UCSF Medical Center
Fontana Tobacco Treatment Center
Stop Smoking Workbook

Paul Brunetta, MD
Suzanne Harris, RN, CTTs
Dianne Derby, MS
Lisa Kroon, Pharm D
Robin Corelli, Pharm D
Credits

Neal Benowitz, MD:
  Neurochemical and Related Effects of Nicotine, page 54

Paul Brunetta, MD:
  Small-Cell Lung Cancer, pages 82–84
  True Emotions, pages 88–92
  Smoking Cessation: Advice to Clinicians and Patients, pages 97–101

Karl Fagerström, PhD
  Fagerström Scale, page 25

John Harding photographs:
  Clarence Brown, page 10
  Roger Sako, page 80
  Barbara Vos, page 86

Suzanne Harris, RN, CTTS:
  Clarence Brown, page 11
  Roger Sako, pages 81, 82
  Barbara Vos, pages 87, 88
Contents

About This Workbook .......................................................................................................... 6

Lesson One ........................................................................................................................... 9
  Clarence Brown ............................................................................................................ 10
  Lung Health .................................................................................................................. 12
  Tobacco-Related Disease ......................................................................................... 13
  What's in Cigarette Smoke? ..................................................................................... 16
  Tobacco Facts .............................................................................................................. 17
  Carbon Monoxide ....................................................................................................... 18
  The Power of Denial .................................................................................................. 19
  What Is Motivation? .................................................................................................. 20
  My “Want to” Motivation ......................................................................................... 22
  Smoking Behavior Awareness .................................................................................. 23
  Rating Your Addiction to Nicotine: Fagerström Questionnaire ............................... 25
  Setting Your Stop Date ............................................................................................. 26
  Practice and Exercises .............................................................................................. 27
  Sample from a Smoking Journal ............................................................................. 28
  Smoking Awareness Journal ..................................................................................... 29

Lesson Two ....................................................................................................................... 31
  Medicines for Smoking Cessation ............................................................................ 32
  Readiness for Change ............................................................................................... 42
  Introduction to the Journey of Change .................................................................. 43
  The Journey of Change ............................................................................................. 44
  Courage = Desire + Doubt + Action ....................................................................... 45
  Practice and Exercises .............................................................................................. 46
  Smoking Awareness Journal ..................................................................................... 47

Lesson Three ..................................................................................................................... 50
  Understanding Dependence .................................................................................... 51
  Nicotine Addiction Cycle .......................................................................................... 52
  Withdrawal Symptoms ............................................................................................... 53
  Neurochemical and Related Effects of Nicotine ..................................................... 54
For a smoker,
quitting smoking
is the single most important thing
you’ll ever do for your health.
About This Workbook

You may be reading this introduction as a member of one of our Stop Smoking Groups. Perhaps you are considering using this workbook to assist you in overcoming smoking on your own. Or you may be a nonsmoker seeking information about tobacco dependence and how you could support a friend or loved one who is trying to achieve freedom from smoking. Regardless of your motivation, we hope you will find content in this workbook that will be of use to you.

The Fontana Tobacco Treatment Center (FTTC) at the UCSF Medical Center was founded by a physician and a nurse who are former smokers and have witnessed immensely debilitating effects of prolonged tobacco use. Recognizing that stopping smoking is the single most important thing a smoker can do to improve health, they created the FTTC as a resource for smokers and their friends and family, and also for medical personnel. The FTTC offers group and individual support for smokers, and it serves as an educational resource for health-care providers and the public.

This workbook is structured into four weekly lessons. Because each lesson builds on the previous ones, the sequence is important. Information in each lesson is organized into three sections: medical implications of tobacco dependence, understanding and building motivation, and planning skills to help you reach your goals. Weekly homework concludes each lesson. We suggest setting a stop smoking date between the third and fourth weeks.

If you are a smoker, quitting smoking will be the most important thing you ever do for your overall health. It probably won’t be easy—and you may experience bothersome withdrawal symptoms as your brain tries to fool you into smoking again. There is no easy way to do this—no magic tricks beyond getting focused and doing the work. Sometimes a person finds that stopping seems easier than expected, and then two months later he or she has a drink, is handed a cigarette, and thinks, It’s OK. I was able to quit before, I can smoke just one.

The important thing is to persevere. Tobacco dependence is a powerful disease, one that millions of smokers have overcome with profound benefits to their health, quality of life, and peace of mind. Congratulations for making the important decision to embark on this journey. Keep putting one foot in front of the other and you will arrive at your destination: a smoke-free life.
Objectives

Upon completion of this course, you will

• Become aware of your tobacco use patterns
• Understand biochemical and physiologic effects of tobacco use
• Understand components of addiction
• Learn to self-motivate
• Acquire practical stress management skills
• Develop a plan to overcome tobacco use
• Recognize risks for relapse
• Overcome a relapse if it occurs
• Move from intention to action
• Live your plan and become tobacco free

Introductions

• Your name

• How much are you smoking now?

• When did you start smoking? Why?

• Have you ever tried to stop before? When was the last time? What were the results?

• What are some of your reasons for choosing to stop smoking now?

• On a scale of 0 to 10, where 0 is ‘not at all confident’ and 10 is ‘extremely confident” how would you rate your confidence in your ability to stop for good?

Notes:
FTTC Stop Smoking Model

SMOKER

Intention

↓

Medical

Motivation

Planning

↓

Action

SMOKE FREE
Lesson One

Medical

- Lung health
- Tobacco-related disease
- What’s in cigarette smoke
- Tobacco facts
- Carbon monoxide

Motivation

- Motivation defined
- Fear vs. desire
- My “want to” motivation
- Power of denial

Planning

- Smoking behavior awareness
- Rating your addiction to nicotine
- Your denial story
- Setting your stop date
In the photograph of Clarence, the medical records on the right are from the five years before he stopped smoking; the records on the left are from the five years after he stopped. Even for someone who has smoked for years and has serious medical problems, the improvements in quality of life and health associated with becoming smoke free can be dramatic.
Hello, my name is Clarence. I was a smoker for 33 years. I had my first cigarette when I was 11 years old. It made me sick and I thought I was going to die. I smoked again when I was 18 years old. When I started smoking it was the cool thing to do and I smoked to be part of the group. As I became older, smoking became a way of life. I had a cigarette when I was thinking things over, when I needed to relax, with coffee, and with meals. I felt that smoking made me smarter.

When the bad news about cigarettes and health started coming out, I thought that it wouldn’t affect me; I kept smoking. When my nurse warned me about cigarettes’ hazards on my health, I thought that it wouldn’t happen to me; I kept smoking.

In 1983, I was intubated for the first time. Since I was unable to breathe for myself, a tube was put down my throat and into my lungs. Oxygen was pushed through this tube by a machine. I couldn't talk because a tube was down my throat; it was terrible.

I remember being trapped in this hospital bed with all kinds of tubes going in and out of me. My only thoughts were about when I could get out of bed and push my IV to the patio and have a cigarette. This same story gets repeated seven times. I'd be in the hospital, intubated, and turn around and continue the same habits that got me there in the first place.

In 1986, I tried to quit for the first time. I went to one group, then dropped the program. It took three more tries, but on March 23, 1991, I quit smoking for good. It wasn't easy. I had abused cocaine, heroin, and marijuana. I quit them all, but nothing was as hard as cigarettes.

