impactsolutions

A Guide to
Healthy Living
Options

WELLNESS basics

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WELLNESS basics

Introduction

This handbook is designed to cover the basics of healthy living in a way that's straightforward and easily applicable. Whether you're just discovering the role nutrition and exercise play in leading a vibrant, healthy life, or you run marathons and snack on fruits and vegetables, you're sure to find several nuggets of information inside this manual to help you make informed, smart decisions for you and your family.

The handbook is set up in three parts:

1. **EXERCISE,** which covers the basics of working out for better fitness and health;
2. **NUTRITION,** to introduce the basics of eating well;
3. **COMMON HEALTH ISSUES,** which takes a look at the chronic illnesses that plague millions of Americans every year—ones that are preventable with good diet and exercise.

Use this handbook as a reference as you continue on your journey to improved well-being. Knowledge is power. By learning the facts behind good nutrition and exercise when it comes to optimizing your health, you'll be able to make gradual, positive changes with ease.



Exercise: The Facts on Getting Fit

The health benefits that accrue from regular workouts for people of all ages are wide-ranging in scope. Children who are more active tend to have stronger bones and muscles and be at a healthier body size than those who are inactive, active adults are less likely to develop chronic diseases or depression, and people 65 and older who work out regularly tend to have better balance and flexibility than those who don't, according to the *2008 Physical Activity Guidelines for Americans,* available at http://www.health.gov/paguidelines/pdf/paguide.pdf.[1] But the pluses of exercising regularly don't stop there. Benefits include

- **A longer life**—Research has shown that physically active adults have a dramatically lower risk of premature death than those who are inactive, and the payoff doesn't require vigorous intensity or long hours at the gym.[2]
- **Lower risk of heart disease and stroke**—Aerobic exercise, which engages the heart, lungs, and blood vessels, reduces the risk of heart disease and stroke, two leading causes of death in the United States.
- **Lower risk of type 2 diabetes**—Not only does exercise lower the risk of getting type 2 diabetes, it helps control blood glucose levels in those who already have it.
- **Weight control**—Working out, when combined with eating healthy foods, can help you shed unwanted pounds and keep them off.
- **Stronger bones and joints**—Physical activity helps offset the gradual decline in bone density that occurs with age.
- **Fall prevention**—The middle aged and the elderly benefit from a reduced risk of falls and other functional limitations when they get regular exercise.
- **Reduced risk of certain cancers**—Studies have shown that folks who are physically active have a lower risk of cancers of the colon and breast than those who don't.[3,4]
- **Reduced depression and better sleep**—Not only will regular workouts lessen the chances of depression and cognitive decline, they also improve sleep quality.

FITNESS BASICS

Physical activity can be broken down into two categories, according to the *Guidelines*. **Baseline activity** encompasses light-intensity movements and activities performed throughout the day, like household chores, standing, lifting light objects, and walking slowly. While these activities are helpful, there's another category of activity that ups the ante. **Health-enhancing physical activity** is movement that, when added to baseline activity, improves or maintains physical fitness. Running and walking briskly fall under this category.

1 U.S. Department of Health and Human Services. (2008). *2008 physical activity guidelines for Americans.* Retrieved April 14, 2014, from http://www.health.gov/

2 Warburton, D. E. R., Nicol, C .W., & Bredin, S. S. D. (2006). Health benefits of physical activity: The evidence. *Canadian Medical Association Journal, 174*(6), 801809.

3 Slattery, M. L. (2004). *Physical activity and colorectal cancer. Sports Medicine, 34*(4), 239–252.

4 Holmes, M. D., Chen, W.Y., Feskanich, D., Kroenke, C. H., & Colditz, G. A. (2005). Physical activity and survival after breast cancer diagnosis. *Journal of the American Medical Association, 293*(20), 2479–2486.

What's the difference? A health-enhancing physical activity, like swimming laps, causes your heart to beat faster and the number of breaths per minute to increase. This strengthens your entire cardiovascular system by increasing the capacity of the lungs, the heart, the working muscles, and your circulatory system. Another example of a health-enhancing exercise is strength training. When you lift weights, your muscles contract and the connective tissue puts added pressure on the bone, which causes it to add mass and get stronger. The body responds and adapts to this kind of positive stress, resulting in improved health outcomes. When it comes to health-enhancing physical activity, the ***Guidelines*** suggest that adults get either of the following:

- A minimum of 150 minutes of moderate-intensity aerobic activity per week—Moderate intensity encompasses activity that causes you to break a sweat but is not so difficult you can't hold a conversation at the same time. Examples include brisk walking at 3 miles per hour, bicycling slower than 10 miles per hour, or playing doubles tennis
- A minimum of 75 minutes per week of vigorous-intensity aerobic activity—With vigorous-intensity aerobic activity, your heart beats fast and you're breathing hard, but you can still speak in short bursts. Examples include jogging, playing basketball, or playing singles tennis.

A combination of moderate and vigorous intensity works just as well. However, bear in mind that the relative intensity differs from one person to the next. A person who's just beginning a regular fitness routine may find brisk walking to be vigorous, while someone who regularly runs marathons would place it in the moderate category. For those new to exercise, jumping into vigorous activity may seem daunting, and it's better to start slowly and gradually build up endurance and strength. A weekly regimen of regular exercise, of doing an activity that's suited to your fitness level, is the ultimate goal and the one that will produce the most health benefits.

ACTIVITY DEFINED: WHERE DO YOU FALL?

- **Inactive:** No activity beyond baseline activities of daily living
- **Low activity:** More than baseline activity, but less than 150 minutes of moderate-intensity physical activity per week, or less than 75 minutes of vigorous-intensity activity
- **Medium activity:** 150 to 300 minutes of moderate-intensity activity per week, or 75 to 150 minutes of vigorous-intensity physical activity
- **High activity:** More than 300 minutes of moderate-intensity physical activity per week

THE DANGERS OF SITTING

While it's important to meet the minimum requirements of health-enhancing physical activity each week, what you do the other hours of the day matters just as much when it comes to good health. In fact, getting up and moving every so often, as part of your daily baseline

activity, is just as crucial as going for a brisk walk or playing a game of pickup basketball.

Over the past 50 years, the baseline activity of daily living has decreased, partly due to advances in technology. Look at it this way: Thirty years ago, retrieving a file required walking to a cabinet, opening a drawer, and returning to your desk. Today, all it takes is a click of the finger.

