



“Therapeutic Weight Management and Physical Fitness for Emotional Health”

This .pdf document contains the course materials you must read.

Simply keep scrolling down and read every page. To receive CEU credit after reading this file, please follow the directions at the end of the course.

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Therapeutic Weight Management and Physical Fitness for Emotional Health

6 CEU Credits

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Course Description:

Being physically fit helps improve depression, self-esteem, confidence and sexual satisfaction. Who is more qualified than a behavioral health professional to help someone lose weight? This course provides nutrition and fitness guidelines, weightloss strategies and a get-started "Healthy By Habit" Game Plan designed to help clients improve their overall emotional and physical health.

Course Objectives:

The primary objectives of the course are to enable a mental health professional to:

1. Understand proper nutrition, fitness and weight management guidelines for diverse population groups.
2. Explore how weight management can be of benefit emotionally to mental health clients.

Purpose of this course:

The purpose of this CEU course is to provide discussion of issues relevant to the mental health counselor on healthy standards for weightloss, nutrition and physical fitness, as related to emotional health concerns.

Course Outline:

Part 1: Course organization, Documentation and Introduction.

Part 2: Reading of the course materials (this document)

Part 3: Administration and Completion of the Evaluation of Learning Quiz

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6 Clock Hours / CE Credits

If you ever have any questions concerning this course, please do not hesitate to contact **PeachTree at (800) 390-9536.**



Your instructor is **Richard K. Nongard**,
a Licensed Marriage and Family Therapist,
Certified Clinical Hypnotherapist
and a Certified Personal Fitness Trainer.

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THERAPEUTIC WEIGHT MANAGEMENT AND PHYSICAL FITNESS FOR EMOTIONAL HEALTH

A 6 Credit Hour Continuing Education Course

INTRODUCTION

A message from your instructor, Richard K. Nongard, LMFT/CCH

Some people may wonder why a course on weightloss and physical fitness would be included in a catalogue of mental health continuing education courses for social workers, professional counselors, marriage and family therapists, substance abuse counselors and psychologists. The answer is simple: we are only as healthy emotionally as we are physically; our physical health impacts us emotionally - and who is more qualified to help someone change their unhealthy behaviors and develop a healthy lifestyle - than a behavioral health professional such as yourself?

Those who are overweight or obese generally have self-esteem issues, self-image issues, self-confidence issues, depression issues, anger issues, anxiety issues, and other emotional difficulties that are only compounded by their unhealthy physical condition.

A person's weight and physical health status, whether healthy or unhealthy, can and does affect so many other aspects of their life: sexual satisfaction and performance, public image, job performance and qualifications, general emotional state, medical conditions, and so forth.

If you can help an overweight person to lose weight and become physically healthy, you will have a greater chance of simultaneously improving their presenting mental health problems.

In fact, physical exercise has been determined to be as effective - and in many cases more effective - than medications, for many conditions, such as major depression.

This course provides a wealth of information on both guidelines for nutrition and weight management and physical fitness guidelines, as well as a practical get-started "Healthy By Habit" Game Plan for achieving overall health.

There are no 'fad diet' plans here; the information is fundamental and practical, based on government research and common sense.

This course provides the basic information necessary to educate clients on how they need to eat and exercise in order to live a healthy lifestyle. You may copy the education sheets and share them with your clients.

But in order for these concepts to work, the client must take action. Anything (safe) that may motivate and assist the client to take positive action towards losing weight and increasing their physical health should be explored and encouraged.

These ideas might include a clinical hypnosis session or two, joining a gym or fitness group, or participating in a Weight Watchers type program that promotes healthy nutrition and portion size, combined with peer support, and so forth.

We hope you enjoy this course and find it beneficial. We feel certain that despite some of the redundancy of information you may already know, you will still find it interesting on the whole, and perhaps even helpful for your own physical and emotional health, as well.

Should you wish to further your education in this area and help more clients achieve a healthy lifestyle by becoming a **Certified Therapeutic Weight Management Specialist**, please contact our office or visit the Certification section of our website at www.FastCEUs.com.

Sincerely,



Richard K. Nongard
Licensed Marriage and Family Therapist
Certified Personal Fitness Trainer
Certified Clinical Hypnotherapist
Executive Director

The primary concern of overweight and obesity is one of health and not appearance.

PREMATURE DEATH

- An estimated 300,000 deaths per year may be attributable to obesity.
- The risk of death rises with increasing weight.
- Even moderate weight excess (10 to 20 pounds for a person of average height) increases the risk of death, particularly among adults aged 30 to 64 years.
- Individuals who are obese (BMI > 30)* have a 50 to 100% increased risk of premature death from all causes, compared to individuals with a healthy weight.

HEART DISEASE

- The incidence of heart disease (heart attack, congestive heart failure, sudden cardiac death, angina or chest pain, and abnormal heart rhythm) is increased in persons who are overweight or obese (BMI > 25).
- High blood pressure is twice as common in adults who are obese than in those who are at a healthy weight.
- Obesity is associated with elevated triglycerides (blood fat) and decreased HDL cholesterol ("good cholesterol").

DIABETES

- A weight gain of 11 to 18 pounds increases a person's risk of developing type 2 diabetes to twice that of individuals who have not gained weight.
- Over 80% of people with diabetes are overweight or obese.

CANCER

- Overweight and obesity are associated with an increased risk for some types of cancer including endometrial (cancer of the lining of the uterus), colon, gall bladder, prostate, kidney, and postmenopausal breast cancer.
- Women gaining more than 20 pounds from age 18 to midlife double their risk of postmenopausal breast cancer, compared to women whose weight remains stable.

BREATHING PROBLEMS

- Sleep apnea (interrupted breathing while sleeping) is more common in obese persons.
- Obesity is associated with a higher prevalence of asthma.

ARTHRITIS

- For every 2-pound increase in weight, the risk of developing arthritis is increased by 9 to 13%.
- Symptoms of arthritis can improve with weight loss.

REPRODUCTIVE COMPLICATIONS

- Complications of pregnancy
 - Obesity during pregnancy is associated with increased risk of death in both the baby and the mother and increases the risk of maternal high blood pressure by 10 times.
 - In addition to many other complications, women who are obese during pregnancy are more likely to have gestational diabetes and problems with labor and delivery.
 - Infants born to women who are obese during pregnancy are more likely to be high birthweight and, therefore, may face a higher rate of Cesarean section delivery and low blood sugar (which can be associated with brain damage and seizures).
 - Obesity during pregnancy is associated with an increased risk of birth defects, particularly neural tube defects, such as spina bifida.
- Obesity in premenopausal women is associated with irregular menstrual cycles and infertility.

ADDITIONAL HEALTH CONSEQUENCES

- Overweight and obesity are associated with increased risks of gall bladder disease, incontinence, increased surgical risk, and depression.
- Obesity can affect the quality of life through limited mobility and decreased physical endurance as well as through social, academic, and job discrimination.

CHILDREN AND ADOLESCENTS

- Risk factors for heart disease, such as high cholesterol and high blood pressure, occur with increased frequency in overweight children and adolescents compared to those with a healthy weight.
- Type 2 diabetes, previously considered an adult disease, has increased dramatically in children and adolescents. Overweight and obesity are closely linked to type 2 diabetes.
- Overweight adolescents have a 70% chance of becoming overweight or obese adults. This increases to 80% if one or more parent is overweight or obese.
- The most immediate consequence of overweight, as perceived by children themselves, is social discrimination.

BENEFITS OF WEIGHT LOSS

- Weight loss, as modest as 5 to 15% of total body weight in a person who is overweight or obese, reduces the risk factors for some diseases, particularly heart disease.
- Weight loss can result in lower blood pressure, lower blood sugar, and improved cholesterol levels.
- A person with a Body Mass Index (BMI) above the healthy weight range may benefit from weight loss, especially if he or she has other health risk factors, such as high blood pressure, high cholesterol, smoking, diabetes, a sedentary lifestyle, and a personal and/or family history of heart disease.

Patient Education

HOW TO BECOME HEALTHY - BY HABIT

6 BASIC PRINCIPLES OF FEELING GOOD

We know (or can easily assume) that we feel better when we take care of ourselves by:

- Eating healthy foods - fruits, vegetables, whole grains, unprocessed / natural foods.
- Getting regular exercise - 30+ minutes a day of activity, from working out at the gym, to a brisk walk, to simply giving the house a good cleaning (dust, vacuum, scrub the floors, wash the windows, etc).
- Getting regular sleep, for at least 6 hours, and preferably 7.5 or 9 hours.
- Taking a 'time out' for ourselves to relax, either through meditation, working on a hobby, or simply reading a book.
- Not doing drugs - from cocaine and marijuana, to caffeine and tobacco, to alcohol.
- Experiencing personal successes and accomplishments.

Feeling Good really isn't all that difficult - and we all know what to do - but it's sometimes it just seems hard to actually do it. Life is so busy and frustrating and overwhelming - how can I make all these changes and actually do all these things? It's hard enough to do just one of these things with any consistency - how will I ever be able to do all 5? How can I actually make these things a part of my daily life?

How can I become *Healthy by Habit*?

We won't lie to you - it does take work and time - but - it truly is easier than you think. It's

just a matter of your approach. You need a game plan - you need to know what to do and how to do it.

MAKING A PLAN FOR BECOMING HEALTHY BY HABIT

First you simply have to decide that you want to be a healthier person. You already know what the benefits will be - you just have to decide that you want them for yourself. It's time to become a bit self-centered. This is all about you. Yes, your spouse, children, boss and co-workers will likely all eventually experience the benefits of your personal changes as well - but you are choosing to become Healthy By Habit for YOU!!

Read the following statement - consider it - and then if you agree, SAY IT OUT LOUD:

I WILL BECOME HEALTHY BY HABIT!

Did you say it? Did you mean it? Say it again - with feeling!

I WILL BECOME HEALTHY BY HABIT!

There - that was easy, wasn't it? You've already accomplished the first step towards becoming healthy!! Congratulations!! Now let's get on with the next steps of the plan for becoming healthy by habit.

HEALTHY BY HABIT - GAME PLAN

HABIT #1

Eating Healthy Foods

(Fruits, vegetables, whole grains, unprocessed / natural foods.)

We're going to tackle this Habit first, because it is often the most difficult to maintain, so we want an early start. The basic concept, which applies to most everything in life, is simple: When we know we are doing the right thing, we feel good - and healthy.

Don't worry - we're not going to talk about the four-letter-word "DIET", nor are we going to count carbs, fat or protein grams. We're going to talk common sense.

Let's talk a minute about natural emotions related to food. We naturally feel good emotionally when we eat healthy things - because we know we are doing the right thing for our body - it's a "Yippee for Me!" thing. Likewise, we naturally feel bad - or guilty - when we eat things we know are unhealthy - because we know they aren't so good for us - it's a "Shame on Me!" thing.

However, sometimes we eat unhealthy things and don't really feel too bad about it emotionally - because we feel we've earned the right to allow ourselves a Special Treat. We like to indulge ourselves.

We naturally know what's good for us, and we naturally know what's not. We also know that moderation is the key for the things we enjoy that are not so good for us. It's all about balance - or a concept of balance - of mostly good things, and just a little bad now and then. Sound reasonable? Make sense? Of course it does!

HEALTHY BY HABIT - FOOD HABIT #1: TREAT YOURSELF.

Pick one day per week for lunch and one day a week for dinner to treat yourself - either with a main course or a dessert that you love - but know isn't really great for you. You're going to treat yourself by eating 'healthy by habit' the rest of the week - for breakfast, lunch, snacks and dinner - so you're not going to feel too guilty about these special treat times. Like we said - its all about balance.

HEALTHY BY HABIT - FOOD HABIT #2: EAT BREAKFAST - EVERY DAY.

We've heard it forever, and we know it's true - Breakfast really is the most important meal of the day. It gives you the energy you need to get moving - and it makes you feel good, because you start off the day with a healthy personal accomplishment right off the bat!

Scrambled eggs, a bagel, a banana, cereal, oatmeal, a grain 'breakfast bar', cold pizza - anything! If you don't like eating breakfast - drink it. Get an 'instant breakfast' packet and mix it with 8 ounces (1 cup) of milk, or down a pre-mixed nutrition drink. Even a glass of orange juice or a V-8 is better than nothing.

HEALTHY BY HABIT - FOOD HABIT #3 SNACK.

We do need snacks between meals. They give us energy bursts to keep going, and they also keep us from overeating during lunch and dinner. And of course, the more healthy the snack, the better we feel.

We tend to reach for chips or crackers or cookies for a snack, because they are easy-access finger-foods, they fill us up quickly and they provide a feeling of 'instant fuel'. But, as you know, these are not the best sources. An apple or a few carrots or a handful of raisins are just as easy to pack and handle, will fill us up just as much, and will provide just as much energy, (and more needed fiber and vitamins) - with none of the extras that we don't need.

Don't have anything to snack on? Drink some water! Amazingly, 8-12 ounces of water will really fill you up - and your body needs it. Don't be tempted to drink a can of soda instead. Water is cheaper, and as you know, far more healthy.

Make the Healthy By Habit choice to go natural as much as possible - and naturally, you'll feel better.

HEALTHY BY HABIT - FOOD HABIT #4 DO LUNCH.

Don't skip lunch - and don't skip an opportunity to be good to yourself either! Lunch can be hard when we work - it's allegedly easier to hit a drive-thru, or to eat too much unhealthy stuff when we go out with coworkers and friends.

Here's a few helpful healthy tips:

- Drink water as your lunch beverage, and add a lemon or lime if you like.
- Pack your lunch - you know what you like, and what's good for you.
- No time in the morning? Take 5 minutes and make it the night before. Use the extra time during lunch for yourself - read a book or take a walk or call a friend.
- Just gotta eat on the road? Make healthy by habit choices in the drive-thru line. Order the grilled chicken or turkey or roast beef sandwich instead of the double cheeseburger.
- Skip the fries, rings and tots completely! The sandwich has enough bread/starch already, and is probably large enough to fill you up by itself.
- Still hungry? Get a side-salad, or use part of your carrots or raisin snack as your side dish.
- Most places these days do offer some healthy options - you just have to decide to make the healthy by habit choice. Remember, you've given yourself one day a week to eat that double cheeseburger - earn it by treating yourself well the rest of the week. You'll feel better - inside and out - when you do!

HEALTHY BY HABIT - FOOD HABIT #5 THE EVENING MEAL.

The evening meal is often chaotic and either over or under done.

We're so busy, juggling work, kids, activities and so on, that it often seems just too hard or overwhelming to actually plan a meal, much less a healthy one. So, we reach for the box of stuff to help the hamburger, or we dial-a-dinner or hit a drive-thru, or we open a jar of this and a can of that and just make due the best we can, as fast as we can - and try not to feel bad about it.

Well, here's a few 'secrets' that might help:

- It takes the same amount of time to grill a chicken breast as it does to fry a pound of hamburger.
- A fresh fish filet dressed with a little butter and lemon pepper bakes just as fast as a box of frozen fish sticks.
- It takes less time to open a bag of pre-mixed salad and add some baby carrots than it does to cook stuffing mix.
- It takes the same amount of time to boil wild rice as it does macaroni and cheese.
- Spices are cheaper, easier and faster than sauces.
- Milk, water and juices are just as easy to pour in a glass as soda pop.
- Applesauce with a dash of cinnamon is just as tasty as pudding for dessert.
- You can use an apple slicer and peel a banana in the same amount of time you can open and serve a can of fruit cocktail, if not faster.
- Tuna goes with everything.
- If your kitchen is full of healthy foods, you will have a hard time fixing unhealthy food for dinner.

HEALTHY BY HABIT - GAME PLAN

HABIT #2

Getting Regular Exercise

(30+ minutes a day of physical activity, from working out at the gym, to a brisk walk, to simply giving the house a good cleaning , etc.)

Some of us exercise for fun, others because it provides socialization, and others for health reasons. There are thousands of ways to get a little exercise every day - you just have to get moving. And when you do - you'll really feel better - and usually immediately!

Here are just a few ideas:

You can take a brisk walk - by yourself, or with a friend or even with your kids. Rollerblade, jog, play tennis, play soccer, play Frisbee, play golf, play Frisbee golf! Calisthenics, jump rope, jumping jacks, Karate, Yoga, Pilates, Aerobics, Jazzercise! Wash your car, work in the garden, clean the house, mow the yard, play catch with the kids, play tag with the kids. The more you can do with your family, the better!

(Note: We recognize that some people are in better shape than others.

You likely know your own physical activity limits necessary to maintain a healthy medical status. Please only physically do as much as you comfortably can without risking injury or medical complication. Contact your physician if you are concerned about your physical health. If you experience inappropriate pain or shortness of breath from any physical activity, stop, and consult your physician.)

If you're not regularly physically active, we recommend you start slow - but steady - and work up. And, there's no better place than with your own home. Our surroundings often mirror our lives, so we're going to kill two birds with one stone.

It's time for the Super-Duper Rejuvenating Deep Clean Exercise Program!

Take a good look around your house. See what's out of place, what hasn't been cleaned or even touched in days, weeks or months.

Is your home cheery, or dreary? Is it bright and sunny and inviting, or dark and gloomy and oppressive?

It might be helpful to **make a checklist** of what needs to be organized, what needs scrubbed, what needs thrown out, what needs to be rearranged or replaced.

Once you've got a written game plan (and you *need* a written game plan), get **moving**. Dust, mop, scrub, vacuum, move this here, move that there, make a pile for Goodwill or the Salvation Army or your cousin or neighbor.

Open the blinds and let the sun in and/or turn on the lights. Liven up a darkly colored or dim room with extra lamps or brighter bulbs, light colored throw pillows, cheery artwork, pictures of happy smiling people, and so on.

Get down on your knees, bend over, and reach up high. Don't forget to dust the baseboards and the trim around the doorways. Stretch. Look behind, crawl under, and climb on top.

You *could* even paint some walls or furniture, buy an area rug, or pick up some festive knick-knacks.

Yes, it may sound like a huge or even overwhelming project. That's why you've been putting it all off forever, right? No worries, you can handle it!

It might be helpful to focus only on starting and finishing one room at a time, instead of thinking about overhauling the whole place at once.

But trust us, just like with everything else you've accomplished so far in your life, once you get started, it really does get easier and easier by the minute. (You might even have some fun!!)

The key is simply to get started. Get moving!

Do as much as you can now, and then (you guessed it!) try to do just a little bit more before you stop. Then you can do more later or tomorrow.

Keep track of your checklist, mark things off and add more tasks. Set time and project goals. Try your best to reach them and even exceed them.

Before you know it, you'll be done!

You'll feel great because you've been physically moving, and because you will have accomplished something wonderful for yourself.

You've created a brand new clean and cheery home!

You're organized. You know where things are because you put them where you wanted them to be.

Your physical world now has structure, purpose, and meaning.

WOW! Aren't you proud of yourself?

Don't you feel good about what you've done?

Doesn't your space look great?

Is it more of an orderly, serene, comfortable place to live?

Would it now be a pleasant, inviting place to visit?

We sure hope so!

You've undertaken and accomplished a lot!

You feel better - and you probably sleep better too!

Now, you can start walking 30 minutes a day - during lunch, before or after work, or after dinner.

Just get moving - every day!

Become Healthy By Habit!

HEALTHY BY HABIT - GAME PLAN

HABIT #3

Getting Regular Sleep

(At least 6 hours, and preferably 7.5 or 9 hours - every night.)

Getting enough quality sleep every night is very important. When we don't get enough quality sleep, we become cranky, we can't concentrate as well, and we just don't feel good.

Here's another one of those not-so-secret secrets: Your body sleeps in 90 to 100-minute cycles. If you're only getting 7 hours from the time you fall asleep until the alarm goes off, you're probably not completing the last sleep cycle, and you probably won't feel rested when you get up. Try to adjust your schedule to allow for a full night's rest of 7.5 or 9 hours of actual sleep.

Paradoxical Sleep

Trouble getting to sleep? At night, get ready for bed and instead of worrying about not sleeping, try to stay awake and aware. Practice becoming physically and mentally aware of trying to stay awake and take note of which parts of your body "drift off" into relaxation first. Again, try to stay awake with your eyes closed.

More Ideas for a Good Night's Sleep - and A Good Next Day

- Get up in the morning and go to bed at night at the same time every day. When your sleep cycle has a regular rhythm, you will sleep and awaken more easily, and you will feel better.
- Cut out the drugs. Stay away from caffeine, nicotine and alcohol at least 4-6 hours before bed. Caffeine and nicotine are stimulants or 'uppers' which will interfere with your ability to fall asleep. While alcohol may seem to help you sleep in the beginning as it slows brain activity, unfortunately you will end up having fragmented sleep, and likely will not feel rested in the morning.
- Sleep only when you're really sleepy. This reduces the time you are awake in bed, which can be frustrating for some, if you're not sleeping.
- If you can't fall asleep within 20 minutes of laying down, get up and do something relaxing until you feel sleepy. Sit quietly in the dark listen to soothing music. Read a book, but try not to expose yourself to bright light while you are up.

- Don't take a nap during the day. This will help ensure you are tired enough at bedtime. If you just can't make it through the day without a nap, take only a short 'power nap', and do it before 3 pm.
- Try not to exercise too much during the last 4 hours before bedtime. Getting regular exercise can help you sleep well, but when you do the workout is important. Exercising in the morning or early afternoon is best, and shouldn't interfere with your sleep.
- Develop a 'sleep ritual'. Get into a routine of listen to relaxing music, reading something mellow for 10-20 minutes, have a cup of warm milk or decaf tea, and practice your therapeutic relaxation exercises.
- If you're hungry, that can interfere with sleep, so try eating a light snack before bed - just make sure it's a healthy one (fruit or veggies), as high sugar or starch foods may keep you awake. Eating a big meal in the few hours before bedtime can interfere with good sleep as well.
- Take a long shower or preferably a hot bath about 90 minutes before you turn in at night. This will help you relax emotionally and physically. You might even use some 'aromatherapy' oils or lotions in the bath water, or on your skin afterwards.
- Make sure your bed is comfortable and the bedroom itself is a quiet, peaceful place.

Become Healthy By Habit!

HEALTHY BY HABIT - GAME PLAN

HABIT #4

Taking a 'time out' for ourselves

(Relax, through meditation, working on a hobby, or simply reading a book.)

Relaxation is important. Remember the saying, "All work and no play makes Johnny a dull boy"?

We want to relax not only because relaxing is fun, but also because it's healthy. The purpose of relaxation is to reduce or eliminate physical and emotional stress. Too much physical and emotional stress can affect us in many negative ways, from making us emotionally irritable and physically sore, to causing a lack of concentration and wild mood swings, to even contributing to heart attacks and strokes - which is definitely not good.

There are two kinds of relaxation you need to understand and practice.

The first is how to relax immediately, whenever you feel yourself becoming too physically or emotionally stressed, angry or anxious.

The second is to make and take time every day just for yourself - to do whatever you want, free from distractions and outside stressors. Watch TV, read, draw, play with the kids, work on a hobby - anything that you find peaceful and enjoyable - for at least 30 minutes every day.

Sometimes we're so busy being stressed that we don't even realize what's happening to us. The following exercise can help you become more aware of your body's physical reaction to stress, and also teach you simple skills to use for immediate relaxation.

DISTRESS TOLERANCE TRAINING (DTT)

Distress Tolerance Training is a combination of techniques designed to help minimize the impact of stress, anger and anxiety by developing relaxation skills and countering distressing thoughts and images.

These skills are not designed (as many relaxation tapes are) to put a person to sleep (although they could be helpful with this at night for some with sleeplessness difficulties). Instead, they teach effective and valuable techniques that you can use anywhere at any time to help yourself calm down and relax, whenever you find yourself in stress, anger or anxiety producing situations.

THERAPEUTIC MUSCLE RELAXATION TECHNIQUES

Think about how you react physically when you are stressed, angry or anxious. Your muscles become tense and your heart races and other distressing physical symptoms occur.

Learning both to recognize these sensations when they begin to occur, and how to counter them by consciously making an effort to physically relax can greatly reduce the physical and emotional impact of your stress, anger and anxiety related symptoms.

*NOTE: If you have PeachTree Professional Education's Audio CD set on **Therapeutic Relaxation and Distress Tolerance Training**, play Track One now. Those of you who do not have PeachTree's Relaxation set should still attempt to implement the following exercises. You can order the CDs by calling (800) 390-9536.*

DO THIS: Read carefully through these instructions and then follow through with them, or have a partner read them out loud for you, as you follow the directions.

Take a moment for yourself and lie on the floor or sit comfortably in a chair. Close your eyes and try to relax. Your breathing should be slow, smooth and rhythmic.

Now that you are comfortable, slowly begin to gently tense the muscles in your hands, arms and shoulders.

Do not tense to the point of pain, but only enough for you to begin to feel and recognize the physical sensation of your muscles feeling tense.

Hold the tension for a moment.

Notice and experience the physical feelings of tension in your muscles.

Now, slowly and gently begin to relax these muscles.

Identify the effort you make to consciously relax these muscles, after you have felt and understood that they were tense.

Make a note in your mind about the physical and emotional differences between tension and relaxation.

Your breathing should still be slow, smooth and rhythmic.

Now repeat this exercise by again gently tensing, holding and then releasing the muscles in your hands, forearms and shoulders, and recognizing the different physical and emotional feelings between tension and relaxation.

Your breathing should still be slow, smooth and rhythmic.

Much of the tension of the day is often stored in the muscles of our upper and lower back. Now gently tense, hold and then release the muscles in your upper and lower back, by tensing your abdomen and rolling your shoulders slowly forward and inward.

Again, do not tense to the point of pain, but only enough for you to begin to feel and recognize the physical sensation of your upper and lower back muscles feeling tense.

Hold this tension for a moment.

Notice and experience the physical feelings of tension in your back muscles.

Now, slowly and gently begin to relax these muscles.

Identify the effort you make to consciously relax these muscles, after you have felt and understood that they were tense.

Make a note in your mind about the physical and emotional differences between tension and relaxation.

Repeat this exercise again, slowly tensing, holding, and then relaxing the muscles of your upper and lower back, and noticing the differences between tension and relaxation.

Your breathing should still be slow, smooth and rhythmic.

Now begin tensing the muscles in your legs and buttocks, by slowly and gently pulling your toes upwards, and tensing your calves and thighs, up to your buttocks.

Again, do not tense your muscles to the point of pain, but only to the point where you can recognize that these leg muscles are actually tense.

Hold the tension for a moment.

Identify and make a note in your mind about how it feels when these muscles are tense.

Slowly relax these muscles, and notice the physical and emotional differences between tension and relaxation.

Repeat this exercise again, and maintain your slow, smooth and rhythmic breathing.

Now focus on the muscles of your face; around the mouth, eyes, cheeks and brow, where much emotional tension is often stored.

Maintain slow, smooth and rhythmic breathing.

Pay close attention to how you feel when your muscles are tense.

Identify the effort required to slowly and gently relax these muscles.

Make the effort to recognize and understand the physical and emotional differences between muscle tension and relaxation.

Take a moment for yourself to completely relax your body and your mind. Visualize in your mind a picture that is pleasing and relaxing to you. This could be a remote island scene, or a sunny day, or your family playing happily together, or whatever makes you feel good.

Take your time and fully experience the relaxing effects of your image.

Repeat these exercises frequently, as often as you would like, learning to recognize the physical and emotional differences between tension and relaxation, and visualize your special place in your mind, again and again.

The next time you are feeling stressed or anxious, you will be able to focus and consciously recognize the physical tension of your body, and you will have the skills and ability to consciously relax your muscles and consciously go to your peaceful picture, allowing yourself more emotional freedom to work out your problems.

HEALTHY BY HABIT - GAME PLAN

HABIT #5

Not Doing Drugs

(From cocaine and marijuana, to caffeine and tobacco, to alcohol, etc.)

We want to feel better - to feel healthy - and well, we really want to feel good. Drugs of all kinds are designed to change the way we feel - and they do - but it is only an illusion that these kinds of drugs make us feel better. Coping strategies with short-term gains generally have long-term consequences.

While the argument can be made that the specific drugs listed above are 'natural' substances, as opposed to methamphetamines or barbiturates and other chemical concoctions or pharmaceuticals, they are still not particularly healthy or good for you. Keep in mind that anthrax and arsenic are 'natural substances' too - and you wouldn't want them in your body. And yes, there are alleged medicinal uses for many drugs, but that's different than recreational usage, which is what we are addressing here.

We all know that smoking and chewing tobacco is bad for us - we know it's addictive, and that it causes cancers, emphysema and other lung, mouth and throat problems and gives us old, wrinkly skin. But we don't smoke or chew it for those long-term consequences - we do it for the short-term gains. We smoke because it enhances socialization or isolation as desired, because it becomes a physical comfort, because we think it helps us relax, and because we're addicted. An unhealthy habit.

We don't drink alcohol because we want to get in a fight, lose our sense of reason and judgment, get arrested, kill someone in a car wreck, or get cirrhosis of the liver. We drink it for the short-term gains of socialization and acceptance, to relax, and to forget about our worries for a while. And some drink not because they really want to anymore, but because they have become addicted. Unhealthy habit.

We don't drink caffeine beverages like coffee, tea and soda pop because we want to feel irritable and jittery, to lose concentration and memory function, to experience gastrointestinal discomfort, or be unable to sleep soundly. We drink it because it gives us a little 'pick-up' in the morning or afternoon, because it's in the beverage we like, and because we believe we become unable to function without it - essentially addicted. An unhealthy habit.

The question then is this - is there any other way to change the way we feel - to feel better - without the use of these drugs? Of course there is! You can become Healthy By Habit. Yes, it can be difficult to make those healthier choices, especially if you have become addicted - but it is possible to stop, and it is possible to replace the unhealthy drugs with alternative behaviors.

Think for a minute about the short-term reasons you use tobacco, caffeine, alcohol or other drugs. Is there any other way you could meet those same needs - without the long-term consequences?

To relax, could you employ therapeutic relaxation skills such as creative visualization, deep breathing exercises and physical muscle relaxation techniques?

To have a bit of extra energy, could you get more sleep at night, eat healthier natural foods, and get more physical exercise?

Could you just drink water and still be social? Of course you can!

One of the easiest ways to make that decision last is to show up at a party and stay sober all night - and watch how ridiculous everyone else looks when they're drunk. Makes you wonder how ridiculous you looked when you were drinking, eh? Probably not such a turn on.

Caffeine and alcohol may be okay for some in moderation - back to the theory of balance. But tobacco and other illicit drugs are just plain addictive and physically and emotionally harmful - not to mention possibly illegal.

Remember - Anything that causes a problem is a problem.

Drop the bad, unhealthy habits - get professional help if you need to -

and ***become Healthy By Habit.***

HEALTHY BY HABIT - GAME PLAN

HABIT #6

Experiencing Successes and Accomplishments. (Setting and Reaching Personal and Professional Goals.)

We feel good when we get what we want. We feel good when we have what we need. We feel even better when we, ourselves, have made it all happen.

There are wishes, there are dreams, and there are goals. The differences are simple: A wish is something we want, a dream is something we really want, and a goal is something we might actually get.

A true goal is written down. If it is not written down on paper, it will likely always remain only a wish or a dream.

**Goal-Setting for Personal Success:
I Can't Change Everything at Once, So I'm Seeking Progress...
Not Perfection**

Goals should be S.M.A.R.T.:

Specific: Not vague ideas like, "I want to look like a supermodel" - but more like, "I will lose 25 pounds and become healthy by habit."

Measurable: I will be able to measure my progress as I weigh on the scales and reduce my clothing size.

Attainable: This goal is attainable because I am willing to exercise and adjust my eating habits and alcohol intake to make it so.

Realistic: I know that I can actually achieve this goal because it is possible for anyone to do this if they follow a reasonable plan, and I will.

Target Date: I will lose 25 pounds and become healthy by habit within 6 months.

This is your defined goal - but you must have an objective plan (strategy) to achieve it:

Objective #1: I have made an exercise schedule, comprised of a list of exercises I can do at specific times during the day and at night, with and without my family.

Objective #2: I have selected one lunch and one dinner per week to splurge, and I will shop for and eat naturally healthy foods for every other meal and snack.

Objective #3: Every day I will write down how I feel about exercising and eating healthy.

Objective #4: Every Friday morning, I will weigh myself, and write it down.

Objective #5: I will ask my friends and family to be encouraging and supportive of my efforts, and to join me as much as possible.

This goal setting strategy will work for any goal you might have - from finishing college or quitting smoking, to planning a birthday party or completing a report for work or school.

Goal setting gives you direction with a purpose, and a plan to make it happen.

Become a Goal Setter - Become a Goal Reacher - Feel Better

- Become Healthy By Habit!

www.health.gov

Aim for a Healthy Weight

Choose a lifestyle that combines sensible eating with regular physical activity. To be at their best, adults need to avoid gaining weight, and many need to lose weight. Being overweight or obese increases your risk for high blood pressure, high blood cholesterol, heart disease, stroke, diabetes, certain types of cancer, arthritis, and breathing problems. A healthy weight is key to a long, healthy life.

Evaluate Your Body Weight

For adults and children, different methods are used to find out if weight is about right for height. If you have concerns about your child's body size, talk with your health care provider.

If you are an adult, follow the directions below to evaluate your weight in relation to your height, or Body Mass Index (BMI). Not all adults who have a BMI in the range labeled "healthy" are at their most healthy weight. For example, some may have lots of fat and little muscle.

A BMI above the healthy range is less healthy for most people; but it may be fine if you have lots of muscle and little fat. The further your BMI is above the healthy range, the higher your weight-related risk.

If your BMI is above the healthy range, you may benefit from weight loss, especially if you have other health risk factors.

BMI's slightly below the healthy range may still be healthy unless they result from illness. If your BMI is below the healthy range, you may have increased risk of menstrual irregularity, infertility, and osteoporosis.

If you lose weight suddenly or for unknown reasons, see a health care provider. Unexplained weight loss may be an early clue to a health problem.

Keep track of your weight and your waist measurement, and take action if either of them increases. If your waist measurement increases, you are probably gaining fat. If so, take steps to eat fewer calories and become more active.

If your BMI is greater than 25, or even if it is in the "healthy" range, at least try to avoid further weight gain.

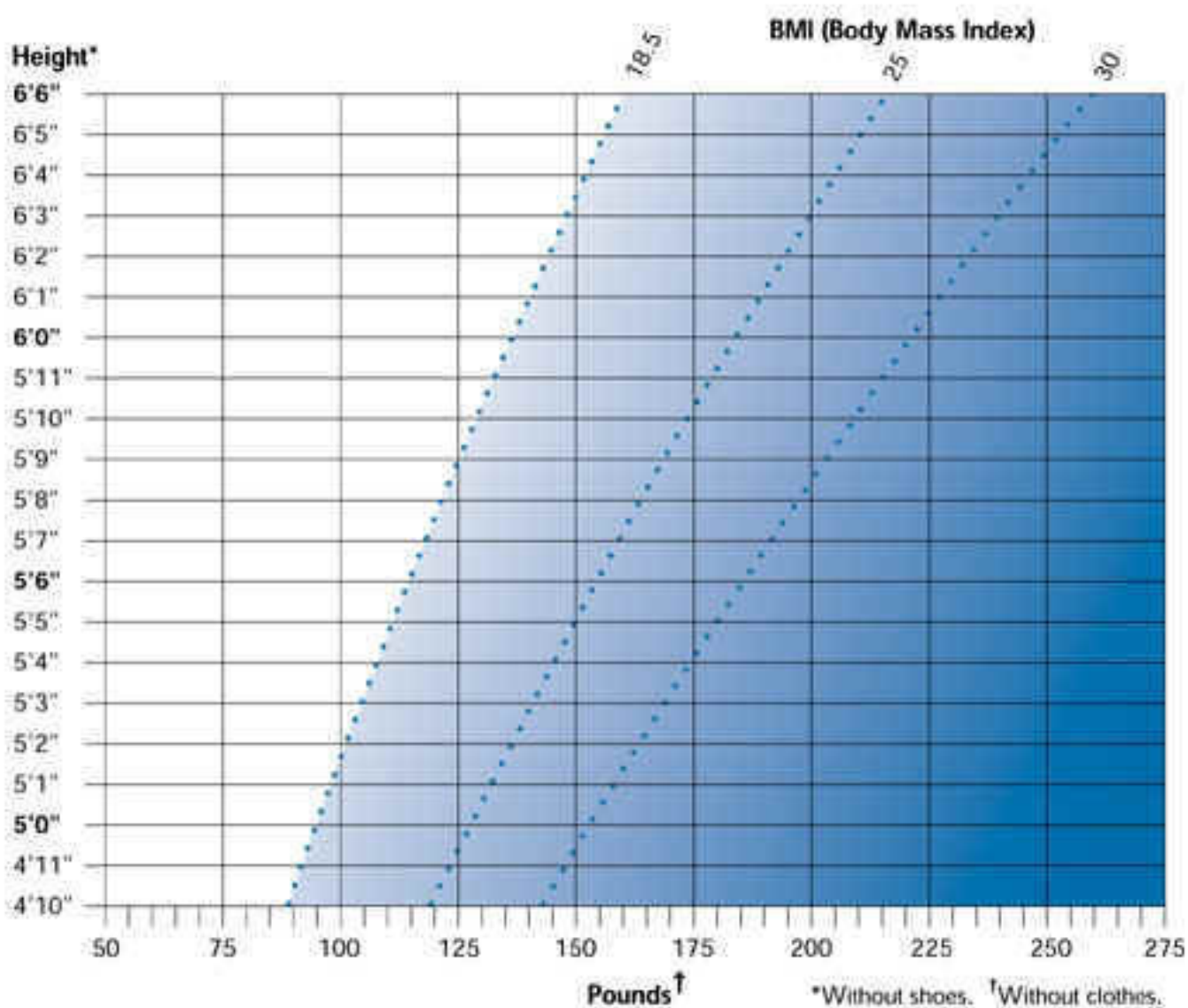
HOW TO EVALUATE YOUR WEIGHT (ADULTS)

1. Weigh yourself and have your height measured.

2. Find your BMI category below. **Directions:** Find your weight on the bottom of the graph. Go straight up from that point until you come to the line that matches your height. Then look to find your weight group. The higher your BMI category, the greater the risk for health problems.
3. Measure around your waist, just above your hip bones, while standing. Health risks increase as waist measurement increases, particularly if waist is greater than 35 inches for women or 40 inches for men. Excess abdominal fat may place you at greater risk of health problems, even if your BMI is about right.
4. Find out how many other risk factors you have.

The higher your BMI and waist measurement, and the more risk factors you have, the more you are likely to benefit from weight loss. NOTE: Weight loss is usually not advisable for pregnant women.

ARE YOU AT A HEALTHY WEIGHT?



- Healthy Weight** BMI from 18.5 up to 25 refers to a healthy weight.
- Overweight** BMI from 25 up to 30 refers to overweight.
- Obese** BMI 30 or higher refers to obesity. *Obese persons are also*

overweight.

BMI measures weight in relation to height. The BMI ranges shown above are for adults. They are not exact ranges of healthy and unhealthy weights. However, they show that health risk increases at higher levels of overweight and obesity. Even within the healthy BMI range, weight gains can carry health risks for adults.

FIND OUT YOUR OTHER RISK FACTORS FOR CHRONIC DISEASE

The more of these risk factors you have, the more you are likely to benefit from weight loss if you are overweight or obese.

- Do you have a personal or family history of heart disease?
- Are you a male older than 45 years or a postmenopausal female?
- Do you smoke cigarettes?
- Do you have a sedentary lifestyle?
- Has your doctor told you that you have
 - high blood pressure?
 - abnormal blood lipids (high LDL cholesterol, low HDL cholesterol, high triglycerides)?
 - diabetes?

Manage Your Weight

Our genes affect our tendency to gain weight. A tendency to gain weight is increased when food is plentiful and when we use equipment and vehicles to save time and energy. However, it is possible to manage your weight through balancing the calories you eat with your physical activity choices.

To make it easier to manage your weight, make long-term changes in your eating behavior and physical activity.

To do this, build a healthy base and make sensible choices.

Choose a healthful assortment of foods that includes vegetables, fruits, grains (especially whole grains), skim milk, and fish, lean meat, poultry, or beans.

Choose foods that are low in fat and added sugars most of the time. Whatever the food, eat a sensible portion size.

Try to be more active throughout the day. Physical activity guidelines recommend that all adults get at least 30 minutes of moderate physical activity, most or preferably all days of the week.

To maintain a healthy weight after weight loss, adults will likely need to do **more** than 30 minutes of moderate physical activity daily.

Over time, even a small decrease in calories eaten and a small increase in physical activity can keep you from gaining weight or help you lose weight.

CHOOSE SENSIBLE PORTION SIZES

What's the difference between a "portion" and a "serving"?

A "portion" can be thought of as the amount of a specific food you **choose** to eat for dinner, snack, or other eating occasion. Portions, of course can be bigger or smaller than the recommended food servings.

A "serving" is a unit of measure used to describe the amount of food **recommended** from each food group. It is the amount of food listed on the Nutrition Facts panel on packaged food or the amount of food recommended in the Food Guide Pyramid and the *Dietary Guidelines for Americans*.

For example, 6-11 servings of whole grains are recommended daily. A recommended serving of whole grains would be 1 slice of bread or 1/2 cup of rice or pasta. People often confuse the recommendation to mean 6 to 11 *portions* with no regard to size. It is not 6 to 11 portions where one portion could mean a large bowl of pasta rather than 1/2 cup. Keep an eye on portion size to see how your portions compare with the recommended servings.

- **Portion control when eating out.** Many restaurants serve more food than one person needs at one meal. Take control of the amount of food that ends up on your plate by splitting an entrée with a friend. Or, ask the wait person for a "to-go" box and wrap up half your meal as soon as it's brought to the table. If you're eating out, choose small portion sizes, share an entree with a friend, or take part of the food home (if you can chill it right away).
- **Portion control when eating in.** To minimize the temptation of second and third helpings when eating at home, serve the food on individual plates, instead of putting the serving dishes on the table. Keeping the excess food out of reach may discourage overeating.
- **Portion control in front of the TV.** When eating or snacking in front of the TV, put the amount that you plan to eat into a bowl or container instead of eating straight from the package. It's easy to overeat when your attention is focused on something else.
- Check product labels to learn how much food is considered to be a serving, and how many calories, grams of fat, and so forth are in the food. Many items sold as single portions actually provide 2 servings or more. Examples include a 20-ounce container of soft drink, a 12-ounce steak, a 3-ounce bag of chips, and a large bagel.
- Be especially careful to limit portion size of foods high in calories, such as cookies, cakes, other sweets, French fries, and fats, oils, and spreads.
- Just because a product is fat free, doesn't mean it is calorie free. In fact, fat free or reduced fat products can have as many, if not more, calories per serving than regular products. So, yes, you do need to watch your fat intake. But remember that calories count too.

The carbohydrates, fats, and proteins in food supply energy, which is measured in calories. High-fat foods contain more calories than the same amount of other foods, so they can make it difficult for you to avoid excess calories. **However, low fat doesn't always mean low calorie.** Sometimes extra sugars are added to low-fat muffins or desserts, for example, and they may be just as high in calories.

Your pattern of eating may be important. Snacks and meals eaten away from home provide a large part of daily calories for many people. Choose them wisely. Try fruits, vegetables, whole grain foods, or a cup of low-fat milk or yogurt for a snack. When eating out, choose small portions of foods. If you choose fish, poultry, or lean meat, ask that it be grilled rather than fried.

Like younger adults, overweight and obese older adults may improve their health by losing weight. The guidance of a health care provider is recommended, especially for obese children and older adults.

Since older people tend to lose muscle mass, regular physical activity is a valuable part of a weight-loss plan. Building or maintaining muscle helps keep older adults active and reduces their risk of falls and fractures. Staying active throughout your adult years helps maintain muscle mass and bone strength for your later years.

If you need to lose weight, do so gradually

If you are overweight, loss of 5 to 15 percent of your body weight may improve your health, ability to function, and quality of life. **Aim to lose about 10 percent of your weight over about 6 months.** This would be 20 pounds of weight loss for someone who weighs 200 pounds. Loss of 1/2 to 2 pounds per week is usually safe. Even if you have regained weight in the past, it's worthwhile to try again.

Encourage healthy weight in children

Children need enough food for proper growth, but too many calories and too little physical activity lead to overweight. The number of overweight U.S. children has risen dramatically in recent years. Encourage healthy weight by offering children grain products; vegetables and fruits; low-fat dairy products; and beans, lean meat, poultry, fish, or nuts—and let them see you enjoy eating the same foods. Let the child decide how much of these foods to eat. Offer only small amounts of food high in fat or added sugars. Encourage children to take part in vigorous activities (and join them whenever possible). Limit the time they spend in sedentary activities like watching television or playing computer or video games.

Help children to develop healthy eating habits. Make small changes. For example, serve low-fat milk rather than whole milk and offer one cookie instead of two. Since children still need to grow, weight loss is not recommended unless guided by a health care provider.

Serious eating disorders

Frequent binge eating, with or without periods of food restriction, may be a sign of a serious eating disorder. Other signs of eating disorders include preoccupation with body weight or food (or both—regardless of body weight), dramatic weight loss, excessive exercise, self-induced vomiting, and the abuse of laxatives. Seek help from a health care provider if any of these apply to you, a family member, or a friend.

ADVICE FOR TODAY

 Aim for a healthy weight. If you are at a healthy weight, aim to avoid weight gain. If you are

already overweight, first aim to prevent further weight gain, and then lose weight to improve your health.

- ▲ Build a healthy base by eating vegetables, fruits, and grains (especially whole grains) with little added fat or sugar.
- ▲ Select sensible portion sizes.
- ▲ Get moving. Get regular physical activity to balance calories from the foods you eat.
- ▲ Set a good example for children by practicing healthy eating habits and enjoying regular physical activities together.
- ▲ Keep in mind that even though heredity and the environment are important influences, your behaviors help determine your body weight.

Be Physically Active Each Day

Being physically active and maintaining a healthy weight are both needed for good health, but they benefit health in different ways. Children, teens, adults, and the elderly—all can improve their health and well-being and have fun by including moderate amounts of physical activity in their daily lives. Physical activity involves moving the body.

A moderate physical activity is any activity that requires about as much energy as walking 2 miles in 30 minutes.

Aim to accumulate at least 30 minutes (for adults) or 60 minutes (for children) of moderate physical activity most days of the week, preferably daily.

If you already get 30 minutes of physical activity daily, you can gain even more health benefits by increasing the amount of time that you are physically active or by taking part in more vigorous activities.

No matter what activity you choose, you can do it all at once, or spread it out over two or three times during the day.

Make physical activity a regular part of your routine

Choose activities that you enjoy and that you can do regularly. Some people prefer activities that fit into their daily routine, like gardening or taking extra trips up and down stairs. Others prefer a regular exercise program, such as a physical activity program at their worksite. Some do both. The important thing is to be physically active every day.

Most adults do not need to see their health care provider before starting to become more physically active. However, if you are planning to start a vigorous activity plan and have one or more of the conditions below, consult your health care provider:

- ▲ Chronic health problem such as heart disease, hypertension, diabetes, osteoporosis, or obesity.
- ▲ High risk for heart disease.

▲ Over age 40 for men or 50 for women.

Health benefits of physical activity

Compared with being very sedentary, being physically active for at least 30 minutes on most days of the week reduces the risk of developing or dying of heart disease. It has other health benefits as well.

No one is too young or too old to enjoy the benefits of regular physical activity.

Two types of physical activity are especially beneficial:

▲ ***Aerobic activities.***

These are activities that speed your heart rate and breathing. They help cardiovascular fitness.

▲ ***Activities for strength and flexibility.***

Developing strength may help build and maintain your bones. Carrying groceries and lifting weights are two strength-building activities. Gentle stretching, dancing, or yoga can increase flexibility.

To get these health benefits, adults need moderate physical activity for a total of at least 30 minutes most days of the week, preferably daily, and children need at least 60 minutes per day.

EXAMPLES OF PHYSICAL ACTIVITIES FOR ADULTS

For at least 30 minutes most days of the week, preferably daily, do any one of the activities listed below—or combine activities. Look for additional opportunities among other activities that you enjoy.

As part of your routine activities:

- Walk, wheel, or bike ride more, drive less.
- Walk up stairs instead of taking an elevator.
- Get off the bus a few stops early and walk or wheel the remaining distance.
- Mow the lawn with a push mower.
- Rake leaves.
- Garden.
- Push a stroller.

- Clean the house.
- Do exercises or pedal a stationary bike while watching television.
- Play actively with children.
- Take a brisk 10-minute walk or wheel in the morning, at lunch, and after dinner.

As part of your exercise or recreational routine:

- Walk, wheel, or jog.
- Bicycle or use an arm pedal bicycle.
- Swim or do water aerobics.
- Play racket or wheelchair sports.
- Golf (pull cart or carry clubs).
- Canoe.
- Cross-country ski.
- Play basketball.
- Dance.
- Take part in an exercise program at work, home, school, or gym.

HEALTH BENEFITS OF REGULAR PHYSICAL ACTIVITY

- Increases physical fitness.
- Helps build and maintain healthy bones, muscles, and joints.
- Builds endurance and muscular strength.
- Helps manage weight.
- Lowers risk factors for cardiovascular disease, colon cancer, and type 2 diabetes.
- Helps control blood pressure.
- Promotes psychological well-being and self-esteem.
- Reduces feelings of depression and anxiety.

Physical activity and nutrition

Physical activity and nutrition work together for better health. For example, physical activity increases the amount of calories you use. For those who have intentionally lost weight, being active

makes it easier to maintain the weight loss. However, 30 minutes of activity daily may not be enough to lose weight or maintain weight loss.

Physical activity and nutrition work together in more ways than weight management. Increasing the calories you use allows you to eat more, which makes it easier to get the nutrients you need. Physical activity and nutrition work together for bone health, too. Calcium and other nutrients are needed to build and maintain strong bones, but physical activity is needed as well.

Help children be physically active

Children and adolescents benefit from physical activity in many ways. They need at least 60 minutes of physical activity daily. Parents can help:

- ▲ Set a good example. For example, arrange active family events in which everyone takes part. Join your children in physical activities.
- ▲ Encourage your children to be physically active at home, at school, and with friends by jumping rope, playing tag, riding a bike.
- ▲ Limit television watching, computer games, and other inactive forms of play by alternating with periods of physical activity.

PHYSICAL ACTIVITIES FOR CHILDREN AND TEENS

Aim for at least 60 minutes total per day:

- Be spontaneously active.
- Play tag.
- Jump rope.
- Ride a bicycle or tricycle.
- Walk, wheel, skip, or run.
- Play actively during school recess.
- Roller skate or in-line skate.
- Take part in physical education activity classes during school.
- Join after-school or community physical activity programs.
- Dance.

Older people need to be physically active too

Older persons also need to be physically active. Engage in moderate physical activity for at least 30 minutes most days of the week, preferably daily, and taking part in activities to strengthen muscles and to improve flexibility.

Staying strong and flexible can reduce your risk of falling and breaking bones, preserve muscle, and improve your ability to live independently. Lifting small weights and carrying groceries are two ways to include strength building into your routine.

ADVICE FOR TODAY

- ▲ Engage in at least 30 minutes (adults) or 60 minutes (children) of moderate physical activity most, preferably all, days of the week.
- ▲ Become physically active if you are inactive.
- ▲ Maintain or increase physical activity if you are already active.
- ▲ Stay active throughout your life.
- ▲ Help children get at least 60 minutes of physical activity daily.
- ▲ Choose physical activities that fit in with your daily routine, or choose recreational or structured exercise programs, or both.
- ▲ Consult your health care provider before starting a new vigorous physical activity plan if you have a chronic health problem, or if you are over 40 (men) or 50 (women).

A NEW VIEW OF PHYSICAL ACTIVITY:

This report brings together, for the first time, what has been learned about physical activity and health from decades of research. Among its major findings:

- People who are usually inactive can improve their health and well-being by becoming even moderately active on a regular basis.
- Physical activity need not be strenuous to achieve health benefits.
- Greater health benefits can be achieved by increasing the amount (duration, frequency, or intensity) of physical activity.

THE BENEFITS OF REGULAR PHYSICAL ACTIVITY:

Regular physical activity that is performed on most days of the week reduces the risk of developing or dying from some of the leading causes of illness and death in the United States. Regular physical activity improves health in the following ways:

- Reduces the risk of dying prematurely.
- Reduces the risk of dying from heart disease.
- Reduces the risk of developing diabetes.
- Reduces the risk of developing high blood pressure.
- Helps reduce blood pressure in people who already have high blood pressure.
- Reduces the risk of developing colon cancer.
- Reduces feelings of depression and anxiety.
- Helps control weight.
- Helps build and maintain healthy bones, muscles, and joints.

- Helps older adults become stronger and better able to move about without falling.
- Promotes psychological well-being.

A MAJOR PUBLIC HEALTH CONCERN:

Given the numerous health benefits of physical activity, the hazards of being inactive are clear. Physical inactivity is a serious, nationwide problem. Its scope poses a public health challenge for reducing the national burden of unnecessary illness and premature death.

WHAT IS A MODERATE AMOUNT OF PHYSICAL ACTIVITY?

As the examples listed in the box show, a moderate amount of physical activity(*) can be achieved in a variety of ways. People can select activities that they enjoy and that fit into their daily lives.

Because amount of activity is a function of duration, intensity, and frequency, the same amount of activity can be obtained in longer sessions of moderately intense activities (such as brisk walking) as in shorter sessions of more strenuous activities (such as running): (+)

EXAMPLES OF MODERATE AMOUNTS OF ACTIVITY:

Less Vigorous, More Time
Washing and waxing a car for 45-60 minutes
Washing windows or floors for 45-60 minutes
Playing volleyball for 45 minutes
Playing touch football for 30-45 minutes
Gardening for 30-45 minutes
Wheeling self in wheelchair for 30-40 minutes
Walking 1 3/4 miles in 35 minutes (20 min/mile)
Basketball (shooting baskets) for 30 minutes
Bicycling 5 miles in 30 minutes
Dancing fast (social) for 30 minutes
Pushing a stroller 1 1/2 miles in 30 minutes
Raking leaves for 30 minutes
Walking 2 miles in 30 minutes (15 min/mile)
Water aerobics for 30 minutes
Swimming laps for 20 minutes
Wheelchair basketball for 20 minutes
Basketball (playing a game) for 15-20 minutes
Bicycling 4 miles in 15 minutes
Jumping rope for 15 minutes
Running 1 1/2 miles in 15 minutes (10 min/mile)
Shoveling snow for 15 minutes
Stairwalking for 15 minutes
More Vigorous, Less Time

- A moderate amount of physical activity is roughly equivalent to physical activity that uses approximately 150 Calories (kcal) of energy per day, or 1,000 Calories per week.
 - + Some activities can be performed at various intensities; the suggested durations correspond to expected intensity of effort.

PRECAUTIONS FOR A HEALTHY START:

To avoid soreness and injury, individuals contemplating an increase in physical activity should start out slowly and gradually build up to the desired amount to give the body time to adjust.

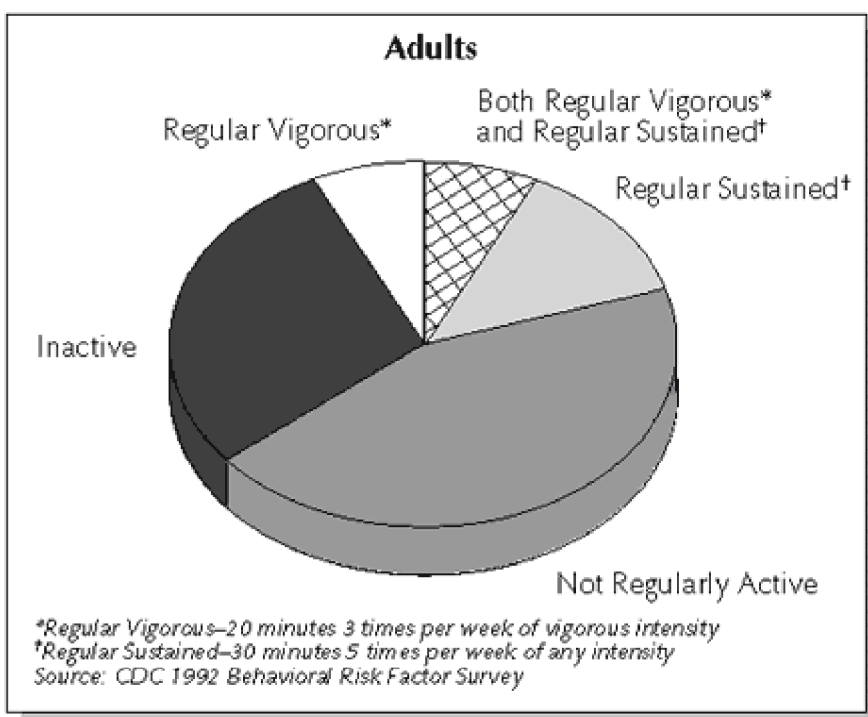
People with chronic health problems, such as heart disease, diabetes, or obesity, or who are at high risk for these problems should first consult a physician before beginning a new program of physical activity.

Also, men over age 40 and women over age 50 who plan to begin a new **vigorous** physical activity program should consult a physician first to be sure they do not have heart disease or other health problems.

STATUS OF THE NATION - A NEED FOR CHANGE:

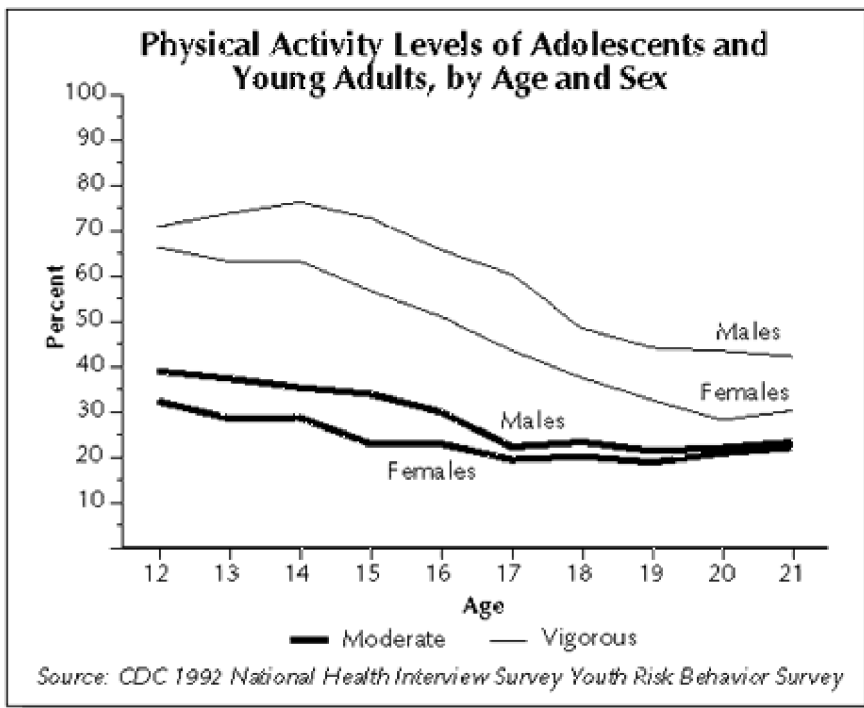
Adults

- More than 60 percent of adults do not achieve the recommended amount of regular physical activity. In fact, 25 percent of all adults are not active at all.
- Inactivity increases with age and is more common among women than men and among those with lower income and less education than among those with higher income or education



Adolescents and Young Adults

- Nearly half of young people aged 12-21 are not vigorously active on a regular basis.
- Physical activity declines dramatically with age during adolescence.
- Female adolescents are much less physically active than male adolescents.



High School Students

- In high school, enrollment in daily physical education classes dropped from 42 percent in 1991 to 25 percent in 1995.
- Only 19 percent of all high school students are physically active for 20 minutes or more in physical education classes every day during the school week.

IDEAS FOR IMPROVEMENT:

This report identifies promising ways to help people include more physical activity in their daily lives.

- Well-designed programs in schools to increase physical activity in physical education classes have been shown to be effective.
- Carefully planned counseling by health care providers and worksite activity programs can increase individuals' physical activity levels.
- Promising approaches being tried in some communities around the nation include opening school buildings and shopping malls for walking before or after regular hours, as well as building bicycle and walking paths separated from automobile traffic. Revising building codes to require accessible stairwells is another idea that has been suggested

SPECIAL MESSAGES FOR SPECIAL POPULATIONS:

Older Adults

No one is too old to enjoy the benefits of regular physical activity. Of special interest to older adults is evidence that muscle-strengthening exercises can reduce the risk of falling and fracturing bones and can improve the ability to live independently.

Parents

Parents can help their children maintain a physically active lifestyle by providing encouragement and opportunities for physical activity. Family events can include opportunities for everyone in the family to be active.

Teenagers

Regular physical activity improves strength, builds lean muscle, and decreases body fat. It can build stronger bones to last a lifetime.

Dieters

Regular physical activity burns Calories and preserves lean muscle mass. It is a key component of any weight loss effort and is important for controlling weight.

People with High Blood Pressure

Regular physical activity helps lower blood pressure.

People Feeling Anxious, Depressed, or Moody

Regular physical activity improves mood, helps relieve depression, and increases feelings of well-being.

People with Arthritis

Regular physical activity can help control joint swelling and pain. Physical activity of the type and amount recommended for health has not been shown to cause arthritis.

People with Disabilities

Regular physical activity can help people with chronic, disabling conditions improve their stamina and muscle strength and can improve psychological well-being and quality of life by increasing the ability to perform activities of daily life.

SUMMARY OF HEALTH GUIDELINES

ADEQUATE NUTRIENTS WITHIN CALORIE NEEDS

Key Recommendations

- Consume a variety of nutrient-dense foods and beverages within and among the basic food groups while choosing foods that limit the intake of saturated and *trans* fats, cholesterol, added sugars, salt, and alcohol.
- Meet recommended intakes within energy needs by adopting a balanced eating pattern, such as the USDA Food Guide or the DASH Eating Plan.

Key Recommendations for Specific Population Groups

- *People over age 50.* Consume vitamin B₁₂ in its crystalline form (i.e., fortified foods or supplements).
- *Women of childbearing age who may become pregnant.* Eat foods high in heme-iron and/or consume iron-rich plant foods or iron-fortified foods with an enhancer of iron absorption, such as vitamin C-rich foods.
- *Women of childbearing age who may become pregnant and those in the first trimester of pregnancy.* Consume adequate synthetic folic acid daily (from fortified foods or supplements) in addition to food forms of folate from a varied diet.
- *Older adults, people with dark skin, and people exposed to insufficient ultraviolet band radiation (i.e., sunlight).* Consume extra vitamin D from vitamin D-fortified foods and/or supplements.

WEIGHT MANAGEMENT

Key Recommendations

- To maintain body weight in a healthy range, balance calories from foods and beverages with calories expended.
- To prevent gradual weight gain over time, make small decreases in food and beverage calories and increase physical activity.

Key Recommendations for Specific Population Groups

- *Those who need to lose weight.* Aim for a slow, steady weight loss by decreasing calorie intake while maintaining an adequate nutrient intake and increasing physical activity.
- *Overweight children.* Reduce the rate of body weight gain while allowing growth and development. Consult a healthcare provider before placing a child on a weight-reduction diet.
- *Pregnant women.* Ensure appropriate weight gain as specified by a healthcare provider.
- *Breastfeeding women.* Moderate weight reduction is safe and does not compromise weight gain of the nursing infant.
- *Overweight adults and overweight children with chronic diseases and/or on medication.* Consult a healthcare provider about weight loss strategies prior to starting a weight-reduction program to ensure appropriate management of other health conditions.

PHYSICAL ACTIVITY

Key Recommendations

- Engage in regular physical activity and reduce sedentary activities to promote health, psychological well-being, and a healthy body weight.
 - To reduce the risk of chronic disease in adulthood: Engage in at least 30 minutes of moderate-intensity physical activity, above usual activity, at work or home on most days of the week.
 - For most people, greater health benefits can be obtained by engaging in physical activity of more vigorous intensity or longer duration.
 - To help manage body weight and prevent gradual, unhealthy body weight gain in adulthood: Engage in approximately 60 minutes of moderate- to vigorous-intensity activity on most days of the week while not exceeding caloric intake requirements.
 - To sustain weight loss in adulthood: Participate in at least 60 to 90 minutes of daily moderate-intensity physical activity while not exceeding caloric intake requirements. Some people may need to consult with a healthcare provider before participating in this level of activity.
- Achieve physical fitness by including cardiovascular conditioning, stretching exercises for flexibility, and resistance exercises or calisthenics for muscle strength and endurance.

Key Recommendations for Specific Population Groups

- *Children and adolescents.* Engage in at least 60 minutes of physical activity on most, preferably all, days of the week.
- *Pregnant women.* In the absence of medical or obstetric complications, incorporate 30 minutes or more of moderate-intensity physical activity on most, if not all, days of the week. Avoid activities with a high risk of falling or abdominal trauma.
- *Breastfeeding women.* Be aware that neither acute nor regular exercise adversely affects the mother's ability to successfully breastfeed.
- *Older adults.* Participate in regular physical activity to reduce functional declines associated with aging and to achieve the other benefits of physical activity identified for all adults.

FOOD GROUPS TO ENCOURAGE

Key Recommendations

- Consume a sufficient amount of fruits and vegetables while staying within energy needs. Two cups of fruit and 2½ cups of vegetables per day are recommended for a reference 2,000-calorie intake, with higher or lower amounts depending on the calorie level.
- Choose a variety of fruits and vegetables each day. In particular, select from all five vegetable subgroups (dark green, orange, legumes, starchy vegetables, and other vegetables) several times a week.
- Consume 3 or more ounce-equivalents of whole-grain products per day, with the rest of the recommended grains coming from enriched or whole-grain products. In general, at least half the grains should come from whole grains.
- Consume 3 cups per day of fat-free or low-fat milk or equivalent milk products.

Key Recommendations for Specific Population Groups

- *Children and adolescents.* Consume whole-grain products often; at least half the grains should be whole grains. Children 2 to 8 years should consume 2 cups per day of fat-free or low-fat milk or equivalent milk products. Children 9 years of age and older should consume 3 cups per day of fat-free or low-fat milk or equivalent milk products.

FATS

Key Recommendations

- Consume less than 10 percent of calories from saturated fatty acids and less than 300 mg/day of cholesterol, and keep *trans* fatty acid consumption as low as possible.
- Keep total fat intake between 20 to 35 percent of calories, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts, and vegetable oils.
- When selecting and preparing meat, poultry, dry beans, and milk or milk products, make choices that are lean, low-fat, or fat-free.
- Limit intake of fats and oils high in saturated and/or *trans* fatty acids, and choose products low in such fats and oils.

Key Recommendations for Specific Population Groups

- *Children and adolescents.* Keep total fat intake between 30 to 35 percent of calories for children 2 to 3 years of age and between 25 to 35 percent of calories for children and adolescents 4 to 18 years of age, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts, and vegetable oils.

CARBOHYDRATES

Key Recommendations

- Choose fiber-rich fruits, vegetables, and whole grains often.
- Choose and prepare foods and beverages with little added sugars or caloric sweeteners, such as amounts suggested by the USDA Food Guide and the DASH Eating Plan.
- Reduce the incidence of dental caries by practicing good oral hygiene and consuming sugar- and starch-containing foods and beverages less frequently.

SODIUM AND POTASSIUM

Key Recommendations

- Consume less than 2,300 mg (approximately 1 tsp of salt) of sodium per day.
- Choose and prepare foods with little salt. At the same time, consume potassium-rich foods, such as fruits and vegetables.

Key Recommendations for Specific Population Groups

- *Individuals with hypertension, blacks, and middle-aged and older adults.* Aim to consume no more than 1,500 mg of sodium per day, and meet the potassium recommendation (4,700 mg/day) with food.

ALCOHOLIC BEVERAGES

Key Recommendations

- Those who choose to drink alcoholic beverages should do so sensibly and in moderation—defined as the consumption of up to one drink per day for women and up to two drinks per day for men.
- Alcoholic beverages should not be consumed by some individuals, including those who cannot restrict their alcohol intake, women of childbearing age who may become pregnant, pregnant and lactating women, children and adolescents, individuals taking medications that can interact with alcohol, and those with specific medical conditions.
- Alcoholic beverages should be avoided by individuals engaging in activities that require attention, skill, or coordination, such as driving or operating machinery.

FOOD SAFETY

Key Recommendations

- To avoid microbial foodborne illness:
 - Clean hands, food contact surfaces, and fruits and vegetables. Meat and poultry should not be washed or rinsed.
 - Separate raw, cooked, and ready-to-eat foods while shopping, preparing, or storing foods.
 - Cook foods to a safe temperature to kill microorganisms.
 - Chill (refrigerate) perishable food promptly and defrost foods properly.
 - Avoid raw (unpasteurized) milk or any products made from unpasteurized milk, raw or partially cooked eggs or foods containing raw eggs, raw or undercooked meat and poultry, unpasteurized juices, and raw sprouts.

Key Recommendations for Specific Population Groups

- *Infants and young children, pregnant women, older adults, and those who are immunocompromised.* Do not eat or drink raw (unpasteurized) milk or any products made from unpasteurized milk, raw or partially cooked eggs or foods containing raw eggs, raw or undercooked meat and poultry, raw or undercooked fish or shellfish, unpasteurized juices, and raw sprouts.

Pregnant women, older adults, and those who are immunocompromised:

Only eat certain deli meats and frankfurters that have been reheated to steaming hot.

DIETARY GUIDELINES FOR AMERICANS

The following information contains the *Dietary Guidelines for Americans*, as based on governmental research, and covers everything from BMI indicators to Sample Servings to Fat Grams.

At first glance, this text may appear to be boring, but let us assure you that some of it is quite interesting, and furthermore, considering that a full 1/3 of the U.S. population is considered 'obese', it's an education that everyone should have concerning proper nutritional and lifestyle habits.

Please take the time to read through the data carefully. We speculate that you will find something of value to your practice, and perhaps even for yourself, within the text.

Background and Purpose of the *Dietary Guidelines for Americans*

The *Dietary Guidelines for Americans [Dietary Guidelines]*, first published in 1980, provides science-based advice to promote health and to reduce risk for chronic diseases through diet and physical activity. The recommendations contained within the *Dietary Guidelines* are targeted to the general public over 2 years of age who are living in the United States. Because of its focus on health promotion and risk reduction, the *Dietary Guidelines* form the basis of federal food, nutrition education, and information programs.

The 2005 DGAC report is a detailed scientific analysis that identifies key issues such as energy balance, the consequences of a sedentary lifestyle, and the need to emphasize certain food choices to address nutrition issues for the American public. The scientific report was used to develop the *Dietary Guidelines* jointly between the two Departments, and this publication forms the basis of recommendations that will be used by USDA and HHS for program and policy development. Thus it is a publication oriented toward policymakers, nutrition educators, nutritionists and healthcare providers rather than to the general public, as with previous versions of the *Dietary Guidelines*, and contains more technical information.

These Key Recommendations are based on a preponderance of the scientific evidence of nutritional factors that are important for lowering risk of chronic disease and promoting health. To optimize the beneficial impact of these recommendations on health, the *Guidelines* should be implemented in their entirety.

IMPORTANCE OF THE *DIETARY GUIDELINES* FOR HEALTH PROMOTION AND DISEASE PREVENTION

Good nutrition is vital to good health and is absolutely essential for the healthy growth and development of children and adolescents. Major causes of morbidity and mortality in the United States are related to poor diet and a sedentary lifestyle. Specific diseases and conditions linked to poor diet include cardiovascular disease, hypertension, dyslipidemia, type 2 diabetes, overweight and obesity, osteoporosis, constipation, diverticular disease, iron deficiency anemia, oral disease, malnutrition, and some cancers. Lack of physical activity has been associated with cardiovascular disease, hypertension, overweight and obesity, osteoporosis, diabetes, and certain cancers.

Furthermore, muscle strengthening and improving balance can reduce falls and increase functional status among older adults. Together with physical activity, a high-quality diet that does not provide excess calories should enhance the health of most individuals.

Poor diet and physical inactivity, resulting in an energy imbalance (more calories consumed than expended), are the most important factors contributing to the increase in overweight and obesity in this country. Moreover, overweight and obesity are major risk factors for certain chronic diseases such as diabetes.

In 1999-2002, 65 percent of U.S. adults were overweight, an increase from 56 percent in 1988-1994. Data from 1999-2002 also showed that 30 percent of adults were obese, an increase from 23 percent in an earlier survey.

Dramatic increases in the prevalence of overweight have occurred in children and adolescents of both sexes, with approximately 16 percent of children and adolescents aged 6 to 19 years considered to be overweight (1999-2002). In order to reverse this trend, many Americans need to consume fewer calories, be more active, and make wiser choices within and among food groups. The *Dietary Guidelines* provides a framework to promote healthier lifestyles.

Given the importance of a balanced diet to health, the intent of the *Dietary Guidelines* is to summarize and synthesize knowledge regarding individual nutrients and food components into recommendations for an overall pattern of eating that can be adopted by the general public. These patterns are exemplified by the USDA Food Guide and the DASH Eating. The *Dietary Guidelines* is applicable to the food preferences of different racial/ethnic groups, vegetarians, and other groups. This concept of balanced eating patterns should be utilized in planning diets for various population groups.

There is a growing body of evidence which demonstrates that following a diet that complies with the *Dietary Guidelines* may reduce the risk of chronic disease. Recently, it was reported that dietary patterns consistent with recommended dietary guidance were associated with a lower risk of mortality among individuals age 45 years and older in the United States.⁴ The authors of the study estimated that about 16 percent and 9 percent of mortality from any cause in men and women, respectively, could be eliminated by the adoption of desirable dietary behaviors. Currently, adherence to the *Dietary Guidelines* is low among the U.S. population.

A basic premise of the *Dietary Guidelines* is that nutrient needs should be met primarily through consuming foods. Foods provide an array of nutrients (as well as phytochemicals, antioxidants, etc.) and other compounds that may have beneficial effects on health. In some cases, fortified foods may be useful sources of one or more nutrients that otherwise might be consumed in less than recommended amounts.

Supplements may be useful when they fill a specific identified nutrient gap that cannot or is not otherwise being met by the individual's intake of food. Nutrient supplements cannot replace a healthful diet. Individuals who are already consuming the recommended amount of a nutrient in food will not achieve any additional health benefit if they also take the nutrient as a supplement. In fact, in some cases, supplements and fortified foods may cause intakes to exceed the safe levels of nutrients. Another important premise of the *Dietary Guidelines* is that foods should be prepared and handled in such a way that reduces risk of foodborne illness.

Adequate Nutrients within Calorie Needs

Many Americans consume more calories than they need without meeting recommended intakes for a number of nutrients. This circumstance means that most people need to choose meals and snacks that are high in nutrients but low to moderate in energy content; that is, meeting nutrient recommendations must go hand in hand with keeping calories under control. Doing so offers important benefits—normal growth and development of children, health promotion for people of all ages, and reduction of risk for a number of chronic diseases that are major public health problems.

Based on dietary intake data or evidence of public health problems, intake levels of the following nutrients may be of concern for:

- **Adults:** calcium, potassium, fiber, magnesium, and vitamins A (as carotenoids), C, and E,
- **Children and adolescents:** calcium, potassium, fiber, magnesium, and vitamin E,
- **Specific population groups (see below):** vitamin B₁₂, iron, folic acid, and vitamins E and D.

At the same time, in general, Americans consume too many calories and too much saturated and *trans* fats, cholesterol, added sugars, and salt.

KEY RECOMMENDATIONS

- Consume a variety of nutrient-dense foods and beverages within and among the basic food groups while choosing foods that limit the intake of saturated and *trans* fats, cholesterol, added sugars, salt, and alcohol.
- Meet recommended intakes within energy needs by adopting a balanced eating pattern, such as the USDA Food Guide or the DASH Eating Plan.

Key Recommendations for Specific Population Groups

- *People over age 50.* Consume vitamin B₁₂ in its crystalline form (i.e., fortified foods or supplements).
- *Women of childbearing age who may become pregnant.* Eat foods high in heme-iron and/or consume iron-rich plant foods or iron-fortified foods with an enhancer of iron absorption, such as vitamin C-rich foods.
- *Women of childbearing age who may become pregnant and those in the first trimester of pregnancy.* Consume adequate synthetic folic acid daily (from fortified foods or supplements) in addition to food forms of folate from a varied diet.
- *Older adults, people with dark skin, and people exposed to insufficient ultraviolet band radiation (i.e., sunlight).* Consume extra vitamin D from vitamin D-fortified foods and/or supplements.

Meeting Recommended Intakes within Energy Needs

Two examples of eating patterns that exemplify the *Dietary Guidelines* are the **DASH Eating Plan** and the **USDA Food Guide**. These two similar eating patterns are designed to integrate dietary recommendations into a healthy way to eat and are used in the *Dietary Guidelines* to provide examples of how nutrient-focused recommendations can be expressed in terms of food choices.

Both the USDA Food Guide and the DASH Eating Plan differ in important ways from common food consumption patterns in the United States. In general, they include:

- **More** dark green vegetables, orange vegetables, legumes, fruits, whole grains, and low-fat milk and milk products.
- **Less** refined grains, total fats (especially cholesterol, and saturated and *trans* fats), added sugars, and calories.

Both the USDA Food Guide and the DASH Eating Plan are constructed across a range of calorie levels to meet the nutrient needs of various age and gender groups

Variety Among and Within Food Groups

Each basic food group⁵ is the major contributor of at least one nutrient while making substantial contributions of many other nutrients. Because each food group provides a wide array of nutrients in substantial amounts, it is important to include all food groups in the daily diet.

Both illustrative eating patterns include a variety of nutrient-dense foods within the major food groups. Selecting a variety of foods within the grain, vegetable, fruit, and meat groups may help to ensure that an adequate amount of nutrients and other potentially beneficial substances are consumed. For example, fish contains varying amounts of fatty acids that may be beneficial in reducing cardiovascular disease risk.

Nutrient-Dense Foods

Nutrient-dense foods are those foods that provide substantial amounts of vitamins and minerals (micronutrients) and relatively few calories. Foods that are low in nutrient density are foods that supply calories but relatively small amounts of micronutrients, sometimes none at all. **The greater the consumption of foods or beverages that are low in nutrient density, the more difficult it is to consume enough nutrients without gaining weight, especially for sedentary individuals.** The consumption of added sugars, saturated and *trans* fats, and alcohol provides calories while providing little, if any, of the essential nutrients.

Selecting low-fat forms of foods in each group and forms free of added sugars—in other words nutrient—dense versions of foods—provides individuals a way to meet their nutrient needs while avoiding the overconsumption of calories and of food components such as saturated fats. However, Americans generally do not eat nutrient-dense forms of foods. Most people will exceed calorie recommendations if they consistently choose higher fat foods within the food groups—even if they do not have dessert, sweetened beverages, or alcoholic beverages.

If only nutrient-dense foods are selected from each food group in the amounts proposed, a small amount of calories can be consumed as added fats or sugars, alcohol, or other foods—the *discretionary calorie allowance*.

Nutrients of Concern

The actual prevalence of inadequacy for a nutrient can be determined only if an Estimated Average Requirement (EAR) has been established and the distribution of usual dietary intake can be obtained. If such data are not available for a nutrient but there is evidence for a public health problem associated with low intakes, a nutrient might still be considered to be of concern.

Based on these considerations, dietary intakes of the following nutrients may be low enough to be of concern for:

- **Adults:** calcium, potassium, fiber, magnesium, and vitamins A (as carotenoids), C, and E,
- **Children and adolescents:** calcium, potassium, fiber, magnesium, and vitamin E,
- **Specific population groups:** vitamin B₁₂, iron, folic acid, and vitamins E and D.

Efforts may be warranted to promote increased dietary intakes of potassium, fiber, and possibly vitamin E, regardless of age; increased intakes of calcium and possibly vitamins A (as carotenoids) and C and magnesium by adults; efforts are warranted to increase intakes of calcium and possibly magnesium by children age 9 years or older. Efforts may be especially warranted to improve the dietary intakes of adolescent females in general.

Low intakes of fiber tend to reflect low intakes of whole grains, fruits, and vegetables. Low intakes of calcium tend to reflect low intakes of milk and milk products. Low intakes of vitamins A (as carotenoids) and C and magnesium tend to reflect low intakes of fruits and vegetables. Selecting fruits, vegetables, whole grains, and low-fat and fat-free milk and milk products in the amounts suggested by the USDA Food Guide and the DASH Eating Plan will provide adequate amounts of these nutrients.

Most Americans of all ages also need to increase their potassium intake. To meet the recommended potassium intake levels, potassium-rich foods from the fruit, vegetable, and dairy groups must be selected in both the USDA Food Guide and the DASH Eating Plan.

Most Americans may need to increase their consumption of foods rich in vitamin E (α -tocopherol) while decreasing their intake of foods high in energy but low in nutrients. The vitamin E content in both the USDA Food Guide and the DASH Eating Plan is greater than current consumption, and specific vitamin E-rich foods need to be included in the eating patterns to meet the recommended intake of vitamin E. Breakfast cereal that is fortified with vitamin E is an option for individuals seeking to increase their vitamin E intake while consuming a low-fat diet.

In addition, most Americans need to decrease sodium intake. The DASH Eating Plan provides guidance on how to keep sodium intakes within recommendations. When using the USDA Food Guide, selecting foods that are lower in sodium than others is especially necessary to meet the recommended intake level at calorie levels of 2,600/day and above.

Considerations for Specific Population Groups

People Over 50 and Vitamin B₁₂

Although a substantial proportion of individuals over age 50 have reduced ability to absorb naturally occurring vitamin B₁₂, they are able to absorb the crystalline form. Thus, all individuals over the age of 50 should be encouraged to meet their Recommended Dietary Allowance (RDA) (2.4 µg/day) for vitamin B₁₂ by eating foods fortified with vitamin B₁₂ such as fortified cereals, or by taking the crystalline form of vitamin B₁₂ supplements.

