

Cooperative Extension

Promoting Healthy Families, Schools and Communities: Making a Difference

Processed Foods and How They Affect Nutrition



Jennifer Shukaitis, MPH, FCHS Educator, Statewide

What is a processed food?

When thinking of processed foods, we tend to think of foods created in factories using chemicals. Processing, however, is not always bad. To process a food means to change it from when it was harvested or raised. This can be as simple as peeling, slicing, and packing fruits / vegetables. Therefore, most foods we eat are likely processed to some degree.

Why are processed foods so prevalent?

One important reason why processed foods became popular was to reduce food insecurity. Food insecurity is a lack of consistent access to enough food for an active, healthy life. Over 1 billion people worldwide are food insecure, a number that includes 37 million Americans (11 million are children). Malnourishment is a problem that affects one-sixth of the world’s population. Processes such as canning and drying give people access to foods that would not otherwise have available in their part of the world.

The NOVA classification system:

In 2014, a group of Brazilian scientists created a method for sorting foods based on how much they have been processed. They established a four-category system, dividing foods into the following groups: *un/minimally processed foods*, *processed culinary ingredients*, *processed foods*, and *“ultra-processed” foods*.

- ✓ **Unprocessed or minimally processed Foods** have only been somewhat changed from their original form. This means they mostly maintain their nutritional integrity.
 - Some examples of minimal processing include cleaning, roasting, removal of inedible parts, refrigeration, and packaging. Fresh fruits, vegetables, whole grains, nuts, meats, and milk fall into this category.
- ✓ **Processed culinary ingredients** include items that result from further processing minimally processed foods, such as milling, pressing, refining, and grinding.
 - Processed culinary ingredients include those used in the preparation of minimally processed foods, such as salt, oils, and grains.
- ✓ **Processed foods** include foods from either of the other two groups, with the addition of salt, sugars, or fats. These are sometimes referred to as “ready-to-eat” foods and require no further preparation to be eaten.
- ✓ **Ultra-processed foods** are foods that have been changed through the addition of artificial colors or flavors, and preservatives to increase shelf-life and desirability.



In This ISSUE

Processed Foods and How They Affect Nutrition	1,7
Did You Know: Mushrooms Are Nutritious in Addition to Being Delicious	2
Step It Up: Ways to be More Active	3
Seven Tax-Advantaged Charitable Gifting Strategies	4
Small Steps to Setting Financial Goals	5
The Cardiac Diet: A Heart Healthy Diet for Stressful Times	6-7

continued on page 7

Did You Know: Mushrooms Are Nutritious in Addition to Being Delicious?

Sherri M. Cirignano, MS, RDN, LDN, FCHS Educator, Warren County

Mushrooms contribute the unique taste of umami to our food, which for many people, makes them delicious. Umami comes from the Japanese word 'umai' which means delicious, savory, brothy or meaty and is thought to provide a complete balance of flavors to a meal. Mushrooms are also a low-fat, low-calorie food with differing amounts of vitamins and minerals dependent on the type. In general, they are good sources of selenium, copper, niacin, potassium and pantothenic acid and are an excellent source of riboflavin. Although they are also a source of vitamin B-12, the same type that is found in animal foods, the amount in mushrooms is too small for vegetarians to rely on them as their sole source of B-12. Mushrooms provide a moderate source of fiber, approximately 1.9-3.2 grams of fiber per cup.

Once a sad, small section in grocery stores, mushroom availability in both type and quantity has grown steadily by about 5-7% over the past 30 years. Perhaps this is due to the unique taste mushrooms can add to a meal, the nutritional quality of mushrooms, and the possible health benefits they may provide. For example, the availability of vitamin D in mushrooms is currently being studied. Mushrooms can have a significant vitamin D content dependent on their exposure to ultraviolet light. For example, a serving of raw portabella mushrooms without UV exposure has 10 IU of vitamin D and those exposed to UV light have 446 IU of vitamin D. For comparison, one cup of milk has 117 IU. Most mushrooms are cultivated and grown in the dark, so adding exposure to UV light could contribute to alleviating a global issue of vitamin D deficiencies and provide a non-animal source of vitamin D for vegetarians.



VISIONS

is a peer reviewed newsletter published four times yearly and sent upon request, without charge.

Published by

Rutgers Cooperative Extension
Department of Family & Community Health Sciences

Editors:

Karen Enslé, EdD, RD, FADA, CFCS
Family & Community Health Sciences Educator

Alexandra Greci, MS, RD, LDN, CDE
Family & Community Health Sciences Educator

Rachel Tansey, MA
Senior FCHS Extension Associate

Daryl Minch, M.Ed. & Luanne Hughes, MS, RDN
Interim Department Chairs

Financial Manager: **Nicole Boily Keuscher**

Please send any questions to:

Rutgers Cooperative Extension
Dept. of Family & Community Health Sciences
88 Lipman Drive, New Brunswick, NJ 08901-8525
848-932-3661

Portions of this newsletter may be reproduced with the use of a courtesy line.
Desktop publishing by: **Arly Ditto Graphics**

Printed December, 2021

Mushrooms are also a good source of ergothioneine, an essential amino acid. Being an essential amino acid means that it cannot be made by humans and needs to be consumed. What is potentially important about this amino acid is that it acts as a very stable antioxidant in the body, helping to guard cells from free radicals that can lead to cell damage and disease.

Studies have shown that adding mushrooms to meals is not only satisfying, but also contributes to positive health parameters including blood pressure, lipid levels and inflammatory markers. An easy way to do this is to substitute mushrooms for high-fat meats and/or enhance your already meatless meals with mushrooms.

When choosing mushrooms, there should be no visible moisture on the outside or in the package, so the mushrooms should be dry, but not dried out and they should be firm and plump. Store bulk or loose mushrooms in a paper bag or in their original package and refrigerate for up to one week. Sautéed mushrooms, but never fresh mushrooms, can be frozen for up to one month. To clean mushrooms, right before use, use a soft brush to remove any traces of peat moss or soil, or rinse quickly and pat dry, but don't soak them in water. Too much water will make the mushrooms tough.

Mushrooms are a delicious source of the taste of umami, are packed with nutritional benefits and may be beneficial in the prevention of chronic diseases including heart disease and certain types of cancer. So, enjoy a variety of mushrooms as part of a healthful plant-based diet.

Step It Up: Ways to be More Active

Chris Zellers, MPP, FCHS Educator, Cape May County

Being active is an important part of aging healthfully. The key to being physically active is finding something enjoyable to do that promotes motivation and encourages regular movement. Since Americans have become increasingly sedentary or lacking in movement, chronic disease rates have increased. Finding small ways to move more or regularly is important to keep our bodies functioning properly and to prevent disease. Physical activity is a great prevention tool for chronic disease, however, according to the Centers for Disease Control (CDC) only 23% of Americans meet the recommendations of 150 minutes per week of moderate level aerobic type exercise plus two days of weight bearing exercise. Think about the reasons you are not moving and find ways to exercise anyway. Many challenging reasons for poor physical activity levels can help you to prevent chronic disease while promoting a sense of well-being.

Are you too tired to exercise? Are you lacking funds and time for regular exercise habits? Instead, use these same reasons to promote energy, save money, and add time to daily routines. The grind of life each day, leaves many Americans feeling rundown and tired, but physical activity will increase energy levels and promote that sense of well-being. Exercise has been associated with better sleep patterns, which in turn provides more energy during the day. Exercise doesn't have to be expensive. By taking time to shop and compare gyms, being a good consumer, can save money up front. A gym is not a necessity but a safe place to walk. All you actually need is a pair of supportive walking shoes to get a daily workout where you live or on a lunch break at work.

The costs associated with physical inactivity account for more than 11% of total health care expenditures and are estimated at \$117 billion annually according to U.S. Department of Health and Human Services. Finding the time to move may be difficult but we are spending too much time on social media and smart phones instead of actually doing some type of physical activity. Making time to exercise each day will save money in the long run and decrease your risk for chronic disease. It will increase energy levels and is an investment in your physical and mental health, which will provide a lifetime of benefits.

If barriers are holding you back from exercising, try focusing on what you can do 30 minutes each day. Rather than avoiding exercise, take some time to be proud of how much was accomplished, no matter what the level. Everyone has a different level of physical fitness and various challenges from day to day. Often at gyms instructors are experienced in helping with modifications to accommodate needs, ask for assistance if you need some help. Do what is realistic for you. It's better to exercise for 10 minutes three times a day than do nothing at all. Finding ways around limitations will improve your overall wellbeing. Start small and remember to think about small steps for good health.



STAYING ACTIVE

Seven Tax-Advantaged

Charitable Gifting Strategies

Barbara O'Neill, Ph.D., CFP®, Distinguished Professor and Extension Financial Management Specialist Emeritus, Rutgers Cooperative Extension



As the pandemic continues after one full year, many people are hurting financially. Examples of traumatic impacts include loss of income, food insecurity, and depletion of emergency savings. On the other side of the spectrum are Americans who have been doing as well as or even better than before throughout the pandemic and whose finances are barely affected. Some may be looking for tax-advantaged strategies to reduce their income taxes. Others may want to help others who are less fortunate than they are.

The good news is there are seven tax-smart strategies to do both; i.e., reduce income taxes and make tax-advantaged donations to help charitable organizations that are helping Americans survive the pandemic. Below is a brief description of each tax-advantaged strategy and action steps that people can take to use them:

- ✓ **Tax Deduction for Non-Itemizing Taxpayers** - As a result of the Omnibus Spending and Coronavirus Relief Law passed in December 2020, there is an income tax deduction for donors who do not benefit from itemizing deductions in 2021. Single taxpayers can deduct \$300 and married couples filing jointly can deduct \$600. This tax write-off applies to cash contributions only, not to donations of property.
- ✓ **"Bunching Up" Tax Deductions** - Unless they have large medical expenses or qualified catastrophic losses, the 10% or so of taxpayers who itemize deductions typically have some type of planning strategy. One is "bunching," i.e. paying several years of tax-deductible expenses in one tax year. Often, this involves "voluntary" tax deductions such as elective medical procedures and charitable gifts. Typically, people "bunch up" deductions in years where they expect to have an above-average income.
- ✓ **Qualified Charitable Contributions (QCD)** - With QCDs, taxpayers aged 70 ½ and over donate the required minimum distribution (RMD) from their traditional IRA to a qualified charity. The QCD counts toward their RMD withdrawal. The distribution is made directly from the IRA custodian (e.g., a bank or mutual fund company) to the charity. The maximum annual exclusion for QCDs is \$100,000 or \$200,000 for married couples filing jointly. Funds must be withdrawn by December 31 of the tax year.
- ✓ **Donating Appreciated Securities** - Assets that can be donated include stocks, bonds, exchange-traded funds (ETFs), real estate investment trusts (REITs), and even bitcoins. Donors are able to give (and charities able to receive) more than if the securities were sold, capital gains taxes were paid, and the remainder was donated. Donors avoid capital gains taxes and can deduct the fair market value of the assets that were donated. This strategy can also help donors rebalance their investment portfolio assets.
- ✓ **Donor-Advised Funds (DAFs)** - DAFs are a tax-deductible irrevocable gift for charitable purposes. First, donors select a custodian (e.g., Fidelity, Schwab, Vanguard, TIAA) by comparing investment options, procedures, and expenses. Next, they contribute cash, investments, or appreciated assets to open a DAF account. Then they set up an asset allocation strategy and invest in one or more asset "pools" (e.g., stocks, fixed income securities, and cash assets). Lastly, donors recommend grants to charities at any time. The custodian makes sure the charity is tax-qualified and sends them the donation.
- ✓ **Charitable Trusts** - Charitable trusts require the assistance of an attorney. Donor assets used to fund the trust are retitled in the trust's name. Ongoing administrative management expenses are involved. The tax deduction for the donor is based on the value of the projected income stream to the charity. Two common types of charitable trusts are charitable lead trusts and charitable remainder trusts.
- ✓ **Private Foundations** - Some donors elect to become their own charitable organization by setting up a private foundation. There are strict regulations and tax laws such as the requirement to file an annual Form 990. Private foundations often involve ongoing hands-on donor involvement and provide a high degree of donor control over charitable gifting. Mandatory minimum distribution rules apply.



To learn more about tax-advantaged gifts, review the Charity Navigator webpage, [Tax Benefits of Giving](#).

Small Steps to Setting Financial Goals

Barbara O'Neill, Ph.D., CFP®, Distinguished Professor and Extension Financial Management Specialist Emeritus, Rutgers Cooperative Extension



One of the best small financial planning steps that everyone can take to improve their finances is to set financial goals. When you set short-term (up to 3 years), intermediate-term (3 to 10 years), and long-term (over 10 years) financial goals, you can calculate how much money you need to save to achieve them.

Short-term goals take less time to reach than long-term goals which may take many years. Building an emergency savings fund may be a short-term goal and having money saved for retirement would be a long-term goal. Every person has different financial goals and different time frames for achieving them.

Do you have a goal or is it a dream? A dream is vague like “I want to send my child to a good college,” or “I want to be comfortable in retirement.” These are dreams. Goals have a clearly defined objective and a deadline date. Many financial educators use the acronym SMART to describe well-written goals, with the letters standing for Specific, Measurable, Achievable, Realistic, and Time-related.

Here are three examples of SMART goals:

- “By the year 2023, we will save \$20,000 for the down payment on a townhouse”
- “By the time my child is 18, I will have \$40,000 in savings to pay part of her college tuition.”
- “In ten years, I will have \$50,000 saved in my 401(k) retirement plan.”

How do you write a SMART financial goal? Start by answering the questions who, what, when, where, and why. Since this is YOUR goal, begin your goal statement with “I/We.” State exactly what you want to accomplish and include a target deadline date in your goal statement.

Then, state exactly what you will do to achieve it and how (e.g., save 6% of pay annually in a 401(k) plan). Keep re-writing your goals until they are specific and achievable. Tell other people about your goals so that there are people to hold you accountable. Track your progress and, if necessary, make changes to your goals as personal circumstances or economic conditions change. Use the template below to get started.

Goal-Setting Template	
Your SMART Goal:	I want to... _____ [Describe a Goal]
I want to...	by _____ [Specify a Deadline Date]
	so I will... _____ [Describe Action Step(s)]
	to reach my goal on time.

Goals provide a framework for investment decisions and help narrow down your choices. For example, if you have a short-term goal, like a new car purchase in three years, you’ll want to keep this money liquid so that there’s no loss of principal. Equity investments like stock or growth funds would be a poor choice due to the historical volatility of the stock market in short time frames. On the other hand, if you have a long-term goal, like retirement in 2050, cash assets are a poor choice due to the risk of loss of purchasing power.

Bottom Line: Determine your financial goals before you invest money and know what you’re investing for. Having a clearly-defined goal provides motivation to set money aside. A key to investment success is goal-setting. Remember, people don’t plan to fail, they fail to plan...and set financial goals.

The Cardiac Diet:

A Heart Healthy Diet for Stressful Times

Alaura Atkinson, *Dietetic Intern, Montclair State University*

Karen Ensle, EdD, RDN, FAND, CFCS, *Preceptor, FCHS Union County*



Now, more than ever, stress levels have increased due to the pandemic, so it is imperative to take action on the food that you eat. Stress is controlled by cortisol, and is produced by the adrenal glands. Cortisol plays a number of roles in the body, including: Regulating sleep cycles, reducing inflammation, increasing blood sugar, body use of carbohydrates, fats, and proteins.

Importantly, cortisol is sometimes known as the “stress hormone” because your adrenal gland releases it when you’re in a stressful situation, or when your body is under physical stress (like inflammation). It’s the key to helping your body manage its fight-or-flight instinct — which is a good thing. Cortisol can be healthy for a short period of time as a protective mechanism, as it gives your body the energy to respond to short-term stressful scenarios. But, in the long-term, too much cortisol actually creates stress in your body, leading to more inflammation and increasing your blood pressure, the opposite of all the good things it does for you in short-term. So, managing stress is the number one treatment for lowering cortisol levels. So what types of foods may help to combat stress?

The Heart-Healthy (Cardiac) Diet limits saturated fat (butter, margarine, coconut oil, palm oil, or any solid fat at room temperature) to 7% of total calories, allows for less than 200 mg of cholesterol daily and less than 2,000 mg of sodium per day. This diet promotes the consumption of whole grains, fruits and vegetables, low-fat or fat-free dairy products, unsaturated fats, 20-30 grams of fiber per day and 5-10 grams of soluble fiber per day and soluble fiber helps in lowering cholesterol. The best way to lower cortisol in the body is to focus on an anti-inflammatory diet. That means fewer processed foods and more whole foods. The goal is to eat foods that reduce inflammation in your body, thus reducing cortisol levels. Here are some food categories that help combat stress.

- ◆ **Grains:** Whole grains, wheat, barley, quinoa, brown/wild rice, oats, whole grain cereals, pasta, bread, crackers, and rolls. These foods will increase fiber intake and vitamin B. Fortified whole grains and some animal sources contain B-vitamins, particularly vitamin B-12, which can assist with metabolism of cortisol.
- ◆ **Protein:** Trimmed cuts of red meat, lamb, skinless chicken or turkey, eggs (2-4 per week due to the cholesterol in yolk), egg whites, fatty fish like salmon or herring (rich in omega-3 fatty acids), unsalted nuts and seeds, peanut butter, almond butter, veggie burgers, and beans. Eating adequate amounts of protein can reduce satiety and help curb stress eating, as well as, help to control blood sugar levels. Omega 3’s found in oily fish like salmon, tuna and mackerel are beneficial in reducing stress by helping to regulate your body’s inflammatory process. Smaller amounts of omega-3s are found in walnuts, chia seeds, and ground flaxseed.
- ◆ **Dairy:** Non-fat milk, 1% milk, low-fat yogurt, low-fat cottage cheese, low-sodium/lower fat cheese like Swiss and mozzarella, fortified almond milk, or frozen yogurt contain calcium and magnesium. High-magnesium foods help to relax the body, which helps to reduce stress. It’s also a mineral for important body function including heart rhythm, strong bones, keeping blood pressure normal, and helping to decrease risk of risk bone diseases. Besides Greek yogurt and dark chocolate, 70-80% of our immune system is reliant on our gut to maintain our immunity.
- ◆ **Vegetables:** Fresh, frozen, unsalted canned vegetables. Dark-green, red, orange vegetables, legumes like beans or peas, and vegetables without added sauces. Probiotic-rich and fermented foods can help balance blood sugar and reduce cholesterol including: kefir, kimchi, kombucha and sauerkraut. They help to provide gut immunity. Other vegetables can reduce inflammation through the action of many anti-oxidant compounds.
- ◆ **Fruits:** Fresh, frozen, canned fruits in 100% fruit juice or without added sugars. Citrus fruits like oranges or grapefruit contain good sources of vitamin C which is an antioxidant. Antioxidants help to prevent, delay, or repair some types of cell and tissue damage. Foods that are anti-inflammatory tend to be the same foods that keep you healthy. Eat sufficient fruits and vegetables every day.

The cardiac diet aims to reduce the risk of cardiovascular disease by encouraging people to eat healthful, anti-inflammatory foods. The basic principles of this diet are:

- ★ **Eat whole foods and avoid processed foods.**
- ★ **Include a wide variety of vegetables and fruits.**
- ★ **Limit red and processed meat.**
- ★ **Limit full fat dairy products.**
- ★ **Eat a few portions of oily fish per week.**
- ★ **Include healthful fats, such as olive oil and avocados.**
- ★ **Add nuts, seeds, and legumes.**
- ★ **Limit alcohol and added sugar intake.**

continued on page 7

The Cardiac Diet:

A Heart Healthy Diet for Stressful Times - continued from page 6



- ◆ **Oils/Fats:** Almonds, olives, avocado, cashews, grapeseed, sesame, and oil-based salad dressings made from olive, corn, soy, sunflower, safflower oils are examples of some unsaturated types along with margarine and spreads that indicate liquid vegetable oil is the first ingredient on the food label. Vegetable oils like olive oil can reduce inflammation and are heart-healthy.
- ◆ **Salt:** Low sodium crackers, soups, seasonings, spices, herbs, vinegar, lemon or lime juice help to reduce salt intake and are recommended.
- ◆ **Drinks:** Stay away from beverages that contain significant caffeine. Choose caffeine-free tea or coffee, and drink more water, or plain seltzer. Caffeine can amplify cortisol levels within the body which causes stress.

Don't skip meals. Eating on a regular schedule, every three to five hours helps balance your blood sugar levels. Being in a chronic state of low blood sugar is stressful on your body and can increase cortisol, so maintaining a balanced blood sugar can go a long way. Also keeping to a weekly plan of physical exercise and healthy meals are two important components in responding to stress. Take these small steps to help reduce your stress!

Processed Foods and How They Affect Nutrition - continued from page 1

Spotting an ultra-processed food: Look at the Nutrition Facts Label to see if a food is ultra-processed. As a rule of thumb: the longer the ingredient list, the more likely a food falls into the "ultra-processed" category. Another simple way to spot ultra-processed foods is to look for ingredients with longer, more complicated names; this suggests food additives, preservatives or unnatural colors and flavorings.

Drawbacks of processed foods:

Processing foods has some definite drawbacks, including removal of beneficial nutrients and increased presence of additions linked to poor health. For example, refining grains removes the part of the grain with the most fiber and phytonutrients. To make "ultra-processed" foods more pleasing and shelf stable, the amount of sugar, sodium, and fats may be increased to extreme levels.



Accessibility of processed foods: Convenience is another big reason processed foods became widespread. Between 1990 - 2010 the amount of processed foods that Americans ate tripled. This offered access to healthier options at a lower cost, such as with frozen fruits and vegetables. Packaged foods provide quick, easy solutions for busy families and individuals.

References:

- http://www.canr.msu.edu/news/what_is_a_processed_food
- <https://www.mcdonalds.com/us/en-us/about-our-food/nutrition-calculator.html>
- <https://www.potatogoodness.com/nutrition/>

(First published in "Healthy on the Job")

Rachel Tansey, MA, Senior FCHS Extension Associate of Monmouth County
Joanne Kinsey, MS, CWWS, FCHS Educator & Associate Professor of Atlantic & Ocean Counties

HEALTHY RECIPE: Slow Cooker Lentil Soup

<https://njaes.rutgers.edu/fchs/recipes/recipe.php?Slow-Cooker-Lentil-Soup>

Ingredients:

- 4 cups low sodium vegetable broth
- 1 - 14 oz can diced tomatoes (don't drain)
- 1 onion
- 2 medium carrots
- 1 cup lentils (any color)
- 1 tbsp. olive oil
- 2 cloves garlic
- 1 tsp. salt
- 1 tsp. tomato paste
- 1 bay leaf
- ½ tsp. ground cumin
- ½ tsp. coriander
- 2 tsp. cider vinegar; if you don't have vinegar use lemon or lime juice.



Preparation Steps:

1. Dice all the vegetables (onion & carrots), and mince garlic
2. Place all the ingredients (except for vinegar into a 4-quart slow cooker.
3. Mix to combine
4. Set the slow cooker to Low for 8 hours,
5. Remove bay leaf, stir in vinegar and garnish with cilantro