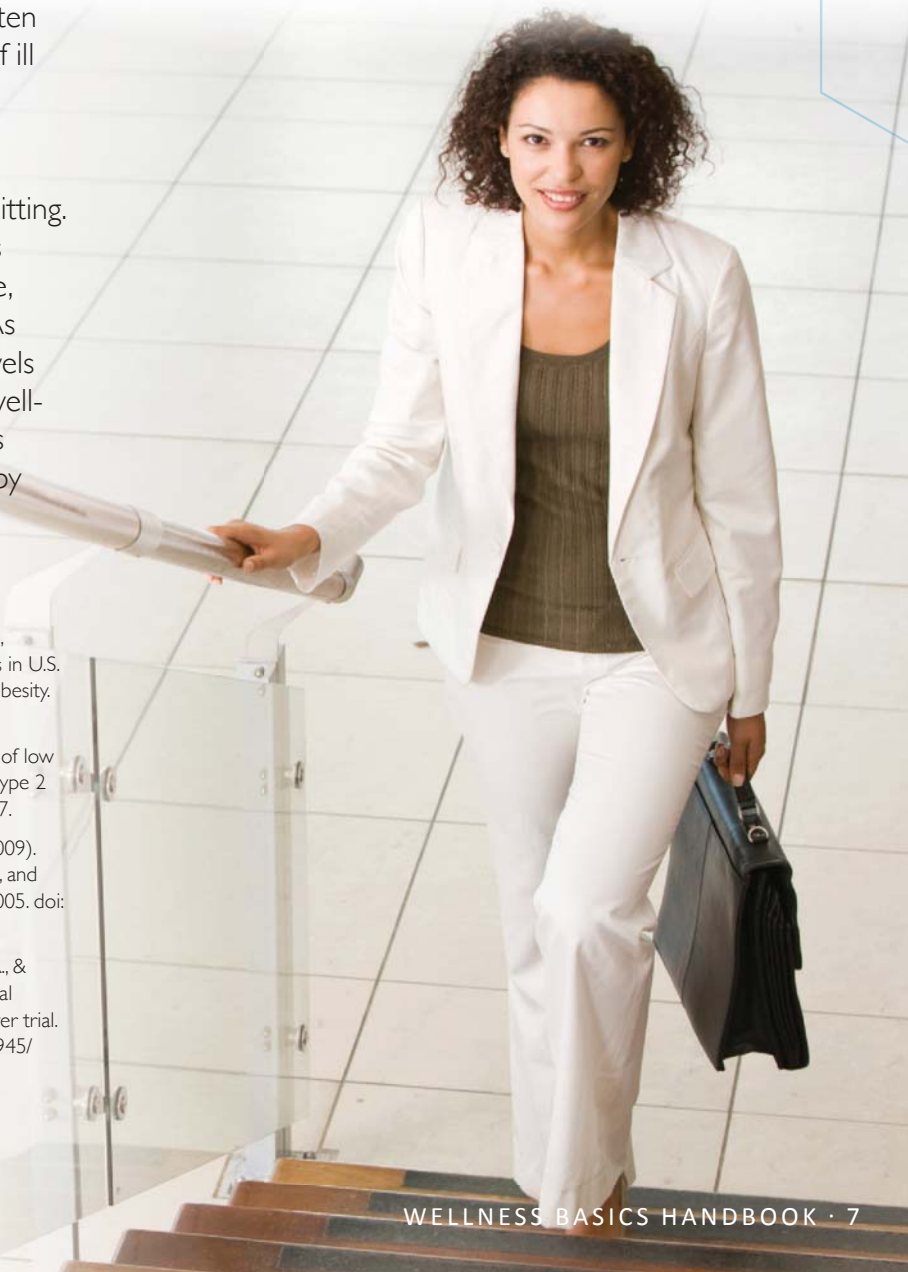
Not surprisingly, it's estimated that a person's daily job-related energy expenditure has decreased by more than 100 calories since 1960.[5] People are sitting more, and that takes a toll on health. Studies have linked prolonged sitting to higher rates of diabetes, heart disease, and death.[6,7] In fact, *sitting disease,* as it's often called, is as risky as tobacco use in terms of ill health effects.

Here's why: The body appears to have an adverse metabolic reaction to prolonged sitting. When large muscles like those in your legs aren't used for an extended period of time, certain enzymes automatically switch off. As a result, triglyceride, glucose, and insulin levels are negatively affected.[8] The takeaway? A well-rounded approach to good health includes boosting your daily baseline activity levels by getting up and out of your chair regularly.

WHAT TO DO

At Work

- Set an alarm to remind you to take a break from sitting every 30 minutes.
- Stand up whenever you're on the phone.
- Communicate in person with anyone within 500 feet of your desk, instead of dashing off an e-mail.
- Drink more water throughout the day. You'll have to get up in order to refill your water bottle, as well as use the restroom.
- If you can, have meetings on the go. Take a walk outside with your colleagues instead of gathering in a conference room.



5 Church, T. S., Thomas, D. M., Tudor-Locke, C., Katzmarzyk, P.T., Earnest, C. P., Rodarte, R. Q., et al. (2011). Trends over 5 decades in U.S. occupation-related physical activity and their associations with obesity. *PLoS ONE, 6*(5), e19657. doi: 10.1371/journal.pone.0019657

6 Hamilton, M. T., Hamilton, D. G., & Zderic, T. W. (2007). Role of low energy expenditure and sitting in obesity, metabolic syndrome, type 2 diabetes, and cardiovascular disease. *Diabetes*, *56*(11), 2655-2667.

7 Katzmarzyk, P.T., Church, T. S., Craig, C. L., & Bouchard, C. (2009). Sitting time and mortality from all causes, cardiovascular disease, and cancer. *Medicine and Science in Sports and Exercise*, *41*(5), 998-1005. doi: 10.1249/MSS.0b013e3181930355.

8 Peddie, M. C., Bone, J. L., Rehrer, N. J., Skeaff, C. M., Gray, A. R., & Perry, T. L. (2013). Breaking prolonged sitting reduces postprandial glycemia in healthy, normal-weight adults: A randomized crossover trial. *The American Journal of Clinical Nutrition, 98*(2), 358-66. doi: 10.3945/ajcn.112.051763.

- Try using a tracking tool like a pedometer or activity monitor (popular ones include the Fitbit Flex and Nike FuelBand), and aim for 10,000 steps per day.

At Home

- Take a walk after dinner instead of immediately sitting down in the front of the TV.
- During commercial breaks, get up and march in place.
- Instead of ordering in, head to the store for groceries and cook at home.
- Purchase an inexpensive pedometer to keep track of how many steps you take per day.

ON THE MOVE TO BETTER HEALTH

The facts are in: People who exercise are more likely to maintain a healthy body composition and size, live longer, and have a reduced risk for some serious chronic diseases. The *Guidelines* suggest doing muscle-strengthening activities on two or more days per week, and adding in flexibility and balance work is also a good idea. To make it easier, let's break it down.

AEROBIC ACTIVITY

What is it?

Aerobic activity stimulates the cardiovascular system by getting the blood and heart pumping, and this occurs when you move your large muscles in a rhythmic manner for a continuous time period. Besides intensity, aerobic activity can be broken down into two other components. *Frequency* describes how often you do it, and *duration* covers how long you spend exercising in any one session. The health benefits increase the more time you spend doing aerobic activity. For example, the risk of heart disease or diabetes drops even further for a person who does 300 minutes of activity a week, versus 150. The goal is to work out regularly, at whatever pace works for you, and avoid prolonged inactivity.

Recommendation

Do at least 10 minutes of aerobic activity at a time, preferably spread out over at least three days per week, working up to 150 minutes total. So taking a 50-minute brisk walk on Tuesday, Thursday, and Sunday would fit the bill. By spacing out your workouts, the risk for injury is lessened.

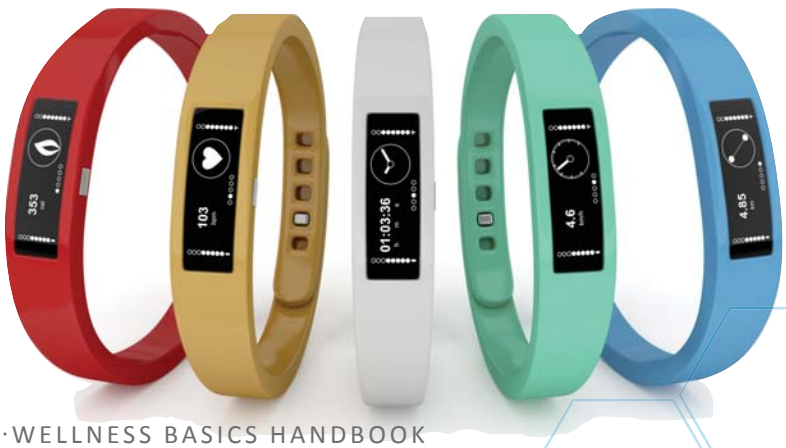
Examples of Aerobic Activity

MODERATE INTENSITY

- Brisk walking
- Social dancing
- Mowing the lawn
- Softball
- Doubles tennis
- Leisurely biking
- Downhill skiing

VIGOROUS INTENSITY

- Running
- Biking more than 10 miles per hour
- Swimming laps
- Soccer
- Basketball
- Hiking
- Climbing multiple flights of stairs
- Cross-country skiing





MUSCLE-STRENGTHENING ACTIVITY

What is it?

