

# Personal Health Plan Manual

## PERSONAL HEALTH PLAN MANUAL

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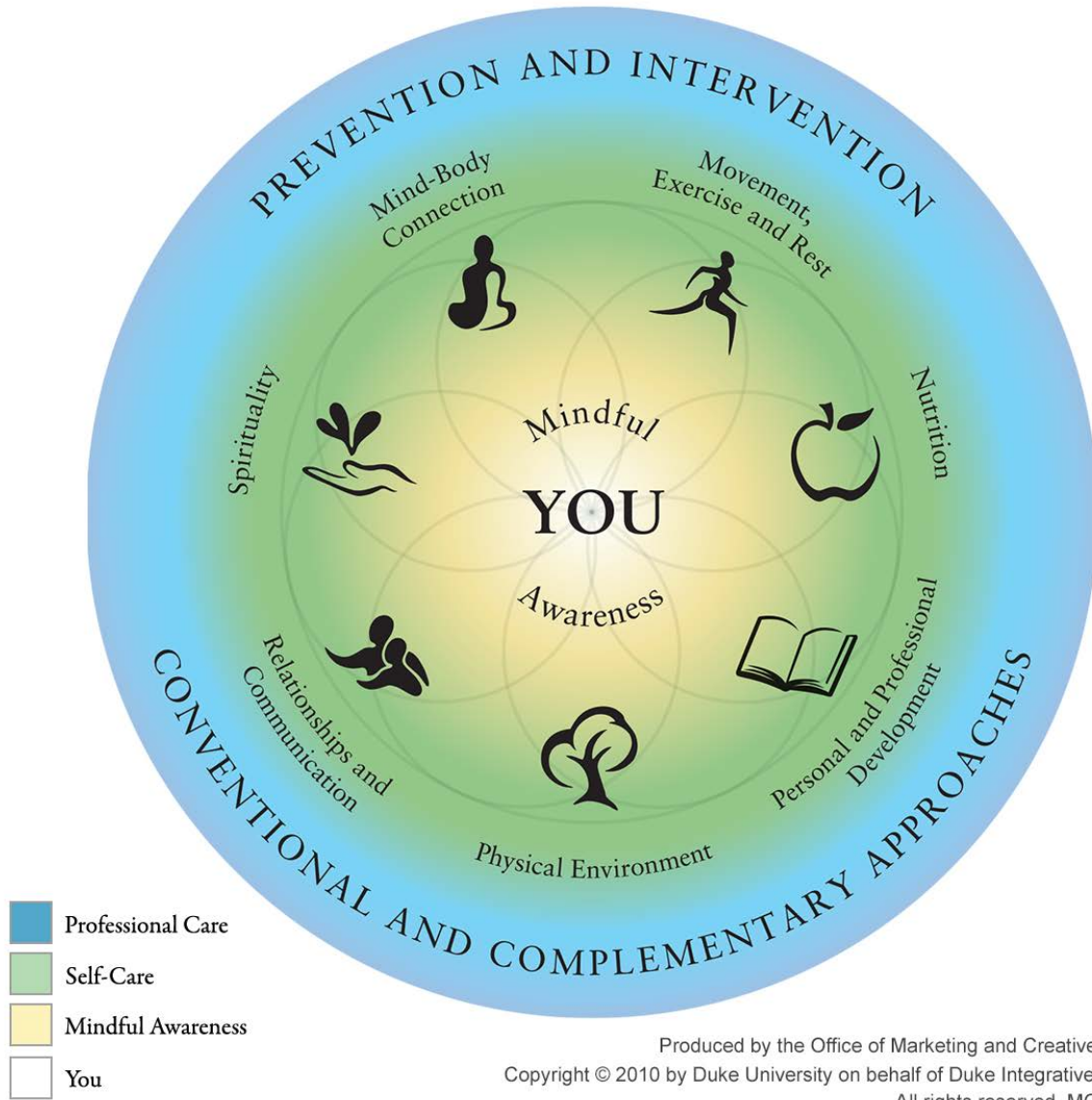
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August 2015 version

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# WHEEL OF HEALTH



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# OVERVIEW

## PERSONAL HEALTH PLANNING AND THE WHEEL OF HEALTH

This Personal Health Plan Manual will help you create a health plan that is unique to your needs and lifestyle. It will guide you to look at your current health concerns as well as consider your future health. It uses the Wheel of Health (WOH), created by Duke Integrative Medicine, to help with your planning. The WOH is a visual reminder of many different layers of your whole life and health. All of these areas can impact health and have connections to one another. Your customized health plan will be based on your personal values, goals and strengths. This manual does not prescribe or recommend specific treatment options. It does provide resources for you to consider and choose what is best for you.

The Personal Health Plan (PHP) is based on two important ideas:

- The human mind and body have the ability to self-repair. Your life choices combined with appropriate therapies and medical interventions can support and enhance this healing.
- Ideal health is a journey that requires frequent reassessing and rebalancing.

Five key concepts distinguish the PHP from other approaches:

### Health

The PHP focuses on health optimization in addition to disease management. According to the World Health Organization, health is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”<sup>1</sup>

### Planning

The PHP encourages you to look beyond your current symptoms and health to develop a proactive plan for a healthy future.

### Healing

No matter what your condition, the PHP helps you envision and attain a future of well-being that includes balance and vitality.

### A Whole-Person Approach

The PHP considers all of who you are—body, mind and spirit—as well as the community in which you live. It pays thoughtful attention to your personal goals, needs and lifestyle.

## **Support**

Your coach and healthcare team can help you implement your personal health plan and make it work for you in the context of the real life you live.

## **USING THE WHEEL OF HEALTH TO OPTIMIZE YOUR WELL-BEING**

This manual is designed to help you use the WOH along your journey to your best health. We hope you will refer to this manual many times to discover ways to find balance and vitality in your life.

In the following sections, you will find in-depth information about each dimension of the WOH. Here is a helpful summary of each dimension.

### **You**

You are at the center of your health. Your values, goals and priorities help to determine the course of your life. You are the most important consideration when it comes to planning for your health.

### **Mindful Awareness**

When you pay attention to the present moment—without judging it in any way—you can experience many health benefits. By being more aware of what is happening within you, you can respond to changes in your life and health in a proactive and engaged way.

### **The Seven Dimensions of Self-Care**

Self-care includes all the choices you make that affect your physical, mental and spiritual well-being. The following seven dimensions of self-care are very important to your overall health. As you read each of these dimensions of self-care, consider what your life is like now in each area and how you may want your life to be in the future.

#### **Dimension 1: Movement, Exercise and Rest**

- Increase the performance of your body through healthy movement, exercise and rest.
- Create a plan that keeps you interested and motivated. An ideal fitness plan keeps you strong, flexible and happy.
- Getting good sleep and rest leaves you feeling balanced and restored. It also gives you more energy to do the things you want to do.

## Dimension 2: Nutrition

- Paying attention to what you eat and drink can nourish and strengthen your body and mind.
- Your health plan will help you develop healthy eating habits.
- You will learn how to choose foods and supplements that sustain your health and fit your lifestyle.
- You will also learn about regulating substances such as caffeine, alcohol and nicotine.

## Dimension 3: Personal and Professional Development

- An ongoing assessment of where you are with personal, career or life goals can support healthy behavior and lifestyle choices. This is especially important in times of major life changes or milestones.
- Take a deeper look at work–life balance, financial goals and areas of personal growth.

## Dimension 4: Physical Environment

- Your surroundings at work and at home can affect your physical, emotional and spiritual health.
- Your overall health can be enhanced by improving the places where you spend the most time. This may include creating a space that enlivens each of the senses or a special place for your mind–body practices.
- You may want to select and arrange furniture to support your body and lifestyle.
- Addressing any concerns about toxins, safety, noise and clutter in your environment will also improve your health.

## Dimension 5: Relationships and Communication

Research shows that supportive relationships with your family, friends, co-workers and colleagues are good for your health.

Which of your relationships are based on open, respectful communication? Which relationships fuel you? Which ones drain you?

By honestly evaluating your relationships, you can invest in your positive connections with others and minimize or reevaluate your choices in those that do not serve you.

### Dimension 6: Spirituality

- Having a sense of purpose and meaning in your life benefits all aspects of your physical and emotional health.
- Religion, prayer and spiritual connections have all been shown to enhance health and well-being.
- Exploring your current spiritual beliefs may help you find more ways to enhance your health and well-being.

### Dimension 7: Mind–Body Connection

- You can strengthen the connection between the mind and the body to nourish every aspect of who you are.
- Mind–body skills such as breathing techniques, meditation and other therapies can increase healing and reduce the harmful effects of stress.

### **Professional Care**

The many dimensions of the WOH are held within a ring of Professional Care that includes conventional and complementary approaches to both prevention and intervention.

#### Prevention and Intervention

The goals of healthcare include overall health planning, disease prevention, early detection and, when necessary, intervention.

#### Conventional and Complementary Approaches

An Integrative Medicine model of care employs a broad base of conventional and complementary evidence-based treatments and therapies. These therapies are described in more detail in the last four chapters of this manual.



# PERSONAL HEALTH PLAN

## **YOU: DISCOVERING YOUR HEALTH GOALS**

You are the ultimate owner of your life and your health. Being in the driver's seat requires a good map. It is important to know your starting point and your destination. This means knowing what your health is like now and what you would like your health to be going forward. This may be a new way to think about your health. Many of us are used to thinking about our health only when we are sick. Whole person health and wellbeing means understanding what your life goals are and what contributes to your sense of wellness over time.

A personal health inventory will follow this introduction. Please take time to think about where you are now and where you want to be. Your health coach will review this personal health inventory with you and use it as a tool to help you plan for your health in a way that fits your unique life and goals.

## Personal Health Plan

For: \_\_\_\_\_

Date: \_\_\_\_\_

### Personal Health Inventory

The first step in creating your plan is to complete a personal health inventory to assess where you are now and where you want to be.

#### 1. How do I picture my best health?

*How would I like to feel and look? What activities would I like to be able to do?*

#### 2. What is most important as I think about the picture of my best health?

**3. For each area, please take a moment to think about where you are now and where you would like to be. Please complete as many of the boxes as you can. You may want to start with the areas that are most interesting to you at this time. It is okay to just circle a number for each box if you prefer.**

<p><b>Mindful Awareness</b>          Awareness of the present moment; paying attention to what you are doing while you are doing it.</p>	
<p>Where are you now?  <i>On a scale of 1 (low) to 10 (high), how would you rate this area of your life?</i></p> <p>1   2   3   4   5   6   7   8   9   10</p> <p>Why did you choose this number?</p>	<p>Where would you like to be?</p> <p>1   2   3   4   5   6   7   8   9   10</p> <p>What changes could you make to help you get there?</p>
<p><b>Movement, Exercise and Rest</b>          Activities of daily living such as cleaning and gardening; exercise activities such as dancing, yoga, walking, running and cycling; adequate rest and relaxation.</p>	
<p>Where are you now?  <i>On a scale of 1 (low) to 10 (high), how would you rate this area of your life?</i></p> <p>1   2   3   4   5   6   7   8   9   10</p> <p>Why did you choose this number?</p>	<p>Where would you like to be?</p> <p>1   2   3   4   5   6   7   8   9   10</p> <p>What changes could you make to help you get there?</p>

**Nutrition**

Eating a balanced, healthy diet.

Where are you now?

*On a scale of 1 (low) to 10 (high), how would you rate this area of your life?*

1 2 3 4 5 6 7 8 9 10

Why did you choose this number?

Where would you like to be?

1 2 3 4 5 6 7 8 9 10

What changes could you make to help you get there?

**Personal and Professional Development**

Growing and developing your abilities, talents and interests, both in your personal life and at work; living with both in balance.

Where are you now?

*On a scale of 1 (low) to 10 (high), how would you rate this area of your life?*

1 2 3 4 5 6 7 8 9 10

Why did you choose this number?

Where would you like to be?

1 2 3 4 5 6 7 8 9 10

What changes could you make to help you get there?

**Physical Environment**

Spaces where you live and work (including safety, light, noise, toxins and color), as well as landscapes surrounding those spaces.

Where are you now?  
*On a scale of 1 (low) to 10 (high), how would you rate this area of your life?*

1 2 3 4 5 6 7 8 9 10

Why did you choose this number?

Where would you like to be?

1 2 3 4 5 6 7 8 9 10

What changes could you make to help you get there?

**Relationships and Communication**

Spending time with family, friends and/or co-workers who are supportive and with whom you communicate effectively.

Where are you now?  
*On a scale of 1 (low) to 10 (high), how would you rate this area of your life?*

1 2 3 4 5 6 7 8 9 10

Why did you choose this number?

Where would you like to be?

1 2 3 4 5 6 7 8 9 10

What changes could you make to help you get there?

**Spirituality**

Seeing purpose and meaning in something larger than yourself. This might include religious affiliation or other areas such as nature or the arts.

Where are you now?  
*On a scale of 1 (low) to 10 (high), how would you rate this area of your life?*

1 2 3 4 5 6 7 8 9 10

Why did you choose this number?

Where would you like to be?

1 2 3 4 5 6 7 8 9 10

What changes could you make to help you get there?

**Mind–Body Connection**

Paying attention to the connection between the mind and body and the effects they have on each other. Using techniques such as breathing and stress reduction practices to help the body relax and heal.

Where are you now?  
*On a scale of 1 (low) to 10 (high), how would you rate this area of your life?*

1 2 3 4 5 6 7 8 9 10

Why did you choose this number?

Where would you like to be?

1 2 3 4 5 6 7 8 9 10

What changes could you make to help you get there?

**Professional Care: Prevention and Intervention; Conventional and Complementary Approaches**

Routine screenings such as mammograms, prostate screenings, colonoscopies, pap tests and dental exams, along with prescribed use of vitamins and supplements. Following treatments recommended by your conventional medical care providers as well as recommended complementary approaches such as acupuncture, massage, hypnosis and osteopathy.

Where are you now?  
*On a scale of 1 (low) to 10 (high), how would you rate this area of your life?*

1 2 3 4 5 6 7 8 9 10

Why did you choose this number?

Where would you like to be?

1 2 3 4 5 6 7 8 9 10

What changes could you make to help you get there?

**4. What stands out for you as significant about where you currently are in any given area of the Wheel of Health?**

**5. If nothing changes in your health and well-being choices, what do you think your health will be like three years or ten years from now? What would be the worst-case scenario?**

**6. If you make significant health behavior changes, what do you think your health will be like three years or ten years from now? What would be the best-case scenario?**



7. Place an X in the column that indicates when you would like to begin working on that area. If you do not anticipate a change in any given area, place an X in the last column.

<b>Area of Wheel of Health</b>	<b>Within the next three months</b>	<b>Within the next year</b>	<b>Next one to three years</b>	<b>No changes desired</b>
<b>Mindful Awareness</b>				
<b>Movement, Exercise and Rest</b>				
<b>Nutrition</b>				
<b>Personal and Professional Development</b>				
<b>Physical Environment</b>				
<b>Relationships and Communication</b>				
<b>Spirituality</b>				
<b>Mind–Body Connection</b>				
<b>Professional Care Prevention and Intervention</b>				

## Goal Setting Guide

The second step in creating your plan is to identify the areas you wish to focus on, the goals you would like to achieve, and the action steps that will get you there.

### 1. What area(s) of your health would you like to focus on now? What specific long-range outcome(s) would you like to achieve?

*For example, losing 30 pounds in 6 months, stopping smoking, improving overall fitness, etc.*

### 2. What 3–6 month SMART goal(s) would help you meet the outcome you desire?

*For example, exercising three times a week on Monday, Wednesday and Friday after work for an hour each time, eating a 1,500-calorie well-balanced diet daily, etc.*

Your SMART goal should be:

**Specific:** Your goals should be *clear and concise*. If your goal is not specific, it is difficult to know when your action begins and when it is complete.

**Measurable:** A goal should be *measurable* so you can track your progress. You need to have clear criteria for progress and completion when taking action on a goal. Keeping track of your progress can be inspiring.

**Action-Oriented:** A goal should include *action*, and that action should be in your direct control.

**Realistic:** A goal should be *realistic*. It is best to work on small lifestyle changes that are easy to complete. Focus on the small steps instead of feeling overwhelmed by the big picture.

**Timed:** A goal should be tied to a *timetable* for completing specific, measurable and realistic action.

SMART Goal 1 \_\_\_\_\_

\_\_\_\_\_

SMART Goal 2 \_\_\_\_\_

\_\_\_\_\_

**3. Is there more than one option for meeting your SMART goal? If so, what are these options? Which one(s) appeal to you now to get you started?**

*For example, if your goal is to begin exercising three times a week after work on Monday, Wednesday and Friday for an hour each session, what kinds of exercise appeal to you? Would you like to exercise alone or with others? What options would you like to consider?*

**4. What are the SMART steps you want to start in Week One to begin working on your 3–6 month goal(s)?**

*For example, do you need to purchase any equipment such as a bike or bike helmet, running shoes or gym membership? Do you want to start exercising this week for 20 minutes at a time to work up to your goal of one hour each time? Do you need to speak with a medical provider for clearance for a new exercise program? Do you need to meet with a nutritionist to plan a well-balanced diet? Make sure the SMART steps meet the same criteria as the SMART goals.*

**Goal I—SMART Steps**

SMART Step 1 \_\_\_\_\_  
\_\_\_\_\_

SMART Step 2 \_\_\_\_\_  
\_\_\_\_\_

SMART Step 3 \_\_\_\_\_  
\_\_\_\_\_

SMART Step 4 \_\_\_\_\_  
\_\_\_\_\_

**Goal II—SMART Steps**

*SMART Step 1* \_\_\_\_\_

\_\_\_\_\_

*SMART Step 2* \_\_\_\_\_

\_\_\_\_\_

*SMART Step 3* \_\_\_\_\_

\_\_\_\_\_

*SMART Step 4* \_\_\_\_\_

\_\_\_\_\_

**5. What have you learned about yourself from other times you have made changes to your health and lifestyle? What strengths do you bring to your health goals?**

- Are you skillful at planning new initiatives? Can you bring your organizational, planning and tracking skills to this new behavior change? How will you do that?
- Do you have more energy and time in the mornings or evenings?
- Do you have more success when you plan goals that include connection with other people, or do you prefer to work alone?

**6. What are some hurdles or barriers that you might encounter? What are your strategies for success?**

- Do you need to make any arrangements with work or family so you can meet your goals?
- What will you do if bad weather, vacations or parties interrupt your schedule?

Barrier 1 \_\_\_\_\_

*Strategy* \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Barrier 2 \_\_\_\_\_

*Strategy* \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Barrier 3 \_\_\_\_\_

*Strategy* \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Barrier 4 \_\_\_\_\_

*Strategy* \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**7. How will you hold yourself accountable and to whom?**

## **Coaching Session Prep Form**

One helpful way to achieve your personal health goals is to take the time to regularly evaluate your progress. This form is designed to give you a quick way to track your progress toward your goals and identify any changes you need to make to achieve them.

**1. What have you accomplished since your last coaching session? What were your small or large successes or new insights?**

**2. What are the biggest challenges you are facing right now?**

**3. How are you addressing the challenges that you are facing in order to move forward to your goals?**

**4. What would you like to focus on in your next coaching session?**

# MINDFUL AWARENESS

## OVERVIEW

Imagine a moment when you feel a cool breeze across your face as you step outside of a building on a hot day. Imagine the instant when you notice the sound of a car passing or a plane overhead. Imagine the moment you realize a stream of angry or worried thoughts has filled your mind or that your muscles are feeling tense. This is *mindful awareness*—noticing what is happening to us in the moment. The more you notice about what is happening, the more you are able to choose a healthy response. You can become better at mindful awareness with practice.

## PROMOTING OVERALL HEALTH

Have you ever started eating an ice cream cone, taken a lick or two, and then noticed in what seemed like an instant that all you had was a sticky napkin in your hand? Or perhaps you have headed somewhere and arrived at your destination, only to realize you had not noticed anything or anyone you met along the way? Of course you have—we all have! These are common examples of “mindlessness” or, as some people put it, “going on automatic pilot.”

We all fall into habits of mind and body, of attention and inattention, which result in our not being present for our own lives. The results of this inattention can be quite costly. You can miss some great experiences or ignore important information and messages about your life, your relationships and even your own health.

One way to change this tendency to “tune-out” is to practice mindful awareness. Practicing mindful awareness means to pay careful attention in a particular way. When you are mindful, you are aware of what is going on outside and inside your own skin. All of your senses are alive and active and you know what is happening in the present moment. You pay attention without trying to change anything. You become deeply aware of what you are sensing.

Western medical science is learning that mindful awareness can be good for your health and can reduce stress in many common conditions, such as:

- Heart disease
- Chronic pain
- Cancer
- Menopause
- Weight management

## **WHY PRACTICE MINDFUL AWARENESS?**

Regular and ongoing practice of mindful awareness can bring more joy and good health into your life. At the most basic level, being more aware allows you to identify and focus on key issues before they get out of control.

Your body and mind are sending you messages all the time. When you become aware of a problem early, it is easier to treat the problem. Current research shows that practicing mindful awareness reduces stress and helps you enhance your emotional well-being and quality of life.

