CULINARY MEDICINE

think like a chef
cook like a dietitian
eat like a local farmer

September 22-24, 2017 | Great Lakes Culinary Institute
Northwestern Michigan College, Traverse City
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WELCOME SESSION

Friday, September 22 2017

PRESENTERS: Don Coe, Dr. James Fox, Fred Laughlin, Paula Martin and Laura McCain

DESCRIPTION: The welcome session will provide the history and genesis of the idea for hosting Culinary Medicine Training for local doctors and other health care providers in our region. Included will be an overview of what makes our region especially well suited for this conference.

OVERALL CONFERENCE GOALS:

1. Enhance the provider’s confidence to discuss and guide patient’s food and nutrition selections to improve or prevent disease symptoms or progressions and overall improve health outcomes.

2. Translate current dietary guidelines into clear food and meal planning recommendations using peer review research articles, lecture, and hands on cooking in a teaching kitchen atmosphere.

3. Apply food and cooking techniques to solve food access and nutrition-related health disparity using demonstration, lecture, and case study evaluation.

4. Experiment with recipe modification to enhance or reduce food or nutrient components as needed to prevent, reduce or eliminate health disparities via cooking demonstration, pre- and post- testing, and case study evaluation.

~NOTES~
What Is Culinary Medicine and What Does It Do?

John La Puma, MD, FACP

Introduction

Over the past 35 years, a new enthusiasm has emerged about the relationship of food, eating, and cooking to personal health and wellness. Though there are few peer-reviewed publications, grant monies, books, or biomedical journals entitled “culinary medicine,” there are thousands of peer-reviewed publications, found mainly in mainstream medical journals that form its published research base. How can the emerging field of culinary medicine be helpfully described?

Culinary Medicine

Definitions and goals

Culinary medicine is not nutrition, dietetics, or preventive, integrative, or internal medicine, nor is it the culinary arts or food science. It does not have a single dietary philosophy; it does not reject prescription medication; it is not simply about good cooking, flavors or aromas; nor is it solely about the food matrices in which micronutrients, phytonutrients, and macronutrients are found.

Instead, culinary medicine is a new evidence-based field in medicine that blends the art of food and cooking with the science of medicine. Culinary medicine is aimed at helping people reach good personal medical decisions about accessing and eating high-quality meals that help prevent and treat disease and restore well-being.

A practical discipline, culinary medicine is unconcerned with the hypothetical case, and instead concerned with the patient in immediate need, who asks, “What do I eat for my condition?” As food is condition-specific, the same diet does not work for everyone. Different clinical conditions require different meals, foods, and beverages.

Culinary medicine attempts to improve the patient’s condition with what she or he regularly eats and drinks. Special attention is given to how food works in the body as well as to the sociocultural and pleasurable aspects of eating and cooking. The objective of culinary medicine is to attempt to empower the patient to care for herself or himself safely, effectively, and happily with food and beverage as a primary care technique.

Development

Five reasons for the rise in interest in culinary medicine are:

- Flourishing interest in eating out away from home and in food and cooking in popular entertainment media, as well as in oft-conflicting popular dietary advice, especially about weight management and chronic illness;
- Widespread dissatisfaction with conventional medical approaches to chronic illness together with popular excitement about integrative medicine;
- Near ubiquity of highly processed and convenience foods, accompanied by an increasing suspicion of their health value and the acknowledgement of the hyperpalatable nature of fast food;
- The rising cost of health care, with the growing economic burden of diet-related noncommunicable health risks and diseases; with reports of some 30% of low-income older US adults having to choose between purchasing medication or food; and with the dearth of healthy food procurement and promotion policies in institutions, worksites, schools, and government; and
- A revived enthusiasm for additive-free organic food, home gardening, local agriculture, and farmers’ markets.

Some eating patterns have been found to be as or more effective than prescription medication for some conditions: an anti-inflammatory eating pattern for rheumatoid arthritis; a ketogenic diet for epilepsy; a Mediterranean eating pattern for cardiovascular disease, advanced colon cancer, and type 2 diabetes. Several foods have been found to be as or more effective as well: legumes for cholesterol lowering; soy nuts for systolic and diastolic hypertension; tree nuts for metabolic syndrome; baked and broiled fish for heart failure; honey and milk for acute cough. For many patients, nutritious food is medicine.

1Department of Medicine, Chef Clinic, Santa Barbara, California.

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Medical education

The first cooking and nutrition elective in a US medical school was taught in 2003 at SUNY-Upstate; the first annual Harvard Healthy Kitchens, Healthy Lives postgraduate course for clinicians was taught in 200714; the first culinary medicine center in a US medical school opened at Tulane in 201315; and the first senior elective in culinary medicine was offered in 2013 by Des Moines University and Santa Barbara Cottage Hospital.

At least 10 US medical schools teach culinary medicine to undergraduates as elective courses in their undergraduate curricula. Tulane has developed and licensed a curriculum to at least 7 other medical schools. Culinary medicine Continuing Medical Education (CME) courses have been offered through NACCME (North American Center for Continuing Medical Education), the largest independent CME organization in the United States. Similar live CME programs have proven successful in lifestyle medicine.16 Several hospitals now offer culinary medicine programs to clinicians and to the public.

Culinary medicine offers systematic ways to understand and appreciate the patient’s understanding of food and cooking as part of her or his care, and apply that understanding to her or his health care goals. Although curricular progress, especially in medical education, may influence the attitudes and practices of clinicians, equally important to many educators is the effect of the “hidden curriculum” (ie, the observed effect of how practicing clinicians actually eat, drink, cook, and care for themselves).17 Such behavior is important not just for self-care, as clinicians’ own health habits predict their counseling practices on food and diet, but also for the health habits of students, staff, and patients.

Objections

Some may doubt the need for another described clinical discipline. Clinicians already offer eating advice to patients, and dietitians, chiropractors, and physician nutrition specialists have specialized training to do so. However, most clinicians have not been trained in culinary skills or preparation, or in behavioral nutrition, including eating patterns, all of which influence patient adherence, quality, quantity, and consumption. Most clinicians also have not been trained to understand the mechanisms by which food influences metabolism, immunity, pathophysiology, or well-being.

In addition, few physicians have learned to facilitate patient access to self-care skills and programs. Expensive conventional interventions take less time to recommend than proven lifestyle intervention. The increased health care costs created by food insecurity, especially in diabetic adults and in children, are not recognized by most physicians. Barely half of graduating resident physicians feel adequately trained to counsel patients on preventive health behaviors.18

Other expert nonclinicians, such as personal chefs, trainers, coaches, and farmers, already offer important advice to clients about optimizing performance, improving mental acuity, healing musculoskeletal injuries, and accelerating recovery. However, these latter experts may lack sufficient training in both the science of medicine and the art of cooking. Some may rely excessively on recommending dietary supplementation. Still, these experts have much to offer culinary medicine.

Future challenges

Every clinician should be able to access evidence-based, practical methods, skills, research, and continuing education in the field. Such materials are not yet widely available.

Culinary medicine, like prescribed exercise, should become another tool in a clinician’s toolkit. One such format for writing culinary medicine prescriptions is FOOD: Frequency (of the food, beverage, or meal to be eaten); Objective (its goal); Options (how much, and different methods to prepare, serve, shop for it, or grow it); Duration (how many times per day, week, or month the prescription should be consumed). This format is simple to follow and patterned after how clinicians prescribe medication.

Every patient should have access to evidence-based, practical, culturally sensitive advice about issues of food, cooking, and eating specific to her or his particular case. These issues, though seldom explicitly discussed, arise daily during patient visits. Identification, analysis, and resolution of these issues should become an explicit part of clinical visits, and a patient’s medical history and treatment plan.

Conclusions

Clinicians can understand food and its importance to health and well-being and make that understanding available to patients, families, and health care systems for high impact, low cost, high value care. Whether clinicians will be able to undertake adequate additional education and training in culinary medicine, access evidence-based materials and research, practice the skills required to meet patient needs directly, and be appropriately compensated for their efforts is unknown, and defines the core challenges ahead.

Author Disclosure Statement

Dr. La Puma declared the following potential conflicts of interest with respect to the research, authorship, and/or publication of this article: He is the author of a book on culinary medicine, ChefMD’s Big Book of Culinary Medicine, from which he receives royalties when the book is purchased. He is founder of Chef Clinic®, a nutrition-focused medical practice in Santa Barbara, California, a professionally trained chef, and cofounder of ChefMD.com, a free online healthy recipe video Web site.

Prior Presentations


References


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KEYNOTE

Culinary Nutrition approaches that enhance dietary patterns and health outcomes: Might teaching kitchens be catalysts of personal and societal health enhancement?

PRESENTER: Dr. David Eisenberg, associate professor Harvard School of Medicine, T.H. Chan Harvard School of Public Health, founder of Healthy Kitchens, Healthy Lives. Dr. Eisenberg is the director of culinary nutrition and adjunct associate professor of nutrition at the Harvard T. H. Chan School of Public Health. He is the founding Co-Director of the Healthy Kitchens, Healthy Lives conference, and founding Co-Director of the recently established CIA-Harvard Chan Teaching Kitchen Collaborative, a group of 32 organizations with teaching kitchens, intended to establish and evaluate best practices relating to nutrition, culinary and lifestyle education.

DESCRIPTION: What is Culinary Nutrition and how did we get here? How might emerging models of “Teaching Kitchens” serve as learning laboratories for health professionals, patients, students, and communities? This session will review this new and evolving practice in an era of global obesity, diabetes, and other lifestyle-related diseases. What does the current literature say about this approach? Can it transform the evidence-informed dietary approaches so important for better health outcomes? Can we envision a path whereby we refer patients to “Teaching Kitchens” in an effort to learn about nutrition facts, basic cooking skills, the importance of movement and exercise, mindfulness, behavior change, and optimal use of web-based technologies, in addition to our current medical prescriptions and directives? When health providers obtain (and model) more food, nutrition, and culinary confidence, how does it transform the provider/patient relationship for better patient health outcomes and provider satisfaction? And in the evolving healthcare landscape, what are the opportunities for and examples of teaching kitchens, which have demonstrated changes in (a) behaviors, (b) clinical outcomes, and (c) the potential to bend cost curves?

KEYNOTE OBJECTIVES FOR OUR LOCAL HEALTH CARE PROVIDERS:

1. Describe the emerging field of Culinary Nutrition and how it can complement our health care practices in northwestern Lower Michigan, including an understanding of the clinical and financial opportunities.

2. Compare and contrast the standard medical interventions for overweight/obesity, diabetes, and cardiovascular health with an expanded approach using multi-disciplinary teaching kitchen models that incorporate nutrition science, cooking instruction, exercise, mindfulness training, and referrals to health coaches.
Saturday, September 23, 2017

FARMERS MARKET TOUR

PRESENTERS: Elise Searles, market manager, and Great Lakes Culinary Institute chef instructors

DESCRIPTION: This off-site excursion will give participants the opportunity to have small group tours of the market and a chance to meet local farmers, see their products up close, learn about their individual farming practices, and explore the seasonal variety available for purchase. The market manager will also educate participants on supplemental nutrition assistance programs that can help people at the market, such as the Bridge Card, the digital version of food stamps. Learn about other farmers market-oriented programs such as Double Up Food Bucks and Munson’s fruit and vegetable Rx program. Recipes that will be used throughout the two-day training will use many of the same market items and products.

LEARNING OUTCOMES:

1. State which seasonal fruit and vegetables are available in September and the anticipated nutrition quality benefits of reduced transit and storage times.
2. Discuss supplemental food and nutrition assistance programs offered by the Sara Hardy Farmers Market though Bridge Card programs.
3. Explain how Double Up Food bucks has been implemented in the farmers market setting and the current status the program.

~NOTES~
Saturday, September 23, 2017

SESSION A

Exploring food access and food environments as an adjunct assessment feature

PRESENTERS: Dr. Cyrus Ghaemi, DO; Les Hagamen, operations director, Father Fred Foundation; Laura McCain, RD.

DESCRIPTION: This overview session and culinary demonstration will give the current state of food security and food environments of our region, help practitioners understand screening and diagnosis codes associated with food insecurity, and allow for seeing, tasting, and discussion around common foods provided by a Grand Traverse County food pantry. A short video will highlight the Double Up Food Bucks program. A chef- and dietitian-led food demo will offer tastings and discussion with tips and recommendations for quick, easy, and cost-effective nutrition quality enhancements for the pantry meals.

LEARNING OBJECTIVES:

1. Describe the scope of food insecurity and lack of healthy food access as identified in the 2016 Munson Healthcare (five-county) Community Health Needs Assessment.
2. Review and analyze a clinical screening tool Hunger Vital Sign 2-question screening to identify potential food insecurity and suggested diagnosis codes to apply.
3. List at least three supplemental nutrition assistance options in our region with emphasis on the Fruit and Vegetable Prescriptions of Health program.
4. Taste and explore foods that are distributed out of a Grand Traverse County food pantry and discuss ways to enhance nutritional quality of these meals.

~NOTES~
Early childhood health depends on consistent access to an adequate and nutritious diet. Unfortunately, one in five U.S. families with children under age six struggles to provide enough food to lead active, healthy lives (are food insecure). To identify young children living in households at risk for food insecurity, Children’s HealthWatch validated the Hunger Vital Sign™, a 2-question food insecurity screening tool based on the US Household Food Security Scale. The Hunger Vital Sign™ measures families’ concerns about and access to food, much the way health care providers check other key vital signs, such as pulse and blood pressure. Healthcare providers, social service providers, community-based outreach workers, teachers, and anyone who works with young children can use the Hunger Vital Sign™ to identify young children and families who may need assistance.

The Children’s HealthWatch Hunger Vital Sign™

Drs. Erin Hager and Anna Quigg and the Children’s HealthWatch team validated the Hunger Vital Sign™, a 2-question screening tool, suitable for clinical or community outreach use, that identifies families with young children as being at risk for food insecurity if they answer that either or both of the following two statements* is ‘often true’ or ‘sometimes true’ (vs. ‘never true’):

- “Within the past 12 months we worried whether our food would run out before we got money to buy more.”
- “Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more.”

What Does the Hunger Vital Sign™ Tell Us?

When compared to children under the age of four who screened as food secure using the Hunger Vital Sign™, young children screening as at risk of food insecurity using the Hunger Vital Sign were:

- 56 percent more likely to be in fair or poor health
- 17 percent more likely to have been hospitalized
- 60 percent more likely to be at risk for developmental delays

Compared to mothers screened as food-secure, mothers screening as at risk of food insecurity were:

- Almost twice as likely to be in fair or poor health
- Almost three times as likely to report depressive symptoms

The Hunger Vital Sign™ identified young children and mothers at high risk of food insecurity in order to help them obtain assistance if needed.

Research Summary

Children’s HealthWatch™ has developed the Hunger Vital Sign, a 2-question screening tool to identify young children in households at risk of food insecurity.

Compared to young children in food-secure households, young children in families at risk of food insecurity are more likely to:

- Be in fair or poor health
- Have been hospitalized
- Be at risk for developmental delays

Compared to food-secure mothers, mothers of young children who are at risk of food insecurity are more likely to:

- Be in fair or poor health
- Report depressive symptoms

The Hunger Vital Sign™ identified young children and mothers at high risk of food insecurity in order to help them obtain assistance if needed.
Apart from the harm to mothers themselves, poor maternal mental health affects mothers’ ability to provide care for their children, and can impede children’s development.4

Putting the Hunger Vital Sign™ Into Action – Health Care Settings and Beyond

Health care providers can use the Hunger Vital Sign™ during routine primary or acute care visits as well as visits to the emergency room, treating food security as a vital sign just like temperature, blood pressure or pulse, all essential measurements for understanding a child’s health and prognosis. The screening tool is also very useful when incorporated into electronic medical records, so that it becomes part of the child’s medical history. The Hunger Vital Sign™ may also be used by emergency food assistance programs, community outreach workers, advocates, and social workers, among others.

Hospitals and other health care institutions can improve the food security, and ultimately the health, of the children they serve through a variety of interventions, including:
• Referring families to nutrition assistance programs, such as the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Assistance Program for Women, Infants, and Children (WIC)
• Some hospitals provide application assistance through their financial assistance departments (or the departments where patients register for health insurance)
• Collaborating with partner food pantries to provide onsite food pantries and/or WIC offices in health care facilities
• Using hospital facilities as sites for community-based summer and after-school feeding programs

Conclusion

The validated Children’s HealthWatch Hunger Vital Sign™ is a 2-item screening tool that provides a straightforward means of identifying families who struggle to access food and whose children are therefore at greater risk of fair or poor health, hospitalizations and developmental delays, and whose mothers are at greater risk of fair or poor health and depression. By routinely screening for food insecurity as a vital sign, healthcare providers and others who work directly with families of young children can connect families at risk of food insecurity with effective resources to sustain and improve their mental and physical health, reducing health care costs for the families and society as a whole.

Thank you to Erin Hager, PhD, of the University of Maryland School of Medicine; Dorigen Keaney, MS, RD, of Hunger Free Vermont; Sarah Grow of The Open Door; and Allison Bovell, M.Div, and Justin Pasquariella, MBA, MPA, of Children’s HealthWatch for their thoughtful and careful review of this work.

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Saturday, September 23, 2017

SESSION B

Using a local food approach for prevention and chronic disease management

PRESENTERS: Chef Becky Tranchell and Dietitian, Judi Marlin; Chef, Rob Rodriguez and Dietitian Kelly Wilson; Chef Robert George and Dietitian Paula Martin

DESCRIPTION: This hands-on cooking session will educate physicians and other health care providers about our local food system and allow time to cook with local foods while learning basic culinary techniques, including: knife skills, traditional mise en place, chopping and cutting techniques, simple solutions for keeping and maintaining a well-stocked pantry, and other skills. Participants will cook local food-based recipes for quick and healthy meals that align with the Dietary Guidelines for Americans, Dietary Approaches to Stop Hypertension (DASH), and the ChooseMyPlate.gov graphic.

LEARNING OBJECTIVES:

1. List at least two key dietary recommendations that are the basis of the DASH diet and state three ways to increase patient adherence to the guidelines in the clinical setting.

2. List and identify three fruit and/or vegetables grown in our region and available in September and state one nutritional fact about the food to share with clients and patients.

3. Explore ways to use cooking and whole food combining techniques to change or enhance macro- and micro-nutrient bioavailability and/or absorption for calcium, iron, carotenoids, and proteins.

~NOTES~
MyPlate, MyWins: Make it yours

Find your healthy eating style. Everything you eat and drink over time matters and can help you be healthier now and in the future.

- Move to low-fat or fat-free milk or yogurt.
- Make half your grains whole grains.
- Vary your protein routine.
- Focus on whole fruits.
- Vary your veggies.

Choose MyPlate.gov

Limit the extras.
Drink and eat beverages and food with less sodium, saturated fat, and added sugars.

Create ‘MyWins’ that fit your healthy eating style.
Start with small changes that you can enjoy, like having an extra piece of fruit today.
Focus on whole fruits and select 100% fruit juice when choosing juices.

Buy fruits that are dried, frozen, canned, or fresh, so that you can always have a supply on hand.

Eat a variety of vegetables and add them to mixed dishes like casseroles, sandwiches, and wraps. Look for "reduced sodium" or "no-salt-added" on the label.

Choose whole-grain versions of common foods such as bread, pasta, and tortillas. Not sure if it’s whole grain? Check the ingredients list for the words “whole” or “whole grain.”

Choose low-fat (1%) or fat-free (skim) dairy. Get the same amount of calcium and other nutrients as whole milk, but with less saturated fat and calories. The label on your milk or yogurt should say "low fat" or "1% milk fat." Don’t forget physical activity!

Drink water instead of sugary drinks. Regular soda, energy or sports drinks, and other sweet drinks usually contain a lot of added sugar. Try water instead.

Don't forget physical activity:

Kids ≥ 60 min/day  Adults ≥ 150 min/week

Visit SuperTracker.usda.gov for a personalized plan.

Daily Food Group Targets — Based on a 2,000 Calorie Plan

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<td>1 large banana</td>
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<td>3 3 cup cooked beans</td>
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<td>3 3 cup cooked brown rice</td>
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<td>2 2 cups raw spinach</td>
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<td>2 2 cups mandarin oranges</td>
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<td>1 1 cup milk</td>
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<td>1 1 cup 100% grapefruit juice</td>
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Protein

Dairy

Grains

Vegetables

Fruits

MyPlate, MyWins

Healthy Eating Solutions for Everyday Life

Choose MyPlate.gov/MyWins

Center for Nutrition Policy and Promotion

May 2016

CNPP-29

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Water
MyPlate Daily Checklist
Find your Healthy Eating Style

Everything you eat and drink matters. Find your healthy eating style that reflects your preferences, culture, traditions, and budget—and maintain it for a lifetime! The right mix can help you be healthier now and into the future. The key is choosing a variety of foods and beverages from each food group—and making sure that each choice is limited in saturated fat, sodium, and added sugars. Start with small changes—“MyWins”—to make healthier choices you can enjoy.