Women and Iron

Based on blood values, substantial numbers of adolescent females and women of childbearing age are iron deficient. Thus, these groups should eat foods high in heme-iron (e.g., meats) and/or consume iron-rich plant foods (e.g., spinach) or iron-fortified foods with an enhancer of iron absorption, such as foods rich in vitamin C (e.g., orange juice).

Women and Folic Acid

Since folic acid reduces the risk of the neural tube defects, spina bifida, and anencephaly, a daily intake of 400 µg/day of synthetic folic acid (from fortified foods or supplements in addition to food forms of folate from a varied diet) is recommended for women of childbearing age who may become pregnant. Pregnant women should consume 600 µg/day of synthetic folic acid (from fortified foods or supplements) in addition to food forms of folate from a varied diet. It is not known whether the same level of protection could be achieved by using food that is naturally rich in folate.

Special Groups and Vitamin D

Adequate vitamin D status, which depends on dietary intake and cutaneous synthesis, is important for optimal calcium absorption, and it can reduce the risk for bone loss. Two functionally relevant measures indicate that optimal serum 25-hydroxyvitamin D may be as high as 80 nmol/L. The elderly and individuals with dark skin (because the ability to synthesize vitamin D from exposure to sunlight varies with degree of skin pigmentation) are at a greater risk of low serum 25-hydroxyvitamin D concentrations. Also at risk are those exposed to insufficient ultraviolet radiation (i.e., sunlight) for the cutaneous production of vitamin D (e.g., housebound individuals).

For individuals within the high-risk groups, substantially higher daily intakes of vitamin D (i.e., 25 µg or 1,000 International Units (IU) of vitamin D per day) have been recommended to reach and maintain serum 25-hydroxyvitamin D values at 80 nmol/L. Three cups of vitamin D- fortified milk (7.5 µg or 300 IU), 1 cup of vitamin D-fortified orange juice (2.5 µg or 100 IU), and 15 µg (600 IU) of supplemental vitamin D would provide 25 µg (1,000 IU) of vitamin D daily.

Fluid

The combination of thirst and normal drinking behavior, especially the consumption of fluids with meals, is usually sufficient to maintain normal hydration. Healthy individuals who have routine access to fluids and who are not exposed to heat stress consume adequate water to meet their needs. Purposeful drinking is warranted for individuals who are exposed to heat stress or perform sustained vigorous activity.

Flexibility of Food Patterns for Varied Food Preferences

The USDA Food Guide and the DASH Eating Plan are flexible to permit food choices based on individual and cultural food preferences, cost, and availability. Both can also accommodate varied types of cuisines and special needs due to common food allergies. Two adaptations of the USDA Food Guide and the DASH Eating Plan are:

Vegetarian Choices

Vegetarians of all types can achieve recommended nutrient intakes through careful selection of foods. These individuals should give special attention to their intakes of protein, iron, and vitamin B₁₂, as well as calcium and vitamin D if avoiding milk products. In addition, vegetarians could select only nuts, seeds, and legumes from the meat and beans group, or they could include eggs if so desired. At the 2,000-calorie level, they could choose about 1.5 ounces of nuts and 2/3 cup legumes instead of 5.5 ounces of meat, poultry, and/or fish. One egg, 1/2 ounce of nuts, or 1/4 cup of legumes is considered equivalent to 1 ounce of meat, poultry, or fish in the USDA Food Guide.

Substitutions for Milk and Milk Products

Since milk and milk products provide more than 70 percent of the calcium consumed by Americans, guidance on other choices of dietary calcium is needed for those who do not consume the recommended amount of milk products. Milk product consumption has been associated with overall diet quality and adequacy of intake of many nutrients, including calcium, potassium, magnesium, zinc, iron, riboflavin, vitamin A, folate, and vitamin D. People may avoid milk products because of allergies, cultural practices, taste, or other reasons. Those who avoid all milk products need to choose rich sources of the nutrients provided by milk, including potassium, vitamin A, and magnesium in addition to calcium and vitamin D. The bioavailability of the calcium in these foods varies.

Those who avoid milk because of its lactose content may obtain all the nutrients provided by the milk group by using lactose-reduced or low-lactose milk products, taking small servings of milk several times a day, taking the enzyme lactase before consuming milk products, or eating other calcium-rich foods.

TABLE 1. Sample USDA Food Guide and the DASH Eating Plan at the 2,000-Calorie Level^a

Amounts of various food groups that are recommended each day or each week in the USDA Food Guide and in the DASH Eating Plan (amounts are daily unless otherwise specified) at the 2,000-calorie level. Also identified are equivalent amounts for different food choices in each group. To follow either eating pattern, food choices over time should provide these amounts of food from each group on average.

TABLE 1. Sample USDA Food Guide and the DASH Eating Plan at the 2,000-Calorie Level^a

Food Groups and Subgroups	USDA Food Guide Amount ^b	DASH Eating Plan Amount	Equivalent Amounts
Fruit Group	2 cups (4 servings)	2 to 2.5 cups (4 to 5 servings)	½ cup equivalent is: <ul style="list-style-type: none"> ▫ ½ cup fresh, frozen, or canned fruit ▫ 1 med fruit ▫ ¼ cup dried fruit ▫ USDA: ½ cup fruit juice ▫ DASH: ¾ cup fruit juice
Vegetable Group <ul style="list-style-type: none"> ▫ Dark green vegetables ▫ Orange vegetables ▫ Legumes (dry beans) ▫ Starchy vegetables ▫ Other vegetables 	2.5 cups (5 servings) 3 cups/week 2 cups/week 3 cups/week 3 cups/week 6.5 cups/week	2 to 2.5 cups (4 to 5 servings)	½ cup equivalent is: <ul style="list-style-type: none"> ▫ ½ cup of cut-up raw or cooked vegetable ▫ 1 cup raw leafy vegetable ▫ USDA: ½ cup vegetable juice ▫ DASH: ¾ cup vegetable juice
Grain Group <ul style="list-style-type: none"> ▫ Whole grains ▫ Other grains 	6 ounce-equivalents 3 ounce-equivalents 3 ounce-equivalents	7 to 8 ounce-equivalents (7 to 8 servings)	1 ounce-equivalent is: <ul style="list-style-type: none"> ▫ 1 slice bread ▫ 1 cup dry cereal ▫ ½ cup cooked rice, pasta, cereal ▫ DASH: 1 oz dry cereal (½-1¼ cup depending on cereal type—check label)
Meat and Beans Group	5.5 ounce-equivalents	6 ounces or less meat, poultry, fish	1 ounce-equivalent is: <ul style="list-style-type: none"> ▫ 1 ounce of cooked lean meats, poultry, fish ▫ 1 egg ▫ USDA: ¼ cup cooked dry beans or tofu, 1 Tbsp peanut butter, ½ oz nuts or seeds ▫ DASH: 1½ oz nuts, ½ oz seeds, ½ cup cooked dry beans
		4 to 5 servings per week nuts, seeds, and dry beans ^c	
Milk Group	3 cups	2 to 3 cups	1 cup equivalent is: <ul style="list-style-type: none"> ▫ 1 cup low-fat/fat-free milk, yogurt ▫ 1½ oz of low-fat or fat-free natural cheese ▫ 2 oz of low-fat or fat-free processed cheese
Oils	27 grams (6 tsp)	8 to 12 grams (2 to 3	1 tsp equivalent is:

		tsp)	<ul style="list-style-type: none"> ▫ DASH: 1 tsp soft margarine ▫ 1 Tbsp low-fat mayo ▫ 2 Tbsp light salad dressing ▫ 1 tsp vegetable oil
Discretionary Calorie Allowance <ul style="list-style-type: none"> ▫ Example of distribution: Solid fat^d Added sugars 	267 calories 18 grams 8 tsp	~2 tsp of added sugar (5 Tbsp per week)	1 Tbsp added sugar equivalent is: <ul style="list-style-type: none"> ▫ DASH: 1 Tbsp jelly or jam ▫ ½ oz jelly beans ▫ 8 oz lemonade

^a All servings are per day unless otherwise noted. USDA vegetable subgroup amounts and amounts of DASH nuts, seeds, and dry beans are per week.

^b The 2,000-calorie USDA Food Guide is appropriate for many sedentary males 51 to 70 years of age, sedentary females 19 to 30 years of age, and for some other gender/age groups who are more physically active. See table 3 for information about gender/age/activity levels and appropriate calorie intakes. See appendixes [A-2](#) and [A-3](#) for more information on the food groups, amounts, and food intake patterns at other calorie levels.

^c In the DASH Eating Plan, nuts, seeds, and dry beans are a separate food group from meat, poultry, and fish.

^d The oils listed in this table are not considered to be part of discretionary calories because they are a major source of the vitamin E and polyunsaturated fatty acids, including the essential fatty acids, in the food pattern. In contrast, solid fats (i.e., saturated and *trans* fats) are listed separately as a source of discretionary calories.

TABLE 2. Comparison of Selected Nutrients in the Dietary Approaches to Stop Hypertension (DASH) Eating Plan^a, the USDA Food Guide^b, and Nutrient Intakes Recommended Per Day by the Institute of Medicine (IOM)^c

Estimated nutrient levels in the DASH Eating Plan and the USDA Food Guide at the 2,000-calorie level, as well as the nutrient intake levels recommended by the Institute of Medicine for females 19-30 years of age.

Nutrient	DASH Eating Plan (2,000 kcals)	USDA Food Guide (2,000 kcals)	IOM Recommendations for Females 19 to 30
Protein, g	108	91	RDA: 46
Protein, % kcal	21	18	AMDR: 10-35
Carbohydrate, g	288	271	RDA: 130
Carbohydrate, % kcal	57	55	AMDR: 45-65
Total fat, g	48	65	—
Total fat, % kcal	22	29	AMDR: 20-35
Saturated fat, g	10	17	—
Saturated fat, % kcal	5	7.8	ALAP ^d
Monounsaturated fat, g	21	24	—
Monounsaturated fat, % kcal	10	11	—
Polyunsaturated fat, g	12	20	—
Polyunsaturated fat, % kcal	5.5	9.0	—
Linoleic acid, g	11	18	AI: 12
Alpha-linolenic acid, g	1	1.7	AI: 1.1
Cholesterol, mg	136	230	ALAP ^d
Total dietary fiber, g	30	31	AI: 28 ^e
Potassium, mg	4,706	4,044	AI: 4,700
Sodium, mg	2,329 ^f	1,779	AI: 1,500, UL: <2,300
Calcium, mg	1,619	1,316	AI: 1,000
Magnesium, mg	500	380	RDA: 310
Copper, mg	2	1.5	RDA: 0.9
Iron, mg	21	18	RDA: 18
Phosphorus, mg	2,066	1,740	RDA: 700
Zinc, mg	14	14	RDA: 8
Thiamin, mg	2.0	2.0	RDA: 1.1
Riboflavin, mg	2.8	2.8	RDA: 1.1
Niacin equivalents, mg	31	22	RDA: 14
Vitamin B6, mg	3.4	2.4	RDA: 1.3
Vitamin B ₁₂ , µg	7.1	8.3	RDA: 2.4
Vitamin C, mg	181	155	RDA: 75
Vitamin E (AT) ^g	16.5	9.5	RDA: 15.0
Vitamin A, µg (RAE) ^h	851	1,052	RDA: 700

^a DASH nutrient values are based on a 1-week menu of the DASH Eating Plan. NIH publication No. 03-4082. www.nhlbi.nih.gov.

^b USDA nutrient values are based on population-weighted averages of typical food choices within each food group or subgroup.

^c Recommended intakes for adult females 19-30; RDA = Recommended Dietary Allowance; AI = Adequate Intake; AMDR = Acceptable Macronutrient Distribution Range; UL = Upper Limit.

TABLE 3. Estimated Calorie Requirements (in Kilocalories) for Each Gender and Age Group at Three Levels of Physical Activity^a

Estimated amounts of calories needed to maintain energy balance for various gender and age groups at three different levels of physical activity. The estimates are rounded to the nearest 200 calories and were determined using the Institute of Medicine equation.

Gender	Age (years)	Activity Level ^{b,c,d}		
		Sedentary ^b	Moderately Active ^c	Active ^d
Child	2-3	1,000	1,000-1,400 ^e	1,000-1,400 ^e
Female	4-8	1,200	1,400-1,600	1,400-1,800
	9-13	1,600	1,600-2,000	1,800-2,200
	14-18	1,800	2,000	2,400
	19-30	2,000	2,000-2,200	2,400
	31-50	1,800	2,000	2,200
	51+	1,600	1,800	2,000-2,200
Male	4-8	1,400	1,400-1,600	1,600-2,000
	9-13	1,800	1,800-2,200	2,000-2,600
	14-18	2,200	2,400-2,800	2,800-3,200
	19-30	2,400	2,600-2,800	3,000
	31-50	2,200	2,400-2,600	2,800-3,000
	51+	2,000	2,200-2,400	2,400-2,800

^a These levels are based on Estimated Energy Requirements (EER) from the Institute of Medicine Dietary Reference Intakes macronutrients report, 2002, calculated by gender, age, and activity level for reference-sized individuals. "Reference size," as determined by IOM, is based on median height and weight for ages up to age 18 years of age and median height and weight for that height to give a BMI of 21.5 for adult females and 22.5 for adult males.

^b Sedentary means a lifestyle that includes only the light physical activity associated with typical day-to-day life.

^c Moderately active means a lifestyle that includes physical activity equivalent to walking about 1.5 to 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life

^d Active means a lifestyle that includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life.

^e The calorie ranges shown are to accommodate needs of different ages within the group. For children and adolescents, more calories are needed at older ages. For adults, fewer calories are needed at older ages.

Weight Management

The prevalence of obesity in the United States has doubled in the past two decades. **Nearly one-third of adults are obese, that is, they have a body mass index (BMI) of 30 or greater.** One of the fastest growing segments of the population is that with a BMI \geq 30 with accompanying comorbidities.

Over the last two decades, the prevalence of overweight among children and adolescents has increased substantially; it is estimated that as many as 16 percent of children and adolescents are overweight, representing a doubling of the rate among children and tripling of the rate among adolescents.

A high prevalence of overweight and obesity is of great public health concern because excess body fat leads to a higher risk for premature death, type 2 diabetes, hypertension, dyslipidemia, cardiovascular disease, stroke, gall bladder disease, respiratory dysfunction, gout, osteoarthritis, and certain kinds of cancers.

Ideally, the goal for adults is to achieve and maintain a body weight that optimizes their health. However, for obese adults, even modest weight loss (e.g., 10 pounds) has health benefits, and the prevention of further weight gain is very important. For overweight children and adolescents, the goal is to slow the rate of weight gain while achieving normal growth and development. Maintaining a healthy weight throughout childhood may reduce the risk of becoming an overweight or obese adult. Eating fewer calories while increasing physical activity are the keys to controlling body weight. While overweight and obesity are currently significant public health issues, not all Americans need to lose weight. People at a healthy weight should strive to maintain their weight, and underweight individuals may need to increase their weight.

KEY RECOMMENDATIONS

- To maintain body weight in a healthy range, balance calories from foods and beverages with calories expended.
- To prevent gradual weight gain over time, make small decreases in food and beverage calories and increase physical activity.

Key Recommendations for Specific Population Groups

- *Those who need to lose weight.* Aim for a slow, steady weight loss by decreasing calorie intake while maintaining an adequate nutrient intake and increasing physical activity.
- *Overweight children.* Reduce the rate of body weight gain while allowing growth and development. Consult a healthcare provider before placing a child on a weight-reduction diet.
- *Pregnant women.* Ensure appropriate weight gain as specified by a healthcare provider.
- *Breastfeeding women.* Moderate weight reduction is safe and does not compromise weight gain of the nursing infant.
- *Overweight adults and overweight children with chronic diseases and/or on medication.* Consult a healthcare provider about weight loss strategies prior to starting a weight-reduction program to ensure appropriate management of other health conditions.

Overweight and obesity in the United States among adults and children has increased significantly over the last two decades. Those following typical American eating and activity patterns are likely to be consuming diets in excess of their energy requirements. However, caloric intake is only one side of the energy balance equation.

Caloric expenditure needs to be in balance with caloric intake to maintain body weight and must exceed caloric intake to achieve weight loss (see tables [3](#) and [4](#)). To reverse the trend toward obesity, most Americans need to eat fewer calories, be more active, and make wiser food choices.

Prevention of weight gain is critical because while the behaviors required are the same, the extent of the behaviors required to lose weight makes weight loss more challenging than prevention of weight gain. Since many adults gain weight slowly over time, even small decreases in calorie intake can help avoid weight gain, especially if accompanied by increased physical activity.

For example, for most adults a reduction of 50 to 100 calories per day may prevent gradual weight gain, whereas a reduction of 500 calories or more per day is a common initial goal in weight-loss programs. Similarly, up to 60 minutes of moderate- to vigorous-intensity physical activity per day may be needed to prevent weight gain, but as much as 60 to 90 minutes of moderate-intensity physical activity per day is recommended to sustain weight loss for previously overweight people.

It is advisable for men over age 40, women over age 50, and those with a history of chronic diseases such as heart disease or diabetes to consult with a healthcare provider before starting a vigorous exercise program. However, many people can safely increase their physical activity without consulting a healthcare provider.

Monitoring body fat regularly can be a useful strategy for assessing the need to adjust caloric intake and energy expenditure. Two surrogate measures used to approximate body fat are BMI (adults and children) and waist circumference (adults). BMI is defined as weight in kilograms divided by height, in meters, squared. For adults, weight status is based on the absolute BMI level. For children and adolescents, weight status is determined by the comparison of the individual's BMI with age- and gender-specific percentile values. Additional growth curves can be found at <http://www.cdc.gov/growthcharts>.

BMI is more accurate at approximating body fat than is measuring body weight alone. However, BMI has some limitations. BMI overestimates body fat in people who are very muscular and underestimates body fat in people who have lost muscle mass. The relationship between BMI and body fat varies somewhat with age, gender, and ethnicity.

In addition, for adults, BMI is a better predictor of a population's disease risk than an individual's risk of chronic disease. For children gaining excess weight, small decreases in energy intake reduce the rate at which they gain weight (body fat), thus improving their BMI percentile over time. As another surrogate measure, waist circumference can approximate abdominal fat but should be measured very carefully. Fat located in the abdominal region is associated with a greater health risk than peripheral fat.

Some proposed calorie-lowering strategies include eating foods that are low in calories for a given measure of food (e.g., many kinds of vegetables and fruits and some soups). However, when making changes to improve nutrient intake, one needs to make substitutions to avoid excessive calorie intake. The healthiest way to reduce calorie intake is to reduce one's intake of added sugars, fats, and alcohol, which all provide calories but few or no essential nutrients.

Special attention should be given to portion sizes, which have increased significantly over the past two decades (<http://hin.nhlbi.nih.gov/portion/index.htm>). Though there are no empirical studies to

show a causal relationship between increased portion sizes and obesity, there are studies showing that controlling portion sizes helps limit calorie intake, particularly when eating calorie-dense foods (foods that are high in calories for a given measure of food).

Therefore, it is essential that the public understand how portion sizes compare to a recommended amount of food (i.e., serving) from each food group at a specific caloric level. The understanding of serving size and portion size is important in following either the DASH Eating Plan or the USDA Food Guide. When using packaged foods with nutrient labels, people should pay attention to the units for serving sizes and how they compare to the serving sizes in the USDA Food Guide and the DASH Eating Plan.

Lifestyle change in diet and physical activity is the best first choice for weight loss. A reduction in 500 calories or more per day is commonly needed. When it comes to body weight control, it is calories that count—not the proportions of fat, carbohydrates, and protein in the diet. However, when individuals are losing weight, they should follow a diet that is within the Acceptable Macronutrient Distribution Ranges (**AMDR**) for fat, carbohydrates, and protein, which are 20 to 35 percent of total calories, 45 to 65 percent of total calories, and 10 to 35 percent of total calories, respectively.

Diets that provide very low or very high amounts of protein, carbohydrates, or fat are likely to provide low amounts of some nutrients and are not advisable for long-term use. Although these kinds of weight-loss diets have been shown to result in weight reduction, the maintenance of a reduced weight ultimately will depend on a change in lifestyle. Successful and sustainable weight loss and weight maintenance strategies require attention to both sides of the energy balance equation (i.e., caloric intake and energy expenditure).

TABLE 4. Calories/Hour Expended in Common Physical Activities

Some examples of physical activities commonly engaged in and the average amount of calories a 154-pound individual will expend by engaging in each activity for 1 hour. The expenditure value encompasses both resting metabolic rate calories and activity expenditure. Some of the activities can constitute either moderate- or vigorous-intensity physical activity depending on the rate at which they are carried out (for walking and bicycling).

Moderate Physical Activity	Approximate Calories/Hr for a 154 lb Person
Hiking	370
Light gardening/yard work	330
Dancing	330
Golf (walking and carrying clubs)	330
Bicycling (<10 mph)	290
Walking (3.5 mph)	280
Weight lifting (general light workout)	220
Stretching	180
Vigorous Physical Activity	Approximate Calories/Hr for a 154 lb Person
Running/jogging (5 mph)	590
Bicycling (>10 mph)	590
Swimming (slow freestyle laps)	510
Aerobics	480
Walking (4.5 mph)	460
Heavy yard work (chopping wood)	440
Weight lifting (vigorous effort)	440
Basketball (vigorous)	440

^a Calories burned per hour will be higher for persons who weigh more than 154 lbs (70 kg) and lower for persons who weigh less.

Source: Adapted from the 2005 DGAC Report.

Adult BMI Chart

Locate the height of interest in the left-most column and read across the row for that height to the weight of interest. Follow the weight column up to the top row that lists the BMI.

BMI of 18.5-24.9 is the healthy weight range, BMI of 25-29.9 is the overweight range, and BMI of 30 and above is in the obese range.

BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Height	Weight in Pounds																
4'10"	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167
4'11"	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173
5'	97	102	107	112	118	123	128	133	138	143	148	153	158	163	158	174	179
5'1"	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185
5'2"	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191
5'3"	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197
5'4"	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204
5'5"	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210
5'6"	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216
5'7"	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223
5'8"	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230
5'9"	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236
5'10"	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243
5'11"	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250
6'	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258
6'1"	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265
6'2"	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272
6'3"	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279
	Healthy Weight						Overweight					Obese					

Source: Evidence Report of Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults, 1998. NIH/National Heart, Lung, and Blood Institute (NHLBI).

Physical Activity

Americans tend to be relatively inactive. In 2002, 25 percent of adult Americans did not participate in any leisure time physical activities in the past month, and in 2003, 38 percent of students in grades 9 to 12 viewed television 3 or more hours per day. Regular physical activity and physical fitness make important contributions to one's health, sense of well-being, and maintenance of a healthy body weight. Physical activity is defined as any bodily movement produced by skeletal muscles resulting in energy expenditure.

In contrast, physical fitness is a multi-component trait related to the ability to perform physical activity. Maintenance of good physical fitness enables one to meet the physical demands of work and leisure comfortably. People with higher levels of physical fitness are also at lower risk of developing chronic disease.

A sedentary lifestyle increases risk for overweight and obesity and many chronic diseases, including coronary artery disease, hypertension, type 2 diabetes, osteoporosis, and certain cancers. Overall, mortality rates from all causes of death are lower in physically active people than in sedentary people. Also, physical activity can aid in managing mild to moderate depression and anxiety.

KEY RECOMMENDATIONS

- Engage in regular physical activity and reduce sedentary activities to promote health, psychological well-being, and a healthy body weight.
 - To reduce the risk of chronic disease in adulthood: Engage in at least 30 minutes of moderate-intensity physical activity, above usual activity, at work or home on most days of the week.
 - For most people, greater health benefits can be obtained by engaging in physical activity of more vigorous intensity or longer duration.
 - To help manage body weight and prevent gradual, unhealthy body weight gain in adulthood: Engage in approximately 60 minutes of moderate- to vigorous-intensity activity on most days of the week while not exceeding caloric intake requirements.
 - To sustain weight loss in adulthood: Participate in at least 60 to 90 minutes of daily moderate-intensity physical activity while not exceeding caloric intake requirements. Some people may need to consult with a healthcare provider before participating in this level of activity.
- Achieve physical fitness by including cardiovascular conditioning, stretching exercises for flexibility, and resistance exercises or calisthenics for muscle strength and endurance.

Key Recommendations for Specific Population Groups

- *Children and adolescents.* Engage in at least 60 minutes of physical activity on most, preferably all, days of the week.
- *Pregnant women.* In the absence of medical or obstetric complications, incorporate 30 minutes or more of moderate-intensity physical activity on most, if not all, days of the week. Avoid activities with a high risk of falling or abdominal trauma.
- *Breastfeeding women.* Be aware that neither acute nor regular exercise adversely affects the mother's ability to successfully breastfeed.
- *Older adults.* Participating in regular physical activity reduces functional declines associated with aging and achieves benefits of physical activity identified for all adults.

Regular physical activity has been shown to reduce the risk of certain chronic diseases, including high blood pressure, stroke, coronary artery disease, type 2 diabetes, colon cancer and osteoporosis. Therefore, to reduce the risk of chronic disease, it is recommended that adults engage in at least 30 minutes of moderate-intensity physical activity on most, preferably all, days of the week.

For most people, greater health benefits can be obtained by engaging in physical activity of more vigorous intensity or of longer duration. In addition, physical activity appears to promote psychological well-being and reduce feelings of mild to moderate depression and anxiety.

Regular physical activity is also a key factor in achieving and maintaining a healthy body weight for adults and children. To prevent the gradual accumulation of excess weight in adulthood, up to 30 additional minutes per day may be required over the 30 minutes for reduction of chronic disease risk and other health benefits. That is, approximately 60 minutes of moderate- to vigorous-intensity physical activity on most days of the week may be needed to prevent unhealthy weight gain.

While moderate-intensity physical activity can achieve the desired goal, vigorous-intensity physical activity generally provides more benefits than moderate-intensity physical activity. Control of caloric intake is also advisable. However, to sustain weight loss for previously overweight/obese people, about 60 to 90 minutes of moderate-intensity physical activity per day is recommended.

Most adults do not need to see their healthcare provider before starting a moderate-intensity physical activity program. However, men older than 40 years and women older than 50 years who plan a vigorous program or who have either chronic disease or risk factors for chronic disease should consult their physician to design a safe, effective program.

It is also important during leisure time to limit sedentary behaviors, such as television watching and video viewing, and replace them with activities requiring more movement. Reducing these sedentary activities appears to be helpful in treating and preventing overweight among children and adolescents.

Different intensities and types of exercise confer different benefits. Vigorous physical activity (e.g., jogging or other aerobic exercise) provides greater benefits for physical fitness than does moderate physical activity and burns more calories per unit of time. Resistance exercise (such as weight training, using weight machines and resistance band workouts) increases muscular strength and endurance and maintains or increases muscle mass. These benefits are seen in adolescents, adults, and older adults who perform resistance exercises on 2 or more days per week.

Also, weight-bearing exercise has the potential to reduce the risk of osteoporosis by increasing peak bone mass during growth, maintaining peak bone mass during adulthood, and reducing the rate of bone loss during aging. In addition, regular exercise can help prevent falls, which is of particular importance for older adults.

The barrier often given for a failure to be physically active is lack of time. Setting aside 30 to 60 consecutive minutes each day for planned exercise is one way to obtain physical activity, but it is not the only way. Physical activity may include short bouts (e.g., 10-minute bouts) of moderate-intensity activity. The accumulated total is what is important—both for health and for burning calories. Physical activity can be accumulated through three to six 10-minute bouts over the course of a day.

Elevating the level of daily physical activity may also provide indirect nutritional benefits. A sedentary lifestyle limits the number of calories that can be consumed without gaining weight. The higher a person's physical activity level, the higher his or her energy requirement and the easier it is to plan a daily food intake pattern that meets recommended nutrient requirements.

Proper hydration is important when participating in physical activity. Two steps that help avoid dehydration during prolonged physical activity or when it is hot include: (1) consuming fluid regularly during the activity and (2) drinking several glasses of water or other fluid after the physical activity is completed.

FATS & OILS

Fats and oils are part of a healthful diet, but the type of fat makes a difference to heart health, and the total amount of fat consumed is also important. High intake of saturated fats, *trans* fats, and cholesterol increases the risk of unhealthy blood lipid levels, which, in turn, may increase the risk of coronary heart disease. A high intake of fat (greater than 35 percent of calories) generally increases saturated fat intake and makes it more difficult to avoid consuming excess calories. A low intake of fats and oils (less than 20 percent of calories) increases the risk of inadequate intakes of vitamin E and of essential fatty acids and may contribute to unfavorable changes in high-density lipoprotein (HDL) blood cholesterol and triglycerides.

KEY RECOMMENDATIONS

- Consume less than 10 percent of calories from saturated fatty acids and less than 300 mg/day of cholesterol, and keep *trans* fatty acid consumption as low as possible.
- Keep total fat intake between 20 to 35 percent of calories, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts, and vegetable oils.
- When selecting and preparing meat, poultry, dry beans, and milk or milk products, make choices that are lean, low-fat, or fat-free.
- Limit intake of fats and oils high in saturated and/or *trans* fatty acids, and choose products low in such fats and oils.

Key Recommendations for Specific Population Groups

- *Children and adolescents.* Keep total fat intake between 30 to 35 percent of calories for children 2 to 3 years of age and between 25 to 35 percent of calories for children and adolescents 4 to 18 years of age, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts, and vegetable oils.

Fats supply energy and essential fatty acids and serve as a carrier for the absorption of the fat-soluble vitamins A, D, E, and K and carotenoids. Fats serve as building blocks of membranes and play a key regulatory role in numerous biological functions. Dietary fat is found in foods derived from both plants and animals. The recommended total fat intake is between 20 and 35 percent of calories for adults.

A fat intake of 30 to 35 percent of calories is recommended for children 2 to 3 years of age and 25 to 35 percent of calories for children and adolescents 4 to 18 years of age. Few Americans consume less than 20 percent of calories from fat. Fat intakes that exceed 35 percent of calories are associated with both total increased saturated fat and calorie intakes.

To decrease their risk of elevated low-density lipoprotein (LDL) cholesterol in the blood, most Americans need to decrease their intakes of saturated fat and *trans* fats, and many need to decrease

their dietary intake of cholesterol. Because men tend to have higher intakes of dietary cholesterol, it is especially important for them to meet this recommendation. Population-based studies of American diets show that intake of saturated fat is more excessive than intake of *trans* fats and cholesterol. Therefore, it is most important for Americans to decrease their intake of saturated fat. However, intake of all three should be decreased to meet recommendations.

Based on 1994-1996 data, the estimated average daily intake of *trans* fats in the United States was about 2.6 percent of total energy intake. Processed foods and oils provide approximately 80 percent of *trans* fats in the diet, compared to 20 percent that occur naturally in food from animal sources. *Trans* fat content of certain processed foods has changed and is likely to continue to change as the industry reformulates products.

Because the *trans* fatty acids produced in the partial hydrogenation of vegetable oils account for more than 80 percent of total intake, the food industry has an important role in decreasing *trans* fatty acid content of the food supply. Limited consumption of foods made with processed sources of *trans* fats provides the most effective means of reducing intake of *trans* fats. By looking at the food label, consumers can select products that are lowest in saturated fat, *trans* fats, and cholesterol.

To meet the total fat recommendation of 20 to 35 percent of calories, most dietary fats should come from sources of polyunsaturated and monounsaturated fatty acids. Sources of omega-6 polyunsaturated fatty acids are liquid vegetable oils, including soybean oil, corn oil, and safflower oil. Plant sources of omega-3 polyunsaturated fatty acids (α -linolenic acid) include soybean oil, canola oil, walnuts, and flaxseed. Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) are omega-3 fatty acids that are contained in fish and shellfish. Fish that naturally contain more oil (e.g., salmon, trout, herring) are higher in EPA and DHA than are lean fish (e.g., cod, haddock, catfish).

Limited evidence suggests an association between consumption of fatty acids in fish and reduced risks of mortality from cardiovascular disease for the general population. Other sources of EPA and DHA may provide similar benefits; however, more research is needed. Plant sources that are rich in monounsaturated fatty acids include vegetable oils (e.g., canola, olive, high oleic safflower, and sunflower oils) that are liquid at room temperature and nuts.

TABLE 8. Maximum Daily Amounts of Saturated Fat - To Keep Saturated Fat Below 10 Percent of Total Calorie Intake

The maximum gram amounts of saturated fat that can be consumed to keep saturated fat intake below 10 percent of total calorie intake for selected calorie levels. A 2,000-calorie example is included for consistency with the food label. This table may be useful when combined with label-reading guidance.

Total Calorie Intake	Limit on Saturated Fat Intake
1,600	18 g or less
2,000 ^a	20 g or less
2,200	24 g or less
2,500 ^a	25 g or less
2,800	31 g or less

TABLE 9. Differences in Saturated Fat and Calorie Content of Commonly Consumed Foods

This table shows a few practical examples of the differences in the saturated fat content of different forms of commonly consumed foods. Comparisons are made between foods in the same food group (e.g., regular cheddar cheese and low-fat cheddar cheese), illustrating that lower saturated fat choices can be made within the same food group.

Food Category	Portion	Saturated Fat Content (grams)	Calories
Cheese			
□ Regular cheddar cheese	1 oz	6.0	114
□ Low-fat cheddar cheese	1 oz	1.2	49
Ground beef			
□ Regular ground beef (25% fat)	3 oz (cooked)	6.1	236
□ Extra lean ground beef (5% fat)	3 oz (cooked)	2.6	148
Milk			
□ Whole milk (3.24%)	1 cup	4.6	146
□ Low-fat (1%) milk	1 cup	1.5	102
Breads			
□ Croissant (med)	1 medium	6.6	231
□ Bagel, oat bran (4")	1 medium	0.2	227
Frozen desserts			
□ Regular ice cream	1/2 cup	4.9	145
□ Frozen yogurt, low-fat	1/2 cup	2.0	110
Table spreads			
□ Butter	1 tsp	2.4	34
□ Soft margarine with zero <i>trans</i>	1 tsp	0.7	25
Chicken			
□ Fried chicken (leg with skin)	3 oz (cooked)	3.3	212
□ Roasted chicken (breast no skin)	3 oz (cooked)	0.9	140
Fish			
□ Fried fish	3 oz	2.8	195
□ Baked fish	3 oz	1.5	129

Source: ARS Nutrient Database for Standard Reference, Release 17.

TABLE 10. Contribution of Various Foods to Saturated Fat Intake in the American Diet (Mean Intake = 25.5 g)

The major dietary sources of saturated fats in the U.S. diet listed in decreasing order.

Food Group	Contribution (% of total sat fat consumed)
Cheese	13.1
Beef	11.7
Milk ^a	7.8
Oils	4.9
Ice cream/sherbet/frozen yogurt	4.7
Cakes/cookies/quick breads/doughnuts	4.7
Butter	4.6
Other fats ^b	4.4
Salad dressings/mayonnaise	3.7
Poultry	3.6
Margarine	3.2
Sausage	3.1
Potato chips/corn chips/popcorn	2.9
Yeast bread	2.6
Eggs	2.3

^a The milk category includes all milk, including whole milk, low-fat milk, and fat-free milk.

^b Shortening and animal fats

Source: Adapted from Cotton PA, Subar AF, Friday JE, Cook A, Dietary Sources of Nutrients among U.S. Adults, 1994-1996. *JADA* 104:921-931, 2004.

TABLE 11. Contribution of Various Foods to *Trans* Fat Intake in the American Diet (Mean Intake = 5.84 g)

The major dietary sources of *trans* fats listed in decreasing order. Processed foods and oils provide approximately 80 percent of *trans* fats in the diet, compared to 20 percent that occur naturally in food from animal sources. *Trans* fats content of certain processed foods has changed and is likely to continue to change as the industry reformulates products.

Food Group	Contribution (percent of total <i>trans</i> fats consumed)
Cakes, cookies, crackers, pies, bread, etc.	40
Animal products	21
Margarine	17
Fried potatoes	8
Potato chips, corn chips, popcorn	5
Household shortening	4
Other ^a	5

^a Includes breakfast cereal and candy. USDA analysis reported 0 grams of *trans* fats in salad dressing.

Source: Adapted from *Federal Register* notice. *Food Labeling; Trans Fatty Acids in Nutrition Labeling; Consumer Research To Consider Nutrient Content and Health Claims and Possible Footnote or Disclosure Statements; Final Rule and Proposed Rule*. Vol. 68, No. 133, p. 41433-41506, July 11, 2003. Data collected 1994-1996.

TABLE 12. Relationship Between LDL Blood Cholesterol Goal and the Level of Coronary Heart Disease Risk

Information for adults with elevated LDL blood cholesterol. LDL blood cholesterol goals for these individuals are related to the level of coronary heart disease risk. People with an elevated LDL blood cholesterol value should make therapeutic lifestyle changes (diet, physical activity, weight control) under the care of a healthcare provider to lower LDL blood cholesterol.

If Someone Has:	LDL Blood Cholesterol Goal Is:
CHD or CHD risk equivalent ^a	Less than 100 mg/dL
Two or more risk factors other than elevated LDL blood cholesterol ^b	Less than 130 mg/dL
Zero or one risk factor other than elevated LDL blood cholesterol ^b	Less than 160 mg/dL

^a **CHD (coronary heart disease) risk equivalent = presence of clinical atherosclerotic disease that confers high risk for CHD events:**

- Clinical CHD
- Symptomatic carotid artery disease
- Peripheral arterial disease
- Abdominal aortic aneurysm
- Diabetes
- Two or more risk factors with >20% risk for CHD (or myocardial infarction or CHD death) within 10 years

^b **Major risk factors that affect your LDL goal:**

- Cigarette smoking
- High blood pressure (140/90 mmHg or higher or on blood pressure medication)
- Low HDL blood cholesterol (less than 40 mg/dL)
- Family history of early heart disease (heart disease in father or brother before age 55; heart disease in mother or sister before age 65)
- Age (men 45 years or older; women 55 years or older)

Source: NIH Publication No. 01-3290, U.S. Department of Health and Human Services, National Institutes of Health, National Heart, Lung, and Blood Institute, National Cholesterol Education Program Brochure, High Blood Cholesterol What You Need to Know, May 2001.

www.nhlbi.nih.gov/health/public/heart/chol/hbc_what.htm.

Carbohydrates

Carbohydrates are part of a healthful diet. The AMDR for carbohydrates is 45 to 65 percent of total calories. Dietary fiber is composed of nondigestible carbohydrates and lignin intrinsic and intact in plants. Diets rich in dietary fiber have been shown to have a number of beneficial effects, including decreased risk of coronary heart disease and improvement in laxation.

There is also interest in the potential relationship between diets containing fiber-rich foods and lower risk of type 2 diabetes. Sugars and starches supply energy to the body in the form of glucose, which is the only energy source for red blood cells and is the preferred energy source for the brain, central nervous system, placenta, and fetus. Sugars can be naturally present in foods (such as the fructose in fruit or the lactose in milk) or added to the food.

Added sugars, also known as caloric sweeteners, are sugars and syrups that are added to foods at the table or during processing or preparation (such as high fructose corn syrup in sweetened beverages and baked products). Although the body's response to sugars does not depend on whether they are naturally present in a food or added to the food, added sugars supply calories but few or no nutrients.

Consequently, it is important to choose carbohydrates wisely. Foods in the basic food groups that provide carbohydrates—fruits, vegetables, grains, and milk—are important sources of many nutrients. Choosing plenty of these foods, within the context of a calorie-controlled diet, can promote health and reduce chronic disease risk. However, the greater the consumption of foods containing large amounts of added sugars, the more difficult it is to consume enough nutrients without gaining weight. Consumption of added sugars provides calories while providing little, if any, of the essential nutrients.

KEY RECOMMENDATIONS

- Choose fiber-rich fruits, vegetables, and whole grains often.
- Choose and prepare foods and beverages with little added sugars or caloric sweeteners, such as amounts suggested by the USDA Food Guide and the DASH Eating Plan.
- Reduce the incidence of dental caries by practicing good oral hygiene and consuming sugar- and starch-containing foods and beverages less frequently.

The recommended dietary fiber intake is 14 grams per 1,000 calories consumed. Initially, some Americans will find it challenging to achieve this level of intake. However, making fiber-rich food choices more often will move people toward this goal and is likely to confer significant health benefits.

The majority of servings from the fruit group should come from whole fruit (fresh, frozen, canned, dried) rather than juice. Increasing the proportion of fruit that is eaten in the form of whole fruit rather than juice is desirable to increase fiber intake. However, inclusion of some juice, such as orange juice, can help meet recommended levels of potassium intake.

Legumes—such as dry beans and peas—are especially rich in fiber and should be consumed several times per week. They are considered part of both the vegetable group and the meat and beans group as they contain nutrients found in each of these food groups.

Consuming at least half the recommended grain servings as whole grains is important, for all ages, at each calorie level, to meet the fiber recommendation. Consuming at least 3 ounce-equivalents of whole grains per day can reduce the risk of coronary heart disease, may help with weight maintenance, and may lower risk for other chronic diseases. Thus, at lower calorie levels, adults should consume more than half (specifically, at least 3 ounce-equivalents) of whole grains per day, by substituting whole grains for refined grains.

Individuals who consume food or beverages high in added sugars tend to consume more calories than those who consume food or beverages low in added sugars; they also tend to consume lower amounts of micronutrients. Although more research is needed, available prospective studies show a positive association between the consumption of calorically sweetened beverages and weight gain. For this reason, decreased intake of such foods, especially beverages with caloric sweeteners, is recommended to reduce calorie intake and help achieve recommended nutrient intakes and weight control.

Total discretionary calories should not exceed the allowance for any given calorie level, as shown in the USDA Food Guide. The discretionary calorie allowance covers all calories from added sugars, alcohol, and the additional fat found in even moderate fat choices from the milk and meat group.

For example, the 2,000-calorie pattern includes only about 267 discretionary calories. At 29 percent of calories from total fat (including 18 g of solid fat), if no alcohol is consumed, then only 8 teaspoons (32 g) of added sugars can be afforded. This is less than the amount in a typical 12-ounce calorically sweetened soft drink. If fat is decreased to 22 percent of calories, then 18 teaspoons (72 g) of added sugars is allowed. If fat is increased to 35 percent of calories, then no allowance remains for added sugars, even if alcohol is not consumed.

In some cases, small amounts of sugars added to nutrient-dense foods, such as breakfast cereals and reduced-fat milk products, may increase a person's intake of such foods by enhancing the palatability of these products, thus improving nutrient intake without contributing excessive calories.

The Nutrition Facts Panel on the food label provides the amount of total sugars but does not list added sugars separately. People should examine the ingredient list to find out whether a food contains added sugars. The ingredient list is usually located under the Nutrition Facts Panel or on the side of a food label. Ingredients are listed in order of predominance, by weight; that is, the ingredient with the greatest contribution to the product weight is listed first and the ingredient contributing the least amount is listed last.

Sugars and starches contribute to dental caries by providing substrate for bacterial fermentation in the mouth. Thus, the frequency and duration of consumption of starches and sugars can be important factors because they increase exposure to cariogenic substrates. Drinking fluoridated water and/or using fluoride-containing dental hygiene products help reduce the risk of dental caries. Most bottled water is not fluoridated.

With the increase in consumption of bottled water, there is concern that Americans may not be getting enough fluoride for maintenance of oral health. A combined approach of reducing the frequency and duration of exposure to fermentable carbohydrate intake and optimizing oral hygiene practices, such as drinking fluoridated water and brushing and flossing teeth, is the most effective way to reduce incidence of dental caries.

Considerations for Specific Population Groups

Older Adults

Dietary fiber is important for laxation. Since constipation may affect up to 20 percent of people over 65 years of age, older adults should choose to consume foods rich in dietary fiber. Other causes of constipation among this age group may include drug interactions with laxation and lack of appropriate hydration).

Children

Carbohydrate intakes of children need special considerations with regard to obtaining sufficient amounts of fiber, avoiding excessive amounts of calories from added sugars, and preventing dental caries. Several cross-sectional surveys on U.S. children and adolescents have found inadequate dietary fiber intakes, which could be improved by increasing consumption of whole fruits, vegetables, and whole-grain products.

Sugars can improve the palatability of foods and beverages that otherwise might not be consumed. This may explain why the consumption of sweetened dairy foods and beverages and presweetened cereals is positively associated with children's and adolescents' nutrient intake. However, beverages with caloric sweeteners, sugars and sweets, and other sweetened foods that provide little or no nutrients are negatively associated with diet quality and can contribute to excessive energy intakes, affirming the importance of reducing added sugar intake substantially from current levels.

Most of the studies of preschool children suggest a positive association between sucrose consumption and dental caries, though other factors (particularly infrequent brushing or not using fluoridated toothpaste) are more predictive of caries outcome than is sugar consumption.

TABLE 13. Major Sources of Added Sugars (Caloric Sweeteners) in the American Diet Food Categories Contribution to Added Sugars Intake

Food groups that contribute more than 5 percent of the added sugars to the American diet in decreasing order.

Food Categories	Contribution to Added Sugars Intake (% of total added sugars consumed)
Regular soft drinks	33.0
Sugars and candy	16.1
Cakes, cookies, pies	12.9
Fruit drinks (fruitades and fruit punch)	9.7
Dairy desserts and milk products (ice cream, sweetened yogurt, and sweetened milk)	8.6
Other grains (cinnamon toast and honey-nut waffles)	5.8

Source: Guthrie and Morton, *Journal of the American Dietetic Association*, 2000.

TABLE 14. Names for Added Sugars That Appear on Food Labels

Some of the names for added sugars that may be in processed foods and listed on the label ingredients list.

Brown sugar	Invert sugar
Corn sweetener	Lactose
Corn syrup	Maltose
Dextrose	Malt syrup
Fructose	Molasses
Fruit juice concentrates	Raw sugar
Glucose	Sucrose
High-fructose corn syrup	Sugar
Honey	Syrup

¹⁴ For information on amounts of added sugars in some common foods, see Krebs-Smith, SM. Choose beverages and foods to moderate your intake of sugars: measurement requires quantification. *The Journal of Nutrition (J Nutr)* 131(2S-1): 527S-535S, 2001.

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Richard K. Nongard, LMFT, CCH, CPFT
Executive Director

“Therapeutic Weight Management and Physical Fitness for Emotional Health”

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EVALUATION OF LEARNING QUIZ - PAGE 1 of 4

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EVALUATION OF LEARNING QUIZ - PAGE 2 of 4

"THERAPEUTIC WEIGHT MANAGEMENT AND PHYSICAL FITNESS FOR EMOTIONAL HEALTH"

6 Hours of Approved Continuing Education Credit

The purpose of the following Evaluation of Learning questions is to:

- A.) Verify that you have read the required course materials
- B.) Demonstrate an understanding of the practical application of the course materials
- C.) Officially document your participation and completion of this course

➔ ANSWER THESE 20 T/F EVALUATION OF LEARNING QUESTIONS

- T F 1. I have read the entire required .pdf text file for this course.
- T F 2. An estimated 300,000 deaths per year may be attributable to obesity.
- T F 3. Obesity can affect the quality of life through limited mobility and decreased physical endurance as well as through social, academic, and job discrimination.
- T F 4. We naturally feel good emotionally when we eat healthy things - because we know we are doing the right thing for our body.
- T F 5. Distress Tolerance Training is a combination of techniques designed to help minimize the impact of stress, anger and anxiety.
- T F 6. Coping strategies with short-term gains generally have long-term consequences.
- T F 7. BMI stands for British Medical Interventions.
- T F 8. Smoking cigarettes is not an indicator of likely chronic disease.
- T F 9. It is not possible to manage your weight through balancing the calories you eat with your physical activity choices, since genetics play the largest role in weight.
- T F 10. A "serving" is a unit of measure used to describe the amount of food recommended from each food group.
- T F 11. If you are overweight, loss of 5 to 15 percent of your body weight may improve your health, ability to function, and quality of life.
- T F 12. Weight loss of 8-12 lbs a week is ideal for very obese people.
- T F 13. No one is too young or too old to enjoy the benefits of regular physical activity.
- T F 14. Children need 60 minutes of physical activity a day.

CONTINUED →

EVALUATION OF LEARNING QUIZ - PAGE 3 of 4

Course Title: "THERAPEUTIC WEIGHT MANAGEMENT AND PHYSICAL FITNESS FOR EMOTIONAL HEALTH"

- T F 15. Regular physical activity helps lower blood pressure.
- T F 16. This is good advice: limit intake of fats and oils high in saturated and/or *trans* fatty acids, and choose products low in such fats and oils.
- T F 17. Together with physical activity, a high-quality diet that does not provide excess calories should enhance the health of most individuals.
- T F 18. Nutrient-dense foods are those foods that provide substantial amounts of vitamins and minerals (micronutrients) and relatively few calories.
- T F 19. A Sedentary lifestyle means a lifestyle that includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life.
- T F 20. Since many adults gain weight slowly over time, even small decreases in calorie intake can help avoid weight gain, especially if accompanied by increased physical activity.

GRADE THIS ONLINE COURSE! – Page 4

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Participant Assessment of Home Study CEU Course

“THERAPEUTIC WEIGHT MANAGEMENT AND PHYSICAL FITNESS FOR EMOTIONAL HEALTH” 6 Credit Hours

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