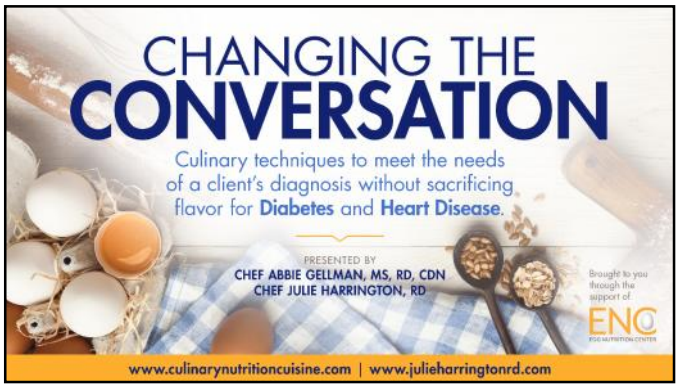

About

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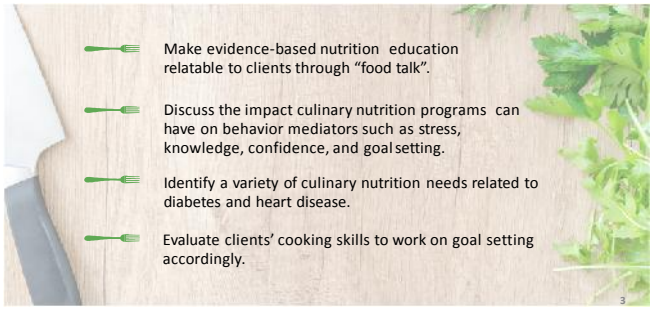
Objectives



- Make evidence-based nutrition education relatable to clients through "food talk".
- Discuss the impact culinary nutrition programs can have on behavior mediators such as stress, knowledge, confidence, and goal setting.
- Identify a variety of culinary nutrition needs related to diabetes and heart disease.
- Evaluate clients' cooking skills to work on goal setting accordingly.

3

Diabetes Biomarkers

A1C

Normal	Less than 5.7%
Prediabetes	5.7% - 6.4%
Diabetes	6.5% or higher

Did you know?
30.3 million people have diabetes (9.4% of the U.S. population)

New CDC Report: More than 100 Million Americans Have Diabetes or Prediabetes
https://www.cdc.gov/media/releases/2017/p0718-diabetes-report.html

Medical Nutrition Therapy for Diabetes:

Achieve and maintain:

- Blood glucose levels in the normal range or as close to normal as is safely possible
- A lipid and lipoprotein profile that reduces the risk for vascular disease
- Blood pressure levels in the normal range or as close to normal as is safely possible

To **prevent**, or at least slow, the rate of development of the **chronic complications** of diabetes by modifying nutrient intake and lifestyle

4

Heart Disease Biomarkers

Cholesterol

	HDL Cholesterol	+ LDL Cholesterol	= Total Cholesterol	Triglycerides
Good	Ideal is 60 or higher; 40 or higher for men and 50 or higher for women is acceptable	Less than 100; below 70 if coronary artery disease is present	Less than 200	Less than 149
Borderline	n/a	130-159	200-239	150-199
High	n/a	160 or higher; 190 considered very high	240 or higher	200 or higher; 500 considered very high
Low	Less than 40	n/a	n/a	n/a

Did you know?
According to the Center for Disease Control, this condition is a primary contributor to the over 600,000 cardiac related deaths yearly.

Heart Disease Facts & Statistics
https://www.cdc.gov/heartdisease/facts.html

Blood Pressure

Blood Pressure Category	Systolic (upper number)		Diastolic (lower number)
Normal	Less than 120	&	Less than 80
Elevated	120-129	&	Less than 80
High (Hypertension Stage 1)	130-139	or	80-89
High (Hypertension Stage 2)	140 or higher	or	90 or higher
Hypertension Crisis (seek medical attention immediately)	Higher than 180	&/or	Higher than 120

Medical Nutrition Therapy

To address **individual nutrition needs**, taking into account personal and cultural preferences and **willingness to change**.

6

Medical Nutrition Therapy

To **maintain** the pleasure of eating by only limiting food choices when indicated by **scientific evidence**.

7

Barriers

Client Barriers

- Time
- Need new ideas
- Low kitchen confidence

Practitioner Barriers

- Translating evidence based research through food
- Low kitchen confidence

8

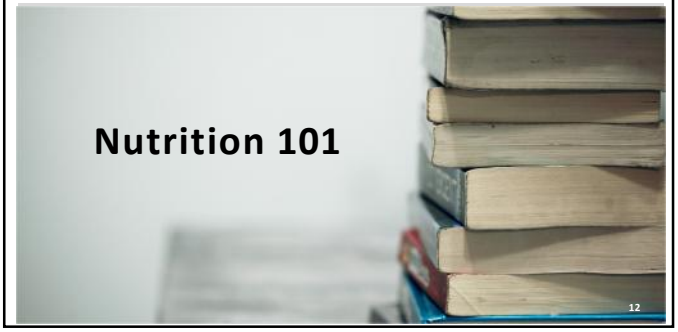
Dietary Protocols with a "Food First" Approach

9

Meeting clients where they are

Culinary Nutrition Intervention for Diabetes

Back to the Basics



Culinary Nutrition Intervention

FRUIT

- Fiber packed
- Antioxidant rich
- Naturally occurring sugar

Plenty of options

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Food Highlight: Pears

A medium-sized pear packs 6 grams of fiber, which equals about 24% of the recommended daily value.

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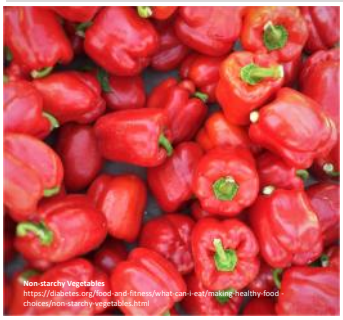
Culinary Nutrition Intervention



Non-starchy Vegetables
https://diabetes.org/food-and-fitness/what-can-i-eat/making-healthy-food-choices/non-starchy-vegetables.html

VEGETABLES

- Starchy vs. Non-Starchy Vegetables
- Recommended 3-5 servings of non-starchy vegetables per day
- ½ cup cooked or 1 cup raw

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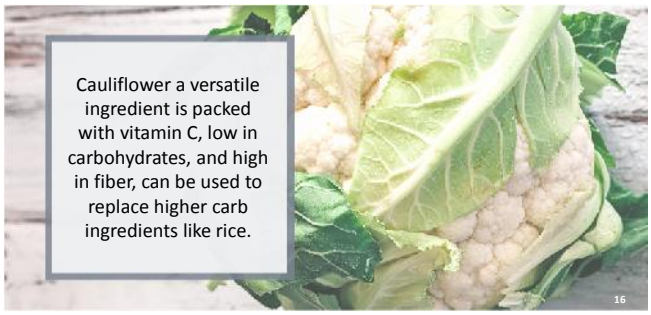
Food Highlight: Cauliflower



Cauliflower a versatile ingredient is packed with vitamin C, low in carbohydrates, and high in fiber, can be used to replace higher carb ingredients like rice.

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Culinary Nutrition Intervention

WHOLE GRAINS

(source: Harvard School of Public Health)

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Food Highlight: Oats

The primary type of soluble fiber in oats is beta-glucan, which has been researched to help slow digestion, increase satiety, and suppress appetite.

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Recipe: Savory Oatmeal

TASTEOVER TIPS

Savory vs. Sweet
- No added sugar

Addition of vegetables at breakfast
- Adds flavor and health benefits

Protein packed
- Adds lean protein, "sauce" for the other ingredients, flavor/complexity, and health benefits

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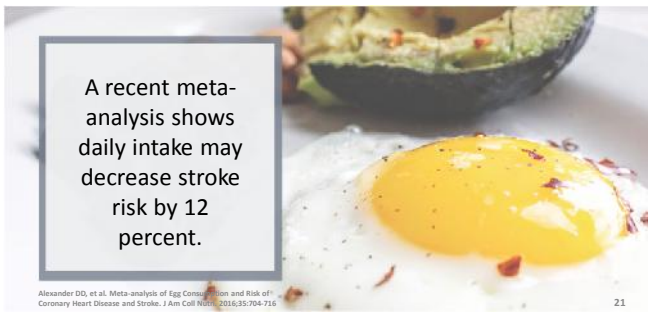
Culinary Nutrition Intervention

LEAN PROTEIN

- **10-35% of total calories**
- **Animal & plant-based sources**

Food Highlight: Eggs



A recent meta-analysis shows daily intake may decrease stroke risk by 12 percent.

Alexander DD, et al. Meta-analysis of Egg Consumption and Risk of Coronary Heart Disease and Stroke. J Am Coll Nutr. 2016;35:704-716

21

Recipe: Confetti Chicken Burgers

TASTEOVER TIPS

Ground chicken in place of ground beef
- Less saturated fat

Vegetable packed
- Adds moisture
- Adds flavor and health benefits

Feta cheese
- Adds flavor and complexity
- Less needed – big flavor

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Culinary Nutrition Intervention

DAIRY

- **Fermented dairy foods consumption (yogurt and cheese)**
- **Inverse relationship with heart disease and type 2 diabetes**

Fermented Dairy Food and CVD Risk
Linda Tapsell – https://www.ncbi.nlm.nih.gov/pubmed/26148916

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Food Highlight: Greek Yogurt

Greek yogurt has a natural balance of CHO and protein to help balance blood sugar levels.