### **Mindful Awareness Research**

Research shows that mindful awareness can help improve these areas of your life:

- Mental and physical health
- Eating and sleeping habits
- Substance abuse
- Spirituality
- Relationships with others<sup>2,3</sup>

### **Mindful Awareness and the Mind**

Research shows that mindful awareness leads to lower levels of anxiety, depression, anger and worry. People who are more mindful say they feel more joyful, grateful and satisfied with life. In addition, being in a mindful state for just a moment can give you a greater sense of well-being.<sup>2, 4, 5, 6, 7, 8</sup>

### **Mindful Awareness and the Brain**

Mindful awareness helps you pay attention to the present moment. In a recent study, people who took eight weeks of meditation training were able to pay better attention to what was happening around them.<sup>9</sup>

Mindful awareness also helps you recognize emotions. One study found that mindful people had better control over emotional reactions. Other studies showed that mindful awareness practice leads to more activity in parts of the brain associated with joy, contentment and love.<sup>10, 11,12</sup>

### **Mindful Awareness and the Body**

Practicing mindful awareness helps your body as well as your mind. It can ease chronic pain and other stress-related symptoms. It can also teach you to cope with the stresses of daily life. As you practice mindful awareness, you are learning to pay attention to signs that something might be wrong with your body. However, it is important to remember that there is usually more right with your body than there is wrong with it.<sup>13,14</sup>



## Mindful Awareness and Behavior

When you become more aware, you can simply observe your thoughts, emotions and physical sensations. Mindful awareness can help you see patterns in your behavior and figure out how to break bad habits. For instance, you can learn to identify when stress makes you want a cigarette or when sadness makes you want to overeat.

As you practice becoming more mindful, you may find that it is easier to feel stress without reacting in a harmful way. Studies have shown that people who trained in mindful awareness have an easier time understanding and coping with stressful situations, such as:<sup>7,15,16</sup>

- Quitting smoking
- Decreasing binge eating
- Reducing illegal drug use

## HOW TO PRACTICE MINDFUL AWARENESS

You can read a thousand books about apples, talk to a hundred farmers or cooks about them and view dozens of photos and paintings, but not one of those experiences will be like actually holding an apple in your hand and taking a bite out of it! Like the apple, understanding what mindful awareness truly is and realizing the benefits mindful awareness can offer comes only through your own direct experience of practice.

### Informal Mindful Awareness Practice

Informal practice is simply being aware during the tasks and experiences of daily life. Whenever you think of it, day or night, remember that you can be more mindful. At any time, you can turn your attention to what is here at this very moment, especially in your own body, heart and mind. This is often called *informal practice*, and it refers to a way of paying attention to whatever is happening in the moment.

In order to get better at mindful awareness, you may make the commitment to practice *paying attention on purpose*. Try spending two minutes before a meeting being silent and focusing on your breath. Or start your exercise routine with a moment of sensing what is happening in your body. When you are waiting in line at the grocery store, quietly notice the sounds, sensations and sights around you. You can practice being present throughout the day, such as when you are:

- Washing dishes
- Eating a meal
- Walking the dog

In these situations, use the sensation of the breath as the anchor for awareness in the present moment. Establish mindful awareness with a narrow focus on just the breath sensation. Allow yourself to feel the breath as it goes in, as it goes out, and observe the pause between in and out. Do not try to control the breath. Simply let it come and go. Bring as much attention, completely and continuously, as you can to the direct sensation of the breath.

If you wish, once you have established awareness on the breath sensation, you can widen your focus to include all body sensations. Again, you are not trying to change anything. You are simply allowing yourself to be aware of the changing sensations in the body.

After a while, you may further widen your focus to include all that is present. You can allow yourself to become aware of whatever you are hearing, seeing, tasting, smelling, touching or even thinking. Just practice being with these different experiences as they unfold. Allow yourself to feel your life in this moment and rest in the openhearted awareness of what is in this moment.

Any time you feel lost, confused or frustrated, gently narrow your focus and return awareness to the sensation of your breath. You may have to do this frequently to calm yourself. One moment of mindful awareness—one breath when we are truly present—can be profound. See for yourself. You can practice mindful awareness in this way, throughout the day and night. Practice for a few breaths at a time, or find a few mindful moments. Next, you will find easy-to-follow instructions for doing your own practice of mindful breathing.

### **Formal Mindful Awareness Practice**

A formal mindful awareness practice involves setting aside time (from a few minutes to an hour or more, as you wish) for daily practice. During this time, you should be free from other activities or distractions. You need to be able to devote your full attention to simply being mindful of what is present. Over time, you may find that this kind of practice makes it easier for you to practice mindful awareness during your daily life.

At the heart of formal mindful awareness practice is sitting. This is time set aside to sit and observe the present moment, paying attention on purpose and without judgment.

To practice formal sitting, first decide where, when and how long you want to practice. Find a place that is free of distraction. Select a time of the day when you can devote a concentrated period of time to your practice. You may want to practice first thing in the morning, when you come home from work or before you go to bed. You may practice for as little as five minutes or as long as an hour or more using these ten easy guidelines.

## Ten Easy Guidelines for a Mindful Awareness Practice

1. You can practice mindful awareness of your breathing in any situation, in any posture, in a still body or in a moving one.
2. You can practice with your eyes closed or open. Closing your eyes can help reduce distractions and make focusing easier. If you open your eyes, let your gaze be soft, not focusing on anything you see, and let yourself be with life as it unfolds before you.
3. It can help to begin by remembering that you do not have to make anything happen. You can trust that you already have all you need to be present and aware.
4. Begin by finding a comfortable position and gently noticing how your body feels.
5. Now, softly bring your attention to the place in your body where you can feel the sensations of your breath as it flows in and out. Your focus could be on your mouth, chest, abdomen or even the tip of your nose.
6. Let your focus be on the direct, changing sensations of the breath. Let your body continue to breathe naturally. There is no need to control the breath in any way. This is an awareness practice, not a breathing exercise.
7. As your attention steadies and awareness becomes more sensitive, look closely at the changing and varied breath sensations. Notice the rising and falling of abdomen or chest. Notice the coolness of the in-breath and the warmth of the out-breath. Notice qualities of the breath, such as how long it is, how deep it is and how rough or smooth. You may also begin to notice the space between the breaths. Let your noticing include the sensations and the spaces before and after them.
8. When your mind moves to something else—perhaps a noise, or a thought, or another sensation—you have not made a mistake. You have not done anything wrong. It is just what the mind does. Acknowledge that your mind moved and patiently and kindly bring your attention back to a primary focus on the breath sensations. Relax and let the next breath come to you. There is no need to fight thoughts or other experiences, and you do not need to follow them, either. When you practice with your attention on your breath, you can allow yourself to relax in such a way that you can begin to drop into a place deeper than your personality, deeper than your identity, deeper than your story. Staying present in this moment, aware, resting in the very nature of your being.
9. Continue practicing for as long as you like. Let attention on the breath sensations steady and hold you in this moment. Practice kindness and patience for all of the movements of your mind and for the flow of changing experience through this moment. Recognizing, sensing that you are already whole and present, that there is nothing more you have to do and nowhere else to go.
10. End your practice by shifting your focus back to your surroundings, opening your eyes and moving gently, if you like.

## Helpful Reminders as You Develop Your Practice

1. Expect your mind to wander. Even if you practice for a few breaths or for a few minutes, you may be distracted. Practice kindness and patience with yourself when this happens and gently return awareness to the breath sensation.
2. Notice any tendency to be hard on yourself, to feel frustrated or think you have failed in some way. Try to view this kind of judgment as just another type of thinking. You may say to yourself kindly, “Thinking,” and gently return your awareness to the breath.
3. Expect to feel some relaxation, especially if you practice for a few breaths or for a few moments. This relaxed feeling is an ally. It helps us to be more present, more mindful. Relaxation alone is *not* what mindful awareness is about, however. It *is* about being present with awareness.
4. Expect to become more aware with practice. Expect to notice more things, including painful experiences. This is actually progress. You are not doing anything wrong. Quite the opposite, you are increasing mindful awareness for all things. When you begin to notice painful thoughts or emotions, see if you can hold yourself with compassion and kindness and continue to bring openhearted awareness to the experience that is unfolding. By practicing staying present and not turning away from the pain in your life, you can learn to remain open to all the possibilities a situation may have to offer. This increases your chances for healing and transformation while meeting the pain you face. It also gives you a way to be with those situations when there is nothing more you can do to “get away from the pain,” and you must find a way to experience it. You can discover that the quality of full attention and awareness is not destroyed or damaged by contact with pain. You can know pain as completely and fully as you know any other experience.
5. Finally, be careful not to try too hard when practicing mindful awareness. Do not try to make anything happen, achieve an altered state or produce any special effects. Simply relax and pay as much attention, as you can, to just what is here, now. Whatever form that takes, allow yourself to experience life directly as it unfolds, paying careful and openhearted attention.

## **Personal Strategies for Mindful Awareness**

Use this page to record your ideas and plans for mindful awareness.

## **Web Site Resources for Mindful Awareness**

National Institute of Health, National Center for Complementary and Integrative Health |  
<https://nccih.nih.gov/health/meditation/overview.htm>

## SELF-CARE



### Movement, Exercise and Rest

#### OVERVIEW

Regular exercise is one of the most powerful things you can do for your health. When you keep your body active, you can prevent and treat many physical and mental health problems. Here are some of the ways exercise can improve your quality of life and ease performance in your daily activities:

- Increases your muscles' strength, endurance and ability to use oxygen.
- Improves joint structure and joint function.
- Increases HDL ("good") cholesterol and helps regulate blood sugar.
- Helps control blood pressure.
- Helps maintain bone density and prevent osteoporosis.
- Improves posture and agility and increases your range of motion.
- Helps reduce stress levels and depression while improving mood and energy levels.
- Reduces risk of coronary artery disease and improves circulation.
- Helps regulate sleeping habits and reduce fatigue.
- Increases the number and size of the vessels that bring blood to your heart.
- Helps decrease body fat and increase lean body mass.

While movement and exercise are important to good health, so are rest and sleep. Your body heals itself while you sleep. Getting enough sleep is the key to learning and memory. Bad sleep or not enough sleep increases your risk of these health problems:

- Anxiety and depression
- Increased pain
- Lowered immune function
- Diabetes
- Obesity
- Heart problems
- Cancer
- Motor vehicle accidents

## PROMOTING OVERALL HEALTH: MOVEMENT AND EXERCISE

### How much exercise do you need?

Aerobic exercise (also known as *cardio*) is a great way to keep your body active. Most adults should do at least 2.5 hours a week of moderate cardio, such as brisk walking, ballroom dancing or gardening. If you prefer, you can do at least 1.25 hours a week of high-intensity cardio, such as jogging, aerobic dancing or jumping rope. Do these activities for at least ten minutes at a time. Spread your aerobic activity throughout the week.

You should also do exercises that strengthen your muscles at least two days a week. Pushups and weightlifting are both good ways to make your muscles stronger.

**Remember:** Some exercise is much better than no exercise. Even exercising just 10 to 15 minutes a day has major benefits for your health.

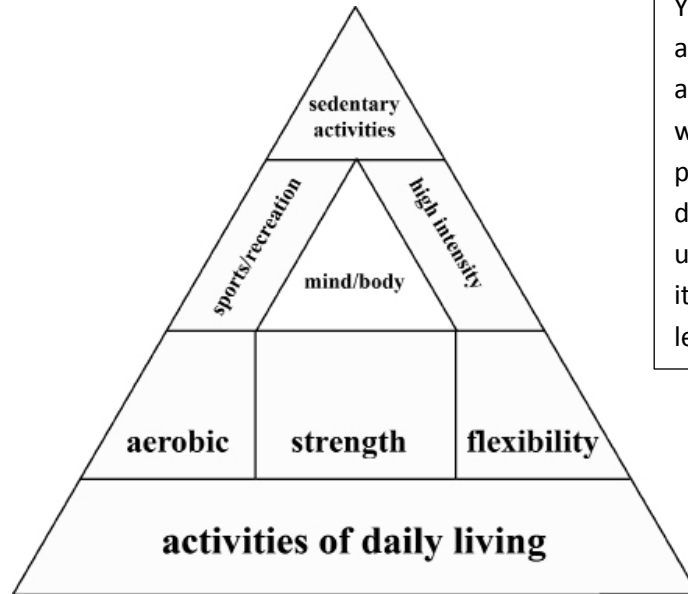
If you are over age 65 or have physical injuries or disabilities, talk to a health professional to help you make an exercise plan. This will help reduce the risk of injury. The exercise plan will also consider your physical needs. In general, plan on the same amount of exercise as described above. If you are at risk for falling, you should do exercises that maintain or improve your balance. For more information, see [www.health.gov/paguidelines](http://www.health.gov/paguidelines).

If you need to lose weight, the American College of Sports Medicine (ACSM) recommends at least 250 minutes (or 4 hours and 10 minutes) per week of medium-intensity physical activity. This amount of exercise may be needed for significant weight loss. It can also prevent weight regain. The ACSM says that modest diet restriction combined with physical activity will help you lose more weight than you will by just changing your diet.<sup>17</sup>



## THE COMPLETE FITNESS TRIANGLE

Many people focus on just one area of fitness—either cardio or strength training. For an exercise program to be successful, it must include both types. The fitness triangle below shows what areas you will need to work on.



You spend the most amount of time on activities of daily living, which is the largest piece of the triangle diagram. As you move up the triangle, each item should take up less of your daily time.

Be careful! These guidelines are general and should be individualized in order to avoid injury. Seek advice from your healthcare provider if you have any problems or concerns with your joints, bones, heart, lungs or nervous system.

## DESIGNING YOUR OWN EXERCISE PROGRAM

There are four basic parts of physical fitness:

**Cardiorespiratory endurance:** How well your heart and lungs work as you exercise.

**Muscle strength:** How much force your muscles can exert.

**Muscle endurance:** How long you can use your muscle strength.

**Flexibility:** How well you can use the full motion of your joints and muscles.

An exercise program that includes aerobic exercise, strength training and stretching can help you achieve these four elements of fitness. You can use the following guidelines to create your own fitness plan.

## AEROBIC ACTIVITY

### Warm-up (5–10 minutes)

Warming up prepares your mind and body for exercise. By gradually increasing your heart rate, blood flow and body temperature, your body becomes ready for a harder workout. A good warm-up will also motivate you. Choose a warm-up activity that uses your whole body and rhythmic movement. The warm-up should be an easier version of the exercise you are about to do. It can include walking, slow jogging, knee lifts, arm circles or trunk rotations.

### Aerobic Exercise (at least 20 minutes)

Aerobic exercise enhances your *cardiorespiratory endurance*. With regular aerobic exercise, you will improve how well your heart, lungs and muscles can use oxygen. You should aim for at least three 20-minute sessions of high-intensity physical activity or five 30-minute sessions of moderate-intensity physical activity each week. You can also do a combination of the two, such as two 30-minute walks and two 20-minute runs in a week.

<b>Moderate-intensity exercises 30 minutes, five times a week</b>	<b>High-intensity exercises 20 minutes, three times a week</b>
Brisk walking	Hiking
Sweeping	Jogging
Vacuuming	Running
Mowing the lawn with a walking mower	Shoveling
Bicycling	Basketball games
Dancing	Soccer
Golf when walking with clubs	Moderate to hard swimming
Doubles tennis	Moderate to hard bicycling
Shooting a basketball	Singles tennis
	Cross-country skiing

## **How do I know if an exercise is moderate intensity or high intensity?**

*Moderate-intensity* physical activity means working hard enough to raise your heart rate and break a sweat. You should still be able to carry on a conversation.

*High-intensity* physical activity requires a lot of effort. You will have a fast heart rate and rapid breathing.

### **Cool Down (5–10 minutes)**

A proper cool down is essential for safety and may help reduce muscle soreness. When you stop exercising, you should do so slowly. If you stop suddenly, you could become dizzy or your heart might beat irregularly. Consider walking, cycling or another low-level exercise.

## **STRENGTH TRAINING**

As you develop the strength training portion of your exercise program, the following guidelines may be helpful. Your weight-training routine should last 20–30 minutes.

- Do at least 8–10 separate exercises.
- Use each of the major muscle groups (upper back, lower back, abdomen, biceps, triceps, chest, quadriceps, hamstrings and gluteals).
- Do 8–12 repetitions of each exercise.
- Increase the amount of weight you use when the 12th repetition no longer feels difficult. Repetitions should be slow and controlled. Breathe with each repetition.
- Repeat the strength training section of your exercise program two to three times each week. Do not do your strength training two days in a row. Try a schedule of cardio one day and strength training the next. Be sure to plan rest days.
- It is very important to breathe regularly while you exercise. If you forget to breathe, you might cause your blood pressure to spike. Remember to exhale as you exert and inhale as you release the movement. For example, when using free weights you should exhale when lifting the weight and inhale when releasing the weight.
- Your initial strength training may consist of using your body weight, hand weights, bands or machines.

## **FLEXIBILITY TRAINING**

The benefits of stretching are highest if performed after 5–10 minutes of warm-up or after a complete aerobic or strength workout to avoid injury. Here are some guidelines:

- Do not bounce. Static stretching is the technique of choice. This involves slow and gradual lengthening of the muscles until you feel slight resistance.
- Hold the stretch for 10–30 seconds. Repeat each stretch three or four times.
- Stretch every time you exercise to maintain and improve flexibility.
- Breathe! Do not hold your breath. Try to relax and breathe normally.
- Focus on the muscles you want to stretch, and try not to move other body parts.
- Stretching should not be painful. If a stretch causes you pain, avoid that stretch until you have consulted a physician or physical therapist.
- Consider taking up yoga, qigong or tai chi to add variety to your training.

## **EXPLORING MIND–BODY MOVEMENT AND EXERCISE**

Many movement and exercise practices help you focus your attention on your body's sensations. They also teach you to release muscle tension. Yoga, tai chi, qigong, Pilates and flexible-strength activities and classes nurture the mind as well as the body.

The mind–body connection, which is discussed later in this manual, has been proven to help overall health and wellness. Mind–body movement and exercise has been shown to:

- Improve posture, balance and coordination.
- Improve muscular strength and decrease level of muscle tension.
- Improve circulation.
- Strengthen core/abdominal muscles.
- Offer opportunities to learn and practice relaxation techniques.
- Improve concentration.
- Foster the release of negative thoughts and decrease levels of anxiety.
- Challenge the mind and body.
- Improve interpersonal relationships.

## Physical Activity Pyramid Worksheet

This worksheet may help you design an exercise program to achieve your health goals. You may also consider meeting with a personal trainer, exercise physiologist or physical therapist to develop a program that meets your specific health needs and goals.



### **Aerobic Activity**

Frequency \_\_\_\_\_

Intensity \_\_\_\_\_

Type \_\_\_\_\_

Time \_\_\_\_\_

### **Strength Training**

Frequency \_\_\_\_\_

Intensity \_\_\_\_\_

Type \_\_\_\_\_

Time \_\_\_\_\_

### **Flexibility Training**

Frequency \_\_\_\_\_

### **Mind–Body Movement and Exercise**

Frequency \_\_\_\_\_

Type \_\_\_\_\_

## **PROMOTING OVERALL HEALTH: REST**

### **How much sleep do you need?**

Sleep needs vary from person to person, but most adults should get seven to nine hours of sleep each night. Nearly 30% of U.S. adults report sleeping less than seven hours per night, and an estimated 50 to 70 million have chronic sleep and wakefulness disorders.

In a recent survey, 11% of U.S. adults reported getting insufficient rest or sleep every day during the preceding 30 days.<sup>18</sup> The *quality* of sleep matters as well. Many of us are so busy that we are still problem-solving and managing concerns while we are sleeping. This is not healthful, restorative sleep. Quantity and quality matter greatly.

### **What is normal, healthy sleep?**

Most adults need about seven to nine hours of sleep a night to maintain proper physical, mental and social health. Children may need as many as 13 hours of sleep a night. Sleep is a period of self-healing and restoration. It is when your body replaces important hormones and converts short-term memories to long-term.

Some researchers believe that when we dream, we create new ideas about ourselves and the world.<sup>19</sup> For these reasons and more, sleep is important to your daily functioning and health.

### **What are sleep disorders?**

A sleep disorder is when you have trouble keeping a normal, healthy sleep pattern. Sleep disorders can lead to problems with your emotional and physical health. According to the National Institutes of Health, over 40 million Americans have a sleep disorder. Everyone has a hard time falling asleep, staying asleep or feeling tired from time to time. However, if sleep problems happen often, see your doctor to find out if you have a sleep disorder.

People with sleep disorders may experience some or all of the following symptoms:

- Consistently taking more than 30 minutes to fall asleep each night.
- Waking several times every night and then having trouble falling back to sleep.
- Waking up too early in the morning and having trouble falling back to sleep.
- Consistently feeling sleepy during the day.
- Taking frequent naps or falling asleep at inappropriate times throughout the day.
- Snoring in a loud, choking, snorting manner.
- Having creeping, tingling feelings in the arms or legs that require you to move them even when you are trying to fall asleep.
- Your legs or arms jerk or spasm often while you are asleep.

- Experiencing sudden muscle weakness when you are fearful, angry or laughing.
- Being unable to move when you first wake up.

There are over 80 different sleep disorders. The most common sleep disorders are:

- Insomnia
- Narcolepsy (falling asleep during daily activities)
- Bruxism (nighttime teeth grinding)
- Restless leg syndrome
- Sleep apnea

Sleep disorders are often made worse by life stress, such as difficulties at work or in your relationships. Staying up late and then waking up early, or sleeping late into the day, can make it hard to keep a healthy sleep pattern. Having caffeine, alcohol or food too close to bedtime can also disrupt sleep. Certain medicines can affect sleep patterns.