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Amounts for 1,600 Calories a Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>1 1/2 cups</td>
</tr>
<tr>
<td>Vegetables</td>
<td>2 cups</td>
</tr>
<tr>
<td>Grains</td>
<td>5 ounces</td>
</tr>
<tr>
<td>Protein</td>
<td>5 ounces</td>
</tr>
<tr>
<td>Dairy</td>
<td>2 1/2 cups</td>
</tr>
</tbody>
</table>

**Fruits:** Focus on whole fruits that are fresh, frozen, canned, or dried.

**Vegetables:** Vary your veggies—choose a variety of colorful fresh, frozen, and canned vegetables—make sure to include dark green, red, and orange choices.

**Grains:** Make half your grains whole grains—find whole-grain foods by reading the Nutrition Facts label and ingredients list.

**Protein:** Vary your protein routine—mix up your protein foods to include seafood, beans and peas, unsalted nuts and seeds, soy products, eggs, and lean meats and poultry.

**Dairy:** Move to low-fat or fat-free milk or yogurt—choose fat-free milk, yogurt, and soy beverages (soy milk) to cut back on your saturated fat.

**Limit:** Drink and eat less sodium, saturated fat, and added sugars. Limit:
- Sodium to 1,900 milligrams a day.
- Saturated fat to 18 grams a day.
- Added sugars to 40 grams a day.

**Be active your way:** Children 2 to 5 years old should play actively every day. Children 6 to 17 years old should move at least 60 minutes every day.

**Use SuperTracker to create a personal plan based on your age, sex, height, weight, and physical activity level.**

SuperTracker.usda.gov
### Food Group Targets for a 1,600 Calorie* Pattern

#### 1 1/2 cups
- 1 cup raw or cooked fruit; or
- 1/2 cup dried fruit; or
- 1 cup 100% fruit juice.

#### 2 cups
- 1/2 cup cooked beans or peas; or
- 1 Tbsp peanut butter; or
- 1 egg; or
- 1 ounce lean meat, poultry, or seafood; or
- 1 ounce of protein counts as 5 ounce equivalents.

#### 5 ounce equivalents
- 1 slice bread; or
- 1 ounce ready-to-eat cereal; or
- 1/2 cup cooked rice, pasta, or cereal.

#### 1 cup of dairy
- 1 cups milk; or
- 1 cup yogurt; or
- 1 cup fortified soy beverage; or
- 1 1/2 ounces natural cheese; or
- 2 ounces processed cheese.

#### 2 1/2 cups
- 1/2 ounce nuts or seeds; or
- 1/4 cup cooked beans or peas; or
- 1 tsp cottonseed oil; or
- 1/2 ounce lean meat, poultry, or seafood; or
- 1 ounce of protein counts as 5 ounce equivalents.

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**MyPlate, MyWins**

Write down the foods you ate today and track your daily MyPlate, MyWins.

<table>
<thead>
<tr>
<th>Fruits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dairy</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

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**Activity**

- Be active your way:
  - Children 2 to 5 years old should play actively every day.
  - Children 6 to 17 years old should play activity every day.
  - Children 6 to 17 years old should move at least 60 minutes every day.

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**Limit**

- Added sugars to 40 grams a day.
- Sodium to 2,300 milligrams a day.

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*This 1,600 calorie pattern is only an estimate of your calorie needs. Monitor your body weight and adjust your calories if needed.
As a health care provider, you know that helping your patients or clients make healthier food choices is essential. Written for health professionals like you, the 2015-2020 Dietary Guidelines for Americans makes your job easier—with clear, evidence-based nutrition guidance you can trust.

The 2015-2020 Dietary Guidelines focuses on overall eating patterns—and how making healthy choices over time can have lasting health benefits. This guide can help you share the recommendations from the 2015-2020 Dietary Guidelines with your patients or clients. Help inspire them to adopt healthier eating patterns.

Get the Conversation Started

When talking about healthy eating and the Dietary Guidelines, keep the conversation positive and encouraging. Try these friendly conversation starters.

**What’s your family’s favorite dinner?**

Meet your patients or clients where they are. Once you have an idea how they’re eating now, you can make suggestions for shifts and substitutions recommended in the Dietary Guidelines—ways to adapt their favorite dishes to make them healthier.

**Who does the grocery shopping in your home? Who cooks?**

Find out what they’re buying and how much they’re cooking. You might be able to make suggestions for new foods to try, or goals for cooking at home more often.

**What are some of your family’s favorite food routines & traditions?**

Are patients or clients sharing family meals each night or eating separately? Talk about how healthy eating patterns are adaptable to any traditions or customs.

**When you’re thirsty, what kind of drink do you reach for?**

Almost 50% of added sugars in the American diet comes from sodas, fruit drinks, and other sweetened beverages. See if you can steer them toward healthier options, like water.

**Does eating healthier seem hard or unrealistic?**

If there are barriers, find out what they are and suggest some workarounds. Read more on Page 3.
Make Healthy Eating Seem Doable—Emphasize the Benefits

People may avoid changing their eating patterns because it feels overwhelming. Share these messages with your patients and clients to frame healthy changes in the Dietary Guidelines as small, manageable steps.

- **Eating healthier doesn’t mean drastic changes for a family’s eating plan.** Healthy eating isn’t all or nothing. People can eat healthier and still enjoy the foods they love. The key is to make some small changes and healthy shifts.

- **There’s no one “right” way to eat.** The Dietary Guidelines shows that there are lots of different paths to healthy eating. Anyone can find a healthy eating pattern that fits with their family’s preferences, traditions, culture, and budget.

- **Healthy eating is one of the most powerful tools we have to prevent or delay disease.** It can help keep people healthy and active as they get older—giving them more time to spend with their families and do the activities they enjoy.

Use this graphic to help your patients and clients understand the basics of a healthy eating pattern.

### What’s in a Healthy Eating Pattern?

The 2015–2020 Dietary Guidelines has basic recommendations for a healthy eating pattern. It includes foods like:

- **Fruits,** especially whole fruits
- **Grains,** at least half of which are whole grains
- **A variety of vegetables**—dark green, red and orange, legumes (beans and peas), starchy, and other vegetables
- **A variety of protein foods,** including seafood, lean meats and poultry, eggs, legumes (beans and peas), soy products, and nuts and seeds
- **Fat-free or low-fat dairy,** including milk, yogurt, cheese, and/or fortified soy beverages
- **Oils,** including those from plants (such as canola, corn, olive, peanut, safflower, soybean, and sunflower) and in foods (such as nuts, seeds, seafood, olives, and avocados)

And it has limits on:

- **Saturated & trans fats**—limit saturated fats to less than 10% of daily calories and keep trans fat intake as low as possible
- **Added sugars**—limit to less than 10% of daily calories
- **Sodium**—limit to less than 2,300 mg a day (for adults and children 14 years and older)
- **Alcohol**—limit to no more than 1 drink per day for women and no more than 2 per day for men
Be Ready for Resistance

Your patients or clients may have valid reasons for why healthy eating is difficult. Here are some ways to get past common barriers.

They say: “I can’t afford healthy foods.”

Explain that healthy eating is for everyone—regardless of income or household budget. For example, if fresh vegetables seem too expensive, suggest frozen or canned—just make sure they check the sodium content.

They say: “I don’t have the time to cook healthy meals.”

Suggest cooking a healthy dinner just once a week—that’s a great first step. Or have them cook meals in batches on the weekend, so they can heat up dinners during the week.

They say: “My kids won’t eat anything healthy.”

Point out that this is a common problem, but offer suggestions—like having kids help pick out a few healthy options at the grocery store and pitch in when cooking.

They say: “I don’t listen to the experts—they keep changing their minds about which foods are healthy and which aren’t.”

Acknowledge that changes in guidance can be confusing, but emphasize that the basic core recommendations in the Dietary Guidelines have stayed largely consistent over the years. People can trust the Dietary Guidelines—they’re based on the body of the best nutrition evidence we have.

Tips for Successful Conversations

Some people may feel judged or criticized when you bring up healthy eating. Use these techniques to prevent that from happening.

• Emphasize that you’re on the same side. The two of you are working together to solve a problem. You’re not trying to criticize or lecture.

• Celebrate successes. If your patient makes steps toward healthier eating, cheer them on. If you notice any benefits—like a lower weight or improved blood pressure—link these changes to their improved diet.

• Have empathy. Changing behavior is hard—especially when it comes to food. The important thing is to encourage your patients and clients to keep trying. Try offering personal examples of how you overcome challenges to make healthy changes.

Take the Next Step

These are just a few topics you can broach with your patients or clients—there’s a lot more in the Dietary Guidelines to learn about and discuss.

• Go to health.gov/dietaryguidelines to see the Recommendations At-A-Glance, the complete 2015-2020 Dietary Guidelines document, and handouts that you can share with your patients or clients.

• Refer your patients or clients to ChooseMyPlate.gov, where they can learn more about the Dietary Guidelines and get practical advice, recipes, and more.
There are many items available all year long in Northwestern Michigan, including:

- Eggs
- Milk
- Cheese
- Ice Cream
- Yogurt
- Butter
- Meat
- Fish
- Dried and Frozen Fruit
- Jams, Sauces, Salsas, and Hot Sauces
- Breads and Baked Goods
- Granola
- Honey
- Maple Syrup
- Chocolates
- Vinegars
- Herbal Teas
- Juice and Cider
- Wine
- Beer
- Distilled Spirits

You can also find locally grown trees, flowers, seedlings, and wreaths, as well as soaps, lotions, balms, sachets, yarns, and other products made with local ingredients.

**GET IT FRESH!**

<table>
<thead>
<tr>
<th>Produce</th>
<th>Harvest Season</th>
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</thead>
<tbody>
<tr>
<td>Apples</td>
<td>Mid-August to late October</td>
</tr>
<tr>
<td>Apricots</td>
<td>July to early August</td>
</tr>
<tr>
<td>Asparagus</td>
<td>Early May to late June</td>
</tr>
<tr>
<td>Beets</td>
<td>July to mid-October</td>
</tr>
<tr>
<td>Blackberries</td>
<td>Mid-August to late September</td>
</tr>
<tr>
<td>Blueberries</td>
<td>Late July to mid-September</td>
</tr>
<tr>
<td>Broccoli</td>
<td>Mid-July to mid-October</td>
</tr>
<tr>
<td>Brussels Sprouts</td>
<td>October</td>
</tr>
<tr>
<td>Cabbage</td>
<td>Mid-August to late October</td>
</tr>
<tr>
<td>Carrots</td>
<td>Late July to October</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>August to October</td>
</tr>
<tr>
<td>Cherries, Sweet</td>
<td>Early July to early August</td>
</tr>
<tr>
<td>Cherries, Tart</td>
<td>July to August</td>
</tr>
<tr>
<td>Chestnuts</td>
<td>October</td>
</tr>
<tr>
<td>Corn</td>
<td>Late July to mid-September</td>
</tr>
<tr>
<td>Cucumbers</td>
<td>Early August to early October</td>
</tr>
<tr>
<td>Eggplant</td>
<td>August</td>
</tr>
<tr>
<td>Grapes</td>
<td>September to October</td>
</tr>
<tr>
<td>Green Beans</td>
<td>Early August to mid-September</td>
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<tr>
<td>Lettuce</td>
<td>April to December</td>
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<tr>
<td>Nectarines</td>
<td>August to September</td>
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<tr>
<td>Onions</td>
<td>Early July to late September</td>
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<tr>
<td>Peaches</td>
<td>Mid-August to mid-September</td>
</tr>
<tr>
<td>Pears</td>
<td>September to October</td>
</tr>
<tr>
<td>Peas</td>
<td>June</td>
</tr>
<tr>
<td>Peppers</td>
<td>August to mid-October</td>
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<tr>
<td>Plums</td>
<td>July to September</td>
</tr>
<tr>
<td>Potatoes</td>
<td>Early September to late October</td>
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<td>Potatoes, New</td>
<td>Mid-July to early September</td>
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<tr>
<td>Pumpkins</td>
<td>September to October</td>
</tr>
<tr>
<td>Radishes</td>
<td>June to October</td>
</tr>
<tr>
<td>Ramps</td>
<td>Mid-April to June</td>
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<td>Raspberries</td>
<td>July to October</td>
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<tr>
<td>Rhubarb</td>
<td>May to June</td>
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<tr>
<td>Saskatoons</td>
<td>July to August</td>
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<td>Snap Peas</td>
<td>Late June to mid-July</td>
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<td>Spinach</td>
<td>June to October</td>
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<td>Squash, Summer</td>
<td>Mid-July to mid-September</td>
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<td>Squash, Winter</td>
<td>Mid-September to mid-October</td>
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<td>Mid-June to early July</td>
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<tr>
<td>Tomatoes</td>
<td>Early July to October</td>
</tr>
<tr>
<td>Product</td>
<td>Temperature (°F)</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Fish</td>
<td>145</td>
</tr>
<tr>
<td>Shellfish</td>
<td>145</td>
</tr>
<tr>
<td>Poultry</td>
<td>145</td>
</tr>
<tr>
<td>Seafood</td>
<td>145</td>
</tr>
<tr>
<td>Sauces, Soups, Gravies, Marinades</td>
<td>165</td>
</tr>
<tr>
<td>Stuffed</td>
<td>165</td>
</tr>
<tr>
<td>Eggs</td>
<td>165</td>
</tr>
</tbody>
</table>

**Note:** These temperatures are recommended for consumer cooking. For more information, consult local or state health department recommendations.
# Testing Sample Worksheet

<table>
<thead>
<tr>
<th>Tasting Sample</th>
<th>Appearance (color appropriate)</th>
<th>Flavor (include smell and texture)</th>
<th>Aftertaste? Y/N</th>
<th>Rate 1-4 (1 = best/favorite)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample A</td>
<td></td>
<td></td>
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<tr>
<td>Sample B</td>
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<tr>
<td>Sample C</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample D</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
CHICKEN WITH ROASTED VEGETABLES

Ingredient | Measure
---|---
Whole roasting chicken | 1
Onions | 2 medium
Potatoes, red | 2 LBS
Mushrooms | 8 OZ
Red peppers | 1
Green peppers | 1
Beets | 4
Carrots | 4 large
Parsnips | 4 large
Garlic | 8 cloves
Salt, pepper | To taste
Balsamic vinegar, olive oil, soy sauce | To taste

1. Preheat oven to 375°F. Line a sheet pan with aluminum foil and coat with a little oil.
2. Cut the vegetables into bite-size pieces and place into a large bowl.
3. Season with salt and pepper and then pour the soy sauce, oil and vinegar on top.
4. Toss to coat the ingredients. Remove from the bowl and put on the sheet pan.
5. Cut the chicken in half lengthwise, and place into the bowl. Season and add more oil, vinegar and say sauce. Toss to coat and place on the sheet pan with the vegetables.
6. Put in oven for 40 minutes or until the internal temperature of the chicken is 160F.

Serves 4-6 (3-4 oz of chicken per serving)

309 calories, 4 g total fat, 1g Sat. fat,
41 g Carb, 8g dietary fiber, 28 g Pro, 353 mg sodium

Recipe by Chef Fred Laughlin, Great Lakes Culinary Institute
**FRITTATA**

**Ingredient** | **Measure**
--- | ---
Olive oil | 3 tbsp
Tomatoes, chopped | 1 cup
Fresh mushrooms, chopped | 1 1/2 cups
Chopped onion | 3/4 cup
Green bell pepper, chopped | 3/4 cup
Garlic, minced | 1 clove
eggs, beaten | 8-Jun
2% or reduced fat milk | 1/2 cup
Shredded Cheddar cheese (or any other cheese you may like) | 2 cups
Salt | 1 tsp
Black pepper, ground | 1 tsp

1. Preheat oven to 350 degrees F. Lightly grease a 9x13 inch baking dish.

2. In a large skillet or frying pan, heat oil over medium high heat. Add tomatoes, mushrooms, onion, green pepper and garlic; sauté until tender. Remove from heat and let cool slightly.

3. In a large bowl, beat together the eggs and milk. Stir cheddar cheese, bread cubes and sautéed vegetables. Season with salt and pepper. Mix well and pour into prepared baking dish.

4. Bake in preheated oven for one hour, or until center is set. Serve hot or cold.

**Makes eight servings**

**note to reduce sodium use low sodium cheese or reduce cheese volume to 1 cup and omit salt**

309 calories, 4g total fat, 1g Sat. fat, 41 g Carb, 8g dietary fiber, 28 g Pro, 353 mg sodium

Recipe by Chef Fred Laughlin, Great Lakes Culinary Institute
**QUESADILLA**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>whole wheat tortilla (9-10 inch)</td>
<td>4 large</td>
</tr>
<tr>
<td>Olive oil</td>
<td>As needed</td>
</tr>
<tr>
<td>Grated cheese, either mild or sharp cheddar, or Monterey Jack</td>
<td>1/2 pound</td>
</tr>
<tr>
<td><strong>Suggested filling ingredients (pan roast):</strong></td>
<td></td>
</tr>
<tr>
<td>Beans, cooked (black beans, pinto beans)</td>
<td>One 15oz. can</td>
</tr>
<tr>
<td>Roma Tomatoes, chopped</td>
<td>2 to 3</td>
</tr>
<tr>
<td>Corn kernels</td>
<td>2 cups</td>
</tr>
<tr>
<td>Onions (green onions, red onions, onion greens)</td>
<td>2 cups</td>
</tr>
<tr>
<td>Mushrooms (sauté first, to remove moisture)</td>
<td>2 cups</td>
</tr>
<tr>
<td>Cooked shredded chicken, pork, or beef</td>
<td>2 cups</td>
</tr>
<tr>
<td>Peppers (green, red, jalapeño, diced small)</td>
<td>1 each</td>
</tr>
<tr>
<td>Cilantro, chopped</td>
<td>1 bunch</td>
</tr>
</tbody>
</table>

1. Preheat oven to 350°F. Butter the bottom of a cookie sheet, approximately the same size as your tortillas.
2. Place one tortilla on the cookie sheet. Spread the cream cheese on the tortilla. Sprinkle some shredded cheese over the tortilla. At this point, you will begin to add your chosen filling ingredients.
3. Put in oven for 10 minutes on 375°F. Let cool for 10 minutes before serving. Cut into quarters.

Serve with chopped avocados, shredded lettuce, cilantro, fermented salsa.
To reduce sodium, rinse all canned products, use low sodium cheese and/or reduce cheese volume.

Serves 4

455 calories, 55g carb, 17g dietary fiber, 15g fat, 5g sat. fat, 29g pro, 933mg sodium

Recipe by Chef Fred Laughlin, Great Lakes Culinary Institute
Culinary Nutrition Research Briefing

PRESENTER:  Dr. Jennifer Lyon, DO, Pure Health

DESCRIPTION: This briefing will outline the key food and nutrition research discussed in the first kitchen session and what we plan to discuss in the next kitchen session. Research includes: a review of the 2016 Dietary Guidelines for Americans and the key nutrition concepts for both the general population and also as a means to engage patients in chronic disease management; updates on the recommendations for dietary strategies, and nutrients of concern for weight management including ways to promote plant-based proteins and essential amino acids; cardiovascular diseases including the evidence to move beyond a focus on overall dietary fat to understanding which fatty acid types and uses for meal planning are effective; dairy fats, plant-based diets, resistant starches, and the gut microbiota for diabetes management.

LEARNING OBJECTIVES:

1. Describe the current evidence for the support of the 2015 Dietary Guidelines Scientific Report as the basis for healthy eating recommendations.

2. Discuss emerging evidence in the nutrition science literature related to:
   - effects of saturated fatty acids on serum lipids and lipoproteins;
   - coconut oil consumption and cardiovascular risk factors;
   - dairy fat and risk of diabetes in adult men and women in the United States;
   - butter consumption and overall mortality;
   - effects of overall well-being improvements associated with fruit and vegetable intakes;
   - vegetarian diets and incidence of diabetes;
   - appetite, satiety and protein intake.

~NOTES~
The 2015–2020 Dietary Guidelines provides the information you need to help Americans make healthy food choices. Based on the current body of nutrition science, the Dietary Guidelines is a go-to resource for policymakers, public health professionals, and other experts working to improve the health of individuals, families, and communities across the nation.

The current edition is structured around 5 overarching Guidelines. This overview gives busy professionals the essentials—a rundown of each Guideline along with supporting Key Recommendations—to help you apply the Guidelines in practice.

**Guideline 1. Follow a Healthy Eating Pattern Across the Lifespan.**

The 2015–2020 Dietary Guidelines emphasizes the importance of overall healthy eating patterns. They’re important because people don’t eat foods and nutrients in isolation. **What really matters is the big picture**—how a person’s food and beverage choices add up over their lives.

**Key Concept:**
**Eating pattern.** The combination of all the foods and beverages a person eats and drinks over time.

**Eating patterns have a significant impact on health.** Diet is one of the most powerful tools we have to reduce the onset of disease. Healthy eating patterns can help prevent obesity, heart disease, high blood pressure, and Type 2 diabetes. Currently, about half of all American adults have one or more of these diet-related chronic diseases.

**Healthy eating patterns are adaptable.** When people follow a healthy eating pattern, they can incorporate many of the foods they enjoy. Healthy eating patterns can work for anyone, accommodating their traditions, culture, and budget.