As I attended the groups and began to view myself as a nonsmoker, I began to notice some changes in my physical health. I was able to walk farther without having to stop and catch my breath. I'd recuperate faster at home without having to come to the hospital. In 1993, for the first time in years, I went a whole year without being hospitalized once!

Believe me, I know it is hard to quit, but you CAN. It's your life. I know how the mind can run things. Always making excuses for smoking, not taking care of your health or the health of the people around you. The biggest barrier you have to face is your mental attitude. That you have to change.

I know my life is much better as a nonsmoker. My health is better. Even my friends and family tell me that they see that things are going better for me.

I used to think, Why should I quit? I enjoy cigarettes. Now as I look back on my smoking, I didn’t enjoy them. I say to people, “Sure, you tell me you want to quit, but what are you going to DO to quit smoking?”
Lung Health

Like any other part of the body, the lungs have a natural progression of aging. Smoking tends to accelerate that aging as well as create debilitating disease.

This graph illustrates the natural history of airflow obstruction, a marker for lung degeneration. The vertical axis shows the amount of air that can be exhaled during the first second of forceful expiration (FEV$_1$). The horizontal axis measures age in years.

A person who never smokes begins a slow decline of lung function starting at about age 60. A smoker who smokes regularly can expect acceleration of that decline, perhaps leading to disability or early death. Even after 25 or more years of smoking, stopping can bring the rate of decline back to normal.

When Clarence Brown became smoke free in 1991, he was already disabled with severe chronic obstructive pulmonary disease (COPD). Had he not stopped when he did, in all likelihood he could have died within a year. As it was, quitting smoking gave him 11 more years of quality life, until he died in 2002.

**Beneficial Effects of Quitting:**

**Pulmonary Effects**

*At any age, there are benefits of quitting.*

COPD = chronic obstructive pulmonary disease

Tobacco-Related Disease

“Cigarette smoking is the chief, single, avoidable cause of death in our society and the most important public health issue of our time.”
—C. Everett Koop, M.D., former U.S. Surgeon General, 1982

Cigarette smoke is made up of a complex mixture of hot gases and particles. When smoke is inhaled, the gases harm the cilia, which are the small hairs lining the airways that help the lungs to remove dirt.

The larger particles (tar) in smoke collect at the branching points in the lungs and increase a smoker’s risk of lung cancer.

The smaller particles collect in the small air sacs in the lung. They damage the air sacs and from this site are carried to other parts of the body where they can cause diseases.

The main health risks from tobacco smoke include the following:

CANCERS

- Lung
- Laryngeal, pharyngeal, oral cavity, esophageal
- Pancreatic
- Bladder and kidney
- Cervical
- Gastric
- Acute myeloid leukemia

CARDIOVASCULAR DISEASES

- Abdominal aortic aneurysm
- Coronary heart disease (angina pectoris, ischemic heart disease, myocardial infarction)
- Peripheral arterial disease
- Cerebrovascular disease (transient ischemic attacks, strokes)
PULMONARY DISEASES
• Acute respiratory illnesses
  • Upper respiratory tract (rhinitis, sinusitis, laryngitis, pharyngitis)
  • Lower respiratory tract (bronchitis, pneumonia)

• Chronic respiratory illnesses
  • Chronic obstructive pulmonary disease
  • Respiratory symptoms
  • Poor asthma control
  • Reduced lung function

REPRODUCTIVE EFFECTS
• Reduced fertility in women; increased occurrence of impotence and sperm abnormalities in men
• Carbon monoxide and carcinogens transferred to the baby by a smoking mother cause a 30% increase in birth defects, stillbirth, and spontaneous abortion.
• Low infant birth weight
• Sudden infant death syndrome

OTHER EFFECTS
• Cataract
• Osteoporosis (reduced bone density in postmenopausal women, increased risk for hip fracture)
• Periodontitis
• Peptic ulcer disease (in patients who are infected with Helicobacter pylori)
• Surgical outcomes
  • Poor wound healing
  • Respiratory complications
• Smoking speeds up the aging process, and the risk of dying from diseases of old age shifts to younger ages.
• Smoking causes the restriction of blood vessels which raises blood pressure and speeds aging of the skin, causing facial wrinkling.

U.S. Department of Health and Human Services. The health consequences of smoking: a report of the Surgeon General. Bethesda (MD); U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2004)
What’s in Cigarette Smoke?

A burning cigarette is a small chemical factory that produces more than 4,000 chemicals, including over 60 known or suspected carcinogens. Some of the chemicals are...

<table>
<thead>
<tr>
<th>Cancer-Causing Agents</th>
<th>Metals</th>
<th>Other Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrosamines</td>
<td>Aluminium</td>
<td>Arsenic</td>
</tr>
<tr>
<td>Cryenes</td>
<td>Zinc</td>
<td>Benzine</td>
</tr>
<tr>
<td>Cadmium</td>
<td>Magnesium</td>
<td>Chromium</td>
</tr>
<tr>
<td>Benzo(a)pyrene</td>
<td>Mercury</td>
<td>Fluoranthene</td>
</tr>
<tr>
<td>Polonium 210</td>
<td>Gold</td>
<td>Furfural</td>
</tr>
<tr>
<td>Nickel</td>
<td>Silicon</td>
<td>Isoprene</td>
</tr>
<tr>
<td>Polycyclic aromatic</td>
<td>Silver</td>
<td>Methyl ethyl ketone</td>
</tr>
<tr>
<td>hydrocarbons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dibenz acidine</td>
<td>Titanium</td>
<td>Phenol</td>
</tr>
<tr>
<td>B-Naphthylamine</td>
<td>Lead</td>
<td>Pyrene</td>
</tr>
<tr>
<td>Urethane</td>
<td>Copper</td>
<td>Selenium</td>
</tr>
<tr>
<td>N. nitrosonornicotine</td>
<td></td>
<td>Styrene</td>
</tr>
<tr>
<td>Toluidine</td>
<td></td>
<td>Tar</td>
</tr>
</tbody>
</table>

Many of the chemicals found in cigarette smoke also have other uses…

- Acetone
  - Nail polish remover
- Acetic acid
  - Vinegar
- Ammonia
  - Floor/toilet cleaner
- Arsenic
  - Rat poison
- Butane
  - Lighter fluid
- Cadmium
  - Rechargeable batteries
- Carbon monoxide
  - Car exhaust fumes
- DDT/dieldrin
  - Insecticide
- Ethanol
  - Alcohol
- Formaldehyde
  - Body tissue preservative
- Hexamine
  - Barbecue lighter
- Hydrogen cyanide
  - Gas chamber poison
- Methane
  - Swamp gas
- Methanol
  - Rocket fuel
- Napthalene
  - Mothballs
- Nicotine
  - Insecticide
- Nitrobenzene
  - Gasoline additive
- Nitrous oxide phenols
- Disinfectant
- Stearic acid
  - Candle wax
- Toluene
  - Industrial solvent
- Vinyl chloride
  - Makes polyvinyl chloride (pvc)
Tobacco Facts

Total deaths = fires, crack, suicide, morphine, car accidents, AIDS, cocaine, homicide, alcohol, and heroin

Portion of U.S. Deaths Attributable to Smoking

<table>
<thead>
<tr>
<th>Cancer</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung cancer</td>
<td>90%</td>
</tr>
<tr>
<td>Emphysema and bronchitis</td>
<td>85%</td>
</tr>
<tr>
<td>Mouth cancer</td>
<td>70%</td>
</tr>
<tr>
<td>Throat cancer</td>
<td>50%</td>
</tr>
<tr>
<td>Bladder cancer</td>
<td>50%</td>
</tr>
<tr>
<td>Esophagus cancer</td>
<td>40%</td>
</tr>
<tr>
<td>Pancreas cancer</td>
<td>35%</td>
</tr>
</tbody>
</table>

5-Year Survival Rates for Selected Cancers

<table>
<thead>
<tr>
<th>Cancer</th>
<th>Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung</td>
<td>12%</td>
</tr>
<tr>
<td>Colon</td>
<td>57%</td>
</tr>
<tr>
<td>Cervix</td>
<td>68%</td>
</tr>
<tr>
<td>Breast</td>
<td>78%</td>
</tr>
<tr>
<td>Prostate</td>
<td>93%</td>
</tr>
</tbody>
</table>

The majority of lung cancers are smoking related, and lung cancer has the lowest survival rate of the cancers listed here.