### **What does the research tell us about sleep and health?<sup>20</sup>**

Research tells us that not sleeping well can be dangerous. People who do not get enough sleep may perform as badly or even worse in driving tests than people who are drunk. In addition, lack of sleep also makes the effects of alcohol stronger. About 100,000 car accidents and 1,500 deaths a year can be linked to drivers being too tired.

Lack of sleep can also affect your health. Studies with rats showed some shocking results. The rats who were not allowed to sleep enough got sores on their bodies and had much shorter lives. Another study with rats showed that lack of sleep caused problems with memory and learning. Studies with humans showed other health problems such as hallucinations and mood swings.

The National Sleep Foundation suggests the following strategies to improve sleep:

- Go to sleep and wake at the same time every day and avoid spending more time in bed than needed.
- Use bright light to help manage your “body clock.” Avoid bright light in the evening and expose yourself to sunlight in the morning.
- Use your bedroom only for sleep (or sex). It may help to remove work materials, computers and televisions from your bedroom.
- Select a relaxing bedtime ritual, such as a warm bath or listening to calming music.
- Create an environment that is conducive to sleep. Your bedroom should be quiet, dark and cool. It is important for your mattress and pillow to be comfortable.
- Reduce or eliminate your intake of caffeine, nicotine and alcohol.

- Save your worries for the daytime. If concerns come to mind, write them in a “worry book” so that you can address those issues the next day.
- If you can’t sleep, go to another room and do something relaxing until you feel tired.
- Exercise regularly, but avoid vigorous workouts close to bedtime.

### **What can you do if you have a sleep disorder?**

How you treat your sleep disorder depends on what kind you have and what is causing it. While there are medications available to treat sleep disorders, most sleep drugs stop working after a while as your body gets used to the drug. Insomnia can be cured by practicing healthy sleep habits, which include the following:

- Set a sleep schedule. Go to bed around the same time every night and wake up around the same time every morning.
- Avoid caffeine, nicotine and alcohol. Caffeine and nicotine may prevent you from falling asleep easily. Alcohol keeps people in light stages of sleep, preventing them from getting deep sleep.
- Exercise frequently. Work out earlier in the day, because exercising at night can make it hard to fall asleep. However, exercise in the afternoon can tire you out, allowing you to sleep better that night.
- Keep bedroom temperatures comfortable. Make sure it is not too hot or too cold in the room where you sleep.
- Wake up to the sunshine. Open your shades so that the first light of the dawn helps wake you up. Exposure to sunlight can reset your “body clock.”
- Create a relaxing bedtime ritual. Read a calming book, take a bath or try meditation or gentle yoga every night before bed.

If after practicing these good sleep habits, you are still suffering from disrupted sleep, you can try one or more of the options listed below.

- Share your symptoms with your doctor.
- Make an appointment with a psychotherapist. A psychotherapist will be able to give you suggestions on how to make your sleep better. He or she can also determine if you need to visit a sleep specialist.
- Read self-help books, such as *Say Good Night to Insomnia* by Gregg Jacobs and Herbert Benson. Self-help books can help you manage your sleeping problems.
- Listen to a guided self-hypnosis for sleep CD when you go to bed, such as “Healthful Sleep” by Belleruth Naparstek and “Sleeping Soundly” by Michael Yapko.



## **Personal Strategies for Movement, Exercise and Rest**

Use this page to record your ideas and plans for movement, exercise and rest.

## **Web Site Resources for Movement, Exercise and Rest**

Centers for Disease Control and Prevention (CDC); Physical Activity Basics |  
<http://www.cdc.gov/physicalactivity/basics/index.htm>

Centers for Disease Control and Prevention (CDC); 2008 Physical Activity Guidelines for  
Americans Fact Sheet for Health Professionals |  
[http://www.cdc.gov/physicalactivity/downloads/pa\\_fact\\_sheet\\_adults.pdf](http://www.cdc.gov/physicalactivity/downloads/pa_fact_sheet_adults.pdf)

Centers for Disease Control and Prevention (CDC); Sleep and Sleep Disorders |  
[http://www.cdc.gov/sleep/about\\_sleep/index.htm](http://www.cdc.gov/sleep/about_sleep/index.htm)

National Heart, Lung, and Blood Institute; What are Sleep Deprivation and Deficiency? |  
<http://www.nhlbi.nih.gov/health/health-topics/topics/sdd>

National Sleep Foundation | <http://sleepfoundation.org/>

U.S. Department of Health and Human Services; Physical Activity Guidelines for Americans |  
<http://health.gov/paguidelines/>



### OVERVIEW

Developing a healthy and balanced diet is an important part of becoming and staying healthy. Traditional American diets have many processed foods, which can lead to disease and slow down the healing process. A healthy diet can improve your well-being throughout your life.

### STRATEGIES

The food you eat has a big impact on your overall health and well-being. Many studies have linked diet with health outcomes including cancer,<sup>21,22</sup> osteoporosis (bone disease),<sup>23,24</sup> heart disease<sup>25,26</sup> and diabetes.<sup>27,28</sup> A recent study showed that about 16% of deaths in men and 9% in women could be prevented by choosing a healthier diet.<sup>29</sup> Most of the nutrients your body needs should come from the foods you eat. Additionally, you may need to take a vitamin or mineral supplement to make sure you are getting all the nutrients you need.

Choosing a healthier diet does not have to mean avoiding all the foods you love. After all, quality of life is an important part of being healthy too. This chapter is a way for you to consider the foods you eat now. If there is an unhealthy food that you eat regularly, consider making that food a special treat instead. Choose plenty of healthy meals, and eat the unhealthier choices in moderation.

Below, you can learn about nine key strategies that were developed by Duke Integrative Medicine. As you look at the role of nutrition in your health plan, consider your health issues and any advice from your doctor. Also, think about the foods that you like and foods that are agreeable to you. You can combine these strategies to create your own nutrition program. You may also consider meeting with a registered dietician.

### THE NINE KEY STRATEGIES

1. Increase your fruit and vegetable intake.
2. Build a diet around healthy fats with anti-inflammatory benefits.
3. Shift the protein sources in your diet.
4. Increase fiber-rich foods.
5. Consume at least one ounce of nuts, nut butters or seeds most days of the week.
6. Consume probiotics daily through foods.
7. Increase your fluid intake daily.
8. Drink alcohol moderately or not at all.
9. Know important vitamin and mineral levels.

## Strategy 1: Increase Your Fruit and Vegetable Intake

Fruits and vegetables have many benefits for your health. Certain dark green vegetables have a substance called *indole-3-carbinol* that has been shown to prevent cancer. Raw or lightly steamed dark greens contain the most indole-3-carbinol because cooking destroys this potent substance. These vegetables are also rich sources of vitamins, minerals and fiber that are protective against an array of diseases.

Dark greens, red, orange and yellow vegetables contain *carotenoids*. Many of the carotenoids found in fruits and vegetables protect you from a type of damage that leads to aging and disease. This damage is known as *free radical damage*. Carotenoids may also prevent heart disease and certain cancers.

Garlic, onions and other members of the *Allium* family can protect your cells against damage caused by cancerous substances. They can also stop cancer cells from growing. Cooking destroys some of the helpful properties of garlic and onion. Cooking them quickly with the least amount of water preserves the health benefits.

Greens are excellent sources of calcium and vitamin K, nutrients that are essential for bone health and strength.

Food (1 cup cooked)	Calcium (mg)	Vitamin K (mcg)
Collard greens	360	370
Spinach*	270	280
Turnip greens	250	106
Kale	180	360
Broccoli	178	240
Bok choy	158	
Mustard greens	150	
Cabbage	50	180
Romaine, green leaf lettuce (raw)	38	112

\*Calcium absorption from spinach is believed to be very low (5%) because of the oxalate content.

Have at least seven servings of fruits and vegetables daily. Vary your selection.

One serving of fruit:

- 1/2 banana
- 1 medium fruit
- 4 ounces juice
- 2 tablespoons of raisins

One serving of vegetables:

- 1 cup raw vegetables
- 1/2 cup cooked vegetables

#### Include dark green vegetables daily

Examples: Broccoli, spinach, kale, collards, cabbage, Brussels sprouts, mustard greens, salad mix

#### Include orange fruits and vegetables daily

Examples: Sweet potato, carrots, carrot juice, winter squash, cantaloupe, dried apricots

#### Include at least four servings of antioxidant-rich fruits each week

Examples: Dried plums (prunes), raisins, blueberries, strawberries, raspberries, pomegranate

#### Eat at least four servings of lycopene-rich foods each week

Examples: Cooked tomato sauce (1 serving = 1/2 cup), salsa, tomatoes, watermelon, red grapefruit

#### Increase garlic and onion in your diet if they are well tolerated

Examples: Add to stir-fries, soups and pasta sauce. Eat chopped with salsa on crackers or toast.

### **Strategy 2: Build a Diet Around Healthy Fats With Anti-Inflammatory Benefits**

Fats are an important part of a healthy diet. Some fats are healthier for us than others. While there are valid concerns regarding the calorie content of high-fat foods, the careful distribution of healthy fats will help you to be healthier, happier and better able to maintain your ideal body weight. People who eat a lot of unhealthy fats are more likely to have high cholesterol levels on blood testing. High levels of some types of cholesterol are associated with an increased risk of heart disease and some types of cancer. The types of cholesterol that are linked to heart disease are high total cholesterol and high LDL (low-density lipoprotein) cholesterol. They cause plaque

to build up in the arteries, reducing blood flow. High levels of HDL (high-density lipoprotein) cholesterol are not linked to heart disease. A higher level of HDL is thought to remove unhealthy cholesterol from the body and is a protective factor in the risk of heart disease.

Unhealthy fats include saturated fats and trans fats. Saturated fats can increase your total and LDL cholesterol levels.

**Saturated fats** are associated with heart disease and cellular damage. Higher intakes of saturated fats have been shown to lead to tumor growth in animals. Saturated fats are found in foods such as:

- Cream, cheese, butter and other dairy products
- Fatty beef, lamb, pork and poultry with skin
- Coconut, cottonseed and palm kernel oils
- Lard

**Trans fats** increase total and LDL cholesterol and lower HDL cholesterol. Trans fats may increase cancer risk and affect brain health. When you go grocery shopping, check the Nutrition Facts label to see if the food has any trans fats. Trans fats may be used in foods such as:

- Fried foods, such as French fries, chicken nuggets, taco shells and donuts
- Store-bought baked goods, such as pastries, pizza dough, muffins, cakes and hamburger buns
- Stick margarine and shortening
- Snack foods, such as chips, candy, popcorn, cookies and crackers
- Food mixes, such as cake mix, pancake mix and chocolate drink mix

Fried foods are particularly unhealthy because many of the calories come from fat. The oil used for frying often contains trans fats. Also, cooking oil at high temperatures can cause free radical damage, which can lead to aging and disease. However, not all fats are bad for you. Your body needs fat in order to absorb some nutrients. Fats are also used for energy and cell growth. Healthy fats are important for maintaining physical and mental health. The two types of healthy fats are *monounsaturated* and *polyunsaturated*. These fats in plant foods do not have a bad effect on your cholesterol levels, and they are not associated with an increased risk for cancer. These fats might have a role in reducing heart disease, cancer, rheumatoid arthritis, depression, PMS symptoms, menstrual cramps and other health concerns.

## Increase healthy fats

Example: Eat at least five servings of plant fats weekly, including nuts, seeds—especially flaxseeds—nut and seed butters (peanut, almond, tahini), olives, avocado.

One serving:

- A small handful nuts
- 1 tablespoon of ground flaxseed
- 2 tablespoons of nut butters
- 10 small olives
- 1/4 avocado

Example: Eat four eggs each week. Organic “designer” eggs (see label) that contain omega-3. Four DHA-rich eggs have the same omega-3 content as 3.5 ounces of salmon.

Example: Eat at least one serving (and ideally three servings) of omega-3 fatty acids in the form of cold-water fish weekly including: wild salmon, sardines, rainbow trout, bluefish, herring and mackerel. One serving is 3.5 ounces.

When you choose the type of fish you eat, it is useful to know the omega-3 content (in grams) per 3.5 ounce serving:

<b>Omega-3 Content</b>	<b>Types of fish</b>
More than 1.0 gram	Anchovies, bluefish, herring, Spanish mackerel, king mackerel*, salmon, sardines, lake trout*, bluefin tuna*, albacore tuna*
0.5 grams–0.99 grams	Striped bass*, sea bass*, rainbow trout*, blue mussels, oysters, flounder, halibut*
Less than 0.5 grams	Carp, catfish, clams, crab, cod, grouper*, lobster*, perch, mahi mahi, mullet, orange roughy*, pike, red snapper*, scallops, sea trout*, shrimp, sole, squid, sturgeon, swordfish*, canned light tuna (not albacore)

\***Caution:** These fish have higher concentrations of mercury. Limit to no more than one serving a week.

**Note:** There is some evidence that farmed salmon can contain higher levels of harmful toxins, including PCBs (polychlorinated biphenyls). Limit farmed salmon to monthly on average. Choose wild salmon instead. Most canned salmon products are made from wild Alaskan salmon. Chum, sockeye and pink salmon are all wild varieties.

Avoid trans fatty acids (foods containing hydrogenated or partially hydrogenated oil)

Examples: Hard-stick margarine, Crisco<sup>®</sup>, fried potato/tortilla chips, French fries and other fried foods, store-bought pastries and baked goods, commercial cookies

Reduce saturated fats to less than 15 grams daily

Examples: Cheese, butter, ice cream, whole milk, beef, processed foods

When you begin to eat less saturated fats, it is useful to know the content of common foods:

Food	Saturated Fat
Ice cream (1 cup of vanilla)	14.8 grams
McDonald's Quarter Pounder w/cheese	11.2 grams
McDonald's large French fries	9.1 grams
Hamburger (3.5 oz. regular)	8.2 grams
Hot dog (1 regular beef)	6.9 grams
Cheese (1 oz.)	6.0 grams
Jelly biscuit	6.0 grams
Whole milk (1 cup)	5.6 grams

Replace saturated oils with monounsaturated oils

Examples: Make extra-virgin olive oil the primary oil in the diet. Other choices include organic canola oil, sunflower oil, safflower oil and organic peanut oil.

Avoid fried foods

Examples: French fries, fried chicken, fried fish, fried snack chips

**Strategy 3: Shift the Protein Sources in Your Diet**

Red meat is a main source of saturated fat in the American diet, which can cause heart disease and several cancers. For instance, a single beef hot dog has half the daily amount of saturated fat.

Choosing low-fat protein sources instead of high-fat meats will help cut down the amount of saturated fat in your diet. Fish and skinless chicken are low-fat animal protein options. Eating



fish is tied to lower rates of disease, particularly heart disease and cancer. Another way to reduce your saturated fat is by replacing some of the meat in your diet with soy protein. Soy provides an array of healthy compounds. Eating vegetarian protein sources more often will mean that you are getting more helpful plant nutrients in your diet.

Soy-Based Food	Serving Size	Soy Protein	Isoflavones
Texturized soy protein (dry)	1/4 cup	6 grams	94 mg
Soy nuts (dry roasted)	1/4 cup	10 grams	84 mg
Green soybeans (edamame)	1/2 cup	11 grams	70 mg
Tempeh	4 ounces	19 grams	60 mg
Soy flour	1/4 cup	8 grams	44 mg
Tofu	4 ounces	13 grams	38 mg
Stonyfield® O'Soy yogurt	4 ounces	4 grams	26 mg
Soy milk	1 cup	4–10 grams	20 mg
Soy-based veggie burger	1 patty	12–18 grams	5–20 mg

Replace at least three servings of animal protein with vegetable protein weekly

Examples: Beans, peas, lentils and other legumes, vegetarian dishes (Indian, Thai, Chinese and Ethiopian cuisines are good choices), pasta with vegetables, beans and rice, vegetable stir-fries, vegetable stews, whole bean burritos, hummus sandwiches

Include moderate amounts of unprocessed and fermented non-GMO whole soy foods

Examples: Edamame, tempeh or miso

Reduce animal protein, red meat in particular

Examples: Hamburgers, steak, roast beef, pork, bacon, sausage, hot dogs, bologna, other luncheon meat

If you do eat animal protein, choose organic, grass-fed, low-fat animal protein

Examples: Chicken breast, turkey breast, fish, egg whites, low-fat yogurt, low-fat cottage cheese, low-fat milk

#### Strategy 4: Increase Fiber-Rich Foods

A diet rich in fiber can reduce cholesterol, lower your risk of colon cancer and keep your digestion regular.

Fiber-rich foods, including whole grains, are excellent sources of vitamins and minerals. They are also a good source of antioxidants, which are associated with reducing overall disease risk.

The chart below shows the fiber content of some popular foods. Choose foods with more soluble fiber, since that is fiber your body can use.

Food	Fiber Content	Soluble Fiber
Nature's Path Organic Smart Bran (2/3 cup)	13 grams	3.0 grams
Kellogg's Raisin Bran® (1 cup)	8 grams	1.2 gram
Kidney beans (1/2 cup)	6.6 grams	1.6 grams
Black beans (1/2 cup)	6.1 grams	2.4 grams
Most beans (1/2 cup)	4–6 grams	0.8–2.4 grams
Kellogg's Frosted Mini-Wheats® (1 cup)	6.3 grams	0.8 grams
Post® 40% Bran Flakes (2/3 cup)	6 grams	0.4 grams
Post® Grape-Nuts (1/2 cup)	5 grams	1.6 grams
Spinach (1 cup cooked)	4.5 grams	1.0 grams
Oat bran (1/2 cup)	4.5 grams	2.2 grams
Pear (1 medium)	4.3 grams	1.1 grams
Raspberries (1/2 cup) 6 oz.	4.2 grams	0.45 grams
Baked potato with skin	4.2 grams	1.0 grams
Oatmeal (1/2 cup dry)	4 grams	2.2 grams
Air-popped popcorn (3 cups)	4 grams	0.1 grams

#### Eat beans at least four times per week

Examples: Black bean burritos; hummus; garbanzo, kidney, pinto and other beans in salads and soups; rice and beans; other bean-based dishes

Eat whole-grain breads. Select those with at least two grams of fiber per slice

Examples: Whole wheat, spelt, kamut, rye, sprouted grains

Eat higher-fiber grains. Select those with at least four grams of mixed fiber per serving

Examples: SmartBran™ Cereal, seven-grain cereals, Raisin Bran®, Post® Grape-Nuts, oatmeal, Kellogg's Frosted Mini-Wheats®

Reduce refined, lower-fiber carbohydrates

Examples: Bagels, white breads, juices, white pasta, white rice

Greatly reduce empty calorie carbohydrates

Examples: Pastries, soft drinks, cakes, candy bars, cookies, baked goods, ice cream

### **Strategy 5: Consume at Least One Serving a Day of Nuts, Nut Butters or Seeds Most Days of the Week**

While it is true that nuts and seeds are high in fat, they are good sources of heart-healthy monounsaturated fat. They are also good sources of protein, fiber, magnesium, folate and vitamin E. Flaxseed is the richest food source of lignans, which may help protect against prostate and breast cancer. Lignans also act as antioxidants and add to flaxseed's high-fiber content.

Make nuts and seeds part of a snack or add them to cooked dishes and salads

Examples: Almonds, almond butter, Brazil nuts, filberts, freshly ground flaxseed, macadamias, peanuts, natural peanut butter, pecans, pine nuts, pistachios, pumpkin seeds, sunflower seeds, walnuts

One serving:

- 1 ounce or 150–200 calories
- 1/4 cup of nuts or seeds
- 2 Tbsp. nut or seed butter

## **Strategy 6: Consume Probiotics Daily through Foods**

Studies have shown that probiotics can help improve irritable bowel syndrome, constipation and diarrhea. They can also control symptoms of lactose intolerance. Yogurt is an excellent source of probiotics. Be aware that many single-serving yogurts have a lot of sugar: A healthier (and cheaper) option is to buy a larger container of plain yogurt and add your own fruit. Consider buying low-fat or nonfat yogurt.<sup>30, 31</sup>

You can consume probiotics in yogurt, kefir and products with added probiotics, such as GoodBelly® juices or DanActive™ milk. Look for sources that contain live cultures.

## **Strategy 7: Increase Your Fluid Intake Daily**

It is important to drink enough water. Drinking at least six cups of water a day can help protect you against kidney stones and gallstones. It will also improve your overall immune function, which is how your body fights off disease. To make sure that you are drinking clean water, invest in a simple filter that removes lead, fluoride, chlorine and other contaminants. If you purchase bottled water, choose distilled or purified water.

Green tea is rich in antioxidants. The antioxidants in green tea may help protect against heart disease by lowering cholesterol. In addition, green tea is linked with a lower risk of several cancers. If green tea has more caffeine than you want, you can remove nearly 80% of the caffeine from the tea easily at home. Let the tea steep in hot water for about 45 seconds and then pour off the liquid. Add fresh hot water to the tea leaves and steep as usual.

- Increase your water intake to at least 48 ounces (6 cups) each day.
- Drink 3–5 cups of green or white tea daily. This can be caffeinated or naturally decaffeinated.

## **Strategy 8: Drink Alcohol Moderately or Not At All**

Alcohol is a common part of American culture, but it is important to consume alcohol responsibly. Alcohol is a source of empty calories and can contribute to excess body weight. Excessive alcohol intake (more than two drinks daily for women and more than three drinks daily for men) increases the risk for alcoholism and many other health problems. However, you don't need to cut alcohol out of your life entirely. Red wine is a good choice because it is also a source of antioxidants.

- Women: One drink or fewer per day.
- Men: Two drinks or fewer per day.

One drink:

- 12 ounces of beer
- 5 ounces of wine
- 1.5 ounces of 80-proof liquor
- 8–9 ounces of malt liquor
- 3–4 ounces of fortified wine (sherry or port)
- 2–3 ounces of cordial, liqueur or aperitif

### **Strategy 9: Know Important Vitamin and Mineral Levels**

A number of vitamins and minerals have been associated with important health outcomes. These include calcium, vitamins B, C and D, iron, folic acid, magnesium and potassium. Getting enough calcium and vitamin D leads to a lower risk of bone loss and osteoporosis. Low vitamin D levels have also been linked with cancer, inflammatory bowel disease and cardiovascular disease. Low amounts of folic acid are linked to a higher risk for a number of serious birth defects. Higher blood levels of vitamins B2, B6 and B12 have been associated with lower risk for colorectal cancer. Potassium has been shown to lower blood pressure, reduce the risk of developing kidney stones and help decrease bone loss.

Based on your health goals, you may want to look at how your diet is meeting your vitamin and mineral needs. You can discuss with your healthcare provider whether you should take any vitamins and minerals.

## **Personal Strategies for Nutrition**

Use this page to record your ideas and plans for nutrition.

## **Web Site Resources for Nutrition**

U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion; Dietary Guidelines for Americans | <http://www.health.gov/dietaryguidelines/>







## Personal and Professional Development

### OVERVIEW

Personal and professional activities can make you feel happy and alive or they can cause you stress. Some people have personal lives that are filled with relationships and hobbies that provide joy, companionship and meaning. Other people do not yet have all those pieces they desire. Similarly, some people have careers that fit with their purpose and values in life, while others work in jobs that have high demands and few rewards. Even those who have reached personal and professional goals may feel as if parts of their lives are neglected. Regardless of where you are personally and professionally, there is no doubt that these parts of your life can have a good or bad effect your health.

### PROMOTING OVERALL HEALTH

Personal and professional development refers to what gives you overall meaning and purpose in life. It may be a job or your family; it may be learning new skills or volunteering at the local homeless shelter; it may be your relationship with your colleagues at work, your friends at school or your children at home. Whatever and wherever you are engaged in activities that give you a sense of fulfillment, you have many opportunities to enhance your health and the joy in your life. As in many other areas of the Wheel of Health, this one is intensely personal and may vary greatly from person to person. Explore you own values and find what brings you joy and meaning.

#### Personal Development

For some people, personal and professional development may not be different. Your personal life may be tied to your work goals. For others, personal development may be separate from their professional development. In fact, your best health may be reached by balancing the two, a topic addressed below.

Many areas of the WOH relate to personal development: spirituality, relationships, communication and mindful awareness. Other areas of your life are important too. Music, art, reading, travel, gardening, history, sports and other interests can make you happy and improve your health. These can be “doing” activities and they can be “being” activities. Staring at the stars, watching the tide roll in, sitting in thought—these can be sources of personal connection and development.

#### Professional Development

Being involved in meaningful work in the world can bring you a deep sense of satisfaction, joy and well-being. People who take time every day to do something they love to do have a vibrancy and energy that make their life full and rich. They go about what they do with meaning and purpose. They know that they are contributing to the world in a way that has significant meaning to them. They have a positive impact on others around them as well. They seem to know when they have devoted enough time and energy to their work, and they know when to stop to

recharge.

People who are in jobs that wear them down may begin to feel the effects of that job on their health. Many times, this shows up as stress or boredom, which in and of itself will harm physical, mental, social and spiritual health. Some people will try to treat these symptoms with food, alcohol, drugs or inactivity when not on the job. This “self-medication” can lead to illnesses and bad overall health. Research shows that job strain—a mix of high demands and little power to make decisions—can have major effects on health including a higher risk of high blood pressure and heart disease.

Some may be in careers or work that makes them happy, but the work requires too much time and energy. The work can then become overwhelming and stressful, leading to health problems. If this sounds like your life, consider where the extra demands are coming from. Is it a temporary sacrifice so you can reach a certain goal? Is a manager giving you too much work to do? Are you making yourself work too hard? People end up spending too much time and energy on work for many reasons. Some of those reasons are practical and relate to financial goals and responsibilities. Others may include fear of failure and the need for approval. Understanding the reasons for a stressful work situation will help you solve the problem.

### **Balancing Personal and Professional Development**

Sometimes, you may have a hard time balancing your personal and professional goals. Finding enough time and energy can be stressful and draining, leading to less than perfect health.

In our culture, many people find themselves working more than 50 or 60 hours a week. That much work takes a lot of energy and can leave you without enough time for family or hobbies. Sometimes you may find yourself working so hard that you don’t have time to enjoy the things you love.

Being mindfully aware of how you have filled your life and the impact it is having on your mental, physical, social and spiritual health can help you achieve your health goals. Once you become aware, you are in a better position to find balance in your life.

## STRATEGIES

In the next section, there are 10 questions that can help you identify how your personal and professional activities are helping or hurting your health.

- Reflect on each question over a period of time. Try choosing one question to think about each week. Taking the time to think deeply can help you find new solutions.
- Choose the questions that are most relevant for you.
- Write down your responses. Many people find clarity when they write down, or journal, their responses.
- Share your thoughts with someone you trust who is willing to listen deeply. Sometimes just hearing ourselves speak out loud can bring profound insight that just thinking about—or even writing—the answers does not.

### Ten Questions to Consider

1. If money and time were no object, what would you love to do that would bring you a profound sense of satisfaction, joy and purpose?
2. How balanced are your work (what you do to earn a living) and your personal interests? What would you need to do to bring them more in balance?
3. If you continue with your current balance of professional and personal development, including time and energy spent on each, how will your life be five years from now? 10 years from now?
4. If you continue on your current path, what do you think you will take pleasure in and what do you think you might regret at the end of your life?
5. How is what you're doing for personal development contributing to your health goals? What is your evidence for your answer?
6. How do you think your professional endeavors are contributing to your overall health? What is the evidence for your answer?
7. What personal and/or professional dreams have you given up on or compromised over the years? What other values did you choose to honor instead?
8. Is there a dream that you would like to resurrect and pursue? How are you stopping yourself? What are some first steps you could take to start pursuing that dream?
9. Most dreams represent important personal values. What are the personal values embedded in your dream? Are there other avenues for fulfilling these values that may be more realistic at this time of your life?
10. How important is it for you to be recognized for your contributions to the world? By whom? How much does this influence what you choose to do?

## **Personal Strategies for Personal and Professional Development**

Use this page to record your ideas and plans for personal and professional development.



## Physical Environment

### OVERVIEW

The spaces we spend the most time in have a major impact on how we feel, physically and emotionally. Every aspect of our physical space can influence our health, for better or worse. There are some problems in the environment—climate change, toxins in the air—that are difficult for us to change. However, there are things in your community, home and work that are easier to improve. We invite you to consider those aspects of your physical environment that you can change so that they support and nurture your health.

### PROMOTING OVERALL HEALTH: YOUR COMMUNITY

#### Climate/Location

Where you live can certainly affect your health and wellness, from basic safety within and outside of your home to the comfort of your environment. Your local climate is one factor. If you live in the northern parts of the United States, you may not get enough sunlight during the winter months. Your skin needs sunlight in order to make vitamin D. If you're not getting enough sunlight, you may benefit from taking a vitamin D supplement. In addition, you may be more prone to seasonal affective disorder (SAD), which can be easily treated with special light bulbs. You may also need to make more of an effort to stay active when cold weather makes outdoor exercise less appealing.

If you live in a warmer state, you may need to be especially careful when exercising outdoors during the summer. Try working out during the morning or near dusk instead of the hottest part of the day. Drink plenty of water and limit outdoor activity when the air quality is poor.

#### Environmental Allergies (Indoor and Outdoor)

Check to see if there is plant life growing in your local area that might cause seasonal allergies. If you experience seasonal allergies, you may want to limit your time outside while those plants are in bloom. Find ways to exercise and relax indoors so your allergies are less of a problem. It is also a good idea to know what troublesome plants might be native to areas where you travel. Ask your doctor about what plants to watch out for.

People who live in urban and rural areas tend to have different health issues. Big cities often have lower air quality, which can contribute to diseases such as asthma. Avoid exercising near high-traffic areas so you don't have to breathe exhaust from cars. Stay indoors when pollution levels are high (you can download an app for your phone or check local air quality online).

Also, it may be hard to find places to exercise. Smaller apartments don't have much room for working out, and it can be dangerous to jog or ride your bike on busy streets. If you live in an urban area, see what parks and bike trails might be nearby. Consider working out early in the morning or later in the evening when there are fewer people and cars around. Many neighborhood parks and recreation departments have gyms, fitness classes and other resources for staying healthy. You can also get a free workout by climbing the stairs instead of taking the elevator.

People who live in rural areas have different problems to worry about. Rural residents may have less access to healthy, affordable foods than people in larger cities and suburbs. If you live in a rural area, you may be able to plant a garden and share the health and wealth with your neighbors. Also, you may have to travel long distances to receive medical care. Don't let this stop you from getting regular checkups, though. You can plan several errands for the same trip. You can even take advantage of a favorite activity you don't have at home so your trip is like a mini-vacation.

## **Strategies**

Each one of us responds differently to scenery. You may find peace and joy looking out at the ocean, hiking through a mountain forest, or taking in the beauty of the desert. If you know that one of these settings makes you feel good, find more chances to spend time there.

## **PROMOTING OVERALL HEALTH: YOUR HOME**

Your home can be a haven for your health, offering support to your body, soul, spirit and senses. According to the Alliance for Healthy Homes, a healthy home has the following seven attributes:

1. It is dry. Dry homes minimize moisture and molds.
2. It is clean. Clean homes have minimal dust and clutter.
3. It is well ventilated. Well-ventilated homes have systems to remove contaminants and allergens.
4. It is free of dangerous gases. Homes that are free of dangerous gases minimize carbon monoxide.
5. It is pest-free. Pest-free homes reduce the presence of pests such as cockroaches, which leave sheddings that can trigger allergies and asthma.
6. It is free from toxic chemicals. Toxic chemical free homes reduce and eliminate products such as asbestos, lead, volatile organic compounds (VOCs) and pesticides.
7. It is comfortable. Comfortable homes address individual household members' needs for temperature, aesthetics and physical abilities.

## Strategies

### Enhance Your Senses

Open the door to your home and notice how you feel when you enter each room.

- Do the colors evoke the mood you intend?
- Is there enough light?
- Does the space seem cluttered? Or is it too bare?
- Are there pleasing smells, as from fragrant flowers, aromatherapy essential oils or fresh-baked bread?

Unlike much of the physical environment outside of your home, you have a great deal of control over the environment inside of it.

Ask yourself what changes you could make so that each room is a more nurturing, healthy environment for you. Experiment with colors, materials, scents, music or the overall design of different rooms so that these spaces satisfy all of your senses.

### Improve Your Air Quality

- Use a good-quality doormat and remove your shoes once inside.
- Note that dirt, pesticides and other pollutants are easily tracked into your home.
- Limit carpeting, which can trap pollutants. New carpet may emit harmful chemicals.
- Choose products with low chemical emissions (for certified products, see [www.greenguard.org](http://www.greenguard.org)) when buying furniture or paint.
- Use a HEPA-style vacuum cleaner, which traps tiny particles. Choose nontoxic cleaning products and keep your home well ventilated.

### Improve Your Water Quality

- Learn about your community's tap water quality by visiting [www.ewg.org/tap-water](http://www.ewg.org/tap-water), or test your water if you get it from a private well.
- Choose a filter that is certified to remove the contaminants found in your water.

### Decrease Your Clutter

Clearing clutter can make falls less likely and help get rid of germs. But clutter can have a more subtle influence: Having stuff sitting around that you no longer use or need can be draining both mentally and emotionally. Common problem areas include paper, clothing, sentimental items and collections of objects. Clutter isn't just the stuff piling up at home. The clutter in your schedule and in your mind can also have an effect on your health.

As you contemplate your home environment, you may consider these questions:

- When does “enough” become “too much”?
- What am I holding on to that no longer serves me?
- What am I ready to let go of?

Other strategies for getting rid of clutter include:

- Follow the “one in, one out” rule: When you bring home something new, get rid of something else.
- Schedule time to regularly go through things and purge.
- If you can deal with something in 30 seconds or less, just do it. If you keep putting off decisions about something, give yourself a deadline.
- Consider hiring a professional organizer (to find one nearby, visit [www.napo.net](http://www.napo.net)) if you have trouble dealing with clutter on your own.

**Note:** People with compulsive hoarding, which is a type of obsessive–compulsive disorder, might benefit from therapy or antidepressant medications.

## **PROMOTING OVERALL HEALTH: YOUR OFFICE**

If you work in an office, it is likely that you spend at least one third of your day there. Although you usually have little control over the building or space you work in, you can usually do something about your immediate workspace. A balanced workspace can bring you good health, wellness and a deep sense of satisfaction.

### **Strategies**

#### Office Ergonomics

Creating a healthy environment in your office space can have a positive impact on your body and on how you feel about going to work each day. The Mayo Clinic suggests several specific considerations regarding office space ergonomics:<sup>32</sup>

#### **Chair Position**

Adjusting your chair can help you maintain proper posture and reduce the amount of strain on your back. Adjust the height of your chair so that your feet rest comfortably on the floor. Adjust the seat so that your knees are about level with your hips. Make sure the seat does not press into the back of your knees.



## **Proper Back Support**

The key to comfortable sitting is maintaining correct posture—keep your backbone straight, your shoulders back, your abdomen and buttocks pulled in and your chin tucked. If your chair does not allow this, place a cushion between the curve in your lower back and the back of the chair. Experiment with pillows, rolled up towels or specially designed back cushions until you find what is comfortable.

## **Using a Footrest**

Rest your feet on a flat surface when sitting in your chair. If your chair is too high for you to rest your feet on the floor, consider using a footrest. Various types of footrests are available. Or get creative and make your own. Try a small stool or a stack of sturdy books.

## **Adjusting Your Computer Monitor Position**

Place your monitor 18 to 30 inches from your eyes—or about an arm's length away. The top of your screen should be at eye level or below so that you look down slightly at your work. Place your monitor so that the brightest light source is to the side. It may help to tilt the monitor downward a little, use a glare screen, or close the window blinds.

## **Lighting**

If glare from fluorescent lighting or sunlight is a problem, turn off some or all of the overhead lights.

## **Spacing**

Making sure key objects are within reach: Position frequently used objects—such as your telephone, pen or coffee cup—within 10 inches of your body to prevent excessive stretching. Stand up to reach anything that is farther away.

## **Audio**

Consider a headset. If you frequently talk on the phone and type or write at the same time, use a headset rather than cradling the phone between your head and neck. Headsets are available in many different styles. Experiment to find one that works best for you.

## **Wrists**

Avoid resting your wrists on sharp edges. Repeated, direct contact with sharp edges may hurt your wrists.

Consider a wrist rest: When you are typing, keep your wrists in a straight, natural position—not bent up, down or to either side. A wrist rest may help you reduce awkward bending. Be careful not to rest your wrists on the pad while typing, though. Rest your wrists on the pad during typing breaks.

## **Hands and Fingers**

Use your mouse properly: Place your mouse within easy reach on the side of your keyboard. Keep your wrist in a natural and comfortable position when you are using your mouse.

## Work Movement, Exercise and Rest

### **Lifting**

Most back injuries in the workplace occur while lifting something. Proper body mechanics can help prevent such injuries. Before lifting an object, test its weight while facing the object squarely. Keep your feet slightly apart and toes pointed out. Now squat down, keeping your back straight and bending at the knees (not the waist). As you grasp the object, tighten your abdominal muscles and pull the object close to you. Use your legs to stand, keeping your back straight. When moving large objects, push rather than pull them.

### **Stretching**

Standing for long periods of time or sitting at a desk all day can take a toll on your upper and lower body. Working on a computer all day can cause soreness in your forearms, wrists and hands. To prevent or reduce stiffness and pain, try simple stretches throughout the day. The Mayo Clinic offers many suggestions that can keep your body supple all through the day at [mayoclinic.com/health/lower-back-stretches/MM00712](http://mayoclinic.com/health/lower-back-stretches/MM00712).

### **Taking a Break**

Even the most focused person needs a break at least twice a day. Change of scenery also helps with emotions. One of the best ways to eliminate stress and recharge the body is to go outside for a ten-minute walk. Focus on your surroundings and take deep breaths. This will give you renewed energy and will aid in vitamin D production. Walk by yourself and focus on clearing your mind. Walking will also get the blood and the lymphatic system flowing.

## **Personal Strategies for Physical Environment**

Use this page to record your ideas and plans for your physical environment.

## **Web Site Resources for Physical Environment**

Centers for Disease Control and Prevention; About Healthy Places |  
<http://www.cdc.gov/healthyplaces/about.htm>

Centers for Disease Control and Prevention; Healthy Homes |  
<http://www.cdc.gov/healthyplaces/newhealthyhomes.htm>

Centers for Disease Control and Prevention; Workplace Safety & Health Topics |  
<http://www.cdc.gov/niosh/topics/officeenvironment/>

Nation Institute of Environmental Health Sciences; Environmental Health Topics |  
<http://www.niehs.nih.gov/health/topics/index.cfm>



## Relationships and Communication

### OVERVIEW

Studies over the years have shown something you may already know—that good social relationships are tied to good health. If you want to reach your health goals, you must take care of the relationships in your life. In this area of the Wheel of Health, we ask you to think about your relationships. We'll also explore how you communicate and offer tips for success.

### PROMOTING OVERALL HEALTH: RELATIONSHIPS

We invite you to spend time regularly looking at the relationships in your life. Think about how they are affecting your health. Some relationships make you feel loved and hopeful, and they have a positive effect on your health. Other relationships might cause you stress or anger, which in turn can cause problems with your health.<sup>33,34</sup>

People with healthy, positive relationships:

- Tend to live longer.<sup>35</sup>
- Are more likely to survive a heart attack.<sup>36</sup>
- Are less likely to report being depressed.<sup>37</sup>
- Are less likely to have a recurrence of cancer.<sup>38</sup>
- Are less likely to develop dementia.<sup>39</sup>
- Are less susceptible to infectious illness.<sup>40</sup>

### Strategies<sup>33</sup>

Take some time to think about the different types of relationships in your life. These three strategies will help you develop and maintain a variety of good relationships that will have a positive effect on your health.

1. Have a variety of social outlets. Even if you are not close to any one person in those groups, being around people who share your interests and goals is good for your health.
2. Have at least one or two close friends. Close friends can give you support when you need it.
3. Nurture the relationships that support and energize you. Minimize the time you spend in relationships that are full of conflict or leave you feeling drained. A bad relationship can be stressful and will have an effect on your health.

Finally, think about the impact of your relationships on other areas of the WOH.

- Do the people in your life help you meet your nutrition and exercise goals?
- How do they affect the amount of stress in your life?
- Are your spiritual beliefs supported by the people in your life?

## PROMOTING OVERALL HEALTH: COMMUNICATION

Communication is an important part of our relationships. Good relationships have good communication. When you can communicate well with another person, your relationship can only get better. You will be able to support each other when needed, and you will get past conflict easier.

### Strategies

There are several ways to improve your communication skills. These include listening, inquiry and use of I-statements.

#### Listening

Think about the last time you felt someone really listened to you. How did it make you feel? What did that person do, or not do?

Here are some things you can do to become a better listener:

1. **Be present.** Be attentive, and give the speaker time and space to speak freely. Don't be in a rush to be somewhere else, either mentally or physically.
2. **Be concerned about the speaker's opinions and feelings.** Don't rush to give your opinions or advice. Let the speaker talk through the issue. Many times, he or she will come to a solution that works for them.
3. **Reflect, paraphrase and ask clarifying questions.** Show the other person that you are listening by reflecting on what they have to say. Rephrasing is a way to give back to the speaker and show that you understood what was said. If you don't understand something, take the time to ask clarifying questions.
4. **Use attentive nonverbal behavior.** You can show that you are listening by making consistent eye contact, sitting still and nodding from time to time. These behaviors may be small, but they show that you are truly present and focused on the speaker.

Start making your communication skills better by picking one of these behaviors and practicing it in several conversations. See if it makes a difference in your relationship with the person to whom you are listening.

## Inquiry

Inquiry is about being genuinely curious about the other person. Ask questions that help you learn about the other person, not just to carry on a conversation.

True inquiry involves asking open-ended questions. These questions cannot be answered with a simple *yes* or *no*. Open-ended questions often begin with words such *what* or *how*. Instead of “Did you enjoy your trip?” try asking “What did you enjoy most on your trip?”

Inquiry is not about pushing the other person to a topic you want or an opinion you have. It is about seeing what he or she is interested in or what their values are. Allow the speaker to explore and talk about his or her own thoughts and beliefs.

## Use of I-Statements

Good, healthy relationships allow everyone involved to have their own opinions, thoughts and beliefs. Each person should feel heard and understood, not judged. Using I-statements is a way to speak only for yourself, and it allows the other person to have a different opinion.

I-statements use the word *I* more than the word *you*. Look at the differences below.