**Guideline 2. Focus on Variety, Nutrient Density, & Amount.**

The Dietary Guidelines gives clear recommendations about how to follow a healthy eating pattern. By definition, healthy eating patterns need to:

- Stay within appropriate calorie limits for a person’s age, sex, and activity level
- Meet nutritional needs
- Be achievable and maintainable in the long-term

There are many paths to a healthy eating pattern. The Dietary Guidelines provides examples of 3 eating patterns — the Healthy U.S.-Style, Healthy Mediterranean-Style, and Healthy Vegetarian Eating Patterns.
One important way of achieving a healthy eating pattern is to choose a variety of nutrient-dense foods across all food groups.

**Key Concept:**

**Nutrient density.** Nutrient-dense foods have the right balance—they pack in plenty of important nutrients and are naturally lean or low in solid fats and have little or no added solid fats, sugars, refined starches, or sodium. Nutrient-dense foods are the foundation of a healthy eating pattern.

Healthy eating patterns include nutrient-dense forms of:

- A variety of vegetables: dark green, red and orange, legumes (beans and peas), starchy, and other vegetables
- Fruits, especially whole fruits
- Grains, at least half of which are whole grains
- Fat-free or low-fat dairy, including milk, yogurt, cheese, and fortified soy beverages
- A variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), soy products, and nuts and seeds
- Oils, including those from plants (canola, corn, olive, peanut, safflower, soybean, and sunflower) and oils that are naturally present in foods (nuts, seeds, seafood, olives, and avocados)

Note that these foods are only nutrient dense if they’re prepared with little or no added solid fats, sugars, refined starches, and sodium.

**Guideline 3. Limit Calories from Added Sugars & Saturated Fats & Reduce Sodium Intake.**

The *Dietary Guidelines* also recommends limits on a few specific dietary components.

**Added Sugars:** Limit to less than 10% of total calories daily.

When sugars or syrups are added to foods as they’re processed or prepared, they’re called added sugars. (Natural sugars—in fruits, vegetables, and milk—are not added sugars.) Added sugars add calories without other nutritional value. When a person’s diet is high in added sugars, it may be hard for them to achieve a healthy eating pattern.

**Saturated & Trans Fats:** Limit saturated fats to less than 10% of total calories daily by replacing them with unsaturated fats and limit *trans* fats to as low as possible.

Diets high in saturated and *trans* fats are associated with heart disease. Foods high in saturated fats include butter, whole milk, and meats that aren’t labeled lean. *Trans* fats are in processed foods, like desserts, frozen pizza, and coffee creamer.

**Sodium:** Limit to less than 2,300 mg daily (for adults and children 14 years and older).

Most Americans get 50% more sodium than recommended. Diets high in sodium are associated with high blood pressure and heart disease.

**Alcohol:** Limit to no more than 1 drink daily for women and no more than 2 for men.

The *Dietary Guidelines* doesn’t recommend that people start drinking alcohol for any reason and many people shouldn’t drink, such as women during pregnancy. But for adults of legal drinking age who already do, moderation is essential.

When it comes to improving food and beverage choices, small changes can add up to big benefits. That’s why the Dietary Guidelines emphasizes shifts—doable, healthy changes to how people already eat.

Key Concept:
Shifts. A term for healthy substitutions—replacing typical food choices with nutrient-dense alternatives. Healthy shifts can be within food groups or between them.

Making healthy shifts is a great way to add more nutrient-dense foods while eating fewer foods with added sugars, saturated and trans fats, and sodium.

Examples include shifts from:

- Full-fat cheese or whole milk to low-fat cheese or milk
- White bread to whole wheat
- Fatty cuts of meat to seafood or beans
- Butter to olive or canola oil
- Soft drinks to water
- Potato chips to unsalted nuts

Don’t forget physical activity! In addition to the Dietary Guidelines, Americans should follow the Physical Activity Guidelines.

Adults need:
- At least 150 minutes of moderate intensity physical activity each week
- Muscle-strengthening exercises on 2 or more days each week

Children age 6 to 17 need:
- At least 60 minutes of physical activity per day, including aerobic, muscle-strengthening, and bone-strengthening activities

The concept of “healthy shifts” makes dietary change tangible and less overwhelming. By helping people focus on small improvements, eating healthy may seem more manageable.

Americans make so many choices every day about what to eat and drink. Help them see each choice as an opportunity to make a small, healthy change.
Guideline 5. Support Healthy Eating Patterns for All.

The vast majority of Americans aren’t following the recommendations in the Dietary Guidelines. You can help change that.

Professionals can work together—with support from the public—to put the Dietary Guidelines into action around the nation. No matter your field of work or area of expertise, you can help bring about healthy changes:

**At Home**

- Add more veggies to favorite dishes
- Plan meals as a family and cook at home
- Incorporate physical activity into time with family or friends

**In Schools**

- Support healthier options in the cafeteria
- Encourage nutrition education programs or school gardens
- Increase physical activity during school

**At Work**

- Add healthier food options in vending machines and during staff functions
- Provide health and wellness programs and nutrition counseling
- Plan regular activity breaks and walking meetings

**In the Community**

- Start a community garden or farmers’ market
- Improve healthy food options at shelters and food banks
- Create walkable communities by maintaining safe public spaces

The Dietary Guidelines can help Americans eat healthier—regardless of zip code, age, sex, or ethnicity.

Take steps to learn even more about the Dietary Guidelines and spread the word. Go to health.gov/dietaryguidelines to:

- Dive into the complete Dietary Guidelines document
- Check out the Toolkit for professionals, which has more information and materials you can share with patients or clients
- Read the Top 10 Things You Need to Know About the 2015-2020 Dietary Guidelines
- Get answers to common questions about the Dietary Guidelines
Saturday, September 23, 2017

SESSION D

Medical Nutrition Therapy in the Kitchen: Weight Management

PRESENTERS: Chef Robert George and Dietitian Mary Shanahan

DESCRIPTION: This hands-on cooking session will expand on what we’ve explored throughout the day. By diving deeper into the macronutrient food components, we will focus on the whole and minimally processed in-season foods and recipes that can be used for weight management in one kitchen, while another kitchen will focus on diabetes, and the third on cardiovascular diseases. Our menus will promote a food-first nutrition care plan that allows for individual taste preferences and unique needs. We will explore the buzz around tropical oils, dairy beverage alternatives (nut, soy and hemp milks), meat alternatives, fermented foods, and plant based-diets. Dinner and discussion will follow time in the kitchen.

LEARNING OBJECTIVES: Weight Management Kitchen:
1. Discover ways to enhance potassium, magnesium, dietary fiber, and phytonutrient intakes for weight management support.
2. List three ways to combine plant-based proteins to ensure amino acid adequacy for adults.
3. Explore the digestive microbiota benefits related to fermented foods and beverages.

~NOTES~
Creating Health & Nutrition
Motivators to Reach Your Health and Fitness Goals

Confidence Builders
Finding it hard to get yourself or someone else motivated to make a healthy change, such as getting more exercise or eating better? Setting and achieving one small health goal a day can help you build your confidence. Over time, this can lead to permanent lifestyle changes.

Set Small Goals
- Write your goal on your daily calendar.
- Check it off the next day if you met it.
- At the end of the week, reward yourself, but do not use food as a reward.

This daily practice will increase your motivation to make changes that benefit your health. To plan a physical activity goal, first ask yourself, “How many hours do I spend sitting each day?” Review your schedule; even 10 minutes of added walking a day is a great place to start to improve fitness. Many people find time (20–60 minutes) for fitness before work, over lunchtime, right after work, and in the early evening.

Sometimes pushing dinner back one hour will give your family the time needed to fit in daily fitness. Offer fruits and vegetables as an afternoon snack with yogurt-flavored dip to stave off hunger and increase fruit and vegetable intake.

Praise and Support Help Build Confidence
Share your successes and setbacks with loved ones. Also share your goals. Don’t let the setbacks get you off track. Learn from your experience and keep focused on your healthy goals and benefits. Often, the best motivator is seeing your health improve.

Individual Benefits of Reaching Health and Fitness Goals
- Decreased risk of disease
- Better management of chronic disease
- Easier breathing and sleeping
- Less pain
- Improved mobility and stamina
- Improved mental health
- Praise from friends and loved ones

These health improvements are examples of individual benefits of reaching your fitness goals. Below are a few more benefits for the family as a whole.

Family Benefits
Several family benefits of healthy lifestyle changes include:
- Increased self-esteem and confidence in social settings
- Decreased risk of health problems associated with childhood obesity
- Feeling more comfortable in clothing
- Participating in sports or gym class with greater ease
- Increased opportunities for family bonding, such as exercising, grocery shopping, cooking, and enjoying meals together

Making Healthier Choices
Do you have a job, children, grandchildren, or a busy social life that may be taking up your time, leaving little time to make healthy behavior changes? Use the plan on the next page to help you make some healthy behavior changes.
Resources
Contact your Penn State Extension county office or visit extension.psu.edu for more information on health and nutrition programs. Also check out www.fruitsandveggiesmorematters.org for helpful tips to help you and your family eat more fruits and vegetables.

Sources


Examine Your Choices

<table>
<thead>
<tr>
<th>My Schedule</th>
<th>What do I do now</th>
<th>What I would like to change</th>
<th>How I plan to change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too busy to plan meals</td>
<td>Not enough vegetables each day and too many meals out at restaurants</td>
<td>Eat one more cup of vegetables per day and go out to eat only once a week</td>
<td>Plan a week of meals and snacks to have on hand; include a vegetable with afternoon snack; plan a weekly reward</td>
</tr>
</tbody>
</table>

My Goal:

Prepared by Lynn James, senior extension educator.
Reviewed by Megan Wall, dietetic intern, and Sharon McDonald, senior extension educator and food safety specialist.

extension.psu.edu
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Code UK170 6/17pod
### Serving-Size Chart

<table>
<thead>
<tr>
<th>FOOD</th>
<th>SYMBOL</th>
<th>COMPARISON</th>
<th>SERVING SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dairy: Milk, Yogurt, Cheese</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheese (string cheese)</td>
<td></td>
<td>Pointer finger</td>
<td>1½ ounces</td>
</tr>
<tr>
<td>Milk and yogurt (glass of milk)</td>
<td></td>
<td>One fist</td>
<td>1 cup</td>
</tr>
<tr>
<td><strong>Vegetables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooked carrots</td>
<td></td>
<td>One fist</td>
<td>1 cup</td>
</tr>
<tr>
<td>Salad (bowl of salad)</td>
<td></td>
<td>Two fists</td>
<td>2 cups</td>
</tr>
<tr>
<td><strong>Fruits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple</td>
<td></td>
<td>One fist</td>
<td>1 medium</td>
</tr>
<tr>
<td>Canned peaches</td>
<td></td>
<td>One fist</td>
<td>1 cup</td>
</tr>
<tr>
<td><strong>Grains: Breads, Cereals, Pasta</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry cereal (bowl of cereal)</td>
<td></td>
<td>One fist</td>
<td>1 cup</td>
</tr>
<tr>
<td>Noodles, rice, oatmeal (bowl of noodles)</td>
<td></td>
<td>Handful</td>
<td>½ cup</td>
</tr>
<tr>
<td>Slice of whole-wheat bread</td>
<td></td>
<td>Flat hand</td>
<td>1 slice</td>
</tr>
<tr>
<td><strong>Protein: Meat, Beans, Nuts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicken, beef, fish, pork (chicken breast)</td>
<td></td>
<td>Palm</td>
<td>3 ounces</td>
</tr>
<tr>
<td>Peanut butter (spoon of peanut butter)</td>
<td></td>
<td>Thumb</td>
<td>1 tablespoon</td>
</tr>
<tr>
<td>ALIMENTO</td>
<td>SÍMBOLO</td>
<td>COMPARACIÓN</td>
<td>PORCIÓN</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>---------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Lácteos: Leche, Yogur, Queso</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Queso (queso para deshebrar)</td>
<td>Dedo índice</td>
<td>1½ onzas</td>
<td></td>
</tr>
<tr>
<td>Leche y yogur (vaso de leche)</td>
<td>Un puño</td>
<td>1 taza</td>
<td></td>
</tr>
<tr>
<td><strong>Verduras</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zanahorias cocidas</td>
<td>Un puño</td>
<td>1 taza</td>
<td></td>
</tr>
<tr>
<td>Ensalada (tazón de ensalada)</td>
<td>Dos puños</td>
<td>2 tazas</td>
<td></td>
</tr>
<tr>
<td><strong>Frutas</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manzana</td>
<td>Un puño</td>
<td>1 mediana</td>
<td></td>
</tr>
<tr>
<td>Duraznos enlatados</td>
<td>Un puño</td>
<td>1 taza</td>
<td></td>
</tr>
<tr>
<td><strong>Granos: Panes, Cereales, Pasta</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereal seco (tazón de cereal)</td>
<td>Un puño</td>
<td>1 taza</td>
<td></td>
</tr>
<tr>
<td>Fideos, arroz, avena (tazón de tallarines)</td>
<td>Puñado</td>
<td>½ taza</td>
<td></td>
</tr>
<tr>
<td>Rebanada de pan integral</td>
<td>Mano extendida</td>
<td>1 rebanada</td>
<td></td>
</tr>
<tr>
<td><strong>Proteína: Carne, Frijoles, Nueces</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pollo, carne, pescado, puerco (pechuga de pollo)</td>
<td>Palma</td>
<td>3 onzas</td>
<td></td>
</tr>
<tr>
<td>Crema de cacahuate (cucharada de crema de cacahuate)</td>
<td>Pulgar</td>
<td>1 cucharada</td>
<td></td>
</tr>
</tbody>
</table>
## Testing Sample Worksheet

<table>
<thead>
<tr>
<th>Tasting Sample</th>
<th>Appearance (color appropriate)</th>
<th>Flavor (include smell and texture)</th>
<th>Aftertaste? Y/N</th>
<th>Rate 1-4 (1 = best/favorite)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FISH EN PAPILLOTE

**Ingredient** | **Measure**
--- | ---
Fish fillet (snapper, salmon, sole) | 1
Snow peas | 4 OZ (1 cup)
Carrots, julienned | 1-2
Celery, julienned | 1 rib
Onion, julienned | 1 medium
Minced gingerroot | 1 TSP
Garlic clove, minced | 1
Butter | 1 TBSP
A squeeze of fresh lemon juice | 
Salt and freshly ground pepper | To taste

1. Just to the right of center on a large square of aluminum foil, arrange the fish fillet, skin side down.
2. Arrange the vegetables around it and season the fish and the vegetables with salt and pepper.
3. Sprinkle the ginger root, garlic and lemon juice over the fish and top with butter.
4. Fold the foil in half to enclose the fish and the vegetables and fold down the edges to make a tight package.
5. Bake in a preheated 400 degree oven for 12 to 15 minutes or until the fish is just cooked through.

Serves 4-5 (5 oz. fish per serving)

309 calories, 13g total fat, 3 g sat. fat, 6g carb, 2g dietary fiber, 40g Pro, 253 mg sodium

Recipe by Chef Fred Laughlin, Great Lakes Culinary Institute
LACTO-FERMENTED SALSA

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomatoes, chopped or equivalent of diced canned organic tomatoes</td>
<td>2.5-3 lb.</td>
</tr>
<tr>
<td>Onion, diced</td>
<td>1 ea</td>
</tr>
<tr>
<td>Garlic, minced</td>
<td>4 ea</td>
</tr>
<tr>
<td>Cilantro, chopped fresh</td>
<td>½ C</td>
</tr>
<tr>
<td>Lemon, juiced</td>
<td>1 ea</td>
</tr>
<tr>
<td>Lime, juiced</td>
<td>1 ea</td>
</tr>
<tr>
<td>Sea salt</td>
<td>TSP</td>
</tr>
<tr>
<td>Jalapeño peppers, chopped fine</td>
<td>1 ea</td>
</tr>
<tr>
<td>Whey or starter culture</td>
<td>1/2 cup</td>
</tr>
</tbody>
</table>

1. Put all ingredients in a large bowl. Add the juice of the lemon and the lime. Add salt to taste. Add whey or starter culture. Stir well to incorporate.
2. Pour into a quart or half gallon sized mason jar, cap tightly. Leave on the counter for 2 to 3 days. Transfer to refrigerator.
3. Should last up to 8 months if kept cold. Flavors will intensify slightly over time.

Serving size 2 oz
31 calories, 1g carb, 1g dietary fiber, 1g pro, 0 fat, 0 sat fat, 108mg sodium

NATURALLY FERMENTED SALSA

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium onion, diced</td>
<td>1 medium</td>
</tr>
<tr>
<td>Tomatoes, diced</td>
<td>2 large</td>
</tr>
<tr>
<td>Green pepper, diced</td>
<td>1 medium</td>
</tr>
<tr>
<td>Jalapeños, diced</td>
<td>1-2</td>
</tr>
<tr>
<td>Clove of garlic, minced</td>
<td>1</td>
</tr>
<tr>
<td>Fresh cilantro</td>
<td>Handful</td>
</tr>
<tr>
<td>Lemon and lime juice</td>
<td>To taste</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>2 teaspoons salt</td>
<td></td>
</tr>
<tr>
<td>1 to 2 teaspoons salt and 1/4 cup whey</td>
<td></td>
</tr>
</tbody>
</table>

1. Mix all the ingredients together including the salt, whey, or finished kefir.
2. Place the salsa in a fermentation container pressing down to release some liquid. Ideally the vegetables should be submerged under the liquid. (Add a bit of extra water if needed.)
3. Ferment for 2+ days at room temperature.
4. Once the fermentation period is complete, the salsa can be removed to a storage container if desired. Store salsa in the refrigerator or root cellar.

Serving size 2 oz
31 calories, 1g carb, 1g dietary fiber, 1g pro, 0 fat, 0 sat fat, 108mg sodium

Recipes by Chef Fred Laughlin, Great Lakes Culinary Institute
KALE SALAD

**Ingredient** | **Measure**
--- | ---
Raisins | 3 T.
Hot Water | 1/3 C
Pine Nuts | 3 T.
Tuscan Kale | 1 bunch (about 3/4 lb.)
Extra Virgin Olive Oil | 2 T.
Red or White Wine Vinegar | 2 T.
Honey | 1 T.
Salt | 1/4 TSP
Freshly Ground Black Pepper | 1/8 TSP

1. Place raisins in a small bowl. Add the hot water and allow the raisins to soak while you prepare the rest of the salad.
2. Toast the pine nuts in a small dry skillet over medium-high heat, stirring frequently, until golden brown and fragrant, about 3 minutes.
3. Remove the center ribs from the kale (if the leaves are large) then cut the leaves very thinly into shreds.
4. In a small bowl, whisk together the oil, vinegar, honey, salt and 1 tablespoon of the raisin soaking water. Add the dressing to the kale and massage it in with your hands so that the kale is well coated and begins to soften, about 30 seconds.
5. Drain the raisins and add them to the kale along with the pine nuts, and toss to combine.

**Serving size:** 3/4 cup

Calories: 170, Fat: 12 gm., Protein: 3 gm,

Recipe by Chef Fred Laughlin, Great Lakes Culinary Institute
Saturday, September 23, 2017

SESSION D

Medical Nutrition Therapy in the Kitchen: Diabetes

PRESENTERS: Chef Bob Rodriguez and Dietitian Emilie Klemptner

DESCRIPTION: This hands-on cooking session will expand on what we’ve explored throughout the day. By diving deeper into the macronutrient food components, we will focus on the whole and minimally processed in-season foods and recipes that can be used for weight management in one kitchen, while another kitchen will focus on diabetes, and the third on cardiovascular diseases. Our menus will promote a food-first nutrition care plan that allows for individual taste preferences and unique needs. We will explore the buzz around tropical oils, dairy beverage alternatives (nut, soy and hemp milks), meat alternatives, fermented foods, and plant based-diets. Dinner and discussion will follow time in the kitchen.

LEARNING OBJECTIVES: Diabetes Kitchen

1. State the portions of complex carbohydrates commonly recommended for individuals with diabetes.
2. List three ways to promote blood glucose stabilization with a vegetable-forward diet.
3. Explore the digestive microbiota benefits related to fermented foods and beverages.

