7.0
- 6.0

Weight
- 293.8
- 224.6

BMI
- 44.7
- 34.2
Medications

Initial Appointment

• Humalog (basal = 28.6 units/day)
  (ICR/ISR = 4/23 & ~135 CHO/d)
• Aspirin 81 mg 1 qd
• Benicar/HCT 40/12.5 mg 1 qd
• Crestor 10 mg 1 qd
• Ramipril 10 mg 1 bid
• Synthroid 100 mcg 1 qd
• Vitamin D 2000 IU 1 bid
• Vitamin C 500 mg 1 qd

Current

• Humalog 38.5 units/day
  (basal = 11 units/day)
• Aspirin 81 mg 1 qd
• Benicar/HCT 40/12.5 mg 1 qd
• Crestor 10 mg 1 qd
• Ramipril 10 mg 1 bid
• Synthroid 100 mcg 1 qd
• Vitamin C 500 mg 1 qd
• Vitamin D 2000 IU 1 bid
Before and After Thoughts

When first presented with that idea, I was surprised.

I came in begrudgingly, thinking I was going to meet a dietitian who would tell me to measure my food, limit my carbs, and eat my vegetables.

I came in because I was so unhappy with my appearance plus I worried constantly about my health. It really was the only stressor in my life - worrying about my health.

I’ve loved learning how to be creative in my cooking.

I’m saving money and now don't even consider buying cheese or meat. I’m completely plant-based.

I’m thrilled with the health results. I have my life back. I know I can keep this up forever, unlike the other "diets" that I have tried and tried throughout the years.
“I find it frightening the physicians and educators I depend on for my life do not support plant based eating. The sad thing is I don't think they are aware of it. They've either never been informed or have not kept up on the research on how it can heal and help. Being aware of diet is just as important as being aware of what medications are prescribed. They all seem to know how to prescribe numerous pharmacological medications but they don't know how to suggest and support plant-based dietary changes.”
Thanks! See you in class!

Red Pepper Hummus & Veggies

Salad with Rice Vinegar & OJ Dressing

Black Bean Chili over Brown Rice
Let Food Be Thy Medicine
and Medicine Be Thy Food

Garth Davis, M.D.
Medical Director of Bariatric Surgery
Memorial Hermann Memorial City
Figure 1  Diabetes Reversal Rates After Bariatric Surgery

The figure above describes the reversal rates of Roux-en-Y gastric bypass (RYGB) and adjustable gastric banding (AGB) and laparoscopic AGB (LAGB) for conventionally but intensively treated patients with type 2 diabetes mellitus (DM2).

POP QUIZ!!!!!
Which Macro Causes Diabetes?
Good or Bad
Good or Bad?
Good or Bad?
THE OKINAWA FOOD PYRAMID

Adapted from: Willcox, Willcox, and Suzuki - The Okinawa Program (Three Rivers Press)
WEIGHT_GAIN_WITH_AGE_IN_AMERICANS_AND_OKINAWANS_ON_DIFFERENT_DIETS

Body Mass Index (kg/m²)

OVERWEIGHT
NORMAL

29
28
27
26
25
24
23
22
21
20

20-29  30-39  40-49  50-59  60-69

Age

Modern American Diet—CD: 1.7
Modern Okinawan Diet—CD: 1.4
Okinawan East-West Fusion Diet—CD: 1.2
Traditional Okinawan Diet—CD: 1.0
Typical Day’s Meals

**Breakfast**
- Oatmeal with cinnamon and raisins
- Half cantaloupe
- Rye toast, dry

**Lunch**
- Vegetarian chili over brown rice
- Green salad

**Snack**
- Banana

**Dinner**
- Minestrone soup
- Pasta with marinara sauce
- Steamed broccoli
Good or Bad?
Cochrane Group

They consistently showed that a high intake of whole grain foods or cereal fibre is associated with a lower risk of the development of T2DM.
Good or bad?
Meat-Eating is a Risk Factor for DEVELOPING DIABETES

#BreakingMedicalNews
PCRM.org/Diabetes
Physicians Committee for Responsible Medicine
Calorie Density

Vegetables: 100
Fruits: 300
UnRef CC: 500
Legumes: 600
Fatty Protein: 1000
Ref CC: 1400
Junk Food: 2300
Nuts/Seeds: 2800
Oil/Fat: 4000

550
Stomach Stretch Receptors

400 Calories of Oil
400 Calories of Chicken
400 Calories of Vegetables
PROTEIN IS SEXY
12 BODY-SCULPTING SHAKES YOUR TONGUE WILL LOVE
Protein to start your day
BEEF,
IT’S WHAT’S
FOR DINNER.
AND BREAKFAST, IN THE UNLIKELY EVENT OF LEFTOVERS.
WWW.BEEFITSWHATSFORDINNER.COM
RDA recommended Protein