<b>Original Statement</b>	<b>I-Statement</b>
You don't understand me.	I'm not sure I'm making myself clear.
Wasn't that a great concert?	I really enjoyed that concert. What was your experience?
It is not a good thing to litter.	I am strongly opposed to littering.
You make me so angry when you refuse to go see your doctor.	I feel upset and worried when you refuse to go see your doctor.
You're so messy all the time. Clean up your room.	I see that some of your clothes and other stuff are on the floor, and I want you to clean up your room.

When you use I-statements, you are showing that you don't blame others for your thoughts, feelings or actions. Blaming the other person often shuts the conversation down and doesn't solve the problem. The other person will usually feel attacked and defensive. When you use I-statements, people are more likely to want to help solve the problem.

I-statements also help you avoid labeling and insulting the other person. Calling someone “messy,” for instance, can be hurtful and can push the other person away. If you talk about the mess in the room instead, you are addressing the problem without being mean.

Think about how often you use I-statements. See if using I-statements leads to better conversations, especially when trying to resolve conflict.

## **Questions for Reflection**

### Relationships

The following questions are here for your reflection. Writing down your answers in your journal or talking with another person will help you more than just thinking about your answers. You may want to keep a journal so you can see how your relationships change over time.

#### **Close Relationships**

- Who are your closest relationships with?
- How do you think they affect your overall health?
- Do they provide everything you ideally like to have in relationships?
- If not, what other kinds of relationships would you like to have?
- Do you have at least one person you can say anything to?
- Who are you most emotionally intimate with?
- Is this a balanced relationship in which you both give and receive?

#### **Social Networks**

- How would you assess the variety of your social networks?
- What, if any, kinds of social contacts would round out your interests in social networking?
- Which groups are most uplifting?
- Are there any that bring you down?

#### **Conflict**

- What relationships are your most difficult or most conflicted?
- What would you like to do about these?
- How are they affecting your health goals?



## Communication

In this section, you will be looking at how you communicate with the people in your life. You may decide to try out a different communication skill. If so, start with a supportive friend or family member. Ask for honest feedback about the changes you want to make.

1. On a scale of 1 to 10, how satisfied are you with your communication with your social network? (1 = not at all satisfied; 10 = completely satisfied)
  - a. If you answered with any number less than 10, what impact might a change (toward a 10) have on your health goals?
2. On a scale of 1 to 10, how satisfied are you with the quality of the communication with your close friends/family members/spouse?
  - a. If you want to improve this area of your relationships, what are some steps you would have to take?
  - b. What difference do you think it would make in terms of your overall health?
3. If you have relationships that are conflicted or that drain your energy what would be some communication strategies that would improve these relationships?
  - a. What would be some first steps you could take?
  - b. Who might assist you?
  - c. What will the impact be to your overall health if these relationships never change?
4. As you review the communication skills briefly discussed above, which one(s) strike you as an area you might want to improve on?
  - a. What would you have to do to make the improvements?
  - b. What impact do you think it would have for a particular relationship or your relationships in general?
  - c. How would this change your health goals?
5. Think of practicing *active listening* for at least 5–10 minutes the next time you find a convenient time to do so. Afterward, reflect on these questions:
  - a. How difficult or easy was it?
  - b. How successful were you?
  - c. What did you find getting in your way?

- d. What do you think the impact was for the relationship?
  - e. What would be the payoff for continuing to practice the skill of listening?
6. Think of practicing the skill of *inquiry* for at least 5–10 minutes the next time you find a convenient time to do so. Afterward, reflect on these questions:
- a. How difficult or easy was it?
  - b. How successful were you?
  - c. What did you find getting in your way?
  - d. What do you think the impact was for the relationship?
  - e. What would be the payoff for continuing to practice the skill of listening?
7. Notice your interactions with others over the next several days, and pay attention to who uses I-statements and who does not.
- a. What impact does the use or non-use of I-statements have on you?
  - b. How does this experience affect how you want to use I-statements?

## **Personal Strategies for Relationships and Communication**

Use this page to record your ideas and plans for relationships and communication.

## **Web Site Resources for Relationships and Communication**

American Psychological Association; Emotional Health |  
<http://www.apa.org/topics/emotion/index.aspx>

Centers for Disease Control and Prevention; Mental Health Basics |  
<http://www.cdc.gov/mentalhealth/basics.htm>



## OVERVIEW

For many people, spirituality is at the core of their being; it is a central component of how they experience life and see the world. For some, religion and spirituality may be the same thing. For others, spirituality may be an idea that's very different from the practice or beliefs of an organized religion. Even though a definition of spirituality is very personal, spirituality can change your health.

## PROMOTING OVERALL HEALTH

### How does spirituality matter?

Spirituality provides a broader context for health. For many people, it gets at the heart of what is most important to them. Some may want to be healthy for health's sake or to feel most alive and vibrant. But for many, being healthy is important in the context of their deepest values and beliefs. It enables them to feel joy and happiness throughout their lives.

For many, spirituality also provides a source of healing strength in the face of adversity, illness, suffering or death. Even when a cure is not always possible, healing is. For many, this healing source involves drawing on their spiritual connection. People are often able to make more sense of their illness, suffering or impending death in light of their spiritual beliefs.

### Exercises to Help You Deepen Your Spirituality and Optimize Your Health

With the exercises that follow or with other approaches that may be better suited for you, you can explore the details of your spiritual life and how they might benefit your health. The two exercises below have been adapted from *Positive Spirituality in Health Care*<sup>41</sup> by Dr. Frederic Craigie. No matter what your personal religious or spiritual beliefs are, you can regularly ask yourself some of these questions to explore the role of spirituality in your health goals. Your journal is a great place to keep track of these responses.

- How does my spirituality affect my current health?
- What areas within my spirituality do I want to devote more time and attention to? What impact will this have on my overall well-being?
- What current behaviors are inconsistent with my spiritual values? What impact do those inconsistent behaviors have on my overall well-being?
- What am I learning from this exercise and where do I see myself going now?
- How is my spirituality connected to other areas of the Wheel of Health? What impact do my spiritual beliefs have on the other areas?

## Exercise 1: Creating a Statement of Purpose

One way to better understand your own relationship to spirituality is to write a personal statement of purpose. This statement reflects how you want to live your life and who you want to be. When you have created a statement of purpose, it will help you manage life's unexpected twists and turns, especially those related to your health.

### **Core**

A personal statement of purpose points the way to what you most want your life to be about. What do you know from your own experience about times when you really feel alive? When do you feel that you are doing something that really matters? When are the times when you really feel spiritually renewed? When you are feeling discouraged, what do you do that restores your soul?

### **Control**

A personal statement of purpose defines what you will do, or what you will be. What you do is within your control; what other people do, or how other people receive you, is not within your control. Therefore, emphasize your own values and action, and avoid statements that depend on other people and their choices. "I will model kindness and caring with the children in my classes," is within a teacher's control. "I will make my second grade class the highest ranking in the school system," is a terrific goal, but not a very good statement of core purpose. Statements of mission often contain verbs that refer to ways that someone wants to relate to the world or to other people. Use phrases such as "encourage," "support," "challenge" and "display."

### **Concise**

A good personal statement of purpose is just one or two sentences. A short statement describing one or two ideas stays with you and is easy to remember through the day.

## Exercise 2: Sustaining present awareness

Once you have written your statement of purpose and found ways to cultivate present awareness, you can look at ways to grow beyond that. Dr. Craigie says, "It does no good to chart the pathway to aliveness if you don't follow it."

Perhaps you have defined some elements of purpose when writing your personal mission. Reflect on your own experience with staying connected with purpose. How do you do this? When have there been times when you have been aware of your purpose, core values and mission, and how did these times come about? Have you engaged in practices that help you to stay connected with purpose or do certain life events bring you to this awareness? What might you do that could enhance your daily awareness of purpose and make this even more vitally a part of what you do?

## **Personal Strategies for Spirituality**

Use this page to record your ideas and plans for spirituality.

## **Web Site Resources for Spirituality**

Center for Spirituality, Theology, and Health at Duke University |  
[www.spiritualityandhealth.duke.edu](http://www.spiritualityandhealth.duke.edu)





## Mind-Body Connection

### OVERVIEW

More and more research indicates that our thought patterns and emotions affect nearly every illness we can get—from arthritis to headaches, from the common cold to cancer. This means that your mind, brain and body are all communicating with each other. This chapter looks at ways you can help those parts communicate in healthy ways.

### PROMOTING OVERALL HEALTH

Stress is an emotion—and it is also a physical experience. You might experience racing thoughts or you might lose your temper easily. Stress can make you feel tired and give you headaches and stomachaches. Maybe your muscles tighten and it is hard to relax. The stress response begins in the brain and spreads throughout the body in a rush of powerful hormones. Not all stress is bad for your health. Acute stress that you recover from can actually be positive for your health. However, chronic stress that builds up over time and becomes a normal part of your everyday life can be harmful.

Stressors can be physical, psychological or social. Physical stressors are factors in the environment that produce stress, such as constant noise or pollution. Physical stressors can also be events or conditions such as injury, surgery or low blood sugar. Psychological stress can come from deeply held beliefs and views about yourself and others. Social stress stems from problems in relationships with loved ones, neighbors or employers. You can even have stressors from all or combinations of any of these places in your life happening at the same time.

Stress can come from many sources in your life. It can also cause many problems with your health, such as:

- Abnormally elevated glucose and insulin
- Weaker immune system
- Reduced resistance to infections, cancer and illness
- Increased blood pressure
- Weakened bones
- Trouble with digestion
- Headaches, backaches and arthritis pain
- Anxiety and mood disorders

Stress also makes it harder for your body to cope with and heal from serious illness.

Stress can make unhealthy behaviors worse. People who are under stress are likely to eat poorly and exercise less. They may also neglect or damage their relationships.

Learning to be aware of the amount of stress in your life and how you react to it will help you handle stress in the future. Being able to cope with stress will make you happier and healthier. The exercises described in this section can help you discover your best options.

## **THE MIND–BODY TOOL KIT: NINE EASY STRATEGIES TO REDUCE STRESS AND ENHANCE HEALTH**

The exercises in this section have been shown to have health benefits. These are skills that develop over time, with practice. The first few times of practicing may seem awkward, and you may not feel the full benefits right away. With practice over time, you may begin to experience positive changes in mood and stress levels.

Find a quiet place where you won't be disturbed and get in a comfortable position so your body feels supported. Try the exercises described below to develop more joy and relaxation in your mind and body. These exercises will get easier and more natural each time you do them. You should create a feeling of complete relaxation at least once a day by using one of these techniques or another of your choosing.

1. Progressive Muscle Relaxation
2. Conscious Breathing
3. Paced Breathing
4. Body Scan
5. Letting Be
6. Mental Vacation
7. Imagery
8. Journaling
9. Positive Psychology

### **Progressive Muscle Relaxation**

This is an opportunity to positively affect all of your muscles and increase awareness of when they are tense and what it feels like when they are relaxed. For each muscle group, first bring your awareness to that area and *just notice what it feels like*. Then do the tightening and releasing as described. You may notice a tendency to hold your breath as you tighten the various muscle groups. Make an effort to continue breathing and keep your belly relaxed as you tense surrounding muscles.

## How to practice Progressive Muscle Relaxation

Begin by focusing attention on your forehead, noticing what it feels like. Then consciously tighten the muscles of your forehead for about five seconds, lifting the eyebrows as high as possible. You are holding the forehead muscles as tight as you can, but not to a point of causing any pain. Then let go of the tension and take a deep breath. If you have time, it is useful to repeat each muscle group twice, tensing and relaxing.

Next, move to your eyes, closing and tightening the muscles around your eyes, again for about five seconds, then releasing and breathing deeply. Repeat. Move to each area of the body, including:

1. **Jaw:** Bite down and pull the corners of your mouth down.
2. **Neck:** Imagine you are holding a golf ball between your chin and chest, pulling your chin down toward your **back, chest and shoulders**. For the first tensing, pull both shoulders up and back. For the second tensing, pull up and forward.
3. **Hands and arms:** Make a fist and tighten arm muscles.
4. **Abdomen:** For the first tensing, pull stomach in tightly, and for the second tensing, push it out.
5. **Buttocks:** Tighten and release.
6. **Legs including the foot:** (which you can point upward) If seated, straighten and lift legs in front of you with heels pushing out and toes toward you.
7. **Feet:** Push out on the balls of the feet and spread toes, then curl toes under.
8. **Whole Body:** End by tightening the whole body, releasing and then breathing deeply for 10 breaths.

## **Conscious Breathing**

Conscious breathing is one of the most effective stress reducers. In our culture, we tend to breathe high in the chest and not use the full space of the lungs. Conscious breathing will change your normal shallow breathing to more relaxed and full breathing. It also involves learning to properly use your abdomen and diaphragm and increase your oxygen intake.

## How to practice Conscious Breathing

1. Lie down on a firm surface (i.e. not a soft bed).
2. Loosen any tight clothing.
3. Place one hand on your abdomen and one on your chest. Spend a moment noticing your usual breath pattern.
4. As you become more aware of your breathing, it may start to deepen on its own naturally, moving the hand on your abdomen up and down.

5. You can enhance this by consciously relaxing abdomen muscles so the breath can move freely and bringing the breath deeply into the abdomen. Your lower belly/abdomen gently rises and falls as the breath moves in and out
6. Deepening the breath will also widen the lower rib cage allowing a full body breath.
7. As you get more accustomed to this way of breathing, it is also helpful to pause at the beginning and end of each breath, thus holding it for a few seconds at the peak of the in-breath and pausing for a few seconds at the end of the out-breath.
8. Do not force the breath, but allow it to deepen with practice over time.

Once you learn this skill, you can also practice sitting or standing through the day.

### **Paced Breathing**

When we panic, we tend to take shallow, panting breaths. They are part of the body's stress response. But you can change this limited breath and your body's stress response simply by changing your breathing pattern. The 4/7/8 breathing pattern, based on an ancient yoga tradition, can change your stress response to a feeling of relaxation. It can be very helpful in protecting your body from the impact of stress, as well as breaking pain cycles or helping you to fall asleep more easily.

#### How to practice Paced Breathing

1. Breathe in through the nose for a count of four.
2. Hold for a count of seven.
3. Exhale through the mouth for a count of eight.
4. Repeat these steps four times.

As you breathe, rest the tip of your tongue on the ridge behind your front teeth. When you exhale with your tongue in this position, it should create a *shooshing* sound. In the yoga tradition, this position is believed to close an energy channel. Be sure to breathe in through your nose and out through your mouth.

The exercise is traditionally done in multiples of four. You should notice a calm descending after you finish the fourth exhalation. Because this technique is fast and portable, you can repeat it as often as you need.

## **Body Scan**

It is important to actually experience your body directly and physically, rather than through your thoughts or judgments about your body. The Body Scan is a way of tuning in to every part of your body. It is an opportunity to bring your awareness from your toes to your head.

The Body Scan can be done either seated or lying down with your eyes closed.

### How to practice the Body Scan

1. Beginning with your right foot, rest your attention on the right toes. Stay with whatever sensations you are feeling.
2. Slowly and gradually bring your awareness to each part of your body—toes, foot, ankle, lower leg, upper leg and so on until you reach the top of your head.
3. If any part of your body catches your interest, you can rest your mind there with an attitude of deep listening to whatever your body is telling you.

**Note:** Some people have difficulty feeling parts of their body, which is not unusual. This can change with attentive practice over time.

## **Letting Be**

Letting Be is a mental attitude that can be learned with practice, especially with the practice of meditation. Letting Be does not mean ignoring or responding inappropriately to situations. It allows your thoughts and emotions to just be as they are, fully felt but not acted on.

For example, when you notice you are angry, instead of trying to get rid of those feelings or lashing out, just sit with the feelings. Observe the anger and angry thoughts with an open and curious attitude. This is a way of being kind to yourself. Accept your full range of feelings and reactions without judgment. It is an opportunity for negative feelings to be noted and then settled. This allows you to approach the situation with a clear mind.

## **Mental Vacation**

Your body responds to what it perceives, not what is real. This is why you can be on vacation but still thinking about your stress at home, and it will feel as if you are really in that stressful situation. The opposite is also true: you can be in the middle of a lot of stress and allow your mind to take a mental vacation. Your body will respond by relaxing. The techniques for taking a mental vacation have some similarities to imagery practice, which is described more fully below.

It is helpful at first to create some quiet space. With practice over time you will be more capable of taking a mental vacation anywhere, but at the beginning try to find a place where you won't be disturbed. Begin by using a relaxation technique, such as progressive muscle relaxation or conscious breathing. As you become more relaxed, invite an image to come to mind of a place where you feel safe, comfortable and at peace. It can be somewhere you have been, or a place

you make up. Notice as many of the details as possible, the colors, smells, temperature and sounds. Spend time exploring or just relaxing in your personal vacation spot.

## **Imagery**

The thoughts, words and images that come from your imagination can have good and bad effects on your body and behavior. For example, worry can cause muscle tension, racing heartbeat or an upset stomach. On the other hand, picturing yourself in nature can make you feel very relaxed. Being very relaxed when practicing imagery helps you be more creative.

### How to practice imagery:

1. Choose a place where you will be comfortable and uninterrupted.
2. Decide on a time frame and set a timer.
3. Use a relaxation technique that works for you.
4. Build your images by using as many senses as possible.
5. For behavior change, picture yourself doing the things you want to happen. For example, picture yourself choosing to eat healthy foods rather than seeing yourself trying to stay away from unhealthy foods.
6. End by telling yourself that you will be relaxed, refreshed and fully awake.

## **Journaling**

Studies have shown that venting about your stresses can be good for your health. One of the most effective ways to do this is by journaling. Journaling has helped people with asthma and arthritis feel better and need fewer medicines. People who struggle with depression, sleep or weight loss have seen improvement after journaling regularly. Writing about painful events several times a week can make you less likely to get sick.

A journal can be whatever you need it to be whenever you choose to write in it. Sometimes it will be a way to record your most intimate thoughts. Other times, you may just want to take notes about your body and health. How you use it, and in what form, is completely up to you. It does not matter whether you use complete sentences, write in shorthand or cursive, use profanity or even choose to draw your thoughts instead of write them. Some people like to organize their journals into daily entries. Others dedicate different sections to specific purposes. Still others like the totally free-form approach. It is all up to you. Here are some ways you can use your journal:

- Have fun picking out a book to use as a journal if you do not have one already.
- You might start writing in your journal by finishing some open-ended sentences: “Today I feel...” Or “What I find most difficult about my current situation is...”
- Write down basic observations about your physical self and your nonphysical self.

- Process your daily experiences.
- Explore your unspoken feelings surrounding a specific issue.
- Begin to find your inner voice.
- Let your mind wander; express whatever happens to be in your mind or heart.
- Do not be concerned about spelling, sentence structure or grammar—just write!
- Write about your most stressful times. Explore your greatest fears and sorrows.

How to use the journal will become clearer to you over time; enjoy exploring and experimenting. The most important thing to keep in mind when you begin to keep a journal is to make it about *you*. A journal is personal and private. It is a place where you can truly explore your inner self, free from worry about how it will sound to someone else or how it might affect someone else.

### **Positive Thinking**

The “power of positive thinking” is not just a saying—it’s real. Gratitude, forgiveness and compassion can lead to big changes in how you feel, physically and emotionally. These positive thoughts are easy and helpful to practice. Through practice, you can have an open heart and mind. You may also see benefits to your health, such as lower blood pressure and less anxiety and depression. Positive thinking is a way to let go of anger and resentment so you can feel more joy and love. For more information on how to be more positive, read *Positivity* by Barbara Fredrickson and visit the Web site [www.positivityratio.com](http://www.positivityratio.com).

### How to practice Gratitude

To bring more gratitude into your life every day, when you wake up in the morning make a list of five things you are grateful for. Then, before you go to bed, mentally say thank you to five people. For more ideas, see the Web site [www.gratefulness.org](http://www.gratefulness.org).

### How to practice Forgiveness

Forgiveness is more of a process than a one-time event. It involves examining the effect of not forgiving, generating empathy for yourself and others and envisioning forgiveness. Intending to be free of the anger, bring the situation to mind and say to yourself, “I forgive you.” Let go of judgments about how it is going. Sense the area around your heart and let it be open and warm in its own time. Say to yourself, “May I be free of suffering,” and “May this person be free of suffering.” Repeat any parts of this you wish and appreciate yourself for your efforts.

### How to practice Compassion

Compassion is a wish to ease suffering. It is the ability to meet yourself and others with a loving attitude and an open heart. This does not mean holding back or suppressing negative emotions. The mindful awareness practices of meditation teach us to accept negative emotions as part of life. The practice is to acknowledge them as they are without

acting on them. A simple way to build compassion is to think about and repeat phrases of loving kindness such as the ones that follow:

- May I be safe
- May I be content and happy
- May I be healthy
- May I be peaceful and at ease
- May all beings be safe
- May they be content and happy
- May they be healthy
- May they be peaceful and at ease



## **Personal Strategies for Mind–Body Connection**

Use this page to record your ideas and plans for mind–body connection.

## **Web Site Resources for Mind–Body Connection**

National Center for Complementary and Integrative Health; Relaxation Techniques for Health:  
What You Need to Know | <https://nccih.nih.gov/health/stress/relaxation.htm>

# PROFESSIONAL CARE

## Integrative Medicine: A Whole-Person Approach

### OVERVIEW

Integrative Medicine is an approach to healthcare that focuses on ideal health by treating the whole person, not just the disease. Being healthy doesn't just mean not being sick. Being healthy is a choice you make every day. Integrative medicine helps you do this by looking at your whole body, mind and lifestyle.