~NOTES~
## Carbohydrate Counting, The Easy Way

<table>
<thead>
<tr>
<th>Meal</th>
<th>Carb Choices</th>
<th>or</th>
<th>Grams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>3-4</td>
<td></td>
<td>45-60</td>
</tr>
<tr>
<td>Lunch</td>
<td>3-4</td>
<td></td>
<td>45-60</td>
</tr>
<tr>
<td>Dinner</td>
<td>3-4</td>
<td></td>
<td>45-60</td>
</tr>
<tr>
<td>Daily Total</td>
<td>9-12</td>
<td></td>
<td>135-180</td>
</tr>
</tbody>
</table>

1 Carb Choice = 15 grams of carbohydrate

### Breads (Whole Grain)
- 1 slice bread
- 2 slice low-carb bread
- ½ english muffin
- ½ small bagel or ½ bun
- 1 small muffin
- 1 (4”) pancake or waffle
- ½ pita
- 1 small roll
- 1/3 cup stuffing
- 1 (6”) tortilla

### Crackers/Snacks
- 2 (4”) rice cakes
- 3 graham cracker squares
- 4-6 crackers
- 3 cups popcorn
- ½ cup pretzels
- 1 oz. Chips (12 baked)
- 15 wheat thins, low salt
- 2 wasa crackers

### Starchy Vegetables/Beans
- ½ cup cooked beans (kidney, pinto, etc.)
- 1/3 cup baked beans
- 1 small corn on the cob
- ½ cup corn or peas
- 1 small (3 oz.) potato
- ½ cup potatoes, sweet or white
- 1 cup winter squash
- 2/3 cup lima beans
- Hummus, ¼ cup

### Cereals/Pasta/Rice
- ¾ cup unsweetened cereal
- ½ cup bran cereal
- 1/3 cup raisin bran
- ½ cup Kashi
- ½ cup oatmeal, cooked
- 1 ½ cups puffed cereal
- ¼ cup granola, grapenuts
- 1/3 cup cooked pasta
- 1/3 cup cooked rice
- 1/3 cup cooked barley
- 1/3 cup quinoa

### Fruits
- 1 small apple/orange/peach/pear
- ½ medium banana, 4”
- 1 cup berries
- 15 fresh cherries or grapes
- 2 small tangerines
- ½ cup fruit juice
- ½ cup canned fruit, lite
- ½ med grapefruit
- 1 cup melon cubes
- ½ cup pineapple chunks
- 3 prunes
- 2 T raisins or dried cherries

### Sweets
- Angel food cake, 1” thick slice
- Cookie, 3”
- Graham cracker, 3 squares
- Granola bar, small
- Syrup, honey, sugar, 1 Tbsp
- Jam or jelly, 1 Tbsp
- ½ cup ice cream
- ½ cup sugar free pudding
- 3 gingersnaps
- 8 animal crackers
- Juice bar
- Sugar-free frozen fudgsicle

### Combination Foods
- ½ cup of a casserole
- 1 cup soup or chili
- 1/8 of a 10” pizza, thin-crust

### Milk/Yogurt
- 1 cup milk, low or no fat
- 1 cup plain or light yogurt
- 1 5 oz. serving greek yogurt

### Vegetables
- If starchy, see portion guide.
- Eat 3 or more servings daily.
- Think salad, stirfry, kabobs.
Non-Starchy Vegetables

These vegetables are high in fiber and nutritional value while being low in calories. Use them freely in your daily meal plan

- Artichokes
- Asparagus
- Beans, green and wax
- Bean Sprouts
- Beets
- Broccoli
- Brussels Sprouts
- Cabbage
- Carrots
- Cauliflower
- Celery
- Cucumbers
- Eggplant
- Leeks
- Mushrooms
- Okra
- Onions, any variety
- Parsnips
- Pea Pods
- Peppers, sweet or hot,
- Radishes
- Rutabaga
- Salad Greens, dark, leafy
- Spaghetti Squash
- Spinach
- Summer Squash
- Tomatoes
- Turnips
- Water Chestnuts
- Zucchini
The Benefits of Select Herbs and Spices for Glucose Control

Many herbs and spices have medicinal properties. Integrative and functional medicine dietitians are called upon to advise patients on the effect of herbs and spices in both culinary preparations and dietary supplements. This fact sheet reviews the potential benefits of herbs and spices most commonly used for glucose control.

<table>
<thead>
<tr>
<th>Herb or Spice Description</th>
<th>Proposed Mechanism of Action and Potential Effect on Glucose Control</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>FENUGREEK</td>
<td><strong>CULINARY</strong>&lt;br&gt;Dried fenugreek seeds are commonly used in cooking, especially in Indian cuisine. They are rich source of protein, fiber, and omega 3 fatty acids. The seeds can be ground for use as a powder or simply heated in a pan to brown them and extract more flavor. Use these seeds in Indian dishes like curries and similar sauces, and in spice mixtures for pickles.&lt;br&gt;<strong>SUPPLEMENT</strong>&lt;br&gt;For diabetes, 10 to 15 grams of fenugreek seed per day, with meals. One gram per day of fenugreek seed extract is used.</td>
<td><strong>HERB</strong>&lt;br&gt;Fenugreek seeds are small, hard, and yellow-beige in color. They have a bitter-sweet taste and odor that is likened to maple syrup. They are often used as a flavoring agent to mask the taste of medicines.</td>
</tr>
<tr>
<td></td>
<td><em>In one study, one gram of fenugreek seed extract daily for two months significantly reduced fasting blood glucose as much as diet modification and exercise in persons with type 2 diabetes. In another trial, fenugreek powder reduced the postprandial blood glucose rise in persons with type 2 diabetes to a level similar to persons without diabetes. A preparation of fenugreek seed powder taken for 10 days cut the 24-hr urine glucose levels of persons with type 1 diabetes in half.</em></td>
<td><strong>SUPPLEMENT</strong>&lt;br&gt;For diabetes, 10 to 15 grams of fenugreek seed per day, with meals. One gram per day of fenugreek seed extract is used.</td>
</tr>
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MODERATE Interaction with Diabetes Medications: Be cautious with this combination. Because fenugreek may reduce blood glucose levels, it may have an additive effect with diabetes medications and cause hypoglycemia. Blood glucose levels should be monitored closely, and medication dosage may need adjustment.

| TURMERIC                      | Curcumin, the major active constituent in turmeric, has anti-inflammatory properties that likely work by inhibiting signaling pathways for prostaglandins, leukotrienes, and other pro-inflammatory cytokines. Turmeric also appears to inhibit the growth of cancer cells, and has some anti-bacterial and anti-viral activity. Overall, there is insufficient evidence to rate the effectiveness of turmeric for glucose control. Still, preliminary evidence suggests that turmeric may also have some protective effect against type 2 diabetes. One study showed that a daily extract of 1500 milligrams of curcumin for 9 months reduced the number of persons with prediabetes who developed type 2 diabetes. Also, animal studies show that curcumin can reduce blood glucose and glycosylated hemoglobin (HbA1C) levels in persons with diabetes. |
| Scientific name: Curcuma longa | **CULINARY**<br>Turmeric is used powdered or fresh. It has a fragrant, sharp taste. Use in marinades, sprinkle on scrambled eggs, and add to sauces or smoothies. Add to hot water or milk/milk alternatives to make turmeric teas or lattes. | **SUPPLEMENT**<br>Both turmeric and curcumin are available in a variety of forms and dosages. |

MODERATE Interaction with Diabetes Medications: Be cautious with this combination. Because turmeric may lower blood glucose levels, it may have an additive effect with diabetes medications and cause hypoglycemia. Blood glucose levels should be monitored closely, and medication dosage may need adjustment.
## Testing Sample Worksheet

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<thead>
<tr>
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<th>Appearance (color appropriate)</th>
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<th>Aftertaste? Y/N</th>
<th>Rate 1-4 (1 = best/favorite)</th>
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<tbody>
<tr>
<td>Sample A</td>
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<td>Sample D</td>
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</tbody>
</table>
RECIPE

LOCALLY PASTURED BEEF RAGOUT IN RED WINE

Ingredient | Measure | Notes
--- | --- | ---
Beef, top round | 3-4 lbs | 
Olive oil | | 
Onions, yellow | 2 C | Sliced
Carrots | 1 C | Cut on a bias
Red wine | 6 C | May use some wine and some beef stock or all stock.
Garlic | 4 cloves | Chopped
Tomatoes | 12 oz. | Use canned plum tomatoes with juice
Rutabaga | 2 medium | Cubed
Cornstarch | 3 TSP | 

Enough additional wine or stock to dissolve the cornstarch.

1. Dry the meat on paper towels.
2. Lightly oil a sauté pan and heat until the oil is very hot.
3. Add the meat in small batches and sauté until it is well browned on all sides. Transfer the meat to a kettle. Remove all but two tbsp of oil.
4. In turn, sauté the vegetables (reserving the tomatoes) until lightly browned. Add vegetables to the kettle.
5. Deglaze the pan with one cup of the wine, scraping up any browned bits that have clung to the sauté pan.
6. Add the deglazing liquid and the tomatoes to the kettle along with the remaining wine (or stock) and herbs and simmer for 2 - 3 hours or until the meat is fork tender. The liquid should be enough to cover the meat and vegetables.
7. Dissolve the cornstarch in some wine and stir into the ragout. Simmer for an additional 5 minutes or until the ragout is slightly thickened. Analysis divided recipe into 12 portions (3.5 oz each)

Serving size: 3.5 oz

300 calories, 9g fat, 3g sat fat, 11g carb, 2g dietary fiber, 26g pro, 89mg sodium

Recipe by Chef Fred Laughlin, Great Lakes Culinary Institute
QUINOA SALAD RECIPE

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quinoa</td>
<td>1 cup</td>
</tr>
<tr>
<td>Cold water</td>
<td>1 1/2 cup</td>
</tr>
<tr>
<td>Salt</td>
<td>1 TSP</td>
</tr>
<tr>
<td>Radish, diced or sliced</td>
<td>1 cup</td>
</tr>
<tr>
<td>Celery</td>
<td>1/2 cup</td>
</tr>
<tr>
<td>Carrots, diced small</td>
<td>2 medium</td>
</tr>
<tr>
<td>Green or red pepper, diced small</td>
<td>1</td>
</tr>
<tr>
<td>Ripe tomato, diced small</td>
<td>1</td>
</tr>
<tr>
<td>Cucumber, peeled, diced small</td>
<td>1 medium</td>
</tr>
<tr>
<td>Chopped fresh parsley</td>
<td>1/4 cup</td>
</tr>
<tr>
<td>Walnuts, chopped</td>
<td>1/2 cup</td>
</tr>
</tbody>
</table>

**DRESSING**

<table>
<thead>
<tr>
<th>Ingredient</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Freshly squeezed lemon juice</td>
<td>1 OZ</td>
</tr>
<tr>
<td>Olive oil</td>
<td>1/4 cup</td>
</tr>
<tr>
<td>Salt</td>
<td>1/4 TSP</td>
</tr>
<tr>
<td>Pepper</td>
<td>TT</td>
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</tbody>
</table>

Pinch of cayenne, fresh minced garlic and/or ginger

1. Quinoa can be made ahead of time and refrigerated
2. Soak the quinoa 5 minutes in cold water
3. Rinse thoroughly 2 times, pour off the water and drain through a large fine mesh strainer
4. Place in 2 qt pot with the water and salt
5. Cover the pot, bring to a full boil, turn the heat to low, and cook for 15 minutes
6. Remove from heat and set aside to cool
7. Steam the carrots and green veg for 5 minutes or until tender-crisp, drain, rinse in cold water and drain again
8. Chop the tomatoes, herb and cucumber
9. Blend dressing ingredients with a whisk or shake in a jar
10. Gently combine veggies, walnuts, quinoa and dressing in a large bowl
11. Cover and chill, or serve immediately

Yield: 8 (1/2 cup) servings

253 calories, 20g carb, 4g dietary fiber, 18g fat, 2g sat. fat, 6g pro, 391mg sodium

**Optional Additions:** Chopped scallions, dried unsweetened cranberries, raisins or apricots, Greek olives, minced jalapeño pepper, fresh mint, or feta cheese. Caution with carbohydrate content of add ons. Walnuts go well with quinoa, but toasted sunflower seeds or pumpkin seeds are also good.
# TURMERIC MILK

<table>
<thead>
<tr>
<th>Ingredient</th>
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<tbody>
<tr>
<td>Homemade almond milk*</td>
<td>2 cups</td>
</tr>
<tr>
<td>Local honey (optional)</td>
<td>1 TBSP</td>
</tr>
<tr>
<td>Coconut oil (optional)</td>
<td>1 TBSP</td>
</tr>
<tr>
<td>Ground turmeric</td>
<td>1 TSP</td>
</tr>
<tr>
<td>Ground cinnamon (or 1 cinnamon stick)</td>
<td>1 TSP</td>
</tr>
<tr>
<td>Black pepper and grated ginger</td>
<td>1 small pinch</td>
</tr>
</tbody>
</table>

1. Simply pour all the ingredients into a small saucepan and bring to a light boil. Whisk to combine ingredients. Reduce heat to low and simmer for up to 10 minutes.

2. Strain the milk if you have large pieces of ginger, cinnamon, peppercorns, etc. To serve, add honey or a dash of cinnamon.

3. Enjoy warm is best!

**NOTES**

* You may use whatever milk you prefer. Coconut or almond milk is recommended.

*Lower sugar: Use stevia to sweeten.

Serves 2
SESSION D

Saturday, September 23, 2017

Medical Nutrition Therapy in the Kitchen: Cardiovascular

PRESENTERS: Chef Fred Laughlin and Dietitian Jodi Jocks

DESCRIPTION: This hands-on cooking session will expand on what we’ve explored throughout the day. By diving deeper into the macronutrient food components, we will focus on the whole and minimally processed in-season foods and recipes that can be used for weight management in one kitchen, while another kitchen will focus on diabetes, and the third on cardiovascular diseases. Our menus will promote a food-first nutrition care plan that allows for individual taste preferences and unique needs. We will explore the buzz around tropical oils, dairy beverage alternatives (nut, soy and hemp milks), meat alternatives, fermented foods, and plant based-diets. Dinner and discussion will follow time in the kitchen.

LEARNING OBJECTIVES: Cardiovascular Kitchen:

1. Determine which types of fatty acids meet the recommended goals for cardiovascular health.
2. List three anti-inflammatory foods and their role in heart disease prevention.
3. Explore the digestive microbiota benefits related to fermented foods and beverages.

~NOTES~
QUICK FACTS ON SALT

Reducing salt in the diet can lower blood pressure. We’d like you to try to consume ________________ milligrams of salt every day.

You eat most salt in the form of sodium chloride, the chemical name for “table salt”. Look word sodium on food packages.

A food package will have a Nutrition Facts panel with list sodium in milligrams— a measurement of weight.

Lower salt foods have 250 mg of sodium or less per serving (around 10% DV)

Fast food, fried foods, pizza, and frozen meals are high salt foods.

Check food labels – sodium is in some foods you might not expect, such as soy sauce, dried meats, lunchmeats, cheese and even some antacids.

Kosher & Sea salts are not better for health.

Don’t forget to count all salt sources when adding up your sodium intake for the day.
Reducing sodium in your foods will help you eat less salt.

- Buy fresh, plain, and frozen, & canned “no salt added” veggies.

- Use fresh poultry, fish, and lean meat, rather than canned or pre-cooked when possible.

- Cook with herbs, lemon, lime, vinegar, spices, and other salt-free seasoning blends.

- Skip adding salt to the water when boiling pasta, rice or hot cereal.

- Cut back on instant or flavored rice or pasta boxed side dishes.

- Powdered drink mixes like instant iced tea and instant hot cereals taste sweet but can be high in salt – check the food label!

- Energy Drinks and ‘fizzy waters’ can contain salt – check the label.

- Check the sodium content on any food with “quick or easy” on the label.

- Use 300 mg or less sodium per serving as a guide when shopping.

- Rinse canned vegetables and beans under cool water to remove some salt before cooking with them.
Fatty Acid Profiles of Common Fats and Oils

* Coconut, palm kernel, and palm oil are called oils because they come from plants. However, they are solid or semi-solid at room temperature due to their high content of short-chain saturated fatty acids. They are considered solid fats for nutritional purposes.

**Shortening may be made from partially hydrogenated vegetable oil, which contains trans fatty acids.


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LENTIL SOUP

1. Place the olive oil into a large 6-quart Dutch oven and set over medium heat. Once hot, add the onion, carrot, celery and salt and sweat until the onions are translucent, approximately 6 to 7 minutes. Add the lentils, tomatoes and broth and stir to combine. Increase the heat to high and bring just to a boil. Reduce the heat to low, cover and cook at a low simmer until the lentils are tender, approximately 35 to 40 minutes. Garnish with infused olive oil (basil, turmeric) and pumpkin seeds. Serve immediately.

2. Note: To reduce sodium rinse all canned vegetables, omit/reduce added salt, and/or use low sodium broth

Serves 6-8 (1-2 cups per serving)

341 calories, 50g carb, 14g dietary fiber, 9g fat, 1g sat fat, 677mg sodium.

Recipe by Chef Fred Laughlin, Great Lakes Culinary Institute
## RECIPE

### FALL ROASTED VEGETABLES

**Ingredient** | **Measure**
--- | ---
Olive oil | 2 TBSP
Balsamic vinegar | 2 TBSP
Low-sodium soy sauce | 2 TBSP
Red potatoes, cut into large cubes | 4
Carrots, cut into bite-size pieces | 1 lb
Celery, cut diagonally into bite-size pieces | 1 stalk
Onion, sliced - divided | 1
Winter squash | 2 C
Parsnips, cut into bite-size pieces | 2 large
Salt and ground black pepper | To taste
Cloves minced garlic | 3

1. Preheat oven to 375°F.
2. Pour olive oil, vinegar, and soy sauce into a large bowl; Add vegetables. Toss to coat.
3. Transfer ingredients to a sheet pan covered with aluminum foil coated with vegetable spray.
4. Roast the vegetables in the preheated oven until browned and tender (about 40 minutes).
5. Serve hot out of the oven. Leftovers can be used in soups and stews.

**Note:** You may substitute root vegetables such as beets and turnips.

Serves 8 (about 1 cup serving)

171 calories, 32g carb, 5g dietary fiber, 4g fat, 1g sat. fat, 4g pro, 228mg sodium

Recipe by Chef Fred Laughlin, Great Lakes Culinary Institute
Canned Fruits and Vegetables

Canned fruits and vegetables are picked when their vitamin levels are highest, and only small amounts of nutrients are lost in the canning process. Therefore, canned fruits and vegetables may be a great alternative to fresh or frozen produce. Read on to learn how to choose and use healthy canned products.

When Should I Choose Canned Fruits and Vegetables?

Here are some possible benefits of choosing canned fruits and vegetables instead of fresh or frozen:

- **Availability**: Canned fruits and vegetables can replace fresh produce when the fresh choices are not in season or are unavailable.
- **Cost**: Fresh fruits and vegetables tend to cost more when they are not in season. Canned varieties are inexpensive and go on sale often.
- **Time**: Canned fruits and vegetables are cleaned and trimmed, which reduces preparation time.
- **Shelf life**: Canned produce can last up to two years when stored in a cool, dark place.

Label Reading Tips

To purchase the healthiest canned fruits and vegetables, read labels:

- Choose canned fruits packed in natural juices or water.
- Avoid canned fruits packed in heavy or light syrup. Syrups add extra sugar and calories to fruits that are naturally sweet.
- Choose canned vegetables labeled as “no added salt.” One cup of regular canned green beans has about 400 milligrams of sodium (salt). The same portion of green beans canned without added salt has only 3 milligrams of sodium!
Canned Fruit and Vegetable Meal Ideas

Canned fruits and vegetable are very easy to use. Here are a few ideas to try:

- Add canned vegetables like peas or carrots to soups, stews, stir-fries, or pasta dishes.
- Top salads with canned vegetables like beets, artichoke hearts, or asparagus.
- Make pasta sauces with canned tomatoes.
- Enjoy canned fruit as a snack.
- Use canned fruit as a topping for low-fat yogurt, cold or hot cereals, pancakes, waffles, and many other breakfast dishes.
- Create a simple side dish by heating canned vegetables and seasoning them with herbs.
- Add canned green peas to potato or macaroni salad.
- Prepare a salsa or soup with diced canned tomatoes.

Food Safety Tips

Do not buy cans that are leaking, rusty, dented, or swollen. The food in these cans might be spoiled or make you sick.

When you open any canned food, the contents should not be foamy or smell foul. If you are unsure whether the food is spoiled, throw the can away without tasting the contents. It may be tainted with botulism, a foodborne illness that can be fatal.
Cooking for One

Cooking for one person can be a challenge, but it can also be fun if you try new foods and get creative in the kitchen. Follow these tips to make cooking for one an easy and enjoyable experience.

Shopping Tips

• Plan meals before you go to the grocery store. Check your pantry to see what you need and create a shopping list.

• Buy foods from bulk bins to save money and avoid waste. You can purchase the amount you will use instead of buying a package that may contain more than one person needs.

• If a recipe calls for several expensive flavoring ingredients, like different herbs, choose only one or two. Use a little extra of them to replace the ingredients you did not buy.

• Buy frozen foods, like fruits, vegetables, and chicken, in larger packages. At home, you can thaw only the amount you need for a particular recipe, leaving the rest frozen for another time.

• Avoid frozen dinners meant for one person. Frozen meals are often high in fat and sodium and they can be costly, too.

Food Preparation and Cooking Tips

• Freeze fresh vegetables and fruits before they spoil or lose nutrients. Thaw them as needed for meals or snacks.

• Look for recipes that yield enough food for one or two servings. If you use a recipe that makes two servings, store the extra serving in the refrigerator for lunch the next day.

• Make a recipe that serves more than one. Freeze leftovers in single-serving containers for quick meals on days when you don’t have time to cook. Remember to label the containers with the date and the contents.
Kitchen Basics

- Choose a recipe that makes several servings, but decrease the amount of each ingredient to make fewer servings. For example, if a recipe makes four servings, cut the amount of each ingredient by half to make two servings.