- Tobacco use is the leading cause of preventable disease, disability, and death in the United States.
- Nicotine is at least as addictive as cocaine or heroin and may even be more addictive than these drugs.
- Medical care for smoking-related illnesses in the United States costs about $50 billion annually.
- Prior to 1900, only 134 cases of lung cancer had ever been reported in the world’s medical literature.
- In the early 1900s, cigarettes began to be mass produced and mass marketed.
- Lung cancer is now the most common malignancy in the world.
- In 1987, lung cancer overtook breast cancer as the most common cancer in women.
- Children of smokers have more asthma, more respiratory and ear infections, and a higher risk of lung cancer later in life.
• Smoking triples the chances of having a heart attack.
• Risk of coronary heart disease is 70% higher among smokers.
• Smoking causes 85% of all chronic obstructive pulmonary disease (COPD) and emphysema deaths.
• Approximately 3,000 nonsmokers die each year from lung cancer due to second-hand smoke exposure.
• More than 35,000 nonsmokers die each year from heart disease due to second-hand smoke exposure.
• Cigarettes are the only products allowed on the market that, if used as intended, will kill half or more of its users.
• More than 3,000 American children and teenagers become smokers each day.
• Tobacco companies need to recruit approximately 5,000 new smokers every day simply to maintain their sales in the United States. (Killing off your regular customers creates a lot of work!)

Carbon Monoxide

Carbon monoxide (CO) is a dangerous gas that is tasteless and odorless. It is produced with any combustion or fire. Therefore, when a smoker takes a drag on a cigarette, he or she is taking in carbon monoxide. In sufficient amounts, carbon monoxide can kill you.

Carbon monoxide has a negative effect on your body’s ability to function properly. Your blood is red because it contains billions of red blood cells that carry a molecule called hemoglobin. Hemoglobin has a vitally important job: to bind to oxygen. Your red blood cells pick up oxygen in your lungs and then deliver it to all of the cells in your body, which allows them to function normally. All of the cells in your body must have oxygen to survive...without it, they will die in minutes.

Carbon monoxide is so dangerous because it binds to hemoglobin 200 times tighter than oxygen, in essence, pushing the oxygen aside. As a result, oxygen does not get delivered properly, and your body’s cells and organs have to struggle to function at all.

The more you smoke, the higher your CO level will be.
A normal CO level is less than 6 parts per million (ppm).
Within days of stopping smoking, your CO level will return to normal.

Your CO level at the start of the program is __________ ppm.
The Power of Denial

In 1995 a telephone survey of smokers was conducted…
  • Only 29% think that they have an increased risk of cardiac infarction.
  • Only 40% think that they have an increased risk of cancer.
    (Ayanian, C. Jama 1999; 281: 1019.)

**DENIAL:**
the stories we tell ourselves to make it okay to keep smoking.

Some familiar denial stories...

My grandmother smoked two packs per day and she lived to be 102.
I’m going to die of something...why not continue to enjoy smoking?
I had a chest X-ray a couple of years ago, and my doctor said it looked great.
My life is too stressful. I have to smoke.
I only smoke two cigarettes a day…or on the weekends…or low-tar cigarettes.
I can’t do my taxes without smoking.
It’s my right to smoke. It is no one’s business what I do.
My sister got cancer and she never smoked, so why not smoke?
If I quit smoking, I’ll gain 50 pounds.
I need to smoke to concentrate on my writing.
I don’t believe that smoking causes diseases…could be a poor diet…or just bad luck.
I don’t smoke as much as I used to.
I’m going to quit when I’m 30…or 40…or 50.

What’s your personal denial story?
Write it down.

Notice how resistant you are to writing your story. Writing it can decrease the power it has to keep you stuck.
What Is Motivation?

It is simple really…

**MOTIVATION = ENERGY**

You notice that things are not how you expect them to be…

not how they “should be”… outside what you are comfortable with

$\downarrow$

Energy turns on

$\downarrow$

Take action to get back on track

$\downarrow$

Energy turns off

It doesn’t matter if the “should be” is better for us or worse for us…

Sink overflows? Fix it! Back to the couch.
Win the lottery? Spend it! Back to work.
Lose weight? Gain it! Back to familiar clothes.

*The trick is knowing how and choosing to motivate ourselves on purpose to accomplish the things we want.*

What “should be’s” or comfort zones keep you from getting what you want?
## Motivation

### FEAR

- A gun
- Restricts behavior
- Avoid something
- “I have to…”

### DESIRE

- A carrot
- Encourages action
- Achieve something
- “I want to…”

### Leads to feeling…

**FEAR**
- Resistant
- Weak
- Powerless
- Worthless
- Hopeless
- Stuck

**DESIRE**
- Confident
- Strong
- Empowered
- Self-esteem
- Hopeful
- You have choices

### One Positive Note:

- Helps combat denial

### The Most Important Point:

- Helps create lasting change
My “Want to” Motivation

To become and stay smoke free, it is helpful to focus on your desire-based reasons for stopping. Why do you want to stop rather than why do you have to stop. In other words...what positive things will being smoke free give you? List as many reasons for stopping as you can...big reasons and small ones. Once you have your list, you may want to place a star beside the reasons that seem particularly important to you.

I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
I want to _________________________________________________________
Smoking Behavior Awareness

Many smokers report that they often smoke without even thinking about it. It is just an automatic habit. Therefore, an important step in the quitting process is to understand your unique relationship to cigarettes. Quitting can be made easier if you know what you are up against. It may take you a while to figure it all out … stick with it!

Dependence

Four basic components work in combination to reinforce smoking behavior and create dependence. On a scale of 1 to 10, rate how strong each component is for you.

Hand-to-mouth stimulation
This component includes all of the habits and behaviors associated with the physical act of smoking: holding the cigarette, putting it in your mouth, striking the match, flicking the ashes, etc. You can try using other objects like toothpicks, cinnamon sticks, chewing gum, licorice root, and the like to satisfy hand and mouth cravings.

Nicotine
Nicotine is among the most addictive substances known to humankind. If you get strong cravings to smoke and feel desperate for it, you are probably having nicotine withdrawal and you may be a good candidate for nicotine replacement therapy.

Emotional and psychological
Have cigarettes been helping you deal with life by reducing your responses to your environment? Smokers often use cigarettes to push down difficult emotions or to deal with unpleasant situations. Cigarettes can become a smoker’s main coping strategy for stress. Choosing to be smoke free offers the opportunity to gain new coping skills.