As you have learned throughout this manual, every aspect of your life can make your health better or worse. Integrative Medicine pays attention to your personal health goals and values as well as your lifestyle choices. It uses treatments from *conventional* medicine as well as from *complementary* medicine. It combines all of these treatment options with the Wheel of Health to create a health plan that is made just for you. Integrative Medicine allows you to partner with your healthcare worker to create the best health plan for your needs.

The relationship between you and your healthcare worker should be one of partnership and support. The list below compares conventional medicine with Integrative Medicine by listing their different approaches to care.

<b>From Conventional Medicine</b>		<b>To Integrative Medicine</b>
Disease oriented	→	Health oriented
Find it, fix it	→	Identify risk, minimize it
Biomedical interventions	→	Whole-person approaches
Reactive	→	Proactive
Sporadic	→	Lifelong planning
Individual left to enact	→	Support in implementation
Physician directed	→	Partnership based

## WHAT ARE CONVENTIONAL AND COMPLEMENTARY MEDICINES?

Integrative Medicine combines the very best of conventional medicine and complementary therapies. Conventional medicine is often known as Western medicine. It is the kind of healthcare you get from most doctors and hospitals in the U.S. Complementary therapies are forms of healthcare that are used in addition to your regular healthcare. The table below shows some of the different treatments you might receive in both kinds of care.

Conventional	Complementary
Preventative exams (pap smears, vaccines, prostate exams)	Acupuncture
Diagnostic exams (X-rays, MRIs, blood tests)	Herbal medicine
Prescription medicine	Yoga therapy
Surgery	Mind–body exercises
Physical therapy	Therapeutic massage

Healthcare providers trained in Integrative Medicine use a variety of treatments to help their patients. In some cases, they work as members of a healthcare team. At other times, they may refer patients to other experts as needed. The goal is not just to respond to health problems as they happen. Integrative Medicine helps you reach your ideal health and well-being and prevent other health problems from happening in the future. A healthcare provider using Integrative Medicine will help you find the best options for you so that you can be healthy throughout your life.

## CONVENTIONAL APPROACHES

This type of medicine, also called Western or *allopathic* medicine, is practiced by:

- Medical doctors (MDs)
- Doctors of Osteopathy (DOs)
- Physical Therapists (PTs)
- Psychologists
- Registered Nurses (RNs)

Conventional medicine prevents some illnesses through yearly checkups, preventive screenings and vaccines. However, it mostly focuses on identifying and treating the diseases that people already have. In some ways, conventional medicine sees the human body as a machine. If something goes wrong, a doctor steps in to fix it just as a mechanic would fix a problem with

your car. Conventional medicine tends to think of the mind and body as somewhat separate parts. It also often uses technology to help identify the problem, such as through blood tests and X-rays. To treat problems, it often prescribes medicine or surgery.

Conventional medicine is great at treating health problems such as injury and infection. However, it does not always focus on teaching patients how to live a healthy life.

## **COMPLEMENTARY APPROACHES**

In complementary medicine, health providers help you reach your health goals using a variety of treatments. They may combine treatments from conventional medicine with other kinds of healthcare. For example, a patient with arthritis may be helped with drugs, physical therapy and yoga.

In this section of the manual, we will look at these three categories of complementary approaches.

### **Natural Products**

These practices use natural treatments, such as herbs, foods, vitamins and minerals.

### **Mind and Body Practices**

These practices include a variety of techniques and therapies. Mind and body practices are provided by trained practitioners. Examples include tai chi, meditation and massage.

### **Other Complementary Health Approaches**

There are cultures in many parts of the world that have developed their own forms of healthcare. Examples include Ayurveda, Traditional Chinese Medicine, homeopathy and naturopathic medicine.

## **PREVENTION AND INTERVENTION**

You can take care of your health on your own in many ways. Your lifestyle choices such as what you eat and drink, how you exercise and how you work with stress in your life all affect your health. In addition, professional support can be very valuable. Healthcare providers can help you improve your health, prevent illness and treat illnesses and injuries when needed.

Advances in science make it easier for healthcare providers to learn if a person is at risk for developing disease. Professional care uses many tools to help detect disease early. These tools include screenings for different types of cancer, mammograms, prostate screenings,

colonoscopies, pap tests and dental exams. However, it is also important for healthcare providers to teach their patients how to reduce their personal risks through lifestyle choices. It is estimated that 75% of all healthcare costs in the United States are caused by problems that could have been prevented, such as type 2 diabetes, high blood pressure or obesity.<sup>42</sup>

## **Preventive Self-Care**

There are many ways you can help to prevent illness and disease. One way is to see your doctor for regular checkups, tests and vaccines. In addition, leading a healthy lifestyle is the best thing you can do on a day-to-day basis. That means eating a wholesome diet, being physically active, getting enough sleep and managing stress.

Here are more strategies for preventive self-care:

- Don't use tobacco.
- Avoid excessive alcohol use (one or fewer drinks per day for women, two or fewer drinks per day for men).
- Avoid illicit drugs.
- Avoid alcohol or drug use while driving, swimming and boating.
- Practice good oral hygiene. Brush with fluoride toothpaste at least twice daily and floss teeth at least once daily.
- Practice safe sex.
- Use seatbelts (and car seats for children) when driving.
- Wear an appropriate helmet when motorcycling, bicycling, riding in all-terrain vehicles or engaging in high-impact sports (including skiing and snowboarding).
- Install carbon monoxide detectors in your home.
- Install smoke detectors at home and change the batteries every 6 to 12 months.
- Keep any firearms unloaded and locked up.
- If you are 65 or older, consider fall prevention measures. Install grab bars in bathrooms, remove throw rugs, eliminate clutter, clean spills promptly and wear low-heeled shoes with nonskid soles.

## **Preventive Professional Care**

Preventive healthcare uses screening tests and other services for people who do not have any signs of illness or disease. These services might help catch a problem before it starts making you sick. There are guidelines about what tests you should be given based on your age and gender. You may also consider other screenings depending on your personal health risks and the advice of your doctor.

On the following pages, we describe various tests and common health concerns that you might discuss with your doctor. This section also shows you how to interpret some test results and what those results might mean to you. Use the information in this section to help you in your health goals.

## **A Note about Medications**

Medications or *pharmaceuticals* include drugs prescribed by a doctor and drugs that you can buy without a prescription. To get the most out of your medicines, take the time to understand what you're taking. Asking your doctor a few questions such as the ones below will help you prevent any potential problems.

- What is the medicine supposed to do?
- Do I need to take this medicine at certain times of day? With meals or without food?
- What should I do if I miss a dose?
- When will the medicine begin to work? What should I do if it doesn't seem to work?
- What side effects should I watch for? What (if anything) can I do to lessen these effects?
- How can I avoid drug interactions? Should I avoid drinking alcohol, eating certain foods or taking certain medications or supplements?
- Does the medicine need to be stored in a particular way? In the refrigerator? Away from heat, light or humidity?

Also, be aware that just because a drug or natural product is available without a prescription does not mean that it is without risks. For example, in the United States, acetaminophen (Tylenol) overdose causes hundreds of deaths each year due to acute liver failure. Other medications may interact with each other and with prescription medications causing health problems. Letting your doctor know what drugs and natural products you are taking is important.

## **BLOOD CHOLESTEROL GUIDELINES<sup>43</sup>**

### **How is high blood cholesterol diagnosed?**

It is best to have a blood test called a *lipoprotein profile* to measure your cholesterol levels. Cholesterol levels are measured in milligrams (mg) of cholesterol per deciliter (dL) of blood.

The lipoprotein profile will give information about your:

- Total cholesterol.
- Low-density lipoprotein (LDL) bad cholesterol: the main source of cholesterol buildup and blockage in the arteries.

- High-density lipoprotein (HDL) good cholesterol: the good cholesterol that helps keep cholesterol from building up in arteries.
- Triglycerides: another form of fat in your blood.

Even if you cannot get a lipoprotein profile done, you can still get a test done that will show your total and HDL cholesterol. This test will give you a general idea about your cholesterol levels.

The American College of Cardiology and the American Heart Association released new guidelines for cholesterol management in November 2013. These new guidelines focus on knowing and treating people in certain risk groups. All people between the ages of 20 and 79 should be tested every four to six years. Drugs used to treat high cholesterol can help people in these four key risk categories:

1. People with existing heart disease (specifically atherosclerotic cardiovascular disease or ASCVD).
2. People with diagnosed type 2 diabetes.
3. People who have a LDL cholesterol above 190 mg/dL.
4. People between the ages of 20 and 79 who have a 10-year risk of stroke or heart attack that is above 7.5%.

## **BLOOD PRESSURE GUIDELINES**

Blood pressure numbers include *systolic* (sis-TOL-ik) and *diastolic* (di-a-STOL-ik) pressures. Systolic blood pressure is the pressure when the heart beats while pumping blood. Diastolic blood pressure is the pressure when the heart is at rest between beats.

You will most often see blood pressure numbers written with the systolic number above or before the diastolic, such as 120/80 mmHg. (The *mmHg* is millimeters of mercury—the units used to measure blood pressure.)

The table below shows normal numbers for adults. It also shows which numbers put you at greater risk for health problems. Blood pressure tends to go up and down, even in people who have normal blood pressure. If your numbers stay above normal most of the time, your doctor may recommend treatment.



## Categories for Blood Pressure Levels in Adults

Category	Systolic (top number)		Diastolic (bottom number)
Normal	Less than 120	and	Less than 80
Prehypertension	120–139	or	80–89
High blood pressure: Stage 1	140–159	or	90–99
High blood pressure: Stage 2	160 or higher	or	100 or higher

(in mmHg, or millimeters of mercury)

The ranges in the table apply to most healthy adults (aged 18 and older).

It is recommended to have your blood pressure checked at least every 2 years if you have normal blood pressure. Get tested once a year if your blood pressure is between 120/80 and 139/89. If you have blood pressure above 140/90, discuss treatment with your doctor.

If you are being treated for high blood pressure and have repeat readings in the normal range, your blood pressure is under control. However, you still have the condition. You should see your doctor and stay on treatment to keep your blood pressure well managed.

Blood pressure tends to rise with age. Following a healthy lifestyle helps some people delay or prevent this rise in blood pressure. People who have high blood pressure can take steps to control it and reduce their risks for related health problems. Key steps include following a healthy lifestyle, having ongoing medical care and following the treatment plan that your doctor prescribes.

## BODY MASS INDEX GUIDELINES

### How are overweight and obesity diagnosed?

The most common way to find out whether you are overweight or obese is to figure out your body mass index (BMI). BMI is an estimate of body fat and a good gauge of your risk for diseases that occur with more body fat. The higher your BMI, the higher your risk of disease. BMI is calculated from your height and weight. You or your healthcare worker can use the chart below or the National Heart, Lung, and Blood Institute's online BMI calculator to figure out your BMI.

Although understanding your BMI can be useful, it does have some limits. For example:

- BMI may overestimate body fat in athletes and others who have a muscular build.
- BMI may underestimate body fat in older persons and others who have lost muscle.

### Body Mass Index Chart for Adults

Use this chart to learn your BMI. First, find your height on the far left column. Next, move across the row to find your weight. Once you've found your weight, move to the very top of that column. This number is your approximate BMI. For an exact calculation, see the BMI calculator at [www.nhlbi.nih.gov/guidelines/obesity/BMI/bmicalc.htm](http://www.nhlbi.nih.gov/guidelines/obesity/BMI/bmicalc.htm).

BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Height (inches)	Body Weight (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
5'0"	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	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
6'0"	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
6'4"	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287

What does body mass index mean?

<b>BMI</b>	
Less than 18.5	Underweight
18.5–24.9	Normal weight
25.0–29.9	Overweight
30.0 and above	Obese

**Body Mass Index for Children and Teens**

Overweight is defined differently for children and teens than it is for adults. Because children are still growing and boys and girls mature at different rates, BMIs for children and teens compare their heights and weights against growth charts that take age and sex into account. This is called *BMI-for-age percentile*. A child or teen’s BMI-for-age percentile shows how his or her BMI compares with other boys and girls of the same age.

To learn more about BMI-for-age and growth charts for children, talk to your doctor or go to the Web site for the Centers for Disease Control and Prevention.

What does the BMI-for-age percentile mean?

<b>BMI-for-Age Percentile</b>	
Less than 5th percentile	Underweight
5th percentile to less than the 85th percentile	Healthy weight
85th percentile to less than the 95th percentile	Overweight
95th percentile or greater	Obese

**Waist Circumference**

Healthcare professionals may also measure your waist. This helps to screen for the possible health risks that come with overweight and obesity in adults. If most of your fat is around your waist rather than at your hips, you’re at higher risk for heart disease and type 2 diabetes. This risk goes up with a waist size that is greater than 35 inches for women or greater than 40 inches for men.

To correctly measure your waist size, stand and place a tape measure around your middle, just above your hip bones. Measure your waist just after you breathe out.

## BLOOD GLUCOSE GUIDELINES

### Normal

A blood glucose test measures the amount of a type of sugar, called glucose, in your blood. Glucose levels in a blood sample taken from your vein may differ a little from glucose levels checked with a finger stick.

Blood Glucose	Level
Fasting blood glucose	70–99 milligrams per deciliter or less than 5.5 mmol/L
Two hours after eating	70–145 mg/dL (less than 7.9 mmol/L)
Random (casual)	70–125 mg/dL (less than 7.0 mmol/L)

Normal results may vary from lab to lab. Many conditions can change your blood glucose levels. Your doctor will discuss any abnormal results with you.

### High Values

If you have high blood glucose values, you may have diabetes. Symptoms include:

- Increased thirst
- Frequent urination (especially at night)
- Unexplained increase in appetite or weight loss
- Fatigue
- Erection problems
- Blurred vision
- Tingling or numbness in the hands or feet

Your doctor will likely use more than one test result to diagnose you with the condition. The American Diabetes Association (ADA) criteria for diagnosing diabetes are met when any of the following results have been repeated on at least two different days:

- A fasting blood glucose level is 126 mg/dL (7.0 mmol/L) or higher.
- An oral glucose tolerance test result is 200 mg/dL (11.1 mmol/L) or higher.
- Symptoms of diabetes are present and a random blood glucose test is 200 mg/dL (11.1 mmol/L) or higher.

- If your fasting blood glucose level is 100 mg/dL (5.5 mmol/L) to 125 mg/dL (6.9 mmol/L), you are considered to have prediabetes. Prediabetes means that you have an increased chance of getting diabetes.
- Other conditions that can cause high blood glucose levels include severe stress, heart attack, stroke, Cushing's syndrome and medicines such as corticosteroids.

### **Low Values**

A fasting glucose level below 40 mg/dL (2.2 mmol/L) in women or below 50 mg/dL (2.8 mmol/L) in men may also be of concern.

Low glucose levels may be caused by conditions such as:

- Addison's disease
- Decreased thyroid hormone levels (hypothyroidism)
- A tumor in the pituitary gland
- Liver disease, such as cirrhosis
- Kidney failure
- Medicines used to treat diabetes

### **What affects the test?**

Reasons you may not be able to have the test or why the results may not be helpful include:

- Eating or drinking less than eight hours before a fasting blood test or less than two hours before a two-hour postprandial test
- Drinking alcohol
- Illness or emotional stress, smoking or caffeine

Taking certain medicines can cause changes in your test results. Make sure that your doctor knows about any medicines you take and how often you take them.

## RECOMMENDED SCREENINGS AND VACCINATIONS FOR ADULTS

The recommendations listed below are meant for most adults in the U.S. People who are at higher risk for some health problems may need to be tested earlier or more often.

### Screenings

#### Abdominal Aortic Aneurysm

*Men:* One-time screening by ultrasonography for those aged 65 to 75 and have ever smoked.

#### Blood Pressure

Get tested at least every two years if you have normal blood pressure (lower than 120/80). Get tested once a year if you have blood pressure between 120/80 and 139/89. If you have blood pressure above 140/90, talk with your doctor or nurse about treatment.

#### Breast Cancer

*Women:* Mammogram every two years between ages 50 and 74. Women with a family history of breast cancer may want to consider getting screened before age 50. Discuss with your doctor if you need screening after age 75.

#### Cervical Cancer

*Women:* Papanicolaou (pap) test every three years from age 21 to 65. If you are age 30 or older, you can have a pap test and a HPV (human papilloma virus) test together every five years. If you have had a hysterectomy, you may no longer require pap smears.

#### Chlamydia

*Women:* Chlamydia screening is recommended yearly for women who are sexually active or pregnant, up to age 24. Age 25 and older, get tested if you are at increased risk, whether you are pregnant or not pregnant.

#### Cholesterol

*Women:* Get screened if you are at increased risk for heart disease. Ask your doctor how often you will need this test.

*Men:* Starting at age 20 until age 35, get a cholesterol test if you are at increased risk for heart disease. Starting at age 35 and older, get a cholesterol test regularly. Your doctor will tell you how often you will need this test.

## Colon cancer

Screening for colon cancer is recommended from ages 50 to 75. Discuss with your doctor the best method for screening.

## Diabetes

Get screened for diabetes if your blood pressure is higher than 135/80 or if you take medications for your blood pressure.

## HIV, Gonorrhea, Syphilis

*Women:* Get tested if you are at increased risk, whether you are pregnant or not pregnant. All women will be screened for these sexually transmitted infections while pregnant.

*Men:* Get tested if you are at increased risk.

## Osteoporosis

*Women:* Bone mineral density test at least once if you are 65 or older. The dual-energy X-ray absorptiometry (DEXA) test is considered the most accurate assessment of bone density.

## **Vaccinations**

### Chickenpox

Adults who have never had chickenpox (also known as *varicella*) or the vaccine.

### Hepatitis A

People traveling to the developing world, where this liver infection is common.

### Hepatitis B

Adults at high risk, including healthcare providers, people with multiple sex partners, men who have sex with men, IV drug users, prison inmates and international travelers.

### Human Papillomavirus (HPV)

Women up to age 26 who have not already been vaccinated. This vaccine is not recommended for pregnant women.

### Influenza (seasonal)

Recommended yearly for all adults. People at high risk for developing influenza include people aged 50 and older, healthcare providers, pregnant women and people with certain chronic conditions.

### Measles, Mumps, Rubella (MMR)

People born outside the United States in 1957 or later. Adults born earlier are considered immune to these three diseases and most younger adults were vaccinated as kids.

### Meningitis

First-year college students living in dorms and travelers to some developing countries.

### Pneumonia (Pneumococcus)

People 65 and older as well as those with chronic illnesses such as heart disease, lung disease and diabetes.

### Shingles

People 60 and older. The vaccine also protects against post-herpetic neuralgia, a painful complication of shingles.

### Tetanus, Diphtheria, Pertussis (Tdap)

Adults 18 to 64 who have not received this combination vaccine.

**Note:** Recommendations change as new research and information becomes available. Speak with your doctor to learn what vaccines are right for you.



## Web Site Resources for Professional Care

American Cancer Society | <http://www.cancer.org/>

American Diabetes Association | <http://www.diabetes.org/>

American Heart Association | <http://www.heart.org/>

America Lung Association | <http://www.lung.org/>

American Psychological Association | <http://www.apa.org/>

American Osteopathic Association | <http://www.osteopathic.org/>

Arthritis Foundation | <http://www.arthritis.org/>

Centers for Disease Control and Prevention; About High Blood Pressure | <http://www.cdc.gov/bloodpressure/about.htm>

Centers for Disease Control and Prevention; About High Cholesterol | <http://www.cdc.gov/cholesterol/about.htm>

Centers for Disease Control and Prevention; Body Mass Index (BMI) | <http://www.cdc.gov/healthyweight/assessing/bmi/>

Centers for Disease Control and Prevention; CDC Prevention Checklist | <http://www.cdc.gov/prevention/>

Centers for Disease Control and Prevention; Diabetes Basics | <http://www.cdc.gov/diabetes/basics/index.html>

Centers for Disease Control and Prevention; Healthy Living | <http://www.cdc.gov/HealthyLiving/>

Centers for Disease Control and Prevention; Immunization Schedules | <http://www.cdc.gov/vaccines/schedules/index.html>

National Center for Complementary and Integrative Health | <https://nccih.nih.gov/>

National Institutes of Health, National Institute of Mental Health | <http://www.nimh.nih.gov/>



# Natural Products

## OVERVIEW

According to the National Center for Complementary and Alternative Medicine, natural products use items found in nature, such as herbs, foods and vitamins to optimize health. Some examples include dietary supplements and herbal products.

## DIETARY SUPPLEMENTS

Dietary supplements are vitamins, minerals, herbs and other substances that are intended to add to—not replace—your diet. Here are several tips for using supplements safely:

### Read the directions and precautions on the label

Look at the dosage size to make sure that you do not take too many pills per day. Also, check the expiration date.

### Look for manufacturers you can trust

Look for certification marks from organizations such as the U.S. Pharmacopeia (USP) and NSF International. These marks tell you that the ingredients and amounts on the label are correct. They also show that the product is free of contaminants.

### Report usage to your doctor

Many people don't tell their doctors about the herbs or other supplements they take. Perhaps they fear bad reactions, or maybe their doctors simply never asked. But your doctor can't help you to avoid possible interactions or other adverse effects if he or she doesn't know what you're taking.