Just as aerobic exercise strengthens the cardiovascular system, muscle-strengthening activities increase bone strength and muscular fitness, which are important for minimizing the risk of injuries, improving bone density, and keeping your body strong and healthy. Workouts that incorporate exercises for all the major muscle groups (legs, hips, back, chest, abdomen, shoulders, and arms) can be performed using resistance bands, weights, or even your own body, in the case of push-ups, pull-ups, and sit-ups. The three components of muscle-strengthening activity are *intensity* (how much weight or force is used), *frequency* (how often the exercises are done), and *repetitions* (the number of times you lift the weight).

Recommendation

Strength training should be done at least twice per week, in addition to your cardio workouts. Look for a routine that covers all the major muscle groups, and do 8 to 12 repetitions of each exercise, building up to two or three sets as you become stronger. The rule of thumb is to use enough weight so the muscle is fatigued by the end of the set.

Examples of Muscle-Strengthening Exercises

- Rock climbing
- Lifting weights
- Using resistance bands
- Calisthenics
- Heavy gardening
- Yoga

BALANCE AND FLEXIBILITY

What are they?

As you get older, balance plays an important role in staying healthy. An 8-year-old who falls may end up with little more than a skinned knee, but an 80-year-old could easily end up in the hospital with a broken hip. Good balance, defined as the ability to move or remain in a position without losing control or falling, should be addressed well before then.

Flexibility is an important tool that enables you to move freely and without pain. If your joints, muscles, tendons, and ligaments lose their flexibility, simple tasks, like doing up the zipper of a dress or bending down to tie a shoelace, can become difficult over time. Stretches can keep your body moving fluidly.

Recommendation

Healthy adults can incorporate balance training through activities like yoga and tai chi a couple of times a week. For older adults, it's recommended that balance training be done three or more days per week. A series of stretching exercises, done at least twice a week, will keep your connective tissue and joints supple and help counteract the natural loss of flexibility that comes with age.

Examples of Balance and Flexibility Activities

- Yoga
- Tai chi
- Stretching
- Dance classes
- Pilates

TIPS ON STAYING HEALTHY AND STRONG AFTER 65

Older adults should get the same amount of activity as those under 65: at least 150 minutes a week of moderate-intensity or 75 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combo of moderate- and vigorous-intensity aerobic activity. But several considerations should be taken into account:

- If chronic illnesses or conditions interfere with getting the full requirement of exercise, then allowances should be made with the consultation of a medical professional.
- Two days a week, do muscle-strengthening activities. Examples include calisthenics, gardening, and carrying groceries.
- To prevent falls, perform balance-focused exercises three times a week. Examples include standing from a seated position, walking on your heels only or toes only, yoga, and tai chi.
- Spread workouts out across the week to avoid the risk of injury and overuse.
- Regular stretches will help keep the body supple and flexible.
- Avoid inactivity. Some exercise is better than none.

TIPS FOR PEOPLE WHO ARE OVERWEIGHT, HAVE CHRONIC CONDITIONS, OR ARE MOBILITY-IMPAIRED

Before embarking on a fitness program, a medical professional should be consulted to ensure safety is paramount. Keep in mind:

- Adults with disabilities may be able to perform aerobic and muscle-strengthening activity in accordance with the *Guidelines* recommendations for healthy adults. The types and amount of activity should be approved by a medical professional first.
- If you're currently inactive or overweight, start slowly and gradually progress over time to moderate-intensity activity.
- For people with chronic conditions, physical activity may be very beneficial in terms of lessening pain and improving quality of life and physical function.
- Regular exercise has been shown to help people with type 2 diabetes when it comes to weight management and as protection against heart disease. However, blood glucose levels must be monitored during workouts, and proper footwear should be worn for protection.
- For the obese or overweight, water exercise is often recommended as a safe, effective way to get moving, as the buoyancy provides added protection for the joints.

TIPS TO KEEP YOUR CHILDREN PHYSICALLY ACTIVE

The ***Guidelines*** recommend that children ages 6 to 17 get 1 hour of exercise every day, the majority of which should be moderate- or vigorous-intensity activity. They should also get muscle-strengthening and bone-strengthening physical activity at least 3 days a week. Here's how to help them achieve those goals:

- Set a good example by working out regularly yourself.
- Encourage muscle-strengthening, aerobic, and bone-strengthening activities that kids find fun, like climbing trees and playground equipment, swimming, basketball, jumping rope, and hopscotch.
- Get your child involved in organized sports. Examples include gymnastics, tennis, and soccer.
- Have contests to see who can do the most muscle-strengthening exercises like push-ups and sit-ups.
- Incorporate even more cardio by playing tag or going rollerblading.
- Go for a family bike ride or walk every night after dinner.

Nutrition: Food for Thought

Your body needs food for fuel, no question. Luckily, maintaining a healthy weight—by balancing the calories you take in versus the ones you expend in your day-to-day activities—doesn't require an advanced degree in nutrition. In this chapter, the basics of good eating, as covered in the *2010 Dietary Guidelines for Americans,*[9] available at http://www.health.gov/dietaryguidelines/dga2010/DietaryGuidelines2010.pdf, will be discussed.

9 U.S. Department of Agriculture and U.S. Department of Health and Human Services. (2010). *Dietary Guidelines for Americans,* 2010 (7th ed.). Washington, DC: U.S. Government Printing Office.

Everyone needs a certain amount of calories per day, which come from three sources: carbohydrates, protein, and fat. For moderately active adult women ages 19-50, it's around 2,000 to 2,200 calories per day, and moderately active adult men in the same age range require between 2,400 and 2,800 calories daily.

CALORIES

Carbohydrates

Although most people automatically think of foods like bread and pasta when it comes to carbohydrates, in fact they're a little more complicated than that. Carbs can be broken down into three categories: sugars, starches, and fiber, and all three play an important role in keeping the body in optimal condition. Sugar shows up naturally in fruits and dairy products, starches are found in foods like grains and potatoes, while fiber is in vegetables, fruits, beans, and whole grains. But not all sources of carbohydrates are created equal. For example, added sugars like corn syrup and sucrose can be dangerous when overconsumed, and most Americans get too many refined grains (a starch) in their diet. Around 45% to 65% of your daily calories should come from carbohydrates.

Protein

Protein should account for 10% to 35% of your daily calories, and for optimal energy, it's best to evenly distribute protein intake over the course of the day. The building blocks of protein are called ***amino acids***, nine of which are essential to your health, meaning they can't be synthesized by the body and must come from food sources. Meat, poultry, and fish are complete proteins, meaning they contain all nine amino acids, and they tend to be protein rich. Plants like beans, peas, spinach, and seeds may not have all nine amino acids but are still significant sources of protein.

Fats

Just like carbohydrates and protein, your body requires fats in order to survive. Total intake for adults should range from 20% to 35% of calories in the diet. However, fats come in several forms, and some are healthier than others. *Monounsaturated fats,* like olive oil and avocados, and *polyunsaturated fats*, which include fish oils, are healthier choices than ***saturated*** and *trans* fats. Saturated fats, found in animal products like beef and butter, are associated with higher levels of cholesterol, which is linked to cardiovascular disease. Trans fats, which can occur naturally but also tend to be added into foods during processing for texture and taste, are not essential to the diet and should be consumed at a minimum, as they are associated with an increased risk of heart disease, stroke, and type 2 diabetes.