Deep breathing
This component is not as obvious as the others; however, one reason people smoke is that it allows them to take a deep breath. Deep abdominal breathing itself is relaxing, without the smoke! Many smokers have forgotten how to use their breath for relaxation. Taking deep breaths several times a day is an easy and effective way to combat cravings.
Smoking Behavior Awareness (cont.)

Environment
It is also helpful to understand how your environment is set up to support your tobacco use. Without even realizing it, you have developed certain ways of living that allow you to continue using tobacco. People who are addicted to nicotine protect their supply in much the same way that alcoholics keep close track of where they will get their next drink. You might be surprised at how much of your life is arranged around your tobacco use. These automatic, unconscious “arrangements” are the behaviors that support your addiction and make it possible for you to continue using tobacco.

So think about the arrangements you have made to make smoking a convenient option:

• Where do you purchase your cigarettes?
• How much do you purchase at once?
• Where do you keep your supply?
• How many lighters do you have?
• Do you collect matches when you are out and about?
• Where are all of your ashtrays located?
• Where do you allow yourself to smoke?
• Who are all the people that you smoke with? Friends? Family? Coworkers?
• Do you seek out other smokers?
• How often are you in smoke-free social situations? Do you avoid them?
• What is your reaction when you are forced into smoke-free places? Malls?
  Restaurants? Airplanes?

To better understand your unique relationship with tobacco, we encourage you to keep a daily Smoking Awareness Journal, which is located at the end of each section in your workbook.

Knowledge is power!
Rating Your Addiction to Nicotine:  
Fagerström Questionnaire

Answer each question by checking the box that best applies to you. At the end you will total your points to find out how addicted you are to nicotine.

1. How soon after you wake up do you smoke your first cigarette?
   ___ within 30 minutes (1)
   ___ after 30 minutes (0)

2. Do you find it difficult to refrain from smoking in places where it is forbidden, for example, church, movie theater, library?
   ___ yes (1)             ___ no (0)

3. Which cigarette would you hate to give up most?
   ___ first one in the morning (1)
   ___ any other (0)

4. Number of cigarettes you smoke in a day?
   ___ 15 or less (0)
   ___ 16 to 25 (1)
   ___ 26 or more (2)

5. Do you smoke more frequently in the early morning?
   ___ yes (1)             ___ no (0)

6. Do you smoke even if you are too ill to get out of bed?
   ___ yes (1)             ___ no (0)

Total your points (in parentheses).
0–3  low dependence
4–5  medium dependence
6–7  high dependence
Setting Your Stop Date

We ask that you select a stop date between weeks 3 and 4 of this program. Setting the date within this window gives you enough time to prepare properly while creating a helpful sense of urgency.

There is no perfect day to stop. Having a stop date and committing to it is what is important. Pick the date that is right for you.

1. Think about your smoking pattern. Are you a smoker who smokes…
   Mostly at work?
   At home?
   Out and about in social situations?
   When you are alone?
   After you eat?
   In your car?
   To help with stress?
   Because you are bored?

   What important patterns do you need to plan for?

2. Given your pattern, what should you consider when setting your date?
   A day of low stress?
   A day that keeps your mind and hands occupied?
   A weekend day?
   A day you are away from your normal routine?
   A day you can spend with friends or family?
   A day you can be by yourself?
   A day you can go to the beach or get a massage?

   What kind of day do you think will give you the best chance of success?

3. The stop date I am considering is ________________________________ .

When you have selected your stop date, record it on your Commit to Quit Agreement in the Week 3 section of this workbook.
Practice and Exercises

Read

• Roger Sako’s story, page 81
• Breathing, Smoking, and the Stress Response, page 94
• Small-Cell Lung Cancer, page 82

Write

• Fill out Intake Survey
• Smoking Awareness Journal for each day
• My “want to” motivation, page 20
• Setting your quit date, page 26

Do

• Build an awareness of why you are smoking (see pages 23–24).
• Switch to a lower tar and nicotine brand of cigarettes (this will bring you greater awareness of when you are smoking, and decreased pleasure).
• Reduce smoking to half a pack per day or reduce by one cigarette per day, whichever is easiest (this will help prepare you to eliminate smoking completely).
• Practice taking five deep abdominal breaths at least three times a day to delay or eliminate cigarettes. This will also provide you with a powerful stress management tool.
• Increase the amount of water you drink each day. This will help with the elimination of toxins and help to prevent constipation from nicotine withdrawal.
## Sample from a Smoking Journal

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of cigarettes</th>
<th>How have you modified your smoking pattern? Be as specific as possible.</th>
<th>What makes you want to smoke? Describe your feelings, thoughts, and anxieties as you reduce your smoking.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>20</td>
<td>I tried to skip cigarettes after meals. It was too hard.</td>
<td>When I’m anxious I want to smoke. When I think about quitting I want to smoke!</td>
</tr>
<tr>
<td>Day 2</td>
<td>22</td>
<td>I didn’t do anything.</td>
<td>Feeling very discouraged.</td>
</tr>
<tr>
<td>Day 3</td>
<td>18</td>
<td>I did not smoke while waiting for the bus. This eliminated 3 cigarettes today!</td>
<td>I felt better having made a change. Feeling good about doing something to take care of myself makes the anxiety easier to deal with.</td>
</tr>
</tbody>
</table>
# Smoking Awareness Journal
## Week One

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of cigarettes</th>
<th>How have you modified your smoking pattern? Be as specific as possible.</th>
<th>What makes you want to smoke? Describe your feelings, thoughts, and anxieties as you reduce your smoking.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Smoking Awareness Journal  
**Week One**

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of cigarettes</th>
<th>How have you modified your smoking pattern? Be as specific as possible.</th>
<th>What makes you want to smoke? Describe your feelings, thoughts, and anxieties as you reduce your smoking.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This week, what did I do well?

What did I struggle with?

What do I intend to do differently next week?
# Lesson Two

## Medical
- Nicotine replacement and medication

## Motivation
- Readiness for change
- The journey of change
- Courage

## Planning
- Medication options
Medicines for Smoking Cessation

There are two general classes of medicines for smoking cessation that are approved by the Food and Drug Administration: nicotine replacement therapy (NRT) and non-nicotine based therapy (non-NRT) such as bupropion sustained-release (SR) and varenicline. NRT includes the nicotine gum, patch, lozenge, nasal spray, and oral inhaler. Several NRT products are available without a prescription (gum, lozenge, patch), but some (nasal spray, oral inhaler) require a prescription.

NRT improves success rates and reduces physical withdrawal from nicotine, allowing you to focus on changing habits and routines associated with smoking. Before using NRT, precautions should be taken by individuals with a recent heart attack (within two weeks), life-threatening arrhythmias (palpitations, heart rhythm problems), and severe or worsening angina (chest pain). Other underlying conditions where NRT should be used with caution include active jaw problems (gum only), pregnancy, and breast feeding.