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Grams of Protein Needed Each Day</th>
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<tbody>
<tr>
<td>Children ages 1 - 3</td>
<td>13</td>
</tr>
<tr>
<td>Children ages 4 - 8</td>
<td>19</td>
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<tr>
<td>Children ages 9 - 13</td>
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<tr>
<td>Girls ages 14 - 18</td>
<td>46</td>
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<tr>
<td>Boys ages 14 - 18</td>
<td>52</td>
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<tr>
<td>Women ages 19 - 70+</td>
<td>46</td>
</tr>
<tr>
<td>Men ages 19 - 70+</td>
<td>56</td>
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<tr>
<td>Country</td>
<td>Life Expectancy at Birth</td>
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<tr>
<td>------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Australia</td>
<td>79.0</td>
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<td>Austria</td>
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<tr>
<td>Belgium</td>
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<td>Canada</td>
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<tr>
<td>Denmark</td>
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<tr>
<td>Greece</td>
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<td>Japan</td>
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<td>Netherlands</td>
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<td>New Zealand</td>
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<tr>
<td>Norway</td>
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<td>Spain</td>
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<td>Sweden</td>
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<tr>
<td>United Kingdom</td>
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<td><strong>Non-U.S. Average</strong></td>
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<tr>
<td><strong>United States</strong></td>
<td><strong>76.7</strong></td>
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Obesity* Trends Among U.S. Adults
(*BMI ≥ 30, or ~ 30 lbs overweight for 5’ 4” person)

Source: BRFSS, CDC.
Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 1990, 1995 and 1999

Source: Mokdad et al., Diabetes Care 2000;23:1278-83; and Diabetes Care 2001;24(2):112
Good or Bad
Think before you eat

Say grace, or take a moment to contemplate your food
When I see this
I think about this
Learn to appreciate this
YOU ARE WHAT YOU EAT
Every time you go to the supermarket, you make a choice between life and death.

Choose life

Go Vegan
Eat food you would have never considered before.

Eat like an Okinawan or like Giovanni
If you do what you have always done
you will get what you always got.

Change your mind.
We are getting lazy
Should I Workout Today?

Yes

Go workout.

No

Yes you should.
Epic/ Panacea Study

> 5 servings fruits and veggies save 4 years
> Not smoking saves 5 years
> MODERATE exercise gives 3 years
> All 3 gives 10 HEALTHY years, and without alcohol its 14 years
> In USA 76% not smoking, 15-20% getting fruits and veggies, moderate exercise only 20%. All 3 only 3%
We Can So Do It!
Take one a day with tomato and cucumber.
I WANT YOU TO EAT YOUR VEGETABLES
When Healthcare Providers are your Patients: Have Patience

The 21-Day Vegan Challenge: Pilot Program for Providers

Kaiser Permanente Georgia Wellness Committee
Our Vision:
To leverage our integrated care system and deliver health promotion programs that engage and motivate our employees.

Our Goal:
Create a culture of shared responsibility and positive health outcomes.

“Get Healthy. Stay Healthy.”
Improved Health Outcomes

Educate / Motivate Healthcare Providers

Promote PBN discussion with patients

“Physicians preach what they practice!”
Step 1: SMART Goals

- **S**pecific - what, why, who, where
- **M**easurable - how many, how much
- **A**chievable - time, ability, finances, support
- **R**elevant - applicable to your organization strategy
- **T**imely - be concise and set dates
Plant Based Nutrition (PBN) Committee

**Step 2: Leadership Approval**
- Leadership support essential
- Be prepared
- Anticipate resistance

**Step 3: Consent Form**
- Use of data distrust
- Legal department engagement
- HIPAA, ERISA, Labor
Plant Based Nutrition (PBN) Committee

Step 4: Plan and Execute

- Email communication
- Registration deadline
- Consent form deadline
- Order 21 Day Weight Loss Kickstart books
- Pre-testing starts

- Day 1
- Day 9
- Day 21
- Day 22
- Day 29, 30
- Day 36
- Day 42
- Day 49
- Day 71

Informational emails
- Handout, books
- Shopping reminder
- Kickoff dinner reminder

Kickoff dinner & program

Begin Challenge

- Emails
- Lunches
- Instagram
- Text
- Have fun!

Post-Challenge dinner & debriefing

Pre-testing completed

Day 42
Ms. Harris

“This is about my patients…”
Data

- 500+ in Medical group
- 86 signed up, 75 completed
- 47 completed pre/post lab
- 40 volunteered as post challenge “champions”

<table>
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<tr>
<th>Pre- Challenge</th>
<th>Avg Total Cholesterol</th>
<th>Avg LDL Cholesterol</th>
<th>Avg BMI</th>
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<tbody>
<tr>
<td></td>
<td>192</td>
<td>112.5</td>
<td>26.34</td>
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<tr>
<td>Post-Challenge</td>
<td>175</td>
<td>99.5</td>
<td>25.68</td>
</tr>
</tbody>
</table>
Suggestions and Lessons

• Start small
• Need “contact person” during the challenge
• Post-challenge “get together” builds momentum; then recruit “champions”
• Educational materials; participants and patients

“Put hot triggers in the path of motivated people”
- BJ Fogg, PhD. Stanford Behavior Design Lab
“Motivation, Ability & Trigger must converge at the same moment for a behavior to occur.”

BJ Fogg, PhD. Director, Stanford Behavior Design Lab

The 21-Day Vegan Challenge provides the trigger!
What did we learn?

It **is not** … all about weight loss
… about being 100% vegan for everyone

It **is**… … about moving the dial in the right (evidence-based) direction
… about influencing others