Vitamins and Minerals

Vitamins and minerals are essential nutrients that the body isn't able to produce on its own but requires in order to work properly. For example, vitamin D helps the body form strong bones by enabling it to absorb calcium, vitamin B12 keeps nerve and blood cells healthy, while the mineral zinc plays a role in cell division and wound healing.

The best way to meet the daily requirements of vitamins and minerals is through nutrient-dense food sources—in other words, by eating a balanced diet, rather than popping a multivitamin. Not only do you get added benefits like fiber and antioxidants by eating whole foods, you may end up with too much of a good thing by taking supplements. For instance, excess vitamin A can cause headaches and liver damage, and some supplements may cause adverse interactions with certain prescription drugs. However, some exceptions do apply:

- **Folic acid**—Women who may become pregnant are advised to consume 400 mcg of folic acid per day from supplements or fortified foods, in addition to eating foods that naturally contain folate (like lentils and spinach), to reduce the risk of birth defects of the brain and spine.
- **Vitamin B12**—Adults older than 50, who may have a reduced ability to absorb B12, should take supplements or consume foods fortified with vitamin B12. The same goes for vegans, to ensure they are meeting the daily requirement.
- **Iron**—Iron supplements are routinely recommended for pregnant women.

Of course, your doctor will be able to determine which, if any, supplements are right for you, depending on your health and diet.

THE ABCS OF EATING RIGHT

Now that you know the percentage of carbohydrates, protein, and fats that should be consumed each day, as well as several important vitamins and minerals, it's time



to delve into specifics. In general, the American diet is lacking in vegetables, fruits, whole grains, dairy, and oils, which are associated with a reduced risk of several chronic diseases. The foods Americans do eat aren't varied enough when it comes to getting all the essential nutrients, and as a nation the U.S. tends to go overboard in terms of calories—all of which begs the question, "What should I be eating?"

Below are five categories of foods you want to include in your diet every day. In each section, you'll find examples, nutritional information, and recommended amounts per day.

GREEN LIGHT: FOCUS FOODS

Vegetables and Fruits

Getting the recommended amount of fruits and veggies each day results in a triple play when it comes to your health, as they're packed with nutrients, fight disease, and tend to be low in calories. For fresh, local produce, find your local farmer's market at http://www.localharvest.org/.

The daily recommendation of veggies for women 19 to 50 years old is 2¼ cups per day, and 2 cups for women over 51.[10] Adult men should consume 3 cups per day. The daily recommendation for fruit for women ages 19-30 is 2 cups per day, and 1½ cups for women 31 and older, while adult men should get 2 cups per day.

The more colorful veggies tend to be the most nutritious. Dark-green ones, like broccoli, spinach, Swiss chard, and kale, are low in calories yet boast important nutrients like vitamins A, C, and K, potassium, folate, and calcium. Red and orange vegetables, like tomatoes, red peppers, carrots, sweet potatoes, and pumpkin, tend to have lots of fiber, vitamins A and C, and beta-carotene. Fruits contain antioxidants, fiber, vitamins like A, C, and E, folate, and potassium. It's best to get most of your daily fruit servings from the actual fruit, whether fresh, canned, frozen, or dried, versus from juice. Juice lacks dietary fiber and may add unnecessary calories.

Whole Grains

Grains can be either whole or refined. Refined grains have been stripped of dietary fiber, iron, and many B vitamins to increase their shelf life (although they may be added back in later), and lack some

10 All daily recommendations from U.S. Department of Agriculture, ChooseMyPlate.gov (n.d.). *Food groups*. Retrieved April 20, 2014, from http://www.choosemyplate.gov/

of the health benefits of whole grains, which include the entire grain kernel. You can check to see if the food you're buying includes whole grains by checking the label—it should say so right near the top of the ingredient list.

At least half of the total grains eaten each day should be whole gains. Adult women should get 3 ounces of whole grains per day. Men between the ages of 19 and 30 should get 4 ounces a day, men between the ages of 31 and 50 should aim for 3½ ounces, and men 51 and older should get 3 ounces. Common types of whole grains include brown rice, oatmeal, quinoa, and wild rice, as well as whole wheat bread, crackers, and pasta. Whole grains offer dietary fiber, several B vitamins, and minerals like iron and magnesium, and are associated with a reduced risk of heart disease, type 2 diabetes, and obesity.

Dairy

Milk and milk products help with bone health and are linked to lower blood pressure and a reduced risk of type 2 diabetes and cardiovascular disease. Vital nutrients like calcium, vitamin D, protein, and potassium can be found in dairy products.

Adult men and women should get 3 cups of dairy each day. Kids, in particular, should be sure to get enough dairy, as bone mass builds up through childhood and adolescence. Children 2 to 3 years old should get 2 cups per day, children 4 to 8 years old should get 2½ cups, and children 9 to 18 should consume 3 cups. The best dairy products are those that are low-fat or fat-free. For example, skim or low-fat milk, low-fat or fat-free yogurt and frozen yogurt, and low-fat or reduced-fat cheeses are all excellent choices. People who are lactose intolerant, meaning they aren't able to fully digest the natural sugar found in dairy products, may have to modify the form or amount of dairy.

Protein

While the most obvious choices of protein may be meats and poultry, some surprising sources are processed soy products, beans, nuts, seeds, eggs, and seafood. Any meat or poultry choices should be lean or low-fat to avoid unnecessary saturated fats. Nutrients provided include not only proteins, but also vitamins B and E, and minerals like iron, zinc, and magnesium. Seafood contains omega-3 fatty acids that may help prevent heart disease.

Women ages 19 to 30 years old should get 5½ ounces of protein a day, and those 31 and older should get 5 ounces. Men ages 19 to 30 should eat 6½ ounces daily, ages 31 to 50 years should eat 6 ounces, and 5½ ounces for men 51 and older. The variety when it comes to protein is outstanding. Keep it lean when choosing beef and chicken. Lean beef cuts include round steaks and roasts, top loin, top sirloin, and chuck shoulder and arm roasts. Ground beef should be labeled at least 90% lean. Remove chicken skin before cooking, and opt for lean pork like pork loin, tenderloin, center loin, and ham.

Aim to eat 8 ounces of seafood a week. Types with lots of omega-3 fatty acids and little mercury include trout, salmon, and herring. Other great protein-rich foods include kidney, black, garbanzo, and pinto beans, black-eyed peas, lentils, tofu, and unsalted nuts.

Oils

Oils aren't a food group like fruits and vegetables, but they have some essential nutrients and so play an important role in a



healthy diet. Oils occur naturally in certain foods and are also extracted from plants to form the fundamental cooking staple. However, you don't need much. Although oils offer essential fatty acids and vitamin E, they can be high in calories.

Women ages 19 to 30 need 6 teaspoons of oils a day, and those over 30 only 5 teaspoons. Men ages 19 to 30 require 7 teaspoons, and above that, only 6. Oils can be found in nuts, olives, avocados, and seafood (good oily choices include tuna, salmon, sardines, and blue mackerel), as well as plant oils like canola, corn, olive, peanut, safflower, soybean, and sunflower oils.

So now you've stocked your pantry full of fruits, veggies, and lean proteins, let's talk about some items you might want to cut down on. Some of these add empty calories, and many are associated with a higher risk of disease. Knowing what ***not*** to put in your shopping cart is just as important as knowing what you should.