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Culinary Nutrition Intervention

HEALTHY FATS

- **Omega-3s**
- **Fiber**
- **Vitamin E**

A variety of sources:



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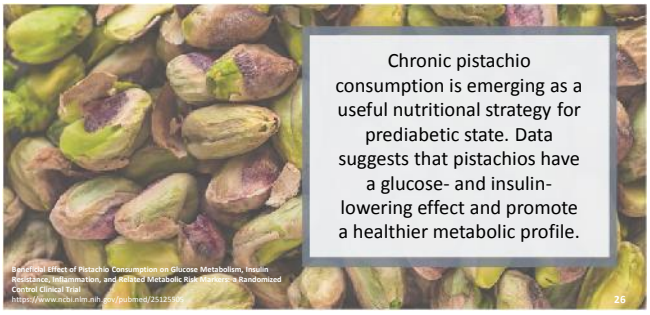
Food Highlight: Pistachios



Chronic pistachio consumption is emerging as a useful nutritional strategy for prediabetic state. Data suggests that pistachios have a glucose- and insulin-lowering effect and promote a healthier metabolic profile.

Beneficial Effect of Pistachio Consumption on Glucose Metabolism, Insulin Resistance, Inflammation, and Related Metabolic Risk Markers: a Randomized Control Clinical Trial
https://www.ncbi.nlm.nih.gov/pubmed/25125505

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Recipe: Pistachios Pesto

TASTEOVER TIPS

Pistachios instead of traditional pine nuts

- More affordable
- Good flavor and health profile

Dairy Free

- No saturated fat

Uses mint in addition to traditional basil

- Good flavor and health profile
- Goes well with pistachios

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Culinary Nutrition Intervention

LEGUMES

- Fiber
- Affordable
- Plant-based
- ⬇ LDL Cholesterol
- ⬆ HDL Cholesterol

Nutrition Information
https://lentils.org/health-nutrition/nutritional-information/

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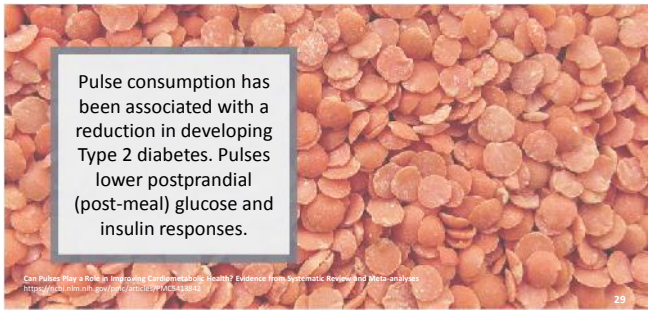
Food Highlight: Lentils



Pulse consumption has been associated with a reduction in developing Type 2 diabetes. Pulses lower postprandial (post-meal) glucose and insulin responses.

Can Pulses Play a Role in Improving Cardiometabolic Health? Evidence from Systematic Reviews and Meta-analyses
https://nchi.nlm.nih.gov/pmc/articles/PMC5418842/

29

Recipe: Lentil Bolognese

TASTEOVER TIPS

Plant-based
- Lentils mimic the texture of ground meat
- Healthy and flavorful meat replacement
- Plant-based protein

Addition of balsamic vinegar
- Adds acid and depth

Zucchini Noodles
- Decreases total carbohydrates in the dish
- Adds healthy nutrients from extra boost of vegetables

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Putting it into Practice

Questions?

Save the Date:
Tuesday, June 18th

Webinar Series:
Part 2 of 4

Changing the Conversation:
Culinary Techniques to meet the needs of a client's diagnosis without sacrificing flavor for **digestive disorders**

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Credit Claiming

You must complete a brief evaluation of the program in order to obtain your certificate.
The evaluation will be available for 1 year; you do not have to complete it today.

Credit Claiming Instructions:

1. **Go to www.CE.TodaysDietitian.com/culinarypart1** OR Log in to **www.CE.TodaysDietitian.com** and go to "My Courses" and click on the webinar title.
2. **Click "Take Course"** on the webinar description page.
3. **Select "Start/Resume"** Course to complete and submit the evaluation.
4. **Download** and print your certificate.

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American Diabetes Association - http://care.diabetesjournals.org/content/31/Supplement_1/S61

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Anja Erkkilä-Alice Lichtenstein - https://insights.ovid.com/pubmed?pmid=16407729

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Imamura F, Micha R, Wu J, de Oliveira Otto MC, Otite FO, Abioye AI, et al. Effects of Saturated Fat, Polyunsaturated Fat, Monounsaturated Fat, and Carbohydrate on Glucose-Insulin Homeostasis: A Systematic Review and Meta-analysis of Randomised Controlled Feeding Trials. PLOS Med 2016; 13: e1002087. https://doi.org/10.1371/journal.pmed.1002087 PMID: 27434027]
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Claire E Berryman, Jennifer A Fleming, Penny Kris-Etherton; Inclusion of Almonds in a Cholesterol-Lowering Diet Improves Plasma HDL Subspecies and Cholesterol Efflux to Serum in Normal-Weight Individuals with Elevated LDL Cholesterol, The Journal of Nutrition, Volume 147, Issue 8, 1 August 2017, Pages 1517–1523, https://doi.org/10.3945/jn.116.245126

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