### Avoid while pregnant or breastfeeding

Unless otherwise directed by your doctor, don't use while pregnant or breastfeeding. Your doctor can prescribe a prenatal vitamin.

### Plan for surgery

Discuss with your doctor to find out if you should discontinue use before surgery. You don't want to be taking anything that may interfere with anesthesia or blood clotting.

## VITAMINS AND MINERALS

The best way to get your vitamins and minerals is to eat a healthy diet that includes plenty of fresh fruits and vegetables. Fresh produce contains fiber and other healthy substances you may not find in a pill. Sometimes you may not be able to get all the nutrients you need from your diet. Some groups of people are more likely to not have enough nutrients, including:

- Children (70% of American youngsters are not getting enough vitamin D)
- People with gluten intolerance or other problems absorbing nutrients from food
- Pregnant women
- Vegans (vitamin B12 is found almost exclusively in animal products)

### Multivitamins

Taking a daily multivitamin can help make sure that you get all the nutrients your body needs. Research suggests that a daily multivitamin can lower your risk of having a first heart attack or of getting colon cancer. However, a large study showed that taking a multivitamin does not reduce your risk of dying from heart disease or cancer. Some studies show that taking a multivitamin can help the brain and immune system in older adults. Consider taking a multivitamin as a safety net to ensure that you get recommended amounts of minerals and vitamins as your diet may vary each day. Whatever brand you choose, check the label to make sure the multivitamin meets the recommended daily amounts of vitamins B, C, D and E.

### Vitamin D

This nutrient (actually a hormone) allows your bones to take up calcium, but it offers a wide range of other benefits. Research suggests it may reduce the risk of many kinds of cancer, including those of the breast, colon, pancreas and prostate. It also protects cardiovascular health, lowers the risk of some autoimmune disorders, helps preserve muscle strength and decreases the likelihood of falls by seniors. The body's ability to make vitamin D in response to sunlight declines significantly with age, so older people are more likely to be deficient. Also at higher risk are individuals with dark skin and those who live in northern climates. Because vitamin D is fat soluble, take it with a meal that contains some fat for proper absorption.

Life Stage	Recommended Amount
Birth to 12 months	400 IU
Children and adults ages 1 to 70	600 IU
Adults 71 years and older	800 IU
Pregnant and breastfeeding women	600 IU

## Calcium

Besides being important for bone health, this mineral promotes healthy teeth and gums, helps to regulate nerve and muscle function, and can lower blood pressure. The best way to get calcium is through foods and drinks. Taking high amounts of calcium supplements may lead to a higher risk of heart disease or prostate cancer. If you do take calcium supplements, aim to get at least half of your calcium through dietary sources. Calcium carbonate, the most common form of supplemental calcium, requires sufficient stomach acid to be absorbed and is best taken with food. Because stomach acid declines with age, calcium citrate is a better choice for people in or beyond midlife. In addition, calcium citrate is less constipating than calcium carbonate and can be taken without food.

<b>Life Stage</b>	<b>Recommended Amount</b>
Birth to 6 months	200 mg
Infants 7–12 months	260 mg
Children 1–3 years	700 mg
Children 4–8 years	1,000 mg
Children 9–13 years	1,300 mg
Teens 14–18 years	1,300 mg
Adults 19–50 years	1,000 mg
Adult men 51–70 years	1,000 mg
Adult women 51–70 years	1,200 mg
Adults 71 years and older	1,200 mg
Pregnant and breastfeeding teens	1,300 mg
Pregnant and breastfeeding adults	1,000 mg

## Iron

In general, it's not necessary to supplement with iron unless you have iron-deficiency anemia. Men and postmenopausal women should choose a multivitamin without iron. Excessive intake of the mineral may increase the risk of cardiovascular disease and cancer. The body cannot eliminate iron except through blood loss.

## Magnesium

This mineral aids in bone formation. It also acts as a mild laxative, helping to counteract the constipating effects of calcium. Taking calcium and magnesium at bedtime may

promote healthy sleep by calming nerves and muscles. Plus, magnesium may play a role in mood stabilization, and regular use of magnesium supplements may reduce symptoms of premenstrual syndrome.

## Selenium

This antioxidant mineral may reduce the risk of prostate and some other cancers. A frequently recommended amount is 200 mg daily. Avoid taking much more than that, as too much selenium can cause brittle nails or hair loss. Yeast-bound forms of selenium are well absorbed.

## **HERBAL REMEDIES**

Unlike vitamins and minerals, your body usually does not need herbs to work normally. But, herbs have been used for thousands of years to help prevent and treat many health concerns. Modern research offers support for some traditional uses. To see the research on herbs, please visit [nccam.nih.gov/](http://nccam.nih.gov/), [naturalstandard.com/](http://naturalstandard.com/) or [www.fda.gov/food/dietarysupplements/](http://www.fda.gov/food/dietarysupplements/). Here are some general points to keep in mind about using herbs:

### **Herbs and Drugs Are Different**

Medications contain one or more chemicals that were made in a science lab. Those chemicals are usually concentrated, meaning that the drugs are very strong for their size. Herbal remedies come from the natural chemicals in plants. Herbs are generally not as concentrated as prescription medications, so they may be less toxic and work more slowly. Depending on the herb, it may take a month or two of daily use to get the desired results.

### **Natural Doesn't Necessarily Mean Safe**

Even though herbal remedies tend to be less concentrated than drugs, this does not mean that all herbs are always safe. Some herbs interact with medicines, foods or alcohol. Recent studies have found heavy metals in some herbs imported from other countries.<sup>44</sup> Some people may have allergic reactions to certain herbs.

### **Consider Using Standardized Extracts**

These products contain a specific amount of the herb's presumed active compound(s).

### **Avoid Herb-Drug Interactions**

Be careful about mixing herbs and drugs with similar actions. For instance, garlic and the prescription drug warfarin (Coumadin) both reduce the blood's ability to clot. Taking both at the same time may increase the odds of excessive bleeding. Also, don't mix herbs and drugs with opposite actions. For example, bitter orange can increase blood pressure and may cause problems

with drugs used to treat high blood pressure. To avoid possible problems, check with your doctor or pharmacist.

## **Popular Herbal Remedies**

Hundreds of herbs are used as medicines. Here's a quick look at 20 popular remedies.

### Astragalus (*Astragalus membranaceus*)

This Chinese herb can help prevent the cold and seasonal flu. In China, it is used with other herbs to help cancer patients who are going through chemotherapy or radiation.

### Bilberry (*Vaccinium myrtillus*)

This cousin of the blueberry is said to improve night vision, but there's little evidence to support this use. However, it has shown promise for treating an eye problem caused by diabetes.

### Black cohosh (*Cimicifuga racemosa*)

Several studies suggest that this herb reduces hot flashes in menopausal women by regulating body temperature. Due to rare reports of liver damage in black cohosh users, avoid the herb if you have liver problems.

### Cinnamon (*Cinnamomum zeylanicum*)

In early research with people with type 2 diabetes, cinnamon lowered blood sugar and cholesterol levels. You can buy cinnamon in a pill form, or you can add 1/4 teaspoon of cinnamon twice a day to cereals, salads, toast or juice.

### Cranberry (*Vaccinium macrocarpon*)

Cranberry is good for preventing and treating urinary tract infections. Take cranberry extract pills or drink unsweetened cranberry juice. You can add sparkling water to the juice to make it taste better. Avoid cranberry drinks that have been sweetened, such as with sugar or high-fructose corn syrup.

### Echinacea (*Echinacea purpurea* and other species)

Many (but not all) studies have found that this herb can reduce the duration and severity of colds.

### Elderberry (*Sambucus nigra*)

Elderberry extract in syrup form has been shown to cut the duration of seasonal flu by four days. A reliable brand is Sambucol®.

### Evening primrose oil (*Oenothera biennis*)

This oil may promote healthy skin, hair, and nails when taken in capsule or liquid form. The herb may also ease pain and premenstrual breast tenderness.

### Garlic (*Allium sativum*)

Garlic can help prevent and treat colds. It also promotes heart health by thinning the blood and helping to relax blood vessels. You may get more health benefits by skipping garlic supplements and eating the herb raw or lightly cooked.

### Ginger (*Zingiber officinale*)

Ginger can ease motion sickness, morning sickness and nausea. It can also reduce pain and thin the blood. Ginger supplements are available in capsule or tincture form, or you can consume the fresh root, candied ginger or ginger tea.

### Ginkgo (*Ginkgo biloba*)

Several studies show that this herb may slow the changes during early-stage Alzheimer's disease. But research is mixed on whether ginkgo can improve memory in healthy older adults. So far, it has not been shown to reduce Alzheimer's risk.

### Ginseng

Asian or Korean ginseng (*Panax ginseng*) may give energy to people who are weak from chronic illness or old age. In Chinese medicine, it is used as a sexual energizer in men. American ginseng (*Panax quinquefolius*) may help your body resist stress.

### Green tea (*Camellia sinensis*)

Numerous studies suggest that drinking a few cups of green tea per day can help prevent cancer and heart disease. However, green tea extracts may not offer the same health benefits. Some case reports have linked use of such supplements to liver damage.

### Milk thistle (*Silybum marianum*)

This herb may benefit people with liver disease (such as cirrhosis and hepatitis B or C). It may also help those undergoing chemotherapy or taking drugs that may harm the liver. Milk thistle contains compounds that protect the liver from toxins and may even help repair liver cells.

### Red yeast rice (*Monascus purpureus*)

Extracts of red yeast rice are good at lowering cholesterol levels. Red yeast rice may have fewer side effects than cholesterol-lowering drugs. But like those prescription drugs, red



yeast rice may affect liver function, so have your doctor watch your liver if you take this herb. Also, take care to purchase a safe red yeast rice product. A 2008 report found that four out of 10 red yeast rice products tested had a toxin called *citrinin*. The report (available for purchase at *consumerlab.com*) includes a list of brands that do not contain citrinin. Take the herb with Coenzyme Q10 (CoQ10) (see below) because red yeast rice can make it hard for your body to make it on its own.

### Rhodiola (Rhodiola rosea)

Also called Arctic root, this herb can prevent some symptoms of stress. Some evidence suggests it can reduce fatigue and enhance mental function among people in stressful circumstances. In addition, rhodiola has shown promise for treating depression and anxiety.

### Saw palmetto (Serenoa repens)

Saw palmetto is used to treat mild to moderate symptoms of prostate enlargement. Studies have shown it to be as effective as the drug Proscar, but with fewer side effects.

### St. John's wort (Hypericum perforatum)

St. John's wort is used to treat mild depression. Several studies have found that it works as well as SSRI antidepressant drugs while causing fewer side effects. Look for products with both *hypericin* and *hyperforin*, thought to be the herb's active ingredients. Because the herb can interact with many medications, consult your doctor before using.

### Turmeric (Curcuma longa)

A relative of ginger, turmeric is an antioxidant and can help relieve pain. The spice may also help treat arthritis and ulcerative colitis. Turmeric is available as a supplement on its own or with other anti-inflammatory herbs (as in New Chapter's *Zyflamend*<sup>®</sup>).

### Valerian (Valeriana officinalis)

Valerian can be helpful for an occasional night of insomnia, as well as, for chronic sleep problems. Valerian may also have antianxiety properties.

## **Other Popular Natural Products**

Vitamins, minerals and herbs are not the only biological products available on the market. Here's what you should know about some other popular products.

### Coenzyme Q10

This compound, which sparks energy production within cells, has shown benefits for people with congestive heart failure. CoQ10 can also help prevent migraine headaches.

High doses may reduce breast cancer recurrence. In addition, very high doses may slow the progression of Alzheimer's.

### DHEA

DHEA is a hormone produced by your body's adrenal glands. Because your body produces less DHEA as you get older, DHEA supplements are said to have antiaging effects. There is little evidence to support such claims, although research suggests that DHEA may help control symptoms of lupus.

### Fish oil

The omega-3 fatty acids in fish oil, called DHA and EPA, have been tied to better heart health and less risk of several cancers. For overall health, it is a good idea for everyone to take at least 1,000 mg daily of DHA and EPA combined.

### Flaxseed

This supplement, available in pill or liquid form, is a popular plant-based source of omega-3 fatty acids. However, flax oil does not have the same benefits as ground flaxseed, and it can go bad easily. You are better off sprinkling two to four tablespoons of freshly ground flaxseed on food each day.

### Glucosamine and Chondroitin

Both of these supplements are used to help ease pain and make it easier for people with arthritis. Glucosamine may increase your body's ability to make cartilage. Chondroitin may slow the loss of cartilage. Together, they may help arthritis from becoming worse.

### Melatonin

This hormone is helpful in recovering from jet lag. It can also be helpful for occasional insomnia. Melatonin may be able to prevent migraine headaches.

### Probiotics

These good bacteria can lower the risk of diarrhea from travel or antibiotics. Probiotics may also help irritable bowel syndrome. Your immune system may function better with probiotics. When taken during pregnancy, probiotics may prevent a skin condition called *eczema* in children.

### Quertecin

Quertecin is found in apples and onions. Quertecin supplements may help prevent hay fever. Start taking it six to eight weeks before allergy season.

### Resveratrol

This antioxidant is found in red wine, grape skins and dark-colored berries. It has shown a lot of promise in animal studies for protecting the heart, lowering cancer risk and extending life. These effects have not yet been shown in humans, and the long-term safety is unclear.

### SAM-e

SAM-e is a natural substance that is used to treat both depression and arthritis. It appears to work more quickly than antidepressant drugs, often within a week, and it may ease arthritis by helping your joints and cartilage.

### Superfruits

There are many drinks and pills sold now that have exotic fruits such as acai, goji, mangosteen and noni. These products are said to increase energy, boost immunity, improve brain function and help you live longer. These fruits may be rich in antioxidants, but there is little evidence these fruits do what is claimed. A fruit that has been more thoroughly studied is pomegranate. Pomegranate juice may help slow down prostate cancer and improve erectile dysfunction. It may also lower the risk of heart problems in people with type 2 diabetes.

## **Web Site Resources for Natural Products**

National Institutes of Health, National Center for Complementary and Integrative Health; Herbs at a Glance | <https://nccih.nih.gov/health/herbsataglance.htm>

National Institutes of Health, Office of Dietary Supplements | <http://ods.od.nih.gov/>

United States Pharmacopeia (USP) | <http://www.usp.org/>

U.S. Food and Drug Administration; Dietary Supplements | <http://www.fda.gov/Food/DietarySupplements/>

# Mind and Body Practices

## OVERVIEW

These practices include techniques and therapies that are provided by trained practitioners. Mind and body practices rank high among all complementary approaches used by adults. There is also a growing body of research that shows these practices can be good for your health.<sup>45</sup>

## ACUPUNCTURE

### What does acupuncture involve?

Acupuncture is the insertion of hair-thin needles into the skin at specific places or channels. The needles are placed in order to change the flow of qi in the body. According to traditional Chinese medicine, each channel links to a specific organ system. The needles are usually kept in the skin for less than half an hour.

### How is acupuncture thought to promote wellness and overall health?

There are two main theories as to how it works. Conventional medicine explains that the needles cause the brain and spinal cord to release chemicals. Those chemicals dull pain and boost the immune system. Chinese medicine explains that the needles help the body's natural healing abilities by balancing qi.

### What have studies shown about the benefits of acupuncture?

Some studies suggest that acupuncture can help treat:

- Addiction and depression
- Asthma
- Head, back and neck pain
- Fibromyalgia and osteoarthritis pain
- Morning sickness and other forms of nausea
- Pain from surgery

Acupuncture may also help improve pregnancy rates after in vitro fertilization (IVF).

### What is the potential risk or harm of acupuncture?

Side effects such as a collapsed lung are rare. Providers are required to use sterile needles to prevent infection.

## ALEXANDER TECHNIQUE

### What does the Alexander Technique involve?

The Alexander Technique focuses on muscle control and how the body moves. The goal of the Alexander Technique is to correct body movements that lead to poor posture, body strain and tension. The method is generally taught one-on-one, but group classes may be held as well. During each session, students perform everyday actions (such as walking, standing or sitting). The teacher shows the students how to do those actions so your body works better throughout the day.

### How is the Alexander Technique thought to promote wellness and overall health?

Having better posture and movement can ease muscle strain, aches and pains. The Alexander Technique can help you improve your body and physical coordination. By helping to reduce stress, the therapy could help your body resist disease.

### What have studies shown about the benefit of the Alexander Technique?

Some studies suggest that the Alexander Technique can help treat:

- Back pain
- Depression and other symptoms of Parkinson's disease
- Poor posture in older people

### What is the potential risk or harm of the Alexander Technique?

The Alexander Technique is considered safe for most people. However, talk to your doctor first if you have chronic pain or joint problems.

## **ART THERAPY**

### What does art therapy involve?

Art therapy uses art to help people cope with symptoms of disease, stress and traumatic experiences. In art therapy, you may paint, draw, sculpt or use art media.

### How is art therapy thought to promote wellness and overall health?

Art can provide a creative outlet for both adults and children that many find stress reducing and healing. Art therapists also help people discover connections between their physical health, their emotions and their thoughts. By learning to interpret their own art, clients are better able to appreciate all parts of themselves.

### What have studies shown about the benefit of art therapy?

Some studies suggest that art therapy can help:

- Reduce anxiety and depression in cancer patients
- People cope with physical and emotional trauma
- People cope with addiction and eating disorders
- People cope with dementia
- People cope with learning difficulties
- People cope with schizophrenia

Art therapy can also reduce stress in family caregivers of cancer patients. In addition, this therapy is often used in palliative care and pediatric hospitals.

### What is the potential risk or harm of art therapy?

Art therapy is considered safe for most people.

## **BIOFEEDBACK**

### What does biofeedback involve?

Biofeedback involves training the mind to change your body's reactions. Patients are connected to equipment that measures certain body functions such as breath rate and blood pressure. This equipment allows patients to see how their bodies react to their behavior or thought processes. As patients try to control these reactions, they can see immediately if there are any changes. In time, patients can learn to change a reaction and thereby help them relax or reduce symptoms of disease.

### How is biofeedback thought to promote wellness and overall health?

By letting patients control their body's reactions, biofeedback can help reduce stress, tension, pain and other symptoms. This therapy also helps patients have a sense of control over their health.

### What have studies shown about the benefit of biofeedback?

Some studies suggest that biofeedback can help treat:

- Alcoholism and substance abuse
- Anxiety
- Attention deficit hyperactivity disorder (ADHD)
- Chronic pain and headaches
- Diabetes
- Epilepsy
- High blood pressure (HBP)
- Insomnia
- Motion sickness
- Temporomandibular joint disorder (TMJ)
- Traumatic brain injury

### What is the potential risk or harm of biofeedback?

Biofeedback is considered safe for most people. However, the small amount of electricity used by the equipment might affect a pacemaker.



## **CHIROPRACTIC**

### What does chiropractic treatment involve?

Chiropractic is a type of healthcare that believes most illness comes from problems inside the spinal cord. A chiropractor tries to treat illness by adjusting the spine to allow the nerves to work better. Chiropractors may use other treatment methods as well.

### How is chiropractic treatment thought to promote wellness and overall health?

Daniel David Palmer, who developed chiropractic in the 1890s, believed that problems in the spine could keep the body from working well and healing itself. This therapy may cause your body to release chemicals that affect how you feel pain and pleasure.

### What have studies shown about the benefit of chiropractic treatment?

Some studies suggest that chiropractic can help treat:

- Acute and chronic back pain
- Migraines and tension headaches
- Neck pain

### What is the potential risk or harm of chiropractic treatment?

Serious side effects are rare. Case reports have linked high-pressure neck adjustments to a certain kind of stroke, but the risk seems to be very small. Chiropractic is not recommended for patients with bone cancer and diseases of the spinal cord and bone marrow.

## **DANCE/MOVEMENT THERAPY**

### What does dance/movement therapy involve?

Dance/movement therapy is based on the idea that your body and mind are connected. Mental and emotional problems may be “held” in your body in the form of muscle tension that can be treated with specific movements. The state of your body can affect thoughts and feelings in either a positive or negative way. Dance/movement therapy may use many different kinds of music. Providers work with clients in groups or one-on-one in settings that include hospitals, clinics, wellness centers, schools and nursing homes.

### How is dance/movement therapy thought to promote wellness and overall health?

Dance/movement therapy can increase self-esteem and self-confidence in people with body-image problems such as those caused by eating disorders and breast cancer treatment. It can reduce pain related to chronic muscle tension. Dance/movement therapy helps you move easier and be more coordinated. It can help make your heart and lungs stronger. Some people have trouble talking about their feelings. Dance/movement can give them a way to express themselves. Dance/movement therapy also helps people feel “at home” in their bodies and give them a source of joy.

### What have studies shown about the benefit of dance/movement therapy?

Some studies suggest that dance/movement therapy can help treat:

- ADHD
- Autism and other developmental delays or disorders
- Cystic fibrosis
- Dementia
- Depression
- Learning disabilities
- Parkinson’s disease
- Schizophrenia

### What is the potential risk or harm of dance/movement therapy?

Dance/movement therapy is considered safe for most people. If you try this kind of therapy, let the provider know about any health problems you have. This will allow the provider to change the therapy based on your needs.

## **FELDENKRAIS METHOD®**

### What does the Feldenkrais Method involve?

Developed by Russian-born physicist and athlete Moshe Feldenkrais (1904–1984), this method teaches people to move with more ease and less pain. In group classes, the teacher guides students in simple exercises involving bending, turning and other movements. The idea is to help each person find how he or she moves most easily. In private sessions, the teacher provides gentle hands-on lessons based on the individual's needs. Clients remain fully clothed during both group classes and private sessions.

### How is the Feldenkrais Method thought to promote wellness and overall health?

Providers help clients to learn about the way they move and try new movements that may be easier. Repeating these easier movements might retrain the brain and body so that the new ways become natural. Some people claim that this method can help people who have a hard time moving because of injury, stroke or other conditions. It is also popular with actors, musicians and athletes.

### What have studies shown about the benefit of the Feldenkrais Method?

Some studies suggest that the Feldenkrais Method can help treat:

- Anxiety in people with multiple sclerosis
- Balance and mobility problems in older adults
- Lower back, neck and shoulder pain
- Problems with body image in people with eating disorders

### What is the potential risk or harm of the Feldenkrais Method?

The Feldenkrais Method is considered safe for most people. Speak with your doctor if you have any chronic health problems or if you are recovering from injury or surgery.

## **GUIDED IMAGERY**

### What does guided imagery involve?

Guided imagery is a way of using your imagination to improve your health. Imagery involves what you see, hear, smell, taste and feel in your imagination. If you imagine a place that relaxes you, your body will feel more relaxed.

### How is guided imagery thought to promote wellness and overall health?

Research shows that imagery can change your heart rate, blood pressure and other actions in your body. Guided imagery can be used for specific health concerns. For instance, people with high blood pressure might imagine their blood flowing through open, relaxed blood vessels. Cancer patients might picture their immune system cells gobbling up cancer cells like Pac-Man.

### What have studies shown about the benefit of guided imagery?

Some studies suggest that guided imagery can help treat:

- Asthma
- High blood pressure
- Migraines and tension headaches
- Osteoarthritis pain
- Poststroke paralysis
- Posttraumatic stress disorder (PTSD)
- Symptoms of Parkinson's disease
- Symptoms related to surgery

### What is the potential risk or harm of guided imagery?

Guided imagery is considered safe for most people.

## HEALING TOUCH

### What does Healing Touch involve?

Healing Touch (HT) is an energy therapy that is used mostly by nurses. HT providers use light touch near or on the client's clothed body. People often report feeling deeply relaxed during and after a session. HT is used with standard medical care at some hospitals, long-term care facilities and private practices.

### How is Healing Touch thought to promote wellness and overall health?

By putting the client's energy field in balance, HT providers try to improve the person's well-being and natural ability to heal.

### What have studies shown about the benefit of the Healing Touch?

Some studies suggest that HT can help reduce:

- Anxiety and stress
- Recovery time after surgery
- Fatigue and nausea in cancer patients
- Chronic headaches
- Symptoms of dementia

### What is the potential risk or harm of Healing Touch?

HT is considered safe for most people.

## **HYPNOSIS**

### What does hypnosis involve?

Hypnosis involves entering a state of focused attention to promote physical or mental health. A therapist with training in hypnosis may help you to enter this state by having you focus on a small object. Once you are in a state of focused attention, the therapist offers ideas specific to your health concern. For instance, he or she may suggest that a painful area is becoming numb or that you will be less anxious in the future. Even while hypnotized, you remain in complete control, just as someone who is daydreaming can decide to stop at any point. In general, about 15 % of people can be hypnotized easily and 15 % show much resistance. The remaining 70 % fall somewhere in between.

### How is hypnosis thought to promote wellness and overall health?

Some scientists believe that hypnosis can cause the brain to release natural painkillers to ease pain. Others believe that hypnosis acts through the unconscious mind and the power of suggestion.

### What have studies shown about the benefit of hypnosis?

Some studies suggest that hypnosis can help treat or reduce:

- Anxiety and phobias
- Eczema
- Irritable bowel syndrome (IBS)
- Nausea and vomiting due to chemotherapy
- Smoking
- Symptoms of dementia
- Tension headaches

### What is the potential risk or harm of hypnosis?

Hypnosis is considered safe for most people.

## **MASSAGE THERAPY**

### What does massage therapy involve?

Massage therapists rub and knead the body's soft tissues. Several different types of massage have developed over time around the world. These include Swedish massage (the most popular form in the United States), shiatsu (from Japan), Thai massage and tuina (from China). Massages often occur in a warm, comfortable room and last 15 to 90 minutes.

### How is massage therapy thought to promote wellness and overall health?

Massage helps your muscles relax, which in turn reduces stress. It is helpful in treating problems made worse by muscle tension, such as headaches, backaches and insomnia. As muscles are rubbed, blood and oxygen start moving through your body more easily. Patients with serious diseases find that massage helps them relax and feel better.

### What have studies shown about the benefit of massage therapy?

Some studies suggest that massage therapy can help treat:

- Anxiety and depression
- Back pain
- Knee arthritis
- Migraines
- Neck pain
- Pain from surgery

Interestingly, studies show that premature babies gain weight faster if they are massaged. However, it is unclear why.

### What is the potential risk or harm of massage therapy?

Massage should be avoided in the following situations or areas of the body:

- Bone metastases
- Bruised, damaged or infected parts of the body
- Circulatory problems such as phlebitis or varicose veins
- Following surgery, chemotherapy or radiation treatment
- Risk of bleeding or tissue damage
- Tumors

## **MEDITATION**

### What does meditation involve?

Meditation involves focusing on one thing, like your breath or a repeated word or phrase. Many forms of meditation come from Eastern and Western religions. However, you do not need to be part of these spiritual traditions to try meditation. Meditation helps to clear the mind of anxious thoughts and relax the body. To get the full benefits of meditation, try it once or twice a day for 10–20 minutes.

### How is meditation thought to improve wellness and overall health?

Meditation can increase activity in the parts of your brain that control good emotions such as happiness. Plus, regular meditation may slow brain decline related to aging. It may also lower blood pressure, relax breathing rates and increase healthy blood flow.

### What have studies shown about the benefits of meditation?

Some studies suggest that meditation can help:

- Anxiety and depression
- Arthritis
- ADHD
- Back pain
- Heart disease and high blood pressure
- Hot flashes
- Irritable bowel syndrome
- Premenstrual syndrome

Meditation may help to improve cognitive function and blood pressure in older people. It can boost mood, improve sleep quality and reduce stress in cancer patients.

### What is the potential risk or harm of meditation?

Meditation is considered safe for most people. However, people at risk of mental illness should talk to a doctor before starting meditation.



## **MUSIC THERAPY**

### What does music therapy involve?

Throughout history, people around the world have used music in stress reduction and healing. Music therapy may be good for patients of any age, ethnicity, religious background or stage of illness. It may involve listening to music, playing instruments, singing or writing your own songs.

### How is music therapy thought to promote wellness and overall health?

Listening to slow, relaxing music can lower your heart rate, blood pressure and breathing rate. Listening to music with a lively beat can give you energy. Research also suggests that music can affect the hormones in your body. These hormones can reduce pain and stress levels, and it can help keep you from getting sick.

### What have studies shown about the benefit of music therapy?

Some studies suggest that music therapy can help treat:

- Anxiety and depression
- Autism
- Chronic pain
- Impaired vision in stroke patients
- Memory problems in Alzheimer's patients
- Sleep problems
- Symptoms of neurological problems

Music therapy can also reduce the need for anesthesia during childbirth and help premature infants gain weight. In addition, music therapy is used in some hospices to ease the dying process.

### What is the potential risk or harm of music therapy?

Music therapy is considered safe for most people.

## QIGONG

### What does qigong involve?

Qigong (pronounced chee gung) is a physical and mental exercise that combines breathing techniques with simple movements. It is based on traditional Chinese beliefs in *qi* (or chi), the life force. Qigong means “cultivating energy.” It resembles tai chi but often consists of shorter sets of movements that are easy to learn.

### How is qigong thought to promote wellness and overall health?

The traditional Chinese purpose of qigong is to rebalance the inner qi, or life force. This calms the mind and energizes the body and all of its systems. In Chinese medicine, qi is believed to affect blood flow, the lymph and nervous systems, blood pressure, heart rate and stress levels.

### What have studies shown about the benefit of qigong?

Some studies suggest that qigong can help:

- Encourage sleep and relaxation
- Reduce anxiety, stress and depression
- Improve balance and reduce the number of falls
- Lower blood pressure
- Treat asthma
- Treat arthritis
- Improve movement problems in people with Parkinson’s disease

### What is the potential risk or harm of qigong?

Qigong exercises do not challenge strength or stamina and can even be used by people in wheelchairs and individuals with frail bones. Qigong is considered safe for most people.

## **REIKI**

### What does Reiki involve?

Reiki (pronounced ray-key) is a spiritual healing practice that seeks to restore balance. Providers place their hands lightly on the patient's body to send subtle energy to the patient. The patient remains fully clothed and often lies on a padded table. Patients typically feel very relaxed and peaceful, and sometimes fall asleep. Some people may sense a feeling of heat or coolness or very subtle pleasant waves. Reiki was developed by a Buddhist monk more than 100 years ago in Japan. It was introduced to the United States in the 1930s.

### How is Reiki thought to promote wellness and overall health?

It is believed that Reiki increases levels of peace, balance and relaxation. Reiki healing is understood to be drawn through the provider in a way that is based on the recipient's need. In this way, it is the recipient, not the provider, who controls what is happening on a subtle level.

### What have studies shown about the benefit of Reiki?

Some studies suggest that Reiki can help reduce:

- Behavioral and memory problems in people with mild Alzheimer's disease
- Pain and anxiety
- Symptoms of depression

### What is the potential risk or harm of Reiki?

Reiki is considered safe for most people.

## TAI CHI

### What does tai chi involve?

Tai chi (pronounced tie-chee) is an ancient Chinese martial art based on the philosophy of Taoism. Taoism teaches about a life energy, termed *qi* (pronounced chee), and a pair of forces called *yin* and *yang*. Tai chi exercises are designed to balance yin and yang and aid the free flow of qi. Its movements are gentle and well suited for those who are not physically strong, healthy or flexible. Deliberate movements are combined with meditation and controlled breathing.

### How is tai chi thought to promote wellness and overall health?

Tai chi exercises relax both the body and mind. Chinese medicine providers believe that tai chi exercises balance qi. Conventional doctors suggest that tai chi improves health through exercise, which helps you relax and reduce stress. Tai chi is thought to improve concentration, energy, posture and circulation. It can also give you an increased sense of well-being. The health benefits of tai chi will not persist if the exercises are stopped. Tai chi is best regarded as a lifelong preventative strategy to keep you healthy.

### What have studies shown about the benefit of tai chi?

Some studies suggest that tai chi can help:

- Lessen arthritis pain and disability
- Lower blood pressure
- Improve heart and lung functions
- Increase balance and flexibility
- Lower the risk of falls in older people
- Maintain bone density in postmenopausal women
- Improve sleep in seniors

### What is the potential risk or harm of tai chi?

As with any fitness program, you could get sore muscles or even sprains if you exercise too much. But in general, these exercises are considered safe for most people.

## **THERAPEUTIC TOUCH®**

### What does Therapeutic Touch involve?

Therapeutic Touch (TT) is based on the idea that a life force within and around the body is essential to good health. TT providers seek to change this life force to remove blockages in the patient's vital energy. Most often practiced by nurses, TT involves sweeping the hands down the patient's body to smooth energy fields and remove blockages. Sessions typically last about 30 minutes. Despite what the name implies, TT does not call for actually touching the patient's body.

### How is Therapeutic Touch thought to promote wellness and overall health?

Some people believe that TT removes blockages and harmful energy in the patient's energy fields. Blocked or harmful energy is believed to cause pain and illness. The TT worker is thought to give his or her own healthy energy to the patient. Patients have reported that they feel more relaxed, less stressed and have less pain after TT treatments.

### What have studies shown about the benefits of Therapeutic Touch?

Some studies suggest that TT can help:

- Treat burns and other wounds
- Relieve osteoarthritis pain
- Relieve tension headaches
- Lower anxiety
- Relieve symptoms of dementia
- Promote well-being in cancer patients

### What is the potential risk or harm of Therapeutic Touch?

TT is considered safe for most people.

## YOGA

### What does yoga involve?

Yoga exercises help the body and mind work together. Yoga is often done in group classes. There are three main parts: breathing exercises, body poses and meditation. Through a series of positions, all the muscle groups in the body can be strengthened and stretched. Through breathing exercises and meditation, yoga poses seek to bring balance between the body and the mind.

### How is yoga thought to promote wellness and overall health?

Yoga connects the mind, body and spirit together. Yoga has been defined as a system of personal development. When practiced regularly, it can help you relax, reduce stress, strengthen your body and improve flexibility.

### What have studies shown about the benefit of yoga?

Some studies suggest that yoga can help treat:

- Anxiety, depression and insomnia
- Arthritis
- Carpal tunnel syndrome
- Chronic low back pain
- Diabetes
- High blood pressure
- Symptoms of menopause

Yoga has been shown to improve sleep, mood and overall quality of life in cancer patients. It has also been found to reduce the risk of falls by older people, and to improve lung function in people with asthma.

### What is the potential risk or harm of yoga?

As with any exercise program, people under medical care should consult their doctors to be sure that yoga is appropriate. Since yoga involves moving your body, you need to be careful about pushing yourself too hard. Some poses can cause problems if done too hard or for too long. Tell your yoga teacher about any health problems, including joint problems, high blood pressure and glaucoma. Your teacher will show you which positions to avoid or change.

## Web Site Resources for Mind and Body Practices

Academy for Guided Imagery | <http://acadgi.com/>

American Academy of Medical Acupuncture | <http://www.medicalacupuncture.org/>

American Art Therapy Association | <http://www.arttherapy.org/>

American Association of Acupuncture & Oriental Medicine | <http://www.aaaomonline.org/>

American Massage Therapy Association | <https://www.amtamassage.org/>

American Music Therapy Association | <http://www.musictherapy.org/>

Association for Applied Psychophysiology and Biofeedback, Inc. | <http://www.aapb.org/>

American Chiropractic Association | <http://www.acatoday.org/>

American Dance Therapy Association | <http://www.adta.org/>

American Society for the Alexander Technique™ | <http://www.amsatonline.org/>

American Society of Clinical Hypnosis | <http://www.asch.net/>

American Tai Chi and Qigong Association | <http://www.americantaichi.org/>

Feldenkrais Guild of North America | <http://www.feldenkrais.com/>

Healing Touch International, Inc. | <http://www.healingtouchinternational.org/>

International Association of Yoga Therapists | <http://www.iayt.org/>

Qigong Institute | <http://qigonginstitute.org/>

The Reiki Alliance | <http://www.reikialliance.com/en>

Therapeutic Touch International Association | <http://therapeutic-touch.org/>

Transcendental Meditation® | <http://www.tm.org/>

University of Massachusetts Medical School, Center for Mindfulness in Medicine, Health Care, and Society | <http://www.umassmed.edu/cfm/>





## Other Complementary Health Approaches

### OVERVIEW

The other medical practices described in this section have been in use for centuries in different parts of the world. Major Eastern whole medical systems include practices from China and India. Major Western whole medical systems include *homeopathy* and *naturopathy*. Other systems have been developed by Native American, African, Middle Eastern, Tibetan and Central and South American cultures.

### AYURVEDA

#### What does Ayurveda involve?

Ayurveda (which means “science of life” in Sanskrit) is the traditional healing system of India. It seeks to balance the body, mind and spirit. It places a strong emphasis on preventive self-care. Treatments may include dietary changes, herbal formulas, yoga poses and massage. Ayurveda may also use fasting, laxatives and enemas to cleanse the body of toxins.

#### How is Ayurveda thought to promote wellness and overall health?

Ayurvedic providers try to match their patients’ lifestyles with their personal traits and medical histories. Ayurvedic medicine’s focus on self-care and prevention is similar to other health programs that aid wellness and health.

#### What have studies shown about the benefit of Ayurveda?

Ayurveda has not been well studied. However, early research suggests it may help people with atherosclerosis and type 2 diabetes. Ginger and turmeric, both widely used in Ayurvedic medicine, might be able to treat arthritis and other disorders.

#### What is the potential risk or harm of Ayurveda?

Pregnant women and people in poor health should not try detoxification. Using detox methods too much could lead to serious problems even in healthy people. Some Ayurvedic medicines sold on the Internet have been found to contain heavy metals such as lead, mercury and arsenic.

## TRADITIONAL CHINESE MEDICINE

### What does Traditional Chinese Medicine involve?

Traditional Chinese Medicine (TCM) is a whole medical system that has been in use for thousands of years. It consists of methods to prevent as well as treat illness. The goal of TCM is to achieve an overall balance within the patient. *Qi* (pronounced “chee”) is the most important concept of TCM. Health is achieved when two forces, called *yin* (feminine—cool, moist, quiet) and *yang* (masculine—warm, dry, active), are in balance and the flow of qi is not blocked. An imbalance of these forces is believed to result in sickness. TCM uses many methods to help qi, including herbs, acupuncture, *moxibustion* (heat therapy), diet, massage, meditation and exercises such as qigong and tai chi.

### How is Traditional Chinese Medicine thought to promote wellness and overall health?

TCM teaches that the flow of qi is important in keeping the body in balance. Balance is composed of the five elements: wood, fire, earth, water and metal. Each element is tied to organs of the body, seasons, colors and tastes. Balance is also composed of the Eight Principles:

- Cold and Heat
- Deficiency and Excess
- Exterior and Interior (location of symptoms in the body)
- Yin and Yang

### What have studies shown about the benefit of Traditional Chinese Medicine?

There have been few studies of TCM as a whole system, in part because each treatment is unique to the patient. But research on specific methods has shown many benefits. (See the sections on acupuncture, tai chi and qigong in the “Mind and Body Practices” chapter.) Studies suggest that Chinese herbs can be helpful for eczema, irritable bowel syndrome and seasonal allergies. Chinese herbs have also shown promise for reducing the side effects of chemotherapy in breast cancer patients.

### What is the potential risk or harm of Traditional Chinese Medicine?

Side effects will vary depending on the treatment used. Some herbs imported from China have been found to be contaminated with heavy metals and prescription drugs. The same herbs sold by U.S. companies might be safer.

## HOMEOPATHY

### What does homeopathy involve?

Samuel Hahnemann, an 18th century German doctor, developed homeopathy. He believed that a substance that causes symptoms in a healthy person could cure those same symptoms in a sick person. Homeopathic remedies are made from substances that are weakened in water or alcohol. Most remedies are so weak that a lab cannot find the original ingredient. Homeopathic providers claim that the solutions contain a “memory” of the original substance. During a first visit, the patient is asked to describe all health problems as well as details about lifestyle and behavior.

### How is homeopathy thought to promote wellness and overall health?

Homeopathy is based on Hahnemann’s idea of “like cures like.” He theorized that a substance that caused specific symptoms could also relieve them. Homeopaths prescribe a remedy based on the patient’s unique symptoms and characteristics. In addition, you can buy over-the-counter products for common problems, such as colds, flu and joint or muscle pain.

### What have studies shown about the benefit of homeopathy?

A 2005 review concluded that the benefits of homeopathy are likely placebo effects. Some people claimed that the review left out many studies with positive results. A 2008 study followed patients at more than 100 German and Swiss homeopathic practices for up to eight years. The study found that many patients said they had long-term improvements in conditions such as headaches, allergies and sleep problems.

### What is the potential risk or harm of homeopathy?

After starting a homeopathic remedy, some patients find their symptoms briefly become worse. Homeopaths believe that these reactions are good for the patient and generally resolve quickly.

## NATUROPATHIC MEDICINE

### What does naturopathic medicine involve?

Naturopathic medicine bases its treatments on natural methods. In the 15 states where naturopaths can be licensed, they might use many of the same tests as conventional doctors. (In other states, naturopaths may act as general health experts, but they cannot diagnose or treat disease.) Naturopaths generally avoid the use of drugs, and they do not perform major surgery. Instead, they rely on the body's own healing ability. Naturopaths may use dietary changes, herbs and other alternative methods. Naturopaths are trained to treat and support the whole person, looking at all aspects of a patient's lifestyle that may affect health.

### How is naturopathic medicine thought to promote wellness and overall health?

The goal of naturopathic medicine is to help the body's natural healing power to fight disease. Naturopaths also seek to find and treat the causes of disease, instead of just hiding symptoms. In addition, preventive care is a very important part of naturopathy. Naturopaths teach their patients how to lead healthy lifestyles.

### What have studies shown about the benefit of naturopathic medicine?

Preliminary research suggests that a mix of natural approaches may help treat:

- Anxiety
- Low back pain
- Rotator cuff tendinitis
- Temporomandibular joint disorder (TMJ)

Naturopathic treatments generally can be helpful in treating minor illnesses. However, they are not cures for serious illnesses such as cancer.

### What is the potential risk or harm of naturopathic medicine?

In general, naturopathic practices are harmless and often add to a healthy lifestyle. However, some practices, such as fasting or other detox methods, can cause problems in the body and may be harmful to weak patients. Some herbs can cause problems with medications.

## **Web Site Resources for Other Complementary Health Approaches**

American Association of Acupuncture & Oriental Medicine | <http://www.aaaomonline.org/>

American Association of Naturopathic Physicians | <http://www.naturopathic.org/>

National Center for Homeopathy | <http://www.homeopathic.org/>

WebMD, Health & Balance, Ayurvedic Medicine |  
<http://www.webmd.com/balance/guide/ayurvedic-treatments>



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