RED LIGHT: FOOD AND FOOD COMPONENTS TO AVOID

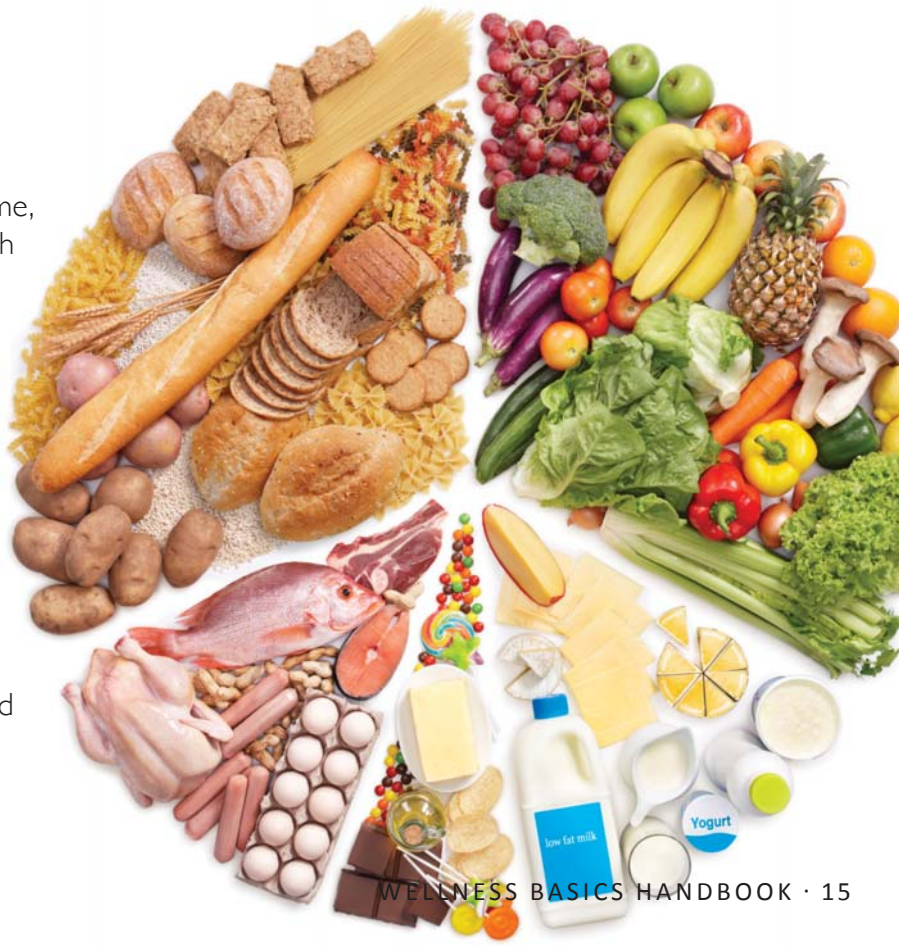
Sodium

Sodium isn't all that bad—you do need some, but in small quantities. Consuming too much sodium tends to lead to higher blood pressure, and that's not good for your heart. The average American gets about 3,400 mg per day, when only 2,300 mg is needed. The specific amount depends on age and health factors. Folks who are over 51, African American, or subject to hypertension, diabetes, or chronic kidney disease should lower their sodium intake even further, to 1,500 mg. Sodium in the U.S. diet comes not only from table salt, but also from processed foods like salad dressing, frozen dinners, and cured meats.

While shopping, take a close look at the Nutrition Facts label to check sodium amounts. Avoid processed foods, and use as little salt as possible during cooking and dining.

Solid Fats

How can you tell if a fat falls into the not-so-healthy saturated or trans fat category? A good clue is if, at room temperature, it becomes a solid (for example, butter or lard). Some of the trans fats we consume are synthetic, added through a process called *hydrogenation* that keeps foods resistant to spoiling. Big red light here. Less than 10% of your daily calories should come from saturated fatty acids, and keep trans fats to a minimum. Popular foods that contain solid fats are full-fat cheese, sausages, hot dogs, bacon, pizza, ice cream, cakes, cookies, pastries, and doughnuts, while synthetic trans fats can be found in margarines, cakes, cookies, crackers, icings, and microwave popcorn.



Refined Grains

Refined grains are the nutrient-challenged cousins of whole grains, and although they may be enriched with some of the vitamins and minerals stripped out during the refining process, they're often made with solid fats and added sugars. Most Americans consume around 6.3 ounces per day, when they shouldn't eat more than 3 ounces. Try to steer clear of white grains, as these tend to fall into the refined category. Common examples include white flour, white bread, white rice, pasta, and noodles.

Added Sugars

Added sugars make up a surprising 16% of the total calories in American diets. These add little or no nutrients or fiber and tend to come with a whole lot of calories. They not only cause tooth decay but also play a role in diabetes, obesity, and other serious health issues. Limit added sugars as much as possible. Check the nutrition label for any of the following ingredients: high fructose corn syrup, white sugar, brown sugar, corn syrup, corn syrup solids, raw sugar, malt syrup, maple syrup, pancake syrup, fructose sweetener, liquid fructose, honey, molasses, anhydrous dextrose, and crystal dextrose. Added sugars tend to show up in sodas, energy and sports drinks, desserts, sweetened fruit drinks, and candy. Cut them down, and your body will thank you.

THE SKINNY ON LOSING WEIGHT

As a country, America is becoming more obese. In the late 1970s, the prevalence of obesity among adults was 15%.[11] Today, it's 34.9%.[12] Unfortunately, being overweight or obese is associated with increased risk of serious health issues, like type 2 diabetes, heart disease, and certain types of cancer.

First off, how can you tell if you're overweight or obese? One method is to determine your *body mass index*, or BMI. To figure it out, divide your weight in pounds by your height in inches squared, then multiply by 703. If your BMI is less than 18.5, you're underweight; 18.5 to 24.9 means your weight is healthy; 25.0 to 29.9 means you're overweight, and 30.0 or over means you're in the obese category.

For example, a woman who weighs 140 pounds and is 5'5" (65 inches) tall would calculate her BMI like this: 140 ÷ (65 x 65) = .033, and .033 x 703 = **23.2**. Or you can enter your height and weight into this handy online calculator at http://www.cdc.gov/healthyweight/assessing/bmi/index.html. Keep in mind that BMI is just one measure of fitness; others include waist circumference and the percentage of body fat.

The average American gains a pound a year between the ages of 20 and 60.[13] We tend to eat foods that are high in energy but low in nutrition, like pizza, grain-based desserts (including cakes, doughnuts, and pies), and sweetened beverages like soda, and energy and sports drinks.[7] These end up making people undernourished yet overweight. No wonder waistlines are expanding!

11 U.S. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. (Reviewed 2011, January 14). *Obesity: United States, 1988-2008.* Retrieved June 20, 2014, from http://www.cdc.gov/

12 U.S. Centers for Disease Control and Prevention. (Reviewed 2014, March 28). *Adult obesity facts.* Retrieved June 20, 2014, from http://www.cdc.gov/

13 U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. (n.d.). *Part B. Section 2: The total diet: Combining nutrients, consuming food.* Retrieved June 20, 2014, from http://www.cnpp.usda.gov/

The amount of calories you need to take in each day depends on your activity level, height, gender, and age. Figure out your daily calorie allowance using the online calculator at http://www.choosemyplate.gov/myplate/index.aspx. Once you know how many calories you should be taking in each day, it's time to start making changes in your eating habits. There's a lot you can do to choose foods that are not only lower in calories, but nutrient-rich as well. For example, try these tactics:

- **Eat more whole grains, fruits, and vegetables.** These have fiber, which fills you up and keeps you feeling satiated.
- **Cut out the sweetened drinks.** The empty calories from sugary drinks like sodas only pack on the pounds.
- **Cut down on the alcohol.** By cutting down the number of drinks you have, you'll quickly cut back on calories as well.
- **Keep a record of what you eat and drink each day.** This helps prevent mindless eating.
- **Beware of dining out.** Here's where the calories get out of control. Scan the menu for lower-calories options, or split an entrée. And avoid fast-food restaurants as much as possible.
- **Watch your portions.** Knowing what a normal serving size looks like will help you control portions and calorie count.
- **Toss the temptations.** Don't keep treats like cookies in the pantry and ice cream in the freezer. Instead, replace them with healthy snacks you enjoy.

If you want to lose weight, you'll need to reconfigure the balance by expending more energy through exercise and cutting back on calories. Enlisting the assistance of a registered dietician can help you get on the right track when it comes to losing weight and keeping it off.

FISH AND MERCURY: WHAT YOU NEED TO KNOW

Nearly all fish contain some amount of mercury, which occurs naturally but is also released into the air through industrial pollution and ends up in streams and oceans. However, the heart-healthy benefits of eating seafood outweigh the risks, as long as a variety is consumed and fishes high in mercury are avoided. The four types of seafood considered high in mercury are tilefish, shark, swordfish, and king mackerel, and women who are pregnant or breast-feeding should avoid these completely. Low-mercury choices include light canned tuna, salmon, anchovies, herring, sardines, and trout. However, pregnant and breast-feeding women should limit their consumption of light canned tuna to 12 ounces or less per week. Consumers can get a pocket guide or download an app to find ocean-friendly, safe seafood via Monterey Bay Aquarium's Seafood Watch at http://www.seafoodwatch.org/cr/cr_seafoodwatch/sfw_consumers.aspx.

DIET EXAMPLES

Below are some examples of healthy diets mentioned in the ***Dietary Guidelines for Americans*** that are easy to maintain and have been proven to reduce the risk of not only heart disease, but several other chronic diseases.

The Mediterranean Diet

Back in the 1950s and '60s, scientists found that the people who lived on Crete, an island in the Mediterranean Sea, had a very low incidence of cardiovascular disease. At that time, the diet of the people of Crete was limited to foods that were easily available, like olives, fish, and fresh fruits and vegetables, and researchers wondered if the secret to the islanders' good health lay in the foods they ate. In fact, studies have shown that adhering to a *Mediterranean diet* results in a lower risk for not only heart disease, but also Alzheimer's, Parkinson's, cancer, and diabetes.[14,15] The Mediterranean diet is easy to follow and includes many delicious choices. Here are the key components:

- Eat fish and poultry at least twice a week, but consume red meat only a few times a month.
- Skip the salt. Use herbs and spices instead.
- Use olive oil as a drizzle on salads, for dipping bread, and while cooking.
- Eat lots of plant-based foods, like fruits and vegetables.
- Enjoy legumes, nuts, and seeds. When choosing nuts, go for almonds, pecans, and walnuts, but limit yourself to a handful per day.

- For grains, choose non-refined, whole wheat options.
- Enjoy a glass of red wine, in moderation. For men over the age of 65 and women, that means less than 5 ounces per day; men under the ages of 65 should drink less than 10 ounces a day. And if you don't drink at all, there's no need to start. This is an optional recommendation.
- Limit dairy to low- or no-fat choices, including yogurt, cheeses, and milk.

Sample Mediterranean diet plan, from the American Diabetes Association (http://www.diabetes.org/mfa-recipes/tips/2011-09/featured-article-the.html)

- Breakfast: bran flakes with cubed cantaloupe and soy nuts
- Lunch: salmon stuffed with spinach and feta, a side of herb and olive oil mashed potatoes, steamed sugar snap peas, and a peach
- Snack: hummus with cucumber slices and baby carrots
- Dinner: mozzarella, tomato, and chickpea salad with ½ whole wheat pita, Greek yogurt dip, and a handful of grapes
- Evening snack: Greek yogurt mixed with chopped pecans and a clementine

The DASH Diet

For folks who struggle with high blood pressure, the *DASH diet* (http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/new_dash.pdf), which stands for *Dietary Approaches to Stop Hypertension*, is a smart way to eat well while

14 Sofi, F., Abbate, R., Gensini, G. F., & Casini A. (2010). Accruing evidence on benefits of adherence to the Mediterranean diet on health: An updated systematic review and meta-analysis. *American Journal of Clinical Nutrition, 92*(5), 1189–1196.

15 Salas-Salvadó, J., Bulló, M., Babio, N., Martínez-González, M. Á., Ibarrola-Jurado, N., Basora, J. et al. (2011). Reduction in the incidence of type 2 diabetes with the Mediterranean diet. *Diabetes Care*, *34*(1), 14-19.



keeping sodium intake low and increasing important nutrients like potassium, calcium, magnesium, protein, and fiber. The diet is recommended for people who have high blood pressure, diabetes, or chronic kidney disease, as well as African Americans and all adults over 51 years old.

The DASH diet is endorsed by the National Institutes of Health, and research has found that the plan has a positive effect when it comes to lowering hypertension.[16] The basics include the following:

- Consume no more than 1,500 mg of sodium per day.
- Eat more fruits and vegetables.
- Choose low-, reduced-, or no-salt condiments and foods.
- Avoid cured meats, foods in brine (like pickles), and condiments.
- Keep saturated fats, cholesterol, and total fats low.
- Choose dairy products that are fat-free or low-fat.
- Enjoy whole grains, fish, poultry, beans, seeds, and nuts.
- Eat less sweets, foods with added sugars, sugary beverages, and red meats.

Sample DASH daily menu, from the National Heart, Lung, and Blood Institute

- BREAKFAST: oatmeal (not instant) with cinnamon; mini whole-wheat bagel with peanut butter; banana; low-fat milk
- LUNCH: chicken breast sandwich on whole wheat with low-sodium Swiss cheese, romaine lettuce, tomato, and low-fat mayo; cantaloupe chunks; apple juice
- SNACK: handful of unsalted almonds and dried apricots
- DINNER: spaghetti with vegetarian sauce made from low-sodium tomato paste; spinach salad with carrots, mushrooms, and homemade vinaigrette; ½ cup cooked corn; ½ cup pears
- SNACK: fat-free fruit yogurt with no added sugar

Vegetarian Diets

The term *vegetarian* is vague, as a number of subgroups exist within the category, like *vegans* (who don't consume any animal products), *lacto-vegetarians* (who eat plant foods plus dairy), and *lacto-ovo vegetarians* (who add in eggs as well). Studies have found that these types of diets have a positive effect on health, in terms of lower obesity levels and reduced risk of heart disease, high blood pressure, and diabetes, as well as some forms of cancer.

In general, vegetarians consume less saturated fatty acids, total fat, cholesterol, and calories than people who eat meat, as well as more vitamin C, fiber, and potassium. However, there are some nutrients that vegetarians need to make an effort to include in their diet, like protein, iron, vitamins B-12 and D, calcium, and zinc.

Luckily, it's easy to get these nutrients in other ways. For example, consuming varied plant proteins, including beans, nuts, peas, and soy

16 Sacks, F. M., Svetkey, L. P., Vollmer, W. M., Appel, L. J., Bray, G. A., Harsha, D., et al. (2001). Effects on blood pressure of reduced dietary sodium and the dietary approaches to stop hypertension (DASH) diet. *New England Journal of Medicine, 344*, 3-10.

products like tofu, can offset the absence of animal proteins. Dried beans, whole wheat breads, and spinach are rich in iron; kale, calcium-fortified soy milk, and broccoli are a good source of calcium; and vitamin D can come from sunlight as well as supplements. Zinc can be found in grains, legumes, and nuts. Finally, vitamin B-12 should be sought out in supplement form or in fortified foods like cereals, veggie burgers, and soy drinks.[17]

Tips for Vegetarians

- Great protein substitutes are easy to find. Try soy-based products like veggie burgers, tofu, and tempeh instead.
- The key to a healthy vegetarian diet is variety. Stretch your taste buds and try plants like collard, turnip, or mustard greens, or check out chickpeas, in the form of hummus and falafel.
- Make beans, lentils, and rice your go-to choices for proteins that, when combined, provide essential amino acids.
- Request vegetarian modifications when dining out, or visit Indian and Asian restaurants for lots of non-meat options.

17 American Heart Association. (Reviewed 2014, March 19). *Vegetarian diets.* Retrieved June 20, 2014, from http://www.heart.org/

Common Health Issues

You probably know at least one person who's suffered from one of the diseases listed below, as they're among the top 10 causes of death of in the U.S.[18] But they're by no means inevitable. Below are explanations of each disease, along with active measures you can take to reduce your risk of falling ill.

CARDIOVASCULAR DISEASE

Heart disease is the number leading cause of death for both men and women in the U.S., with approximately 600,000 people dying each year.[19] The causes of cardiovascular disease are varied. For example, if cholesterol builds up along the artery walls, it reduces the flow of blood to the heart. High blood pressure puts added force against artery walls, and high blood sugar from diabetes slowly damages blood vessels. Risk factors include having high blood pressure, high cholesterol, or diabetes, being overweight or obese, and being inactive. Smoking also increases the risk of heart disease, as does stress, excessive alcohol use (which can lead to high blood pressure), and an unhealthy diet.

18 U.S. Centers for Disease Control and Prevention. (Updated 2013, December 30). *Leading causes of death.* Retrieved June 20, 2014, from http://www.cdc.gov/

19 Murphy, S. L., Xu, J. Q., & Kochanek, K. D. (2013). Deaths: Final data for 2010. *National Vital Statistics Report, 61*(4), 5.



Steps for Prevention and Management

- Eat fruits and vegetables, whole grains, lean protein, and good fats.
- Do regular aerobic exercise that puts positive stress on the heart and lungs.
- Find ways to manage stress.
- Lose excess weight.
- Stop smoking.

CANCER

Cancer, the second most common cause of death in the U.S.,[7] occurs when abnormal cells grow out of control. Causes are wide ranging, including genetics, environmental exposures, and lifestyle factors like poor diet and not getting enough exercise. The good news is that more than half of cancer deaths are preventable, according to the American Cancer Society.[20] For example, a diet high in red meat and processed meats increases the risk for colorectal cancer, while people who consume lots of fruits and vegetables appear to be at a lower risk. The chance of getting cancer goes up if you smoke (lung cancer is the leading cause of cancer death among men and women in the U.S.), get too much sun exposure, are overweight or obese, are a heavy drinker, eat unhealthily, or don't exercise.

Steps for Prevention and Management

- Quit smoking, or don't start in the first place.
- Eat a diet rich in vegetables, fruit, poultry, fish, and low-fat dairy products.
- Get active by exercising regularly.
- Maintain a healthy weight.
- When outside, protect yourself from exposure to ultraviolet rays by wearing a hat and sunglasses and using sunscreen.
- Don't drink excessively.

DIABETES

Diabetes contributes to over 230,000 deaths each year, according to the American Diabetes Association.[21] Type 2 diabetes is the most common, occurring in 90% to 95% of cases.[22] The body normally secretes a hormone called *insulin*, which helps metabolize sugar into glucose. An unhealthy diet or extra weight can promote insulin resistance, which means the insulin can't do its job and blood glucose levels rise. If diabetics don't control their blood sugar levels, serious problems like hyperglycemia and nerve, kidney, and heart damage may occur. The chance of getting diabetes increases if you're overweight, make poor food choices, or don't get enough exercise.

Steps for Prevention and Management

- Lose weight if you're overweight or obese. Losing even 10 to 15 pounds can make a difference.
- Fill your diet with fruits and vegetables, lean meats, low-fat dairy products, and whole grains.
- Avoid soda and calorie-rich, nutrient-poor snack foods and candy.
- Do regular aerobic, strength training, and flexibility exercises.

20 American Cancer Society. (n.d.). *The importance of behavior in cancer prevention and early detection.* Retrieved June 20, 2014, from http://www.cancer.org/

21 American Diabetes Association. (2014, June 10). *Statistics about diabetes.* Retrieved June 20, 2014, from http://www.diabetes.org/

22 U.S. Centers for Disease Control and Prevention. (Updated 2011, August 1). *Diabetes.* Retrieved June 20, 2014, from http://www.cdc.gov/

- Keep moving. Don't sit in one place for too long.

GOOD HEALTH: BEYOND DIET AND EXERCISE

Along with chronic illnesses, a number of other issues can negatively impact your quality of life. Sleeping well and keeping stress levels low are essential to feeling your best on a day-to-day basis. The habitual use of drugs and tobacco can have a devastating effect on your well-being, as can mental illness, which strikes tens of millions of people each year.

COMMON MENTAL HEALTH DISORDERS

Eating well and getting exercise are vital to keeping your mind sharp and your mood positive, and have been shown to reduce the risk of developing a mental illness.[23] Although the exact cause of mental illness is unknown, it's believed to be due to a combination of genetic, environmental, psychological, and developmental factors, according to the National Institute of Mental Health.[24] In 2013, only 40% of people with a mental illness received treatment, yet a number of therapies exist that can successfully help alleviate or control symptoms.[25] Common types of mental illness include the following.

Anxiety Disorders

Anxiety is one of the more common mental health disorders experienced by Americans, striking 18% of adults each year.[15] Although anxiety is a normal reaction to stress, those with the disorder are overwhelmed by anxiety and find it affects their daily lives. Examples of anxiety disorders include post-traumatic stress disorder, phobias, and compulsive disorder, and typical symptoms include irrational fears and dread. Treatments usually include cognitive behavioral therapy and medications like antianxiety drugs, beta-blockers, and antidepressants.

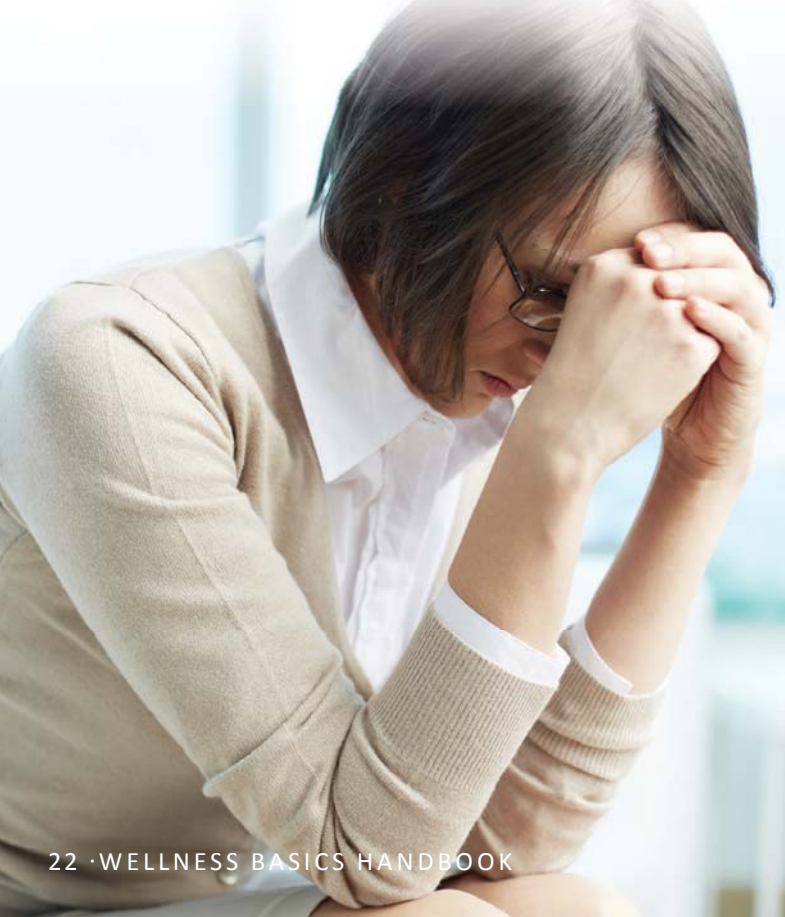
Depressive Disorders

People who are depressed don't simply feel down for a couple of days—it's a painful, lingering illness that affects just under 7% of adults each year.[15] Symptoms include feelings of hopelessness, guilt, emptiness, irritability, fatigue, and thoughts of suicide. Common treatments include medication and psychotherapy.

Other Disorders

Mental illness manifests itself in many ways, and getting the right diagnosis can lead to long-term improvement. Seasonal depression, known as *seasonal affective disorder,* tends to strike at the same time each year and can be treated with

23 National Alliance on Mental Illness. (n.d.). *Exercise and mental illness*. Retrieved June 20, 2014, from http://www.nami.org/



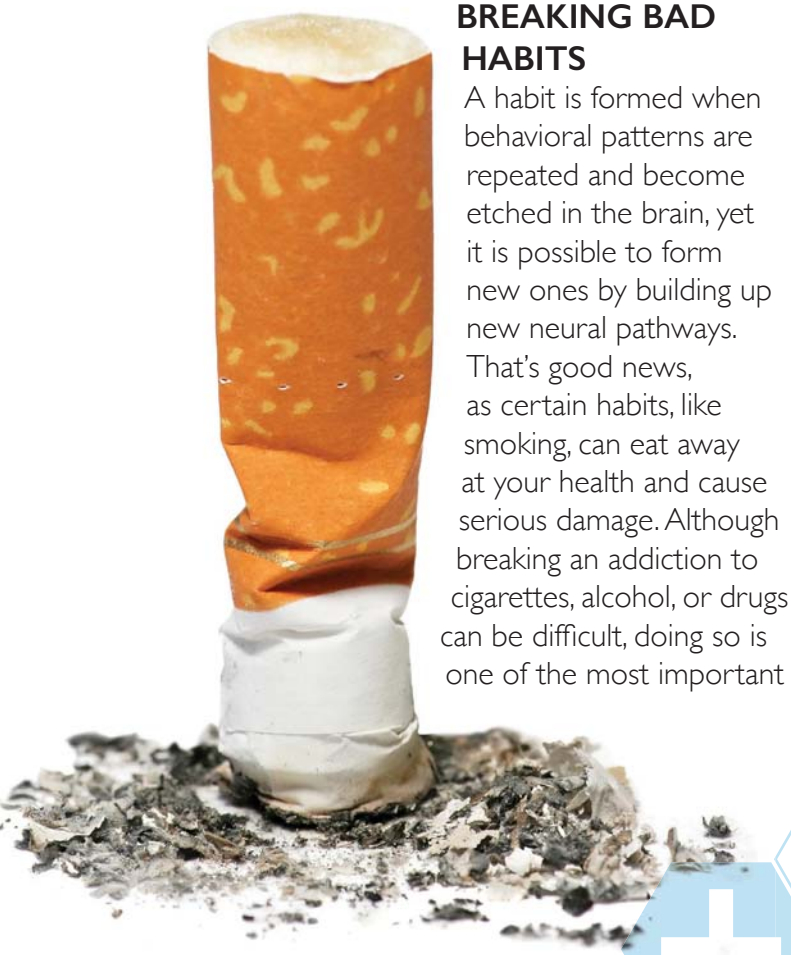
24 U.S. National Institute of Mental Health. (n.d.). *What is anxiety disorder?* Retrieved June 20, 2014, from http://www.nimh.nih.gov/

25 National Alliance on Mental Illness. (Reviewed 2013, March). *Mental illness facts and numbers*. Retrieved June 20, 2014, from http://www.nami.org/

light therapy, psychotherapy, and medications. Treatments for serious illnesses like bipolar disorder, borderline personality disorder, eating disorders, and schizophrenia have improved markedly in the past couple of decades. No matter what kind of mental illness you may be struggling with, the first step is to obtain professional help and realize you're not alone.

WHOM TO CALL

If you're not sure whom to turn to for professional help, reach out to someone like a doctor, nurse, religious leader, or counselor who might be able to refer to you a mental health specialist. You can also find references through your employee assistance program, your insurance company, social service agencies, and mental health hotlines. Of course, if you're experiencing a severe crisis, go immediately to your local emergency room. More resources can be found on the National Alliance on Mental Illness Web site at http://www.nami.org/.



BREAKING BAD HABITS

A habit is formed when behavioral patterns are repeated and become etched in the brain, yet it is possible to form new ones by building up new neural pathways. That's good news, as certain habits, like smoking, can eat away at your health and cause serious damage. Although breaking an addiction to cigarettes, alcohol, or drugs can be difficult, doing so is one of the most important ways to avoid getting seriously ill or dying prematurely.

Smoking

Tobacco use remains the single largest preventable cause of death and disease in the U.S., killing 443,000 Americans each year.[26] If you quit, your chances of having cancer, heart attacks, stroke, heart disease, and cataracts will be reduced, and your blood pressure will drop. Your skin and teeth will look better, and your lung capacity will increase. But quitting a powerful drug like tobacco isn't easy. A great place to start is http://smokefree.gov/. You'll find reasons to quit, ways to prepare for quitting, and where to find support.

Drugs and Alcohol

The use of illicit drugs has risen among Americans ages 12 or older since 2002, and in 2012, 17 million people were dependent on alcohol or had problems related to their drinking. Unfortunately, only 11% of those who needed it received treatment at a specialty facility, a woefully low figure.[27] Risk factors that may increase your vulnerability to drug abuse include a family history of drug abuse, a traumatic childhood, and having a mental disorder, but it's not certain why some people become addicted and others don't. What is proven is that abusing alcohol and drugs changes the way your brain works, interfering with your ability to think clearly and show good judgment. Common signs of addiction include building up a tolerance, experiencing withdrawal symptoms like restlessness or

26 U.S. Centers for Disease Control and Prevention. (2012). Current cigarette smoking among adults—United States, 2011. *Morbidity and Mortality Weekly Report, 61* (44), 889–894.

27 Substance Abuse and Mental Health Services Administration. (2013). Results from the *2012 National Survey on Drug Use and Health: Summary of national findings*. NSDUH Series H-46, HHS Publication No. (SMA) 13-4795.

nausea, and revolving your life around the next hit, drink, or pill. However, it is possible to quit. Call 1-800-662-HELP for a free referral helpline from the Substance Abuse and Mental Health Services Administration. For more information on quitting, visit http://www.recovery.org/.

Conclusion

Once you're armed with the facts, good health is easily attainable. But don't change your behavior just because you want to avoid some serious illnesses like diabetes, cancer, and heart disease down the road (although it's a great reason). Do it because you want to pass down the tools for healthy living to your children. Do it because you want to live life to the fullest. Do it because you want to feel great. Staying healthy should be considered a priority, even when life is at its most hectic. The result? Longer, happier, and more fulfilling lives for you and your family.

Additional Resources

2008 Physical Activity Guidelines for Americans, from the U.S. Department of Health and Human Services

American Diabetes Association

American Cancer Society

American Heart Association

U.S. Centers for Disease Control and Prevention

ChooseMyPlate.gov, from the U.S. Department of Agriculture

Dietary Guidelines for Americans, 2010, from the U.S. Department of Agriculture and the U.S. Department of Health and Human Services

Harvard School for Public Health

Localharvest.org

U.S. National Alliance on Mental Illness

U.S. National Cancer Institute

U.S. National Heart, Lung, and Blood Institute

U.S. National Institute of Mental Health

U.S. National Institutes of Health

U.S. NIH Osteoporosis and Related Bone Diseases

U.S. National Resource Center

Recovery.org

Smokefree.gov

Healthy People 2020 (http://www.cdc.gov/nchs/healthy_people/hp2020.htm)

American Council of Exercise

impactsolutions

TOLL-FREE: 800-227-6007
WEBSITE: www.myimpactsolution.com

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WELLNESS basics

A Guide to Healthy Living Options