- After planning your menus, do some prep work on the weekends. Chop vegetables; wash salad greens and wrap them in a damp towel; and measure dry ingredients (like spices, flour, and sugar) for the recipes you selected.

Easy Meals for One

- **Omelets**: Use any of the following: two eggs; four egg whites; a combination of one whole egg and two egg whites; or ½ cup of liquid egg substitute. Before cooking eggs, mix in chopped vegetables like tomatoes, peppers, onions, and mushrooms. Top the hot omelet with 1 tablespoon of shredded low-fat cheese, if desired.

- **Sandwiches**: Start with whole grain bread, a whole wheat bun, or a whole wheat pita. Add leftover chicken or turkey or low-sodium lunchmeat. If you like, also add a slice of low-fat cheese or a few slices of avocado. Then pile on your favorite vegetables, such as lettuce, tomatoes, peppers, and cucumbers. Go easy on high-fat, creamy spreads, like ranch dressing or mayonnaise, or use reduced-fat versions instead.

- **Salads**: Top dark leafy greens, like spinach or mixed field greens, with your favorite fruits and vegetables. Add chickpeas, beans, or sunflower seeds for protein. Use 2 tablespoons or less of a low-fat dressing or vinaigrette.

- **Smoothies**: Blend frozen berries, bananas, or other fruit with ½ cup of low-fat, plain yogurt and ½ cup of either low-fat milk or 100% fruit juice.

Healthy Recipe Finder

- **Eating Well**: www.eatingwell.com
- **Cooking Light**: www.cookinglight.com
- **Epicurious** (choose the Healthy Recipes section of Recipes and Menus): www.epicurious.com
Cooking Methods

There are many healthy ways to cook food that are free of added fat or use just a little oil. Keep reading to learn more about healthy cooking methods.

Roasting

Roasting is used for larger cuts of meat, fish, and poultry, and for fruits and vegetables. It is similar to baking in an oven.

You can roast meat, fish, and poultry on a rack or sheet pan. Using a rack allows fat to drip away from the food. To keep the meat, fish, or poultry moist, brush it with marinade from time to time as it roasts.

You can also roast potatoes, peppers, carrots, and other vegetables on a sheet pan. Roasting brings out their natural flavor.

Grilling

Grilling is used for meat, chicken, fatty fish (like tuna and salmon), and vegetables. The food is cooked by the heat underneath it.

Grilling caramelizes the natural sugars in foods, which causes browning and provides delicious flavor. It also allows the fat to drip off, making grilling a healthy cooking method.
**Broiling**

Broiling is done in an oven or a broiler. It uses high heat from above to cook foods such as thinner cuts of meat (like steak), chicken, and fatty fish (like tuna or salmon). Broiling is also used to finish cooking dishes with crispy or browned toppings.

The broiling time and the placement of the food relative to the heat source will vary. To brown the topping on a casserole, place the pan close to the heat for just a few minutes. A thick piece of fish or chicken takes longer to broil and should be placed farther from the heat source.

**Sautéing**

Sautéing is a quick-cooking method that prevents vitamins from being destroyed by heat. It is used for small pieces of meat, fish, poultry, or vegetables.

To sauté, use a shallow pan. This allows the food to brown and release its natural flavors. To keep food from sticking, add a small amount of oil (about 1 teaspoon) to the pan or spray the pan with nonstick cooking spray or an oil spritzer. When the pan is hot, add the food you want to sauté and stir occasionally. You can add broth, a splash of wine, herbs, and spices to bring out flavor without adding lots of calories and fat.

**Stir-Frying**

Stir-frying quickly cooks food over high heat for a short period of time. It is used to cook small pieces of meat, poultry, fish, vegetables, and tofu. This cooking method is traditionally used for Asian dishes. It helps preserve vitamins and the crisp texture and bright color of vegetables.

To stir-fry food, add a small amount of oil (about 1 teaspoon) to a wok or nonstick frying pan. Heat over high heat. When the oil is hot, add foods and stir frequently until the foods are cooked. (Cooking will take just a few minutes.)
**Poaching**

Poaching uses water or a flavorful liquid (like stock, broth, or wine) to gently cook fish, poultry, eggs, or whole fruits (like apples and pears). Some vitamins are lost when foods are poached, but poaching does not use oil or added fat.

To poach a food, choose a skillet or saucepan that is large enough to fit the food you will poach when it is covered by liquid. To this pan, add the cooking liquid and bring it to a boil. Then lower the heat and add the food. It should be completely immersed in liquid. Simmer over low heat until the food is cooked. For more flavor, you can add herbs, spices, or vegetables like carrots, onions, and celery to the poaching liquid.

**Steaming**

Steaming is a quick cooking method that helps retain the vitamins, moisture, and flavor of foods. It does not use any oil or added fat, which makes it a healthy cooking method.

You can steam vegetables, fruits, fish, shellfish, and chicken in a steamer basket or insert. Boil a few inches of water in a pot that is large enough to hold the steamer. Add the steamer to the pot. Fill the steamer with food and cover tightly. A boneless piece of fish or chicken breast will take 15 to 30 minutes to steam. Steam vegetables for just a few minutes. They should be tender but not mushy.

You can also steam vegetables without a steamer. Add them to a pan with a small amount of boiling liquid that does not completely cover the food. Cover tightly and cook until tender.
Cooking with Your Kids

Cooking with your kids can help them build a foundation for healthy cooking and eating habits. They become familiar with ingredients, recipes, and cooking methods. Also, they will be more likely to taste different foods because they helped prepare them. Cooking as a family is a good way to spend time together and bond. While they cook, kids can learn math skills, like multiplication and division.

What Can My Child Do in the Kitchen?

Kids of all ages can help in the kitchen. Be sure to choose activities that are safe and fun for your children. Here are some ideas to consider for kids of different ages.

**Toddlers Ages 2½ to 3 Years**

- Gather ingredients from low shelves or cabinets.
- Wash fruits and vegetables, and peel bananas.
- Dry lettuce in a salad spinner.
- Stir batters and pour liquids (with help).
- Place prepared ingredients in a bowl or tray.
- Portion out cookies or cupcakes.
- Top homemade pizza with toppings.
- Squeeze oranges, lemons, and limes with a plastic juicer.
- Pick herbs off stems.

**Children Ages 4 to 5 Years**

- Measure or collect simple ingredients (like 1 cup of berries or five apples).
- Grease pans or spray them with nonstick cooking spray.
- Spread soft foods like cream cheese or jam.
- Open packages.
- Scoop batter into muffin tins.
• Set the table (with help or instructions).
• Wash or tear lettuce for a salad.
• Stir batters (without help).
• Knead dough and use a rolling pin.

Children Ages 6 to 8 Years
• Peel fruits and vegetables like carrots or cucumbers with a peeler (not a knife).
• Make a simple salad.
• Whisk eggs or a marinade.
• Layer simple ingredients (like in a parfait or sandwich).
• Garnish foods (for example, sprinkle chopped dill on a salad).
• Use a hand grater to grate or shred cheese, potatoes, or other such ingredients.
• Dice or mince foods with a kid-friendly plastic knife.
• Measure ingredients.
• Pour liquids into smaller containers.
• Prepare a platter of food to be served.
• Set the table (without much help).
• Help plan part of the meal.
• Shape cookies or hamburger patties. (Do not let kids taste batter, and make sure they wash their hands before and after handling raw ingredients.)

Children Ages 9 to 12 Years
• Find ingredients in the pantry, refrigerator, or freezer.
• Use the microwave, blender, stove, or toaster (with supervision).
• Cook eggs or other simple dishes (with supervision).
• Set the table (without help).
• Plan part of a meal or an entire meal.
• Put away leftovers.
How to Choose the Right Cookware

With so many types of pots and pans available, how do you choose? Keep reading to learn about the common types and determine which ones are right for you.

Stainless Steel Cookware

Stainless steel cookware is durable, and it can be used to cook foods at high temperatures. Stainless steel pots and pans can last a lifetime, but they are pricey.

Acid and salt can damage stainless steel. Do not store acidic or salty foods like tomato sauce in stainless steel cookware.

Aluminum Cookware

Aluminum cookware is a cheaper option, and it conducts heat well. However, it will not last as long as stainless steel.

Untreated aluminum cookware can scratch easily, leaving flecks of aluminum on the surface of the pot or pan. Eating those aluminum flecks can be harmful to your health. Aluminum pots and pans coated with a nonstick chemical finish, such as Teflon, may not leach (spread) aluminum into food. They are also easy to clean!

Acids from foods may react with aluminum. This reaction could be toxic, so do not store acidic foods in aluminum cookware that lacks a nonstick finish. For the same reason, choose an aluminum pot with a nonstick finish to cook tomato sauce or soups that cook for a long time.

Copper Cookware

Copper pots and pans are typically used for stovetop cooking. They conduct heat well and can be inexpensive.
Eating foods with high levels of copper can be harmful. To be safe, choose copper cookware lined with stainless steel or tin. The lining will keep the copper from leaching into acidic foods, like tomato sauce.

**Unglazed Cast Iron Cookware**

Unglazed cast iron cookware is very heavy, sturdy, and inexpensive. It conducts heat evenly and can be used for frying, browning, and baking.

When you cook with unglazed cast iron pots and pans, they leach some iron into your food. Cooking with unglazed cast iron pots and pans once a week may help you get enough of this important mineral.

Unglazed cast iron is not dishwasher-safe and should not be cleaned with scouring pads. If unglazed cast iron cookware rusts, coat the inside and outside with vegetable oil. Then bake it at 350 to 400 degrees for 1 hour. Turn off the oven and leave the cookware inside until it cools. Wipe the surface of the cookware clean with a paper towel.

**Enamel and Nonstick Cookware**

Enamel pots and pans are coated with enamel. They are typically made with metals that can easily scratch and corrode, like aluminum or cast iron. The enamel coating prevents such damage and can help food from sticking to the cookware.

Nonstick pots and pans have a chemical coating to prevent food from sticking to them. This cookware is easy to clean, inexpensive, and durable.

When nonstick cookware is heated to high temperatures, the coating can release harmful gas. Do not to overheat this type of cookware. It is best to use nonstick pots and pans over low to moderate heat.

If the surface on your nonstick cookware becomes chipped or scratched, do not use it. To avoid chipping the nonstick coating, use only wooden, plastic, or silicone utensils. Do not scrape with metal tools or wash with wire scrubbing pads.
Flavor Boosters

Many people use butter, oil, and salt to flavor food. But butter and oil add a lot of extra fat and calories. Most people tend to go overboard with salt, too. Instead, give the following healthy flavor boosters a try.

Fresh Herbs

Fresh herbs are flavorful and nearly calorie free. They are loaded with vitamins, minerals, and antioxidants. Common herbs include cilantro, parsley, basil, dill, chives, tarragon, mint, oregano, and thyme.

Simple ideas:

• Add chopped dill to chicken soup.
• Brush a chicken breast with a mixture of 3 tablespoons of minced tarragon, 2 teaspoons of lemon juice, 1 tablespoon of olive oil, and a sprinkle of salt and pepper. Then bake or broil it.
• Enhance seltzer or plain water with sprigs of mint.
• Make a pizza with fresh oregano and basil. Top a thin whole wheat crust (10 inches across) with 2 cups of tomato sauce and 1 ½ cups of shredded, part-skim mozzarella cheese. After the pizza is baked, sprinkle it with finely chopped oregano and torn basil leaves. (Serves two.)

Citrus Fruits

A small amount of juice or peel from citrus fruits can add a ton of flavor. Use a small, sharp knife, microplane, or grater to remove the colored part of the peel (the zest). Avoid the bitter white part of the rind.

Citrus fruits are a source of vitamin C. One-half cup of citrus juice has an average of 30 calories, while the same amount of oil has 960 calories.
Simple ideas:

- Squeeze a lemon or sprinkle lemon zest over baked or grilled fish and cooked vegetables.
- Stir orange zest into yogurt or oatmeal.
- Add the juice of limes, lemons, or oranges to sparkling water for a healthy “soda.”

Dried Herbs and Spices

You can store most ground dried herbs and spices for up to six months. They last up to one year if they are whole.

Simple ideas:

- Sprinkle ground cinnamon on oatmeal.
- Add zing to chicken by sautéing or stir-frying it in curry powder.
- Toss cooked mushrooms with a teaspoon of olive oil and a few rosemary leaves.
- Add a sprinkle of oregano to pasta sauce.
- Use $\frac{1}{2}$ teaspoon of ground tarragon in salad dressing.

Stocks and Broths

Stocks and broths can add flavor for about 35 calories per cup. Common stocks and broths include chicken, beef, vegetable, and fish.

Try either homemade or store-bought stocks and broths. When shopping for broths or stocks, choose those labeled “low sodium.”

Simple ideas:

- Cook rice, couscous, pasta, or grains in chicken or vegetable stock rather than water.
- Create a delicious soup by simmering vegetables in stock or broth.
- Flavor stews with beef or vegetable stock.
- Cook chicken in broth with a splash of wine, instead of using oil or fat.
Marinades

Marinades contain an acidic ingredient like wine, vinegar, or citrus juice. This acid tenderizes meat and vegetables while adding flavor. Many marinades (especially ones that contain little oil) are low in calories.

Simple ideas:

- Use a reduced-sodium teriyaki marinade for salmon, tuna, beef, and chicken.
- Try a citrus or pineapple marinade for mahi mahi, tilapia, or chicken.

Vinegar

Vinegar has a tangy, light flavor and few calories. Red wine, white wine, balsamic, and rice vinegar are common types. Remember, a small amount of vinegar goes a long way.

Simple ideas:

- Top a mozzarella and tomato salad with 1 teaspoon of balsamic vinegar.
- Make a homemade salad dressing with raspberry vinegar.
- Add 2 tablespoons of sherry vinegar to a shrimp stir-fry.

How to Marinate Meat, Chicken, and Fish

1. Place the raw meat, chicken, or fish in a sealable container. Pour the marinade evenly over the meat, chicken, or fish. Cover and seal the container.

2. Place the container in refrigerator. Marinate fish for about 30 minutes. Marinate meat or chicken from 30 minutes to several hours (or overnight).

3. For more flavor, brush the leftover marinade on the meat, chicken, or fish during cooking.

4. Discard any leftover marinade that touched raw meat, chicken, or fish. Never use this leftover marinade as a sauce for cooked items.
Frozen Fruits and Vegetables

If you are watching your budget or are tired of throwing away fresh produce that spoils before you can eat it, consider choosing frozen fruits and vegetables. They are frozen shortly after being picked, when they are freshest. Most of the nutrients are locked in, which makes frozen produce a healthy choice.

Frozen fruits and vegetables can be quickly prepared, and they can save you money, too. Read on for tips about choosing and using frozen produce.

When Should I Choose Frozen Fruits and Vegetables?

Frozen fruits and vegetables are available at the grocery store year-round. Sometimes, though, fresh produce might be a better option. Here are some questions to consider:

• **Is produce in season?** Some fresh fruits and vegetables are not available year-round. Or they might be locally out of season and coming to your store from someplace far away. Long-distance travel can lessen their quality and increase their cost. If a fruit or vegetable is not in season where you live, consider the frozen variety.

• **How do the prices compare?** When fresh fruits and vegetables are in season, they are usually cheaper than other times of year. However, they still may cost more than frozen types.

• **Are you short on time?** Fresh fruits and vegetables need to be cleaned and prepped before you cook. Frozen varieties usually come ready to cook, with no preparation necessary.

• **Is a long shelf life important?** Fresh produce can spoil in a few days. If you aren’t planning to use the fruits or vegetables right away, frozen produce is a good alternative.
What’s in the Package?

When buying frozen fruits and vegetables, read the ingredients list. The only ingredients listed should be types of produce. Avoid frozen fruits that have added sugar or syrup. Also avoid frozen vegetables that have butter or other high-fat sauces, or added salt.

Frozen Fruit and Vegetable Meal Ideas

Frozen fruits and vegetable are very versatile. Here are a few ideas for using them:

• Add frozen vegetables like onions, peppers, peas, carrots, edamame (fresh soybeans), or broccoli to soups, stews, stir-fries, and rice and pasta dishes.
• Thaw frozen vegetables or fruits and add them to salad greens.
• Make smoothies with frozen fruit like berries or peaches.
• Top low-fat plain yogurt with thawed fruit for a healthy snack.
• Use frozen fruit in baking recipes like blueberry muffins or fruit crisp.
• Thaw frozen spinach and squeeze out any extra liquid. Add the thawed spinach to lasagna, egg dishes, and casseroles.

How to Cook Frozen Fruits and Vegetables

You usually do not need to thaw frozen produce before cooking with it. To retain vitamins and minerals, cook frozen fruits and vegetables quickly with little or no added water.

Steaming, sautéing, microwaving, and stir-frying are good cooking methods for frozen vegetables. Cook them until they are just tender (not mushy).
Grilling foods is quick and easy. It’s healthy, too, because you need to use only a little added oil and the natural fats found in meat and poultry drip off during cooking. Grilling also gives food a delicious smoky and slightly charred flavor. Keep reading to learn simple tips for using the grill.

What Foods Can I Grill?

Lean meats, fish, and chicken are tasty when grilled. Sturdy vegetables, like potatoes, sweet potatoes, onions, mushrooms, eggplants, peppers, and zucchini, are also good choices. You can even grill many kinds of fruit, like pineapple, peaches, nectarines, apples, and plums.

When you grill meats, choose leaner cuts and trim off extra fat. The fat that drips off meat produces smoke and can ruin the metal on grills. Also, the fat drippings and smoke may release chemicals that increase your risk of cancer.

When grilling meat, fish, or poultry, remember that portion size matters. Aim for a 3- to 4-ounce piece per person. Choose healthy cuts, such as:

- **Poultry:** Skinless, boneless, white meat chicken, duck, or turkey; ground turkey breast
- **Beef:** Flank steak, top loin, sirloin, T-bone steak and tenderloin; 90% lean ground beef
- **Pork:** Tenderloin, loin, or chops
- **Veal:** Any trimmed cut
- **Lamb:** Look for the word “loin”
- **Game:** Rabbit, venison, buffalo, pheasant, ostrich, or quail
- **Fish:** Tuna, salmon, halibut, tilapia, or mahi mahi
How Do I Prepare the Grill?

- Scrub the grill rack with a grill brush to remove any burnt bits of food. Then gently rub cooking oil on the grill rack with a brush or paper towel.
- If you use a gas grill, preheat it.
- For a charcoal grill, you can build the fire using charcoal and lighter fluid or charcoal in a chimney starter.
  - If you use lighter fluid, stack the charcoal in a pyramid shape at the bottom of the grill. Then apply the lighter fluid as instructed on the product label. Let the lighter fluid soak into the charcoal for a minute before lighting the grill. Allow the charcoal to burn for 30 minutes before putting food on the grill rack.
  - To use a chimney starter (a metal tube with air holes), remove the grill grate and place the starter on the grill. Add a layer of newspaper to the starter. Then fill it with charcoal and light the newspaper. When the charcoal is burning, carefully pour it into the grill and replace the grill grate.

How Do I Prepare Foods for the Grill?

Meat, Fish, and Poultry

Marinate meats, fish, and poultry before grilling them. Marinades contain acidic ingredients, such as vinegar, wine, and citrus juice. They add flavor and tenderize meats and poultry. Marinades also decrease the production of cancer-causing agents that can be created when foods are grilled.

Place the food in a container, and toss it in marinade (store-bought or homemade). Cover the container, and refrigerate it for at least 30 minutes before grilling.

Vegetables and Fruits

Cut vegetables and fruits in large pieces that won’t fall through the grill grate. A grill basket or skewers may be helpful. Brush the cut pieces with a little oil or marinade to keep them from sticking.
Kitchen Basics

How Do I Grill Foods?

• When using a gas grill, do not set the temperature too high. When using a charcoal grill, let flames die down a bit before you add food. Flames should not touch the food.
• Plan where you will place each food on the grill. Separate different foods to keep the flavors from mixing. Also, certain foods (like fish and vegetables) require lower cooking temperatures. Do not place them on the hottest parts of the grill, such as directly over the charcoal.
• Place each food on the grill. Turn foods occasionally to cook them on all sides.
• Brush marinade or sauce on the grilling food to keep it moist. Once the food is cooked, do not add any marinade that touched the raw food. Either discard it or boil it on stove to make a sauce that is safe to eat.
• Use a cooking thermometer to check doneness of meat, poultry, and fish. (See the chart for the recommended cooking temperatures.)
• Do not reuse tools or dishes that touched raw meats or raw poultry for cooked food unless you wash them thoroughly first.

Recommended Internal Cooking Temperatures

<table>
<thead>
<tr>
<th>Food</th>
<th>Minimum Internal Cooking Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry (any form of chicken, turkey, or duck)</td>
<td>165°F</td>
</tr>
<tr>
<td>Beef, lamb, veal, ground meats, hamburger, hot dogs, sausages, fresh (raw) ham</td>
<td>160°F</td>
</tr>
<tr>
<td>Steak, fresh pork</td>
<td>145°F</td>
</tr>
<tr>
<td>Precooked ham</td>
<td>140°F</td>
</tr>
</tbody>
</table>
Herbs

Herbs are the leafy part of certain plants that grow at moderate temperatures. Both fresh and dried herbs can be used for cooking. They have few calories and great flavor, which means they are a healthy addition to many dishes. Read on to find out more about some herbs to try.

**Basil**

Basil is used in Thai, Mediterranean, and Italian dishes. Fresh basil tastes like a combination of cloves and licorice.

Enjoy fresh basil leaves with eggs, fish, and pork and as an ingredient in tomato sauces. It can also add flavor to homemade pizza and to fruit and vegetable salads. Top pasta, cooked vegetables, or sandwiches with basil pesto—a sauce of finely chopped fresh basil with olive oil, garlic, ground nuts, and grated parmesan cheese.

**Cilantro**

Also called “Chinese parsley” or “coriander,” this herb has a pungent, citrus-like flavor. You can eat both the leaves and the stems.

Cilantro is commonly used in Indian, Thai, Latin, Caribbean, Chinese, Vietnamese, and Mexican cuisines. Use fresh cilantro in salsa, guacamole, and pasta salads. Sprinkle chopped cilantro on tacos and rice dishes, too.

**Dill**

Dill is most commonly known for flavoring pickles. You can also enjoy it in soups (like chicken soup), dips, sauces, salads, cooked fish dishes, and vegetable dishes.

**Mint**

Peppermint and spearmint are common varieties of mint. Peppermint has a stronger and more peppery flavor than spearmint.
Add fresh mint leaves to seltzer, water, iced tea, or fresh salads. Use it in tomato sauce, fruit salsa, yogurt or bean dips, and salads made with grains like bulgur and brown rice.

**Oregano**

Both fresh and dried oregano (which is also called “wild marjoram”) are used in cooking. Fresh oregano has a strong flavor that works well with cooked tomatoes. Try it in tomato sauce or as a topping for homemade pizza.

The flavor of dried oregano is milder and earthier than the flavor of fresh oregano. Add dried oregano to salad dressings, stuffed peppers, and lasagna.

**Parsley**

Types of parsley include curly leaf and Italian/flat leaf. Commonly used as a garnish, parsley can also add a fresh, mild flavor to many dishes. It works well in chicken and fish dishes and in chopped salads. You can also toss fresh, raw parsley into cooked vegetable dishes, like roasted potatoes.

**Tarragon**

Tarragon tastes like anise (licorice). It is commonly used in classic French cooking.

Because it has a strong flavor, chop fresh tarragon finely and use it in small amounts. Try fresh tarragon in chicken, fish, pork, and beef dishes. It can also flavor dishes made with vegetables like asparagus, carrots, cauliflower, and green beans.

Dried tarragon has a milder flavor. You can add it to chili or egg dishes.

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**How to Select, Store, and Cook with Herbs**

- When shopping for fresh herbs, choose those without bruised leaves and stems (no brown spots).
- To store fresh herbs, wrap them in a damp paper towel and place them in a plastic bag. They will last in the refrigerator for up to one week. Dried herbs can be stored in a cool, dry place for about one year.
- Add fresh herbs at the end of the cooking process to get a richer flavor. Raw, fresh herbs taste great in salads, salsas, and dips.
- Use dried herbs in dishes that are cooked longer, such as stocks, stews, chili, and sauces.
Ten Must-Have Kitchen Tools

To cook healthy, you need some basic kitchen tools. Start with this list of ten tools that every cook needs. Before buying new tools, check to see if you already have them on hand.

#1: Measuring Cups and Spoons

Basic measuring cup sizes are 1 cup, ½ cup, ⅓ cup, and ¼ cup. Measuring spoons include 1 tablespoon, 1 teaspoon, ½ teaspoon, ¼ teaspoon, and ⅛ teaspoon. These tools help you use the correct proportions of ingredients when following recipes. They can also help you control portion sizes. And you can use them to compare the amount you eat to the recommended serving size on a food label.

Use measuring cups to check portions of pasta, oats, rice, quinoa, beans, lentils, and cereal. Use measuring spoons to control portions of high-fat ingredients like oils, grated cheese, chopped nuts, mayonnaise, barbecue sauce, and salad dressings.

#2: Baking Sheets

You can use rimmed, rectangular baking sheets for many tasks. Use them to bake healthy muffins, cookies, and rolls; toast nuts and seeds; and roast vegetables, chicken, or fish.

#3: Cooking Thermometer

Undercooked meat and poultry can cause foodborne illness. Use a cooking thermometer to know if meat and poultry are thoroughly cooked and safe to eat.

To check the internal temperature of poultry or meat, insert the bottom 2 inches of the thermometer into the thickest part of the food. To learn more about how to cook foods to the proper temperature, visit the Home Food Safety Web site (www.homefoodsafety.org/cook).
#4: Microplane

Use a microplane (also called a “rasp”) to grate many foods. This tool can help you control portions of hard cheese and chocolate, which are high in calories and fat. For example, you can grate small amounts of cheese on salads or potatoes.

To add flavor to recipes, grate a small amount of spices, like ginger and nutmeg, or the zest (the colorful part of the peel) of citrus fruits, like lemons and oranges.

#5: Citrus Reamer

Citrus fruit can liven up dishes without adding many calories. Get the most juice from lemons, limes, oranges, and grapefruit with this low-cost tool. Add citrus juice to salads, fish, beverages, dips, sauces, and marinades.

#6: Knives

Sharp knives are important for preparing food and preventing accidents. Invest in good knives, take care of them, and they will last a long time.

Start with an all-purpose, 8-inch chef’s knife for chopping, slicing, and mincing. To trim fruits and vegetables, use a small paring knife (with a 2-inch to 4-inch blade).

#7: Tongs

Tongs are handy for grabbing and turning food. Use them to pick up cooked corn on the cob or baked potatoes, to turn meat in a pan or on a grill, or to toss a salad.

For food safety, always thoroughly wash tongs that touched raw meat or poultry before you use them for any other purpose, like serving cooked foods. You can also use two sets of tongs, one for raw meat and poultry and one for cooked food.

#8: Blender

Create homemade smoothies, sauces, soups, or salad dressings with a blender. Blenders can also crush ice or puree fruit and vegetables.

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#9: Peeler

Healthy meals and snacks include many fruits and vegetables. Peelers are inexpensive and can help you quickly and easily prepare fruits and veggies. Be sure to wash your peeler after each use.

#10: Colander

Colanders separate liquids from solids. Use a colander to drain cooked pasta or canned vegetables or to rinse raw fruits and vegetables with water.

Other Handy Kitchen Tools

- Whisk
- Rubber or metal spatula
- Ladle
- Slow cooker
- Food scale
- Mixing bowls
- Oven mitts
- Wooden mixing spoon
- Cutting board
- Slotted spoon
- Can opener
- Ice cube trays
- Salad spinner
- Kitchen timer
Meal Planning

Planning meals has many benefits. You will eat fewer restaurant and fast-food meals and save money. You can control what you eat and how much you eat. You can prepare food ahead of time for busy days and enjoy more meals as a family.

Are you ready to get organized and stick to a healthy eating plan? Keep reading for tips that can help you stay on track!

Ten Tips to Help You Get Organized

#1: Plan Your Future Meals on a Weekly or Monthly Basis

If possible, involve the whole family in planning. Ask family members what they would like to eat, or sit down and make a plan together. Use a calendar to stay organized, and set a reasonable weekly or monthly food budget.

#2: Collect Healthy Recipes

Buy a cookbook, borrow one from a friend, or check one out from the library. Many Web sites offer healthy recipes, too. Save the recipes you like in a binder or folder, or bookmark them on your computer.

#3: Make a Shopping List

Start the list by noting the ingredients you need for the recipes you plan to cook. Organize the list by how you travel the aisles of the grocery store. Check your pantry, refrigerator, and freezer to make sure you do not overbuy.

To save time, create a standard shopping list and check off the items you need to buy on your next trip to the store. If you have a smart phone, try an app that allows you to add recipes to your “favorite” folder and then generates a shopping list.

#4: Assign Meals to Specific Days

A schedule can help you stay organized and relaxed. For example, if you work late every Friday, then plan a simple meal that needs little preparation, like homemade pizza.
#5: Invest in the Proper Cooking Tools

Be sure that you have the tools you need before you start planning what to cook.

#6: Schedule Your Shopping

Set aside at least an hour each week to shop for food. Give yourself enough time to read food labels and make healthy choices.

#7: Start Slow

Meal planning can be overwhelming at first. Begin by choosing a few simple recipes and planning one week of menus.

Get familiar with the first recipes you chose, and then try new ones. Once you are comfortable with the process, you can make a meal plan for a longer time period (for example, meals for an entire month).

#8: Shop for Bargains

If you see a sale on expensive ingredients that you enjoy, like meat or fish, buy them. You can plan meals around these ingredients for the week, or freeze them for later use.

#9: Gather Your Ingredients

Each day (or the evening before), take out the ingredients you need for a recipe. Thaw frozen items like meat in the refrigerator, not at room temperature.

If you are missing any ingredients, you may not need to run to the store. Consider making a substitution in the recipe, or recheck your recipe collection. Can you make something else with the ingredients you have?

#10: Keep a Well-Stocked Pantry

Identify the ingredients you use often. Then make sure you always have them on hand.
Measurements and Conversions

To follow a recipe, you need to know how to correctly measure dry and liquid ingredients. With the right measuring tools and some practice, you can confidently buy and measure all the ingredients you need.

Measurements for Dry and Liquid Ingredients

- **Dry ingredients** (like flour, dry rice, and meats) are measured by weight (grams, ounces, or pounds) when they are sold. However, many recipes measure dry ingredients in teaspoons, tablespoons, and cups. Be sure to read the directions for a recipe carefully.

- **Liquid ingredients** (like oil, milk, or stock) are measured by volume (teaspoons, tablespoons, cups, pints, quarts, gallons, fluid ounces, milliliters, and liters).

Choosing the Right Measuring Tools

- **Liquid and dry measuring cups**: There are separate types of measuring cups for liquid and dry ingredients. Be sure to use the correct type as you follow recipes.

- **Measuring spoons**: You can use the same measuring spoons for dry ingredients (like baking powder or sugar) that you use for liquid ingredients (like oil or vanilla).

- **A food scale**: When a recipe calls for ounces, pounds, or grams of a dry ingredient like flour, meat, tofu, or uncooked pasta, a food scale provides an accurate weight. Recipes for baked goods rely on exact measurements. Therefore, weighing ingredients is especially important when you bake.
How to Convert Recipe Measurements

Sometimes, to buy ingredients for a recipe, you need to convert one kind of measurement into another type of unit. For example, if the store sells milk packaged in pints, quarts, and gallons, what should you buy for a recipe that uses 5 cups?

You can use the chart in this handout to make these kinds of conversions. For example, to have enough milk for the recipe with 5 cups of milk, you could buy 1 gallon (16 cups) or you could buy 1 quart (4 cups) plus 1 pint (2 cups).

Keep in mind that ounces and fluid ounces are not the same. They cannot be converted from one to the other!

### Common Measurement Conversions

**Dry Measurements**

- 1 ounce = 28.35 grams
- 1 gram = 0.035 ounces
- 1 pound = 16 ounces

**Liquid Measurements**

- 1 teaspoon = ⅓ tablespoon
- 1 tablespoon = 3 teaspoons
- 1 cup = 16 tablespoons or 8 fluid ounces
- 1 pint = 2 cups or 16 fluid ounces
- 1 quart = 2 pints or 4 cups or 32 fluid ounces
- 1 gallon = 4 quarts or 8 pints or 16 cups or 128 fluid ounces
Cooking With Heart-Healthy Oils

Oils add flavor to dishes when used in small amounts. But not all oils are healthy. Keep reading to find out which oils are healthier choices and when to use them.

Choose Unsaturated Oils

Unsaturated oils are the best choices for heart health. Eating them can improve your blood cholesterol levels and stabilize heart rhythms. Eating certain unsaturated oils (especially those with omega 3 fatty acids) also helps decrease inflammation in diseases such as arthritis.

Unsaturated oils mostly come from plants like vegetable oils, nuts, and seeds. They are liquid at room temperature.

There are two types of unsaturated fats found in healthy oils:

- **Monounsaturated fats** are found in olive, canola, and peanut oils; avocados; almonds, pecans, hazelnuts, and other nuts; and sesame and pumpkin seeds.
- **Polyunsaturated fats** are found in sunflower, soybean, corn, and flaxseed oils, and in walnuts.

One tablespoon of oil has 120 calories. For this reason, use all oils (even healthy ones) in moderation.

Cooking with Healthy Oils

Each type of oil has its own **smoke point** (the temperature an oil can reach before it starts to smoke and become discolored):

- Oils with a lower smoke point are usually best for salads and dressings.
- Oils with a higher smoke point are good for cooking or baking.
Olive Oil

Olive oil is a flavorful monounsaturated oil. It is essential in every kitchen.

- **Extra virgin olive oil** and **virgin olive oil** are pure and flavorful, but they can be pricey. Cooking these oils can change their flavor. They are typically used in cold foods that are not cooked (like salad dressings) or drizzled on hot foods just before serving.

- **Regular olive oil** is suitable for cooking foods over low heat. It is not the best oil to cook foods at higher heats because it has a low smoke point.

- Be aware that “lite” or “light” **olive oil** refers to the color of the oil. These oils are not lower in calories.

Canola Oil

Canola oil is a monounsaturated oil derived from the rape plant. It is also known as “rapeseed oil.”

Canola oil is nearly colorless and odorless. You can substitute it for most other oils in recipes. It has a high smoke point and can be used for high-temperature cooking methods, like stir-frying.

Corn Oil

Corn oil is a mild, yellow-colored oil, which is typically used in salad dressings. It is an inexpensive polyunsaturated oil.

Corn oil can be substituted for more flavorful oils, like almond or hazelnut, in recipes. It has a high smoke point. Therefore, it is good for all cooking methods.
Storing Oils

Oils tend to spoil quickly, which can cause them to have a bad flavor or smell. Proper storage can help prevent spoilage. Store oils in a cool, dry place for up to one year.

Peanut Oil

Peanut oil is a monounsaturated oil. Its mild peanut flavor works well in salad dressings. Peanut oil has a high smoke point, which makes it a good choice for frying, sautéing, and stir-frying foods.

Sesame Oil

Sesame oil is a polyunsaturated oil made from toasted or untoasted sesame seeds.

- **Toasted sesame oil** is dark brown in color and has a strong, nutty flavor. Use a small amount (a few drops to a teaspoon) to add flavor to Asian dishes, like stir-fries, marinades, or salad dressings.

- **Untoasted sesame oil** is lighter in color and has a mild, hazelnut flavor. Common in Middle Eastern food, it can be used for cooking or in salad dressings.

Sunflower Oil

Sunflower oil is pale yellow, odorless, and nearly flavorless. This versatile polyunsaturated oil can be using in baking, cooking, and frying.

Walnut Oil

Walnut oil is an amber-yellow, monounsaturated oil with a nutty flavor. It is not a good choice for frying or cooking foods over high heat. To maintain its nutty flavor, use it in small amounts in salad dressings and cold dishes.
A Well-Stocked Pantry

Cooking can be easy when you have the right ingredients at your fingertips. Stock your pantry or kitchen shelves with these ten kitchen staples.

#1: Healthy Cooking Oils

Replace vegetable oil with heart-healthy oils like olive oil and canola oil.

- Olive oil is perfect for salad dressings or to drizzle on cooked vegetables.
- Use canola oil for stir-frying, grilling, and roasting. It has a neutral flavor and can also substitute for vegetable oil in baked goods.

All types of oil (even the healthy ones) contain 120 calories per tablespoon. Use them sparingly.

#2: Brown Rice and Other Whole Grains

Brown rice is a whole grain food with a nutty flavor. It contains more fiber, protein, and B vitamins than white rice, but it takes a bit longer to cook. (Read the package label for the exact cooking time.) Use brown rice in salads, as a side dish, and in soups or stuffing.

Other whole grains include quinoa, millet, and amaranth. You can use them in most recipes that call for rice. Check the package to learn how much liquid to use for each grain.

#3: Beans

Dried and canned beans are budget-friendly and can be stored for several years. They provide fiber, protein, and B vitamins. Choose from black beans, pinto beans, kidney beans, white beans, and more. Add them to salads, soups, chili, salsa, casseroles, and pasta.

When buying canned beans, choose products with no added salt. You can also rinse and drain regular canned beans before you use them to remove much of the salt.
#4: Whole Grain Pasta

Many types of whole grain pasta are now available. Made from whole grains such as whole wheat, brown rice, oats, and barley, these types of pasta are higher in fiber and protein than enriched pasta.

Use whole grain pasta for cold or hot dishes. Cooking times for whole grain pastas vary; check labels for directions.

#5: Canned Tuna

Canned tuna is budget-friendly, and it contains heart-healthy omega-3 fats. Choose chunk light tuna canned in water (not oil). You can make tuna salad or a tuna casserole, or serve tuna over a bed of greens.

#6: Oats

One cup of cooked oats contains 150 calories, 4 grams of fiber, and 6 grams of protein. Oats also provide iron and B vitamins, and they have soluble fiber, which can help lower your blood cholesterol.

In addition to eating oatmeal, you can enjoy oats in smoothies, cookies, pancakes, and homemade granola and snack bars.

#7: Canned Tomatoes

Canned tomatoes are low in calories and are packed with vitamin C and fiber. They also contain lycopene, an antioxidant that can help lower the risk of prostate cancer and heart disease.

To limit sodium (salt), choose canned tomatoes labeled “no added salt.” Use whole or crushed tomatoes for sauces and soups. Choose diced tomatoes for bruschetta, salsa, or guacamole.
**#8: Dijon Mustard**

Dijon mustard provides great flavor for only 5 calories per teaspoon. It can add creaminess and spice to salad dressings, sauces, marinades, and dips. It is also a perfect ingredient for chicken, beef, pork, and seafood dishes.

**#9: Whole Grain Cereal**

Whole grain cereals make a quick and easy breakfast. They can also be a fast snack or serve as ingredients in homemade trail mix.

When buying cereal, read labels. Choose a cereal that lists a whole grain as the first ingredient and contains at least 3 grams of fiber per serving. Sugar or another sweetener (like syrup or honey) should not be listed among the first three ingredients.

**#10: Low-Sodium Stocks and Broths**

Low-sodium stocks and broths are great low-calorie ways to add flavor to soups, sauces, rice, pasta, and other dishes. Chicken, beef, vegetable, and seafood broths and stocks are available. Look for canned, boxed, and frozen products, and check labels to make sure your choice is a low-sodium one.
Healthy Recipe Improvements

Simple changes can often lighten up recipes without lessening the flavor or texture. Here are easy ways to create healthier dishes that taste great.

Cut Back on Some Ingredients

Often you can reduce calories and fat in a recipe by cutting back on one or two ingredients. Here are some examples:

- **Salads**: Reduce meats, cheese, nuts, dried fruits, and bacon to half the amount in the recipe. Serve dressings on the side, using no more than 2 tablespoons of dressing per serving.

- **Pasta dishes with cheese**: When a recipe calls for a Cheesy topping, you can substitute grated Parmesan cheese for other types of cheese. It is flavorful and has fewer calories than many other cheeses. Use about 2 teaspoons of Parmesan per serving. If you want to use the type of cheese in the original recipe, limit it to about 1 tablespoon per serving or use half the amount of cheese listed.

- **Sandwiches**: Cut back on high-calorie ingredients like cheese and bacon, as well as sauces and spreads like mayonnaise and cream cheese. Use one-third or one-half less than the amount in the recipe, or choose lighter versions of ingredients (such as low-fat cheese or mayo). Load the sandwich with vegetables for healthy flavor with few calories.
Use Less Oil and Fat

Oil and fat are high in calories. Even healthy choices, like canola or olive oil, have 120 calories per tablespoon. Think about it: ½ cup of oil has 960 calories!

When cooking, you can often use much less oil than the amount in the recipe. You can also cut back on mayonnaise in recipes, such as those for potato or tuna salad. Aim for about 1 tablespoon of mayonnaise per serving, or substitute a lower fat mayo or plain nonfat Greek yogurt.

Butter, stick margarine, cream, and cheese all contain fats that are not heart-healthy. Choose recipes that limit these ingredients or cut back on the amount used. You can also make healthier substitutions, such as heart-healthy oils, pureed fruits and vegetables, or low-fat or fat-free dairy foods. See the substitutions chart at the end of this handout for ideas.

You can easily remove fat from soups, sauces, stews, and stocks. Prepare the recipe as directed, and then cool the food properly. First, divide the hot food into small containers and stir occasionally. Once it has cooled to room temperature (no longer than 2 hours), place the food in a loosely covered container and store it in the refrigerator overnight. The fat will rise to the surface. Skim it off the top and throw it away.

A Note about Baking

In general, baking is a more exact science than cooking. Therefore, you need to take extra care when making recipe substitutions for baked goods. Low-fat and fat-free ingredients may not work well because they have less flavor or a less creamy texture.

Still, you can cut calories and fat when baking. See the substitutions chart on the next page for some ideas.
## Substitutions for Healthier Recipes

<table>
<thead>
<tr>
<th>Instead of...</th>
<th>Use...</th>
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<tbody>
<tr>
<td>Whole milk</td>
<td>1% or 2% milk</td>
</tr>
<tr>
<td>Evaporated milk</td>
<td>Evaporated fat-free (skim) milk</td>
</tr>
<tr>
<td>Regular cream cheese</td>
<td>Reduced-fat cream cheese</td>
</tr>
<tr>
<td></td>
<td>Neufchatel cheese</td>
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<tr>
<td></td>
<td>Reduced-fat cottage cheese</td>
</tr>
<tr>
<td></td>
<td>Part-skim ricotta cheese</td>
</tr>
<tr>
<td>Soft cheese (like mozzarella or ricotta)</td>
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<tr>
<td>Hard cheeses (like cheddar and Swiss)</td>
<td>Low-fat cheese with no more than 5 grams of fat per serving</td>
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<tr>
<td>made from whole milk</td>
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</tr>
<tr>
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<tr>
<td></td>
<td>Plain nonfat Greek yogurt</td>
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<tr>
<td>Regular ice cream</td>
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</tr>
<tr>
<td></td>
<td>Frozen yogurt</td>
</tr>
<tr>
<td>Cream or cream-base (a combination of flour and oil or fat)</td>
<td>Pureed potatoes, beans, or rice</td>
</tr>
<tr>
<td>Oil</td>
<td>When baking, replace half the oil with applesauce</td>
</tr>
<tr>
<td>Regular butter</td>
<td>As a spread, use a healthier butter-flavored spread made without <em>trans</em> fat</td>
</tr>
<tr>
<td>1 cup shortening</td>
<td>¾ cup canola oil</td>
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<tr>
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<tr>
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<td>2 egg whites</td>
</tr>
<tr>
<td></td>
<td>¼ cup egg substitute</td>
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</table>
Slow Cooker Basics

Slow cookers are handy kitchen tools that use steam instead of oil or butter to cook food. This low-fat cooking method keeps calories in check.

You can also save money with a slow cooker. Use one to easily turn inexpensive cuts of tough meat into a delicious meal. Keep reading for tips on how to use a slow cooker.

Step 1: Learn How Your Slow Cooker Works

Slow cookers vary from model to model. Some are set at higher temperatures than others. The rate at which liquids evaporate also varies. Take time to read the instructions and learn about your slow cooker.

- **Understand the settings:** Cook tender cuts of meat on high. Tougher cuts of meat need to be cooked longer, so set the slow cooker to low.

- **Explore your slow cooker’s features:** Check for options like warming and automatic shut-off, and learn how they work.

- **Fill it up:** For a successful meal, fill the slow cooker to half to three-quarters of its capacity.

- **Leave the lid on:** When food is cooking, do not lift the lid often. Steam is used for cooking. Lifting the lid allows the steam to escape, which slows the cooking process. Lifting the lid frequently also allows the cooking temperature to fall. That may allow harmful bacteria to grow.

Which Foods Cook Well in a Slow Cooker?

For tasty slow-cooker meals, try recipes using these ingredients:

- Pork roast or loin
- Fish
- Chicken (whole or cut into pieces)
- Beef roast, brisket, or stew meat
- Lean ground beef
- Beans
- Vegetables that won’t get mushy (like potatoes, onions, mushrooms, celery, carrots, and canned tomatoes)
Step 2: Schedule Your Meal Preparation

The cooking time for slow cooker recipes can range from 2 to 10 hours. You do not need to be present while the slow cooker is cooking.

Before you leave home in the morning, prepare the ingredients and place them in the slow cooker. When you return at the end of the day, a delicious meal will be waiting!

Step 3: Build Flavor

Try these ideas for the best-tasting meals:

- **Brown meat first**: If you use ground meat, always brown it and drain off the fat before adding the meat to the slow cooker. You don’t have to brown other types of meat, but taking this extra step will add delicious flavor to the finished meal.

- **Use a limited amount of liquid**: Because slow cookers use “trapped” steam to cook food, you do not need to add a lot of liquid. When you use a recipe that was not created for a slow cooker, cut the amount liquid in half. If a sauce or stew or other slow-cooked dish seems too thick, you can always add more liquid.

- **Experiment with ingredients**: Try a variety of flavorful liquids to cook your food. Among the possibilities are stocks, broths, low-fat gravy, low-fat cream soups, and even salsa. You can also add flavor with spices and herbs. Whole spices have powerful flavors, so limit the amount you use. To preserve the flavor of fresh herbs, like dill or parsley, add them toward the end of the cooking process.
Spices

Spices are the roots, barks, seeds, flowers, fruits, and buds of certain tropical plants, and they add great, low-calorie flavor to foods. You can store dried spices in a cool, dry place for up to one year. Read on to learn about some of the many different spices you can use for cooking.

Cayenne

Also called “red pepper,” cayenne is a fine powder made from dried red chilies. Its hot, pungent flavor works well in chicken, pork, and seafood dishes; soups (like black bean); dips (like hummus); pizza; chili; and stew. When cooking with cayenne, start with a small amount (even just a pinch has a lot of heat). Then taste the food and add a little more cayenne if you wish to boost the flavor.

Chili Powder

Chili powder is a blend of dried chilies, garlic, oregano, cumin, coriander, and cloves. Use it in Mexican dishes and to season chili, steak, hamburgers, chicken, and fish.

Cinnamon

Cinnamon is the inner bark of a tropical evergreen tree. It is sold as sticks or powder. You can use cinnamon powder in sweet dishes or sprinkle it on oatmeal and other hot cereals. Use cinnamon sticks to flavor savory dishes like stews or curries that take longer to cook.

Cumin

Cumin is the seed of a small plant in the parsley family. It is available as whole seeds or as powder. Cumin has an earthy, nutty flavor and is typically used in Mexican, Middle Eastern, Asian, and Indian cuisines.

Curry Powder

Curry powder is a blend of up to 20 spices, herbs, and seeds. Most blends include chilies, cinnamon, cloves, cumin, fennel seed, and turmeric. Some are mild in flavor; others are
Kitchen Basics

quite hot. Curry powder is traditionally used in Indian dishes. You can also use it to liven up burgers, steak, chicken, seafood, and lamb.

Ginger

Fresh ginger looks like a knobby root with grayish-tan skin and pale flesh. The flesh should be moist and firm, not dry and stringy. You can also buy dried ginger powder.

Ginger has a sweet yet slightly spicy flavor. Use grated or finely chopped fresh ginger in Asian and Indian dishes, such as curries, stir-fries, and soups. Ginger powder adds flavor to stewed or baked fruit desserts and to spiced cookies.

Nutmeg

Nutmeg is a grayish-brown seed with a delicate, sweet, and spicy flavor. It is sold as whole seeds and as ground powder.

Use nutmeg in baked goods, meat dishes, eggnog, apple cider, and creamy foods like custards. It also tastes good with fruits and many vegetables (like spinach, sweet potato, and squash). A little nutmeg adds a lot of flavor, so start by adding just a pinch or two.

Paprika

Paprika is a powdered spice made from sweet red pepper pods. Its flavor can range from mild to hot and spicy. Some paprika is smoked. Read labels to learn which kind you are buying. Use paprika to add zing to seafood, beef, chicken, and pork dishes.

Pepper

Both black and white pepper come from the same plant. Black peppercorns were picked before fully ripening. White peppercorns fully ripen before they are harvested. Black pepper has a warm flavor and aroma. White pepper is milder in taste. You can buy whole peppercorns or ground pepper. Use pepper in a wide variety of dishes, such as soups, stews, chicken, beef, pork, lamb, and vegetables.
How to Choose the Right Vinegar

Vinegar is a thin, tart liquid, which can enhance the flavor of dishes without adding many calories. It can be used as a preservative, a cooking ingredient, or a condiment. Keep reading to learn more about different types of vinegar and how to use them. Remember that a little vinegar can go a long way!

Selecting and Storing Vinegar

Vinegar should be clear in color, not cloudy or muddy. Most varieties of vinegar are pasteurized (heat-treated to kill dangerous microorganisms) and have a shelf life of a few years.

Store unopened bottles of vinegar in a cool, dark place. Opened bottles of vinegar can last for up to 3 months. Throw away the bottle if you see any mold.

Balsamic Vinegar

Balsamic vinegar is a dark reddish-brown, sweet vinegar made with white or red wine that has been aged in wooden barrels. Use it in salad dressings, marinades, sauces, and soups. It also tastes delicious with tomatoes and strawberries.

Champagne Vinegar

Champagne vinegar is made from grapes. It has a pale color and mild, delicate flavor. It can be used in salad dressings and marinades or tossed with cooked vegetables.

Cider Vinegar

Cider vinegar is pale brown and has a tangy, fruity flavor. It is made from unpasteurized apple juice, apple cider, or apple pulp. Its strong flavor works well in marinades, hearty stews, chutney, potato salads, and barbecue sauces. Cider vinegar can also be used for pickling vegetables like cucumbers and beets.
Distilled or White Vinegar

Distilled (white) vinegar is colorless and made from grain alcohol. It has a strong tart flavor and a higher acidity level than other vinegars. Use it for pickling and preserving vegetables. You can also use it for chores, like cleaning coffee pots or washing windows.

Malt Vinegar

Malt vinegar is produced from malt barley and has a slightly sweet, lemony flavor. In England and Canada, it is commonly served with fish and chips. It can also add flavor to chutneys, but it is not an ideal choice for vinaigrettes or delicate sauces.

Red and White Wine Vinegars

Red wine vinegar has a strong flavor and is good for hearty dishes. Try it in salad dressings, marinades, sauces, and stews.

The flavor of white wine vinegar can range from mellow to very tangy and sharp. It can be used in a variety of dishes, including vinaigrettes, soups, stew, and vegetable dishes.

Rice Vinegar (Rice Wine Vinegar)

Rice vinegar (also known as rice wine vinegar) is made from fermented rice. It is used in many Asian dishes, including sushi, and in marinades and salad dressings. It has a mildly sweet flavor. Note that seasoned rice vinegars contain salt.

Sherry Vinegar

Sherry vinegar is made from sherry wine and aged in wooden barrels. It has a smooth, rich flavor that works well in stews and sauces for hearty meats, like duck or beef.

Flavored Vinegars

Flavored vinegars are traditional vinegars with added herbs, spices, fruits, or other flavor-boosting ingredients. You can buy flavored vinegars or make your own.
Sunday, September 24, 2017

SESSION A

Eat Better for Less:
An Introduction to Cooking Matters for Adults

PRESENTERS: Jane Rapin RD, CDE & Michelle Smith RD, Michigan State University Extension, Health and Nutrition Institute, USDA Supplemental Nutrition Assistance Program Education (SNAP-Ed) Program Instructors

DESCRIPTION: This is a hands-on cooking session. Cooking Matters believes the negative health and economic effects of hunger and poor diet can be avoided if families know how to shop for and prepare healthy, low-cost meals. Cooking Matters for Adults is a nutrition program where participants will learn how to eat healthy, cook and grocery shop on a limited budget. The program consists of six lessons, lasting approximately two hours each. With the help of an experienced chef and nutrition educator, participants will gain the skills and confidence to make healthy, budget-friendly meals for their family. Each week, participants receive take-home food, which they can use at home to practice a recipe they learned in class. Michigan State University Extension facilitates Cooking Matters courses throughout state. Experience a hands-on class with MSU Extension Grand Traverse County staff and registered dietitians Jane Rapin and Michelle Smith.

LEARNING OBJECTIVES:

1. Recognize Michigan State University Extension as a statewide provider of Cooking Matters and other health and nutrition offerings available for patient referral.

2. Gain awareness of Cooking Matters curriculum through participating in lesson 3 of 6 - “Healthy Starts at Home.”

3. State key patient learning outcomes related to basic knowledge for using nutrition information to make healthier choices.

~NOTES~
Turkey Tacos
Chef John Haddock • Baltimore, Md.

Serves 8, 2 tacos per serving
Prep time: 20 minutes • Cook time: 25 minutes

Ingredients
1 medium carrot, small sweet potato, or small zucchini
1/4 medium head lettuce
2 large tomatoes
7 ounces low-fat cheddar cheese
1 (1 1/2-ounce) can low-sodium pinto beans
Non-stick cooking spray
1 pound lean ground turkey
1 (1 1/2-ounce) can chopped or crushed tomatoes, no salt added
1 Tablespoon chili powder
1 teaspoon garlic powder
1 teaspoon dried oregano
1/2 teaspoon salt
1/2 teaspoon ground black pepper
16 taco shells

Directions
1. Rinse, peel, and grate carrot, sweet potato, or zucchini (if using zucchini, grate but do not peel). Squeeze dry with paper towels.
2. Rinse and shred lettuce. Rinse, core, and chop tomatoes.
3. Grate cheese.
4. In a colander, drain and rinse beans.
6. Add grated veggies, beans, canned tomatoes, chili powder, garlic powder, oregano, salt, and black pepper. Stir well.
7. Reduce heat to medium. Cook until thickened, about 20 minutes.
8. Add 2 Tablespoons cooked meat mixture to each taco shell. Top each with 1 Tablespoon grated cheese, 1 Tablespoon shredded lettuce, and 1 Tablespoon fresh tomatoes.

Chef’s Notes
- Top tacos with any of your favorite veggies, hot sauce, salsa, low-fat sour cream, or low-fat plain yogurt.
- Use any type of cooked beans you like.
- Make soft tacos using corn or whole wheat tortillas. Or, serve over brown rice or cornbread.
- For more heat, add minced hot peppers to sauce in step 6.

Nutrition Facts
Serving Size 2 tacos (308g)
Servings per Recipe 8

Amount Per Serving
Calories 290 Calories from Fat 90
Total Fat 10g 15%
Saturated Fat 3g 15%
Trans Fat 1.5g
Cholesterol 40mg 13%
Sodium 500mg 21%
Total Carbohydrate 28g 9%
Dietary Fiber 5g 20%
Sugars 4g
Protein 22g

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.
Cooking Matters for Families

Inside...
- Chef’s Secrets
- Family-Friendly Recipes
- Mealtime Is Family Time
- Cooking as a Team
- Planning Quick, Healthy Meals

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Introduction

Welcome to Cooking Matters for Families

Welcome to the Cooking Matters for Families healthy cooking class. We are so glad you could join us.

For the next six weeks, you will take part in a series of hands-on cooking and nutrition classes. These classes will help you improve your skills at planning and preparing tasty, healthy, low-cost meals — with the help of the whole family! Working together, you and your child will learn about healthy food choices, cook and share meals, and then practice your new skills at home. Each Cooking Matters for Families class will be led by a team of volunteers - including chefs, nutritionists, and other community members. They are trained to help you make smart choices about your eating, cooking, and food-shopping habits.

To help you make the most of this time, keep these tips in mind:

• Get involved. Commit to coming to class each week. Work with your child on all classroom activities. You'll learn the most when you're actively involved.

• Let your child try new things. Kids are thrilled to learn and practice new things in the kitchen. Let them show you what they can do. You may be surprised by how quickly they learn!

• Don't be shy. Ask questions when you want to know more about a topic. Let your instructor know the challenges your family faces putting these lessons into action. You, your instructor, and other families in the class can come up with ideas to try.

• Practice together at home. Work with your child to use what you've learned in class each week. Use the groceries you get from class to make a meal together. Remind each other what you need to do to complete the weekly challenges.

Thank you for taking this step to help you and your family make the most out of your meals!

Want more healthy cooking and shopping tips? Visit CookingMatters.org
Sunday, September 24, 2017

SESSION B

Core4 Weight Management Program: ‘Appetite Awareness Training’

PRESENTERS: Mary Shanahan, MS, RD, Clinical Nutrition Manager/Director Core4, Munson Healthcare with Laura McCain, RD and Culinary Chef

DESCRIPTION: Explore the question, “Are you a mindless or an enlightened eater?” while learning about the key elements of this program that include focusing on internal versus external environmental cues to control appetite and “eat like a baby.” This core concept allows the participant to rediscover the stomach signals (hunger and fullness) as a positive and effective way to stop binge eating and reduce the preoccupation with food that in turn leads to weight control. The program supplies the participant with a toolkit of strategies to work toward a life-long normal relationship with food. The successful outcomes of this pilot program are shared during the presentation.

LEARNING OBJECTIVES:

1. Describe the three eating paths that represent the most common types of problematic eating: normalized overeating, binge eating, and restricted eating.
2. Describe the seven points of intervention where you can make different decisions that put you back on the normal eating path.
3. Explain at least three ways to help your patients overcome the Carbohydrate Craving Cycle.
4. Describe at least five of the 20 lifestyle changes that promote permanent weight change as a secondary benefit.
5. Explore the benefits of mindful training including meditation to promote full living in the turmoil of anxiety.

~NOTES~
## AVOCADO AND BLACK BEAN SALAD

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<td>2-3</td>
</tr>
<tr>
<td>Black beans, drained and rinsed</td>
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</tr>
<tr>
<td>Frozen white corn, cooked and drained</td>
<td>1 (10 ounce) package</td>
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<tr>
<td>Onion, chopped</td>
<td>1/4-1/2 C</td>
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<tr>
<td>Roma tomatoes, chopped</td>
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</tr>
<tr>
<td>Cilantro, chopped</td>
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<tr>
<td>Lime juice, freshly squeezed</td>
<td>1/2 lime</td>
</tr>
<tr>
<td>Coarse salt</td>
<td>1 dash</td>
</tr>
<tr>
<td>Olive oil</td>
<td>1 dash</td>
</tr>
</tbody>
</table>

1. Mix together all of the above ingredients. I’m an avocado lover, so I use three, but two is good. You can use fresh corn if you prefer and also use as much chopped onion or squeezed lime as you like. In fact, all of the ingredients are to your own liking, use as much or as little as you want. The lime juice helps to keep the avocado from turning brown. Refrigerate for a couple of hours and serve cold. Enjoy!

Serving Size: 1 (258 g)  Servings Per Recipe: 4

Calories 410.6; Total Fat 16.9g; Saturated Fat 2.5g; Cholesterol 0.0mg; Sugars 2.4 g; Sodium 44.9mg; Total Carbohydrate 60.5g; Dietary Fiber 17.8g; Sugars 2.4 g; Protein 13.9g

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CARROT, CABBAGE & SNOW PEA SLAW

**Ingredient** | **Measure**
--- | ---
Soy Sauce | 1 TBSP
Rice Vinegar | 1½ TBSP
Sugar | 2 TSP
Garlic, minced | 3/4 TSP
Ginger, ground | 1/4 TSP
Crushed Red Pepper Flakes | 1/8 TSP
Peanut Oil | 1 TBSP
Green Cabbage, shredded | 2-3 C
Carrots, shredded | 1-2 C
Snow Pea Pods, halved lengthwise | 1-2 C
Green Onions, sliced thin on bias | 2-3 medium
Dry Roasted Peanuts | 2 oz.

1. Combine soy sauce, vinegar and sugar for dress. Whisk until sugar is dissolved.
2. Add garlic, ginger, red pepper flakes and peanut oil. Mix until well blended.
3. Combine cabbage, carrots, snow peas, onion and dressing. Toss evenly to distribute.
4. When ready to serve, stir in peanuts.

Per 3 oz serving:
Calories 80; Total Fat: 4.5g; Carbohydrates: 89;
Protein 3g; Fiber 2g; Sodium 240mg

Recipe by Munson Healthcare
SIMPLE LEMONY CHICKEN & SPRING VEGGIE SOUP

**Recipe**

**Ingredient** | **Measure**
--- | ---
Butter | 2 TBSP
Olive oil | 1 TBSP
Onion, diced | 1 small
Carrots, peeled and diced small (if you can find multi-colored carrots, those are beautiful) | 2
Garlic cloves, pressed through garlic press | 2
Salt |  
**Herbs de Provence** | 1 TSP
Chicken stock, hot | 4 C

**Ingredient** | **Measure**
--- | ---
Fresh English peas (or frozen peas) | 1 C
Baby zucchini, small dice | 1 C
Cooked chicken breasts, shredded or cubed (you can use rotisserie chicken for convenience) | 2
Lemon zest | 2 TSP
Fresh lemon juice | 2 TBSP
Cooked quinoa | 2 C
Chopped, fresh basil leaves | 1/4 C
Lemon wedges, garnish | 4

1. Place a medium-large soup pot over medium heat; add in the butter and olive oil, and once melted, add in the onion and diced carrots, and sweat for about 3-5 minutes, or until slightly tender and the onions are becoming translucent.
2. Add in the garlic, and once that becomes aromatic, add in a pinch or two of salt and pepper, and the herbs de Provence; stir to combine.
3. Next, add in the hot chicken stock, and bring to a gentle simmer; cover partially with a lid, and cook for about 15-20 minutes, or until carrots are tender.
4. Turn the heat off; add in the English peas (or frozen peas), the diced baby zucchini, the shredded or cubed chicken breast, and the lemon zest and juice; stir to combine, and allow the peas/zucchini to become crisp-tender and bright green in the hot stock, about 3-4 minutes; check to see if additional salt or pepper is needed.
5. To serve, add about ½ cup of the cooked quinoa to a bowl, and ladle some of the soup with the veggies and chicken over top; sprinkle over some of the fresh basil, and squeeze in some additional lemon juice from the lemon wedge garnish, if desired.

Yield: Serves about 4-6

233 Calories; 18.5 gm Protein; 21 gm Carbohydrate; 4 gm Fiber; 8.6 gm Fat; 160 mg Sodium

---

**Herbs De Provence**

2 T. Rosemary | 2 T. Basil
1 T. Fennel Seed | 2 T. Marjoram
2 T. Savory | 1 T. Oregano
2 T. Thyme |  

---

CULINARY MEDICINE | September 22-24, 2017
RECIPE

TAHINI FREE HUMMUS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chickpeas, drained (reserve some of the liquid)</td>
<td>1 (15 oz.) can</td>
</tr>
<tr>
<td>Olive Oil</td>
<td>1/4 C</td>
</tr>
<tr>
<td>Lemon (juiced)</td>
<td>1/2 lemon</td>
</tr>
<tr>
<td>Minced garlic</td>
<td>1-2 cloves</td>
</tr>
<tr>
<td>Cumin</td>
<td>1/4 TSP</td>
</tr>
<tr>
<td>Salt and pepper</td>
<td>To Taste</td>
</tr>
</tbody>
</table>

1. Add all ingredients to a blender or food processor and blend/process until smooth and creamy.
2. If needed, add some of the reserved liquid from the chickpeas until desired consistency achieved. Add salt per taste.

120 Calories; 7 gm. Fat; 11 gm. Carbohydrate; 3 gm. Protein; 3 gm. Fiber

HUMMUS WITH TAHINI

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chickpeas, drained (reserve some of the liquid)</td>
<td>1 (15 oz.) can</td>
</tr>
<tr>
<td>Olive Oil</td>
<td>1/4 C</td>
</tr>
<tr>
<td>Tahini</td>
<td>1/4 C</td>
</tr>
<tr>
<td>Lemon (juiced)</td>
<td>1/2 Lemon</td>
</tr>
<tr>
<td>Minced garlic</td>
<td>1-2 Cloves</td>
</tr>
<tr>
<td>Cumin</td>
<td>1/4 TSP</td>
</tr>
<tr>
<td>Cayenne</td>
<td>1/8 TSP</td>
</tr>
<tr>
<td>Salt and pepper</td>
<td>To taste</td>
</tr>
</tbody>
</table>

160 Calories; 11 gm. Fat; 12 gm. Carbohydrate; 4.5 gm. Protein; 3.5 gm. Fiber

Adapted from Munson’s cafeteria
SESSION C

Overheard in the Diabetes Educator’s Office

PRESENTERS: Patricia Hennrick, RD, CDE, Munson Diabetes Education; Thomas White, MD, FA-COG, Student, Great Lakes Culinary Institute

DESCRIPTION: This interactive educational experience will address diabetes-related nutrition misconceptions and how to handle these misconceptions with evidence-based nutritional guidance alongside local resources. This session will build upon the concepts from the Diabetes Kitchen Saturday session. Additionally, the presentation will pair meal ideas for patients when discussing how to address patient misunderstandings.

LEARNING OBJECTIVES:

1. Identify common diabetes nutrition misconceptions and develop strategies on how to respond when patients present these misconceptions.
2. Discuss carb counting and portion control as best-practices from the perspective of the patient.
3. Review the role of macronutrients in diabetes nutrition and discuss how local food choices are of benefit to the patient with diabetes.
4. Experience the preparation of vegetable-centric recipes that promote local produce and fit easily into a diabetes meal plan.
5. Examine the role of the Northern Michigan Diabetes Initiative and develop the ability to reinforce the methods used by the NMDI in your own patient care.

~NOTES~
# CAPONATA

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eggplant (1 large)</td>
<td>1 1/2 lbs.</td>
</tr>
<tr>
<td>Olive oil</td>
<td>2 TBSP</td>
</tr>
<tr>
<td>Onion (chopped)</td>
<td>1 medium</td>
</tr>
<tr>
<td>Heart of Celery (inner tender stalks)</td>
<td>2 stalks</td>
</tr>
<tr>
<td>Garlic cloves – minced</td>
<td>3 large cloves</td>
</tr>
<tr>
<td>Red Bell Peppers – diced</td>
<td>2</td>
</tr>
<tr>
<td>Crushed San Marzano Tomatoes</td>
<td>1 (14 oz.) can</td>
</tr>
<tr>
<td>Capers, rinsed &amp; drained</td>
<td>3 heaped TBSP</td>
</tr>
<tr>
<td>Green Olives, coarsely chopped</td>
<td>3 TBSP pitted</td>
</tr>
<tr>
<td>Sugar</td>
<td>2 TBSP + 1 pinch</td>
</tr>
<tr>
<td>Red Wine Vinegar</td>
<td>3 TBSP</td>
</tr>
<tr>
<td>Salt and Pepper</td>
<td>To taste</td>
</tr>
</tbody>
</table>

1. Preheat oven to 350 degrees F. Cover a baking sheet with foil and roast eggplant until very tender, about 45 minutes. Scoop out the softened flesh and chop into a large dice. The eggplant may fall apart at this point, which is fine.

2. Heat 1 Tbsp. of the oil over medium heat in a large non-stick skillet or saute pan and add the onion and celery. Cook while stirring until the onion softens, about 5 minutes, and add the garlic. Cook together for a minute until the garlic becomes fragrant, and add the peppers and 1/2 tsp. salt. Cook, stirring, until just about tender, about 8 minutes. Add another Tbsp of oil and the eggplant and stir together for another 5 minutes, until the vegetables are tender. Season to taste.

3. Add the tomatoes to the pan with about 1/2 tsp. salt and a pinch of sugar. Cook, stirring and scraping the bottom of the pan often, for 5-10 minutes, until the tomatoes have cooked down a bit and they are fragrant. Add the capers, olives, remaining sugar and vinegar. Turn the heat to medium-low and cook, stirring often for 20-30 minutes, until the vegetables are very tender and the mixture is sweet, thick and fragrant. Season to taste with salt and pepper and remove from the heat. Allow to cool to room temperature.

Servings: 8

103 Calories; 2 g. total fat; 0 g. saturated fat; 28 mg sodium; 10 g. total carbs; 1 g. protein; 2 g. fiber
**CHILE RELLENOS RICE CASSEROLE**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweet Corn - shucked</td>
<td>2 ears</td>
</tr>
<tr>
<td>Poblano peppers</td>
<td>4</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>2</td>
</tr>
<tr>
<td>Limes</td>
<td>2</td>
</tr>
<tr>
<td>Cilantro (fresh)</td>
<td>0.5 oz.</td>
</tr>
<tr>
<td>Brown Rice (uncooked)</td>
<td>1.5 C</td>
</tr>
<tr>
<td>Taco Seasoning</td>
<td>2 TBSP</td>
</tr>
<tr>
<td>Shredded Cheddar Cheese</td>
<td>6 oz.</td>
</tr>
<tr>
<td>Sour Cream</td>
<td>2 oz.</td>
</tr>
<tr>
<td>Olive Oil</td>
<td>3 TSP</td>
</tr>
<tr>
<td>Salt &amp; Pepper</td>
<td>To taste</td>
</tr>
<tr>
<td>Crispy Jalapeños (optional – see below)</td>
<td>2</td>
</tr>
</tbody>
</table>

1. Rinse corn. Place on aluminum foil lined baking sheet with poblano peppers and coat both with 1 tsp olive oil. Broil until poblano skin is blistered and corn is browned, turning both every 3 minutes. Set poblanos in a plastic wrap covered bowl.

2. Core tomatoes and cut into 1/2” dice. Zest limes, halve, and juice. Mince cilantro (no need to stem).

3. Place a 4-quart oven safe pan over medium-high heat and add 2 tsp olive oil. Add rice, taco seasoning and 1/2 tsp salt to hot pan. Stir in 3 cups water and bring to a simmer. Cover and place pan in oven. Cook until rice is tender, about 20 minutes.

4. Make salsa. When corn is cool enough to handle, remove kernels from cob. In a mixing bowl, combine tomato, corn kernels, 4 tsp lime juice, 2 tsp lime zest, half the cilantro (reserve remaining for the rice) and a pinch of salt and pepper.

5. Finish rice. Peel cooked poblanos, remove seeds and slice into thin strips. Stir poblano strips, half the cheese and return pan to oven until cheese is melted – 4 to 5 minutes.

6. Top casserole with sour cream and salsa – crispy jalapeños may be added if desired.

**CRISPY JALAPEÑOS:** Half and seed peppers and cut into 1/2” semicircles. Mix ½ cup all-purpose flour, 1 Tbsp garlic powder and salt and pepper to taste. Beat 1 egg in a mixing bowl. Heat 1 cup vegetable oil in a saucepan over medium heat. Dip jalapeño slices in egg, then coat generously with flour mixture. Fry slices in hot oil until peppers are golden brown 4 – 6 minutes.

Servings: 8 – 5oz. servings

312 calories; 12 g. total fat; 7 g. saturated fat; 645 mg. sodium; 39 g. total carbs; 9 g. protein; 2 g. fiber
# Pathways to Pre-Diabetes and Diabetes Education in Northern Michigan

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>Program description</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anyone at risk for developing Type 2 diabetes will benefit from this structured, active program. Participants will be encouraged to lose 7% of body weight and exercise 150 minutes per week to reduce their risks for Type 2 diabetes.</td>
<td>Individuals with pre-diabetes or diabetes learn self-management skills to control the condition and prevent complications. Participants will learn about healthy eating, being active, monitoring blood sugar, taking medications, reducing risks and coping with a health condition.</td>
<td>Interactive education and weekly goal-setting activities help participants build healthy lifestyle skills. Participants will learn techniques to cope with diabetes including managing emotions and stress, eating healthy, taking medications appropriately and working with healthcare providers.</td>
<td>Through instruction and food demonstrations, participants will explore realistic diet changes to manage pre-diabetes and diabetes. Participants will learn to cook and eat using healthy ingredients. Classes include cooking demonstrations and a sampling of tasty, seasonal food.</td>
</tr>
</tbody>
</table>

### Who should attend

- Adults 18 years or older
- BMI ≥ 24 kg/m²
- Have established risk for Type 2 diabetes;
- Have been diagnosed with pre-diabetes; or
- Previously diagnosed with gestational diabetes

- Individuals with a diagnosis of
  - Pre-diabetes
  - Type 1 diabetes
  - Type 2 diabetes
  - Gestational diabetes

- Anyone interested in pre-diabetes or diabetes (Type 1 or Type 2) may attend.

- Anyone interested in learning about healthy eating to manage pre-diabetes and diabetes (emphasis on Type 2 diabetes).

### Format of the program

- **National Diabetes Prevention Program**
  - Group sessions: 16 weeks followed by 6 monthly meetings.

- **Diabetes Education, Self-Management and Support**
  - One-on-one and group sessions are available.

- **Personal Action Towards Health (PATH)**
  - Group sessions: 2½ hours for six weeks.

- **Dining with Diabetes**
  - Group sessions: 2 hours for four weeks.

### Program leader

- **National Diabetes Prevention Program**
  - Trained lifestyle coach

- **Diabetes Education, Self-Management and Support**
  - Registered Dietitian or Nurse, or Certified Diabetes Educator

- **Personal Action Towards Health (PATH)**
  - Two trained leaders (who have experienced diabetes)

- **Dining with Diabetes**
  - Michigan State University Extension Educator

### Program developer

- **National Diabetes Prevention Program**
  - Centers for Disease Control and Prevention

- **Diabetes Education, Self-Management and Support**
  - American Diabetes Association or American Association of Diabetes Educators

- **Personal Action Towards Health (PATH)**
  - Stanford University Patient Education Research Center

- **Dining with Diabetes**
  - West Virginia University Extension

### Cost

- **National Diabetes Prevention Program**
  - Cost may vary by program site. Diabetes education is covered by insurance. Coverage for pre-diabetes education may vary.

- **Diabetes Education, Self-Management and Support**
  - Free

- **Personal Action Towards Health (PATH)**
  - Free

- **Dining with Diabetes**
  - $25 for the full series.

### Contact for more information

- **National Diabetes Prevention Program**
  - Northern Michigan Diabetes Initiative (231) 935-9227
  - nmdi.org/prediabetesclass

- **Diabetes Education, Self-Management and Support**
  - Munson Healthcare hospitals offer a variety of diabetes education opportunities.
  - nmdi.org/DiabetesEd

- **Personal Action Towards Health (PATH)**
  - Area Agency on Aging of Northwest Michigan 1-800-442-1713
  - aaanm.org/path-workshops

- **Dining with Diabetes**
  - Michigan State University Extension (231) 922-4836
  - eichber2@anr.msu.edu

More resources are available at www.nmdi.org.
Not Carbohydrates

Protein (Up to 5-8 ounces a day)

Each ounce has about 7 grams of protein, 3-8 grams of fat, very little or no carbohydrate, and 50-100 calories. An average serving of meat, fish, or poultry is 3 ounces – about the size of a deck of cards. Bake, boil, broil, roast, or grill meat, fish and poultry.

Meat
Pork, veal, lamb
Beef, round or loin
Chicken, turkey – no skin
Ham, lean – fat trimmed
Fish or seafood, not fried
Turkey or venison jerky
Lunchmeat, low-fat deli meats
Soy or veggie burger
Wild game
Buffalo

1 ounce equivalents
Cheese, part-skim or reduced fat, 1 oz.
String cheese
Cottage cheese, ¼ cup
Egg, medium 1
Egg substitute, ¼ cup
Peanut butter, 1 Tbsp (100 calories)
Nuts, ¼ cup (200 calories)
Tofu, ½ cup
Tuna or salmon canned in water, ¼ cup

Fats (Up to 4 servings a day) Use measuring spoons.
Each serving has about 5 grams of fat, little or no carbohydrate, and 45 calories.

Unsaturated Fats (healthier)
Avocado, 1/8
Margarine, soft, tub or squeeze, 1 tsp
Margarine, light, 1 Tbsp
Mayonnaise, 1 tsp
Mayonnaise, light, 1 Tbsp
Nuts, 4-6 or 1 Tbsp
Olives, 5
Oil, 1 tsp (Canola, Olive, Peanut)
Salad dressing, 1 Tbsp
Salad dressing, light, 2 Tbsp
Sunflower seeds, 1 Tbsp

Saturated or Trans Fats (less healthy)
Bacon, 1 slice
Butter, 1 tsp
Cream, table or light, 2 Tbsp
Cream cheese, light, 2 Tbsp
Cream cheese, regular, 1 Tbsp
Deep-fried or fried foods
Gravy, 2 Tbsp
Shortening, 1 tsp
Sour cream, 2 Tbsp
Stick margarine
RESOURCES

Equipment
Suggested Kitchen Equipment for Hands On Nutrition Education programs

- pots and pans
  - 1 (10-quart) pressure cooker
  - 1 electric wok or skillet
  - 1 stock pot
  - 2 smaller pots
  - 1 roasting pan
  - 1 large (12 in or more) cast iron skillet
  - 2 frying pans, 1 large, 2 small
  - 1 large cookie sheet
  - 1 (9x13) oblong baking pan (glass or stainless steel)
  - 1 (8 inch) square baking pan
  - 2 round pie pans (glass or stainless steel)
  - 1 tea kettle (standard or electric)
- cutting boards: 2 larger, 2 small
- food processor

- grater: 4-sided box style
- knives: 2 larger, 2 small, bread knife and paring knife
- measuring cups for both dry and wet measure (oven-proof)
- measuring spoons
- metal tongs
- mixing bowls (glass and plastic)
- pitcher
- potholders and mitts
- serving bowl-2
- serving spoons (ladle, slotted, regular)
- spatulas - 1 rubber, 1 metal
- thermometer (instant read, oven, refrigerator/freezer)
- vegetable peeler

Faculty Recommended Resources

BIBLIOGRAPHY


RESOURCES

Web and Digital Resources

MEAL PLANNING

**Shape Up North.** Fruit and Vegetable Prescription Program website and recipe resources.
http://shapeupnorth.com/about-us/fruit-vegetable-rx-program.html

**USDA MyPlate.gov.** Professional resources, recipes, handouts, menu plans and other resources.
https://www.choosemyplate.gov/recipes-cookbooks-and-menus

**USDA Thrifty Food Plan.** USDA provides shopping strategies and meal planning advice to help families serve more nutritious meals affordably in one PDF book.

**USDA SNAP-Ed Connection.** Resources for menu planning, shopping & budgeting.

**Leanne Brown’s Good Food and Cheap.** PDF cookbook website. English and Spanish versions.
https://www.leannebrown.com/cookbooks/

**Environmental Working Group.** Good Food on a Tight Budget: EWG’s Guide
http://www.ewg.org/goodfood/

FOOD SHOPPING RESOURCES

**Environmental Working Group.** Dirty Dozen and Clean Fifteen Shopping Guides.
https://www.ewg.org/foodnews

**Michigan Farmer’s Market Association.** For Shoppers includes where to find markets and recipe cards.
http://mifma.org/for-shoppers/

**Michigan Department of Health and Human Services.** Eat Safe Fish Guide. Statewide resource and guide to safe fish eating.

**Northwest Michigan Food and Farming Network.** A Guide to Food Assistance and Eating Local. This comprehensive local food access guide is a must have for all healthcare providers.
https://foodandfarmingnetwork.files.wordpress.com/2015/05/a-guide-to-food-assistance-and-eating-local_proof-v5_final-draft.pdf

**Taste the Local Difference.** Comprehensive food and farming consumer search tool for any local at any food access point in the state of Michigan. Includes farms, direct from farm foods, farm markets, retailers, restaurants and special local food events.
http://www.localdifference.org/
RESOURCES

One Pantry.Org. OnePantry.org is a partnership between Taste the Local Difference and Food rescue of Northwest Michigan to help the community locate food pantry and meal site resources. http://www.localdifference.org/find-food-farms/one-pantry.htm

MOBILE APPS

EWG Food Scores. Food Scores provides ratings for 80,000 foods in its database on the basis of nutrition, ingredients (including pesticides), and processing factors. http://www.ewg.org/foodscores

Fooducate. Fooducate offers virtual weight loss coaching and has a good shopping app. Scan food package barcodes to shop and compare products. http://www.fooducate.com/


SuperTracker. SuperTracker can help you plan, analyze, and track your diet and physical activity. https://www.choosemyplate.gov/tools-supertracker

Taste the Local Difference. Your go-to source for local food in Michigan when you are on the go! http://www.localdifference.org/contact/tld-app.html

FOOD AND NUTRITION PATIENT EDUCATION

ChooseMyPlate.gov. The ChooseMyPlate.gov website includes a number of print materials which are available as downloadable PDFs. These materials are in the public domain and therefore no permission is needed to print, reproduce, or use them. For more information, read our MyPlate Graphics Standards. https://www.choosemyplate.gov/printable-materials

The MyPlate Daily Checklist (formerly Daily Food Plan) shows your food group targets – what and how much to eat within your calorie allowance. Your food plan is personalized, based on your age, sex, height, weight, and physical activity level. Can be used in conjunction with SuperTracker. https://choosemyplate-prod.azureedge.net

MOBILE TEXTING SERVICE

Michigan Department of Education and USDA Team Nutrition Michigan offers a texting service. Parents of young children will receive nutrition messages right to their phone. Text “@ht4pyg” to the number 81010 to sign up!
CULINARY MEDICINE REFERENCES

FRIDAY, SEPTEMBER 22, 2017

Welcome Session and Keynote


SATURDAY, SEPTEMBER 23, 2017

Session A: Exploring food access and food environments as an adjunct assessment feature


Session B: Using a local food approach for prevention and chronic disease management


Session C: Nutrition Briefing


**Sessions D: Medical Nutrition Therapy in the Kitchen**


CULINARY MEDICINE REFERENCES


“As a doctor and the son and grandson of professional bakers and cooks, my work in the area of Culinary Nutrition and the development of model ‘teaching kitchens’ across dozens of hospitals, universities, medical schools, corporate settings, K-12 schools and community organizations convinces me that in the future we will develop successful ways to enable people from all backgrounds to eat, cook, move and think in ways that promote health and are fun!”

—Dr. David Eisenberg, founder of Harvard University’s Healthy Kitchens, Healthy Lives

“This type of personal connection—sharing favorite recipes and cooking ideas—helps patients feel more comfortable. Having a rapport with them and their families frequently changes the physician-patient dynamic from an authoritarian ‘let me tell you what to do’ to a partnership of ‘let’s find a way to make your health better.’”

—Dr. James Fox, cardiologist, Munson Healthcare

“Going back to basics of nutrition in my practice has changed way I practice medicine. For the first time I’m seeing people heal and get better.”

—Dr. Jennifer Lyon, Traverse City family practice physician

“‘There’s a lot of questions out there about what diets are most helpful. We look for evidence-based medicine to be able to make educated changes about diet and lifestyle. Those things can really impact their health overall.’”

—Dr. Erik Lindstrom, Traverse City family practice physician