Bupropion SR, also used for depression, is a non-NRT and also marketed as Zyban® or Wellbutrin SR.® Varenicline is also a non-NRT medicine and is sold as Chantix.®

<table>
<thead>
<tr>
<th>Nicotine Gum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Examples/Description:</strong></td>
</tr>
</tbody>
</table>
| Delivers nicotine across the lining of the mouth when the gum is “parked” between the cheek and gum. Sugar-free gum with buffering agents to increase nicotine absorption in the mouth
Nicorette (generic is also available) is available in 2 mg and 4 mg strengths
Flavors: original (peppery), cinnamon, fruit, mint and orange |
<table>
<thead>
<tr>
<th>Pros and Cons:</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Available without a prescription</td>
<td>Not recommended for people with dental problems or jaw joint problems (TMJ)</td>
</tr>
<tr>
<td></td>
<td>Flexible dosing</td>
<td>Frequent use during the day is required to maintain adequate nicotine levels</td>
</tr>
<tr>
<td></td>
<td>Fast delivery of nicotine</td>
<td>Coffee, wine, juices, and soft drinks may reduce effectiveness (by reducing the absorption of nicotine across the lining of mouth)</td>
</tr>
</tbody>
</table>

| Directions for use: | Chew each piece slowly several times. Stop chewing at first sign of peppery, minty, or citrus taste or tingling in mouth (about 15-30 chews) then “park” gum between cheek and gum to allow absorption of nicotine. Resume chewing when taste or tingle fades. When taste or tingle returns, stop chewing and park gum in a different place in the mouth. Repeat chew/park steps until most of the taste or tingle does not return because this is when the nicotine is gone (generally in about 30 minutes). Do not eat or drink 15 minutes before or while using the gum or while using the gum. Chewing gum will not provide the same rapid satisfaction that smoking provides. If the gum is chewed too rapidly, excessive nicotine is released, resulting in lightheadedness, nausea/vomiting, irritation of throat and mouth, hiccups, and indigestion. |

| Dosing: | If you smoke your 1st cigarette within 30 minutes of waking up, use the 4 mg gum. If you smoke your 1st cigarette more than 30 minutes after waking up, use the 2 mg gum. If used alone: Chew 1 piece every 1–2 hours (minimum of 9 per day) for the first 6 weeks, then use 1 piece every 2–4 hours for the next 3 weeks, and finally use 1 piece every 4–8 hours for the final 3 weeks (a 12 week treatment program). If used in combination with other nicotine-containing medicines: Chew 1 piece every 1-2 hours as needed for cravings Use up to 24 pieces per day. Adjust dose as needed for cravings |
## Nicotine Lozenge

| Examples/Description: | Delivers nicotine across the lining of the mouth while the lozenge dissolves  
Nicorette Lozenge (generic also available) and Nicorette Mini-Lozenge available in 2 mg and 4 mg strengths  
Sugar free, mint and cherry flavors |
|-----------------------|----------------------------------------------------------------------------------|
| Pros and Cons: | **Pros:**  
Easy to use  
Available without a prescription  
Flexible dosing  
Delivers about 25% more nicotine than equivalent gum dose  
**Cons:**  
Frequent use during the day is required to maintain nicotine levels  
Coffee, wine, juices, and soft drinks may reduce effectiveness (by reducing the absorption of nicotine across the lining of mouth) |
| Directions for use: | Allow lozenge to dissolve slowly in the mouth; the nicotine release may cause a warm, tingling sensation. Do not chew or swallow the lozenge.  
Occasionally rotate to different areas of the mouth.  
Do not eat or drink 15 minutes before or while using the lozenge.  
The lozenge will dissolve in about 20–30 minutes (10 minutes for mini-lozenge). |
| Dosing: | If you smoke your 1st cigarette within 30 minutes of waking up, use the 4 mg lozenge.  
If you smoke your 1st cigarette more than 30 minutes after waking up, use the 2 mg lozenge.  
*If used alone:*  
Use 1 lozenge every 1–2 hours (minimum of 9 per day) for the first 6 weeks, then use 1 lozenge every 2–4 hours for the next 3 weeks, and finally use 1 lozenge every 4–8 hours for final 3 weeks (a 12 week treatment program).  
*If used in combination with other nicotine-containing medicines:*  
1 lozenge every 1-2 hours as needed for cravings  
Use up to 20 lozenges per day.  
Adjust dose as needed for cravings |
# Nicotine Patch

| Examples/Description: | Delivers a low, consistent level of nicotine through the skin over 24 hours  
Available in 21, 14, and 7 mg strengths. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pros and Cons:</strong></td>
<td><strong>Pros</strong></td>
</tr>
<tr>
<td></td>
<td>Applied only once a day</td>
</tr>
<tr>
<td></td>
<td>Available without a prescription</td>
</tr>
<tr>
<td></td>
<td>Easy to use, few side effects</td>
</tr>
<tr>
<td></td>
<td><strong>Cons</strong></td>
</tr>
<tr>
<td></td>
<td>Less flexible dosing</td>
</tr>
<tr>
<td></td>
<td>Slower onset of action compared to other NRT products</td>
</tr>
<tr>
<td></td>
<td>Mild skin rashes and irritation are common</td>
</tr>
<tr>
<td></td>
<td>Some people experience vivid dreams, sleep disturbances (these can be minimized by removing the patch before going to bed)</td>
</tr>
<tr>
<td><strong>Directions for use:</strong></td>
<td>Apply patch to a clean, dry, and hairless part of the upper body like the arm or chest. Apply a new patch to a different area each day. The same area should not be used again for at least 1 week. Apply the adhesive side of the patch to the skin and press firmly with palm of hand for 10 seconds. Make sure the patch sticks well to skin, especially around the edges. Wash hands since nicotine on hands can get into eyes or nose and cause stinging or redness. Water will not harm the nicotine patch if it is applied correctly. You may bathe, swim, and exercise while wearing the patch. Do not cut patches in half to adjust the dose or to save money as nicotine may evaporate from the cut edges, making the patch less effective. If you experience sleep disturbances, take the patch off before bedtime.</td>
</tr>
<tr>
<td><strong>Dosing:</strong></td>
<td><strong>More than 10 cigarettes/day</strong></td>
</tr>
<tr>
<td></td>
<td>21 mg/day x 4–6 weeks</td>
</tr>
<tr>
<td></td>
<td>14 mg/day x 2 weeks</td>
</tr>
<tr>
<td></td>
<td>7 mg/day x 2 weeks</td>
</tr>
<tr>
<td></td>
<td><strong>10 or less cigarettes/day</strong></td>
</tr>
<tr>
<td></td>
<td>14 mg/day x 6 weeks</td>
</tr>
<tr>
<td></td>
<td>7 mg/day x 2 weeks</td>
</tr>
</tbody>
</table>
### Nicotine Nasal Spray

<table>
<thead>
<tr>
<th>Examples/Description:</th>
<th>Delivers nicotine across the lining of the nose when sprayed directly into each nostril</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pros and Cons:</strong></td>
<td><strong>Pros</strong>&lt;br&gt;Flexible dosing&lt;br&gt;Most rapid delivery of nicotine of currently available medicines&lt;br&gt;May reduce cravings more quickly than other NRT products</td>
</tr>
<tr>
<td></td>
<td><strong>Cons</strong>&lt;br&gt;Available by prescription only&lt;br&gt;Nose and eye irritation is common, but usually disappears within one week&lt;br&gt;Frequent use during the day is required to maintain adequate nicotine levels&lt;br&gt;Not recommended for people with chronic nasal conditions</td>
</tr>
<tr>
<td><strong>Directions for use:</strong></td>
<td>With first use, prime pump by pushing the pump until a fine mist is seen. Blow nose (if not clear) before using. Tilt head back slightly and place tip at nostril opening, hold bottle, breathe normally through mouth and press up on bottom with thumb. If pump is not used for 24 hours, prime pump until you see a fine mist. Do not sniff or inhale while spraying. Wait 2–3 minutes before blowing nose and 5 minutes before driving or operating heavy machinery. Avoid contact with skin, eyes, and mouth.</td>
</tr>
<tr>
<td><strong>Dosing:</strong></td>
<td>If used alone:&lt;br&gt;1 spray in each nostril 1–2 times/hour (up to 5 times/hour or 40 times/day)</td>
</tr>
<tr>
<td></td>
<td>If used in combination with other nicotine-containing medicines:&lt;br&gt;Use at least 8 times a day for first 6–8 weeks of treatment&lt;br&gt;Reduce dose over 12 weeks&lt;br&gt;1 canister provides 100 doses</td>
</tr>
</tbody>
</table>

### Nicotine Oral Inhaler

| Examples/Description: | A cartridge containing nicotine vapor is inserted into a plastic cylinder.<br>Nicotine is absorbed across the lining of the mouth and back of throat (not the lungs as with other “inhalers”)<br>Nicotine enters the body much more slowly than the nicotine in cigarettes. |
**Pros and Cons:**

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible dosing</td>
<td>Available by prescription only</td>
</tr>
<tr>
<td>Mimics the hand-to-mouth behavior of smoking</td>
<td>Frequent use during the day is required to maintain adequate nicotine levels</td>
</tr>
<tr>
<td>Faster delivery of nicotine than with the patches</td>
<td>Coffee, wine, juices, and soft drinks may reduce effectiveness (by reducing the absorption of nicotine across the lining of mouth)</td>
</tr>
<tr>
<td></td>
<td>May cause mouth or throat irritation</td>
</tr>
</tbody>
</table>

**Directions for use:**

- Align marks on the mouthpiece. Pull and separate mouthpiece into two parts. Press nicotine cartridge firmly into bottom of mouthpiece until seal breaks. Put top on mouthpiece and align marks to close. Press down firmly to break top seal of cartridge. Twist top to misalign marks and secure unit. Place mouth on mouthpiece and inhale into back of throat or puff in short breaths. Do not inhale like a cigarette.
- You may experience mild irritation of the mouth or throat, and an unpleasant taste or cough when first using the inhaler, and should adapt to these effects in a short time.
- Nicotine in cartridge is depleted after about 80 puffs or 20 minutes of active puffing. The cartridge does not have to be used all at once since an open cartridge retains potency for 24 hours.
- Do not eat or drink 15 minutes before or while using the oral inhaler.
- The mouthpiece should be reused and cleaned regularly with a mild detergent.

**Dosing:**

- **If used alone:**
  - Use 1 cartridge every 1 to 2 hours
  - Use 6 cartridges/day and increase as needed to a maximum of 16 cartridges/day.
  - Reduce dose over 8–12 weeks according to cravings and withdrawal symptoms.
- **If used in combination with other nicotine-containing medicines:**
  - Use 1 cartridge every 1 to 2 hours as needed for cravings.
# Bupropion SR

| Examples/Description: | Non-nicotine cessation aid, sustained release antidepressant tablet  
| | Available by prescription only  
| | Primary role of this medication is to effect brain chemistry in a way that brings about some of the same effects that nicotine has when people smoke |

| Pros and Cons: | **Pros**  
| | Easy to use oral tablet  
| | May be used in combination with NRT  
| | **Cons**  
| | Available by prescription only  
| | Should not be used by patients with eating disorders, seizure disorders, severe liver disease, or significant brain trauma, or if taking medicines known as MAO inhibitors  
| | Common adverse effects are insomnia (avoid bedtime dosing) and dry mouth  
| | Very rare risk of seizure (1/1,000 people)  
| | Some people have had changes in behavior, hostility, agitation, depressed mood, suicidal thoughts or actions while using bupropion. You should stop bupropion and contact a health care provider immediately if you experience agitation, hostility, depressed mood or changes in thinking or behavior (including suicidal ideation). |

| Directions for use: | Start therapy 1 to 2 weeks PRIOR to your quit date to ensure that the medicine has had enough time to reach an adequate level in your body. |

| Dosing: | 150 mg each morning for 3 days, then 150 mg twice a day for 7–12 weeks or longer if necessary. Take 2nd dose *no less* than 8 hours after first dose. Don’t take at bedtime. |
Varenicline (Chantix®)

<table>
<thead>
<tr>
<th>Examples/Description:</th>
<th>This medicine works by attaching to the same sites in the brain as nicotine to reduce cravings and withdrawal symptoms. It also reduces the pleasure associated with smoking.</th>
</tr>
</thead>
</table>
| Pros and Cons: | **Pros**
| | Easy to use oral tablet
| | Offers a new option for people who have failed to quit with other medicines.
| | **Cons**
| | Available by prescription only
| | Common side effects include: nausea, sleep disturbances (insomnia, unusual dreams), headache, gas, constipation.
| | Some people have had changes in behavior, hostility, agitation, depressed mood, suicidal thoughts or actions while using Chantix. You should stop Chantix and contact a health care provider immediately if you experience agitation, hostility, depressed mood or changes in thinking or behavior (including suicidal ideation). |
| Directions for use: | Start therapy 1 week PRIOR to your quit date to ensure that the medicine has had enough time to reach an adequate level in your body. Alternatively, a person can begin Chantix and then quit smoking between days 8–35 of treatment.
| | Take the tablet with a meal and full glass of water to decrease chances for nausea.
| | Duration of treatment is 12 weeks, but may be used for an additional 12 weeks if needed.
| | Do not use with nicotine replacement therapy or bupropion SR. |
| Dosing: | Days 1–3: 0.5 mg (white tablet) every morning
| | Days 4–7: 0.5 mg (white tablet) twice daily
| | Weeks 2–12: 1 mg (blue tablet) twice daily |
## Worksheet for considering your medication options:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Maybe</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine gum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicotine lozenge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicotine patch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicotine nasal spray</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicotine oral inhaler</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bupropion SR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varenicline</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
LONG-TERM (≥6 month) QUIT RATES for AVAILABLE CESSATION MEDICATIONS


Copyright 1999–2006. The Regents of the University of California, University of Southern California, and Western University of Health Sciences. All rights reserved.
**Readiness for Change**

*Bringing about a lasting change involves a process, not just a flip of a switch.*

Dr. James Prochaska and Dr. Carlo DiClemente outlined a five-stage framework for understanding this process.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>The stage of unawareness. Many individuals in this stage do not see their problem. If they do see a problem, there is no intention to change the behavior in the foreseeable future (i.e. in the next six months).</td>
</tr>
<tr>
<td>Contemplation</td>
<td>The stage in which people are aware that a problem exists and have begun to think seriously about overcoming it. However, they have not yet made a commitment to take action in the next month.</td>
</tr>
<tr>
<td>Preparation</td>
<td>The stage that combines intention and planning for the behavioral change. Individuals in this stage intend to take action within a month but have not successfully taken action within the last year.</td>
</tr>
<tr>
<td>Action</td>
<td>The stage in which individuals modify their behavior or environment in order to overcome their problem. Action involves the most overt behavioral changes and requires considerable commitment of time and energy.</td>
</tr>
<tr>
<td>Maintenance</td>
<td>The stage in which people work to prevent relapse and anchor the gains attained during the action stage. New habits and patterns are put in place. For addictive behaviors, this stage lasts at least six months, often much longer.</td>
</tr>
</tbody>
</table>

What stage are you in?

What would it take for you to move to the next stage?
Introduction to the Journey of Change

On a journey into unknown experience, it can be helpful to have a map from those who have gone before you. Then, when you find yourself in uncomfortable places, you will have a reference for knowing that discomfort is part of the process and does not necessarily mean that something is wrong. The illustration on page 43 is a map to which you can refer over the next months to reassure yourself that you are moving in a positive direction.

A journey of change starts with an ending of an Old Way. Perhaps you are going to move to a new home, break off a relationship, or anticipate the loss of a loved one. You can almost feel a Change coming. Approaching the decision to stop smoking falls into this category. And when you first stop smoking, it may feel like the rug has been pulled out from under you. You may feel alone, fearful, and even desperate as you enter a period of Denial and Decline. Much of your energy may go to resisting change and trying to bargain your way back to the Old Way (“I can smoke once in a while,” “I can switch to lower tar cigarettes,” etc.). Or you may spend considerable energy lamenting, “Why me? Why does it hurt so much?” In this stage, your denial messages may become very loud (“I don’t smoke that much.” “My grandmother smoked all her life and she never got sick.”). Finally, with persistence, you stop bargaining and Let Go and become committed to orienting yourself toward the New Way of a smoke-free life.

Once you really let go, you enter into a period of Creative Confusion. This part of the journey is characterized by all-or-nothing experiences, feeling up and down, fabulous and terrible, inspired and discouraged. You try a lot of new thoughts and behaviors as you meet challenges and find creative solutions to staying smoke free (“How do I get through the morning commute without smoking?” “How do I manage stress without smoking?”). Sometimes you feel like you are managing well, and other times you feel like something must be terribly wrong because you just don’t feel like yourself. You may feel like a smoker who is just not smoking. This is a natural part of the journey of change.

With persistence, you arrive at a place of Illumination: “I see how I’m getting out of this old behavior. It may be far and take lots of work, but I can see the direction I’m going and I’m doing it.” As you proceed to Rebuild your life, learning how to do all the things smoke free that used to involve smoking, the bumps are no longer devastating. The all-or-nothing feeling has pretty much gone until ultimately you arrive at the New Way. Your new normal is now being smoke free.

There is no way to leap over the challenges that make up a journey of change. The best course is to keep finding ways to push forward, secure in the knowledge that with focus and persistence you will reach the New Way, which has become even more comfortable than the Old Way.
The Journey of Change

Old Way

Change Event

Ending Neutral Zone Beginning

Letting Go

Denial and Decline

New Way

Rebuild

Creative Confusion

Illumination

Ending Neutral Zone Beginning
Courage = Desire + Doubt + Action

Quitting takes courage! At different times in our lives, we have all demonstrated courage as well as been inspired by the courage of others. It is often helpful to remember these times as we face the quitting process. Take some time to reflect and record your thoughts.

<table>
<thead>
<tr>
<th>My courage experiences</th>
<th>How I can use them to help me to become smoke free</th>
</tr>
</thead>
</table>

There is an exhilaration that comes in facing head-on the hard truths and saying, “I will not give up. It may take a long time but I will find a way to prevail.”

—Jim Collins, in his book *Good to Great*
Practice and Exercises

Read

• Smoking cessation: Advice for Clinicians and Patients, page 97
• Review workbook pages on nicotine replacement and medications, page 32

Write

• Continue Smoking Awareness Journal, page 47
• Readiness for Change plan, page 42
• Courage = Desire + Doubt + Action, page 45

Do

• Pick one place in your home or work and smoke only there.
• Move all smoking paraphernalia to your designated spot.
• Continue to reduce the number of cigarettes you smoke each day.
• Continue deep breathing exercises (five deep breaths at least three times a day) to delay or eliminate cigarettes you would otherwise smoke.
• Continue to drink water and perhaps increase the amount consumed each day.
• Set a stop date between week 3 and 4.
# Smoking Awareness Journal

## Week Two

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of cigarettes</th>
<th>How have you modified your smoking pattern? Be as specific as possible.</th>
<th>What makes you want to smoke? Describe your feelings, thoughts, and anxieties as you reduce your smoking.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Smoking Awareness Journal

### Week Two

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of cigarettes</th>
<th>How have you modified your smoking pattern? Be as specific as possible.</th>
<th>What makes you want to smoke? Describe your feelings, thoughts, and anxieties as you reduce your smoking.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This week, what did I do well?

What did I struggle with?

What do I intend to do differently next week?
Today’s teenager is tomorrow’s potential regular customer, and the overwhelming majority of smokers first begin to smoke while still in their teens.

—Philip Morris Tobacco Company confidential document, 1981
Lesson Three

Medical

• Understanding dependence
• Understanding withdrawal
• Neurochemical effects of nicotine

Motivation

• The thought process
• Using language

Planning

• Commit to Quit Agreement
• Stop date tips
• Dealing with urges
• Rewards and celebrations
• My Quit Plan
Understanding Dependence

Nicotine has many effects on the body, particularly the heart and hormonal systems. However, nicotine’s most important effects are on the brain. The effect that nicotine has on the brain is dramatic and self-reinforcing. The initial “hit” reaches the brain within a few seconds, which is much faster than other modes of delivery, even injection with a needle.

Once inhaled into the lungs, nicotine is quickly transferred into the bloodstream. This massive and rapid upswing of nicotine is part of the reason that it’s so addictive. Once nicotine is distributed in the brain, it binds to millions of receptors and changes nerve cell activity, causing the release of many other neurotransmitters that have a wide variety of effects...

<table>
<thead>
<tr>
<th>Pleasure</th>
<th>Appetite suppression</th>
<th>Anxiety reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arousal</td>
<td>Cognitive enhancement</td>
<td>Mood modulation</td>
</tr>
<tr>
<td>Tension reduction</td>
<td>Memory improvement</td>
<td></td>
</tr>
</tbody>
</table>

At the same time that the nicotine is creating all of its positive effects, it is also making some serious changes. In short, nicotine affects the brain, which then develops a tolerance to the drug through a change in brain chemistry. The absence of nicotine leads to withdrawal symptoms that lead the smoker to use enough nicotine to boost blood levels to a comfortable target level. The ultimate result is that the smoker’s focus becomes maintaining a constant nicotine level during waking hours. This is a classic response to an addictive drug.

To illustrate, consider two simple equations...

Normal brain chemistry + Nicotine = Adjusted brain chemistry

NOTHING! Nicotine - cigarettes = Adjusted brain chemistry

Hey, where’s the cigarette? I must have a cigarette!
Nicotine Addiction Cycle

Most smokers start in their teens, and 90% of teen smokers become addicted. The addictive potential of nicotine is very high, higher than, for example, alcohol. (If alcohol had the same addictive potential, then 90% of teenagers who use alcohol would become alcoholic. In fact, 7.4% of the U.S. population meets the diagnostic criteria for alcoholism while 44% of the population aged 18 and over have had at least 12 drinks over the past year).* The Nicotine Addiction Cycle illustrates that when we first use nicotine, it is for pleasure, enhanced performance, and mood regulation. Users quickly become tolerant and dependent, and then use cigarettes primarily to avoid nicotine withdrawal.

**WITHDRAWAL SYMPTOMS INFORMATION SHEET**

Quitting tobacco use brings about a variety of physical and psychological withdrawal symptoms. Most of these symptoms decrease sharply during the first few days after quitting, followed by a continued but slower decline in symptoms during the 2nd and 3rd weeks after quitting. For some people, coping with withdrawal symptoms is like riding a roller coaster—there may be sharp turns, slow climbs, and unexpected plunges. **Most symptoms pass within 2 to 4 weeks after quitting.** Report new symptoms to your health-care provider, especially if severe. Consider the impact of recent medication changes.

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>CAUSE</th>
<th>DURATION</th>
<th>RELIEF</th>
</tr>
</thead>
</table>
| Chest tightness              | Tightness is likely due to tension created by the body’s need for nicotine or may be caused by sore muscles from coughing. | A few days                | • Use relaxation techniques  
• Try deep breathing  
• Use of NRT may help |
| Constipation, stomach pain, | Intestinal movement decreases for a brief period. | 1–2 weeks                | • Drink plenty of fluids  
• Add fruits, vegetables, and whole-grain cereals to diet   |
| gas                          |                                            |                          |                                                             |
| Cough, dry throat, nasal drip| The body is getting rid of mucus, which has blocked airways and restricted breathing. | A few days                | • Drink plenty of fluids  
• Avoid additional stress during first few weeks           |
| Craving for a cigarette      | Nicotine is a strongly addictive drug, and withdrawal causes cravings. | Frequent for 2–3 days; can happen for months or years | • Wait out the urge, which lasts only a few minutes  
• Distract yourself  
• Exercise (take walks)  
• Use of NRT may help |
| Depressed mood               | It is normal to feel sad for a period of time after you first quit smoking. Many people have a strong urge to smoke when they feel depressed. | 1–2 weeks                | • Increase pleasurable activities  
• Talk with your clinician about changes in your mood when quitting  
• Get extra support from friends and family |
| Difficulty concentrating     | The body needs time to adjust to not having constant stimulation from nicotine. | A few weeks               | • Plan workload accordingly  
• Avoid additional stress during first few weeks           |
| Dizziness                    | The body is getting extra oxygen.          | 1–2 days                  | • Use extra caution  
• Change positions slowly                                    |
| Fatigue                      | Nicotine is a stimulant.                   | 2–4 weeks                 | • Take naps  
• Do not push yourself  
• Use of NRT may help                                         |
| Hunger                       | Cravings for a cigarette can be confused with hunger pangs; sensation may result from oral cravings or the desire for something in the mouth. | Up to several weeks       | • Drink water or low-calorie liquids  
• Be prepared with low-calorie snacks                         |
| Insomnia                     | Nicotine affects brain wave function and influences sleep patterns; coughing and dreams about smoking are common. | 1 week                    | • Limit caffeine intake, the effects of which will increase with quitting smoking  
• Use relaxation techniques                                   |
| Irritability                 | The body’s craving for nicotine can produce irritability. | 2–4 weeks                 | • Take walks  
• Try hot baths  
• Use relaxation techniques                                   |

Adapted from materials from the National Cancer Institute.

Reprinted with permission. Rx for Change: Clinician-Assisted Tobacco Cessation, Version 5.0. Copyright 1999–2006. The Regents of the University of California, University of Southern California, and Western University of Health Sciences. All rights reserved.
Neurochemical and Related Effects of Nicotine

<table>
<thead>
<tr>
<th>NEUROTRANSMITTER</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dopamine</td>
<td>Pleasure, reward</td>
</tr>
<tr>
<td>Norepinephrine</td>
<td>Arousal, appetite suppression</td>
</tr>
<tr>
<td>Acetylcholine</td>
<td>Arousal, cognitive enhancement</td>
</tr>
<tr>
<td>Glutamate</td>
<td>Learning, memory enhancement</td>
</tr>
<tr>
<td>Serotonin</td>
<td>Mood modulation, appetite suppression</td>
</tr>
<tr>
<td>Beta-endorphin</td>
<td>Reduction of anxiety and tension</td>
</tr>
<tr>
<td>GABA</td>
<td>Reduction of anxiety and tension</td>
</tr>
</tbody>
</table>

Benowitz, N. *Nicotine & Tobacco Research* 1999; 1(suppl):S159–S163
Understanding the Thought Process

Another step in tackling a tobacco habit includes understanding how our minds work. How we think can be a great asset or a great liability. Once we understand how thoughts occur, habits are formed, and choices and decisions are made, we can use this understanding to our benefit. Goals can be achieved more easily if we can recruit the help of our natural thought process rather than trying to fight against it. The thought process has three basic functions and three major steps:

The Functions

*The Desk* represents our conscious mind. All the things we are currently aware of and are attending to are kept here. Just as the top of a desk has all the papers and notes that we are currently using, our conscious mind is dealing with all the current information, ideas, and sensations that are of immediate interest to us.

*The Filing Cabinet* represents our subconscious. All our past experiences, feelings, memories, and opinions about ourselves and the world around us are filed away for future reference. This storage allows us to remember our first grade teacher’s name, the theme song to “Gilligan’s Island,” as well as other more important stuff. Who we are and what we know are recorded in the files.

*The Guardian* represents our creative subconscious. The Guardian has a couple of jobs, but the main one is to protect the files. The creative subconscious creates the energy needed to solve problems. A problem occurs anytime something on the Desk does not agree with what is in the Filing Cabinet. The Guardian leaps into action to discredit or throw away the information on the Desk. The Guardian’s motto is “Stay the Same!” The Guardian considers any attempt to quit smoking as an attack on the “I Love Smoking” file that has been in the Filing Cabinet for a very long time.

The Steps

*Notice* is the first step. The thought process begins with perception. We notice or perceive something. It catches our attention and is placed on the Desk.

*Compare* is the next step. Once we have perceived something, we then compare it to the information in our Filing Cabinet. We ask ourselves, “Have I seen anything like this before?” Then we ask, “What do I know this leads to? Is it a good thing or a bad thing?”

*Choose* is the last step. Given the answers to the comparison questions, we choose the action to take. We can choose to take positive action, ignore the situation, or push it away. It all depends on what the files tell us is right and comfortable for us.

If we work to update the information in the Filing Cabinet before we attempt a change, we won’t have to deal with all of the drama and discomfort the Guardian creates. In fact, the Guardian will actually help us achieve our goal.
The Thought Process

File Cabinet Stores:
- Important Stuff about Me
- Important Stuff about the World
- My version of the Truth
- My version of Reality
- My Comfort Zones (should be’s)

Acts like a personal auto-pilot

Files = Words+Images+Feelings

The Guardian:
- Wants to keep the files the same!
- Turns on to solve problems
- Very creative...even sneaky at times
- Creates the energy to fix things
- Turns off when files match desk top
The Thought Process

Stop Smoking Workbook  57

Problem!

Must maintain the file!

Pick a fight?

Have “just one”?

Stronger cravings?

Find an excuse?

Increase stress?

Fix it!
Using Language

When making a significant change, most people underestimate the power of language as a tool to achieve their goal.

Consider the RESULTS LADDER along the right side of the page. Starting at the bottom, our beliefs about ourselves and the situation at hand lead to the thoughts we have, which in turn lead to the language we use. The words that we choose set our options for action. And only by taking the right actions can we ever realize the results we want. The good news is …

*By using clear goal-focused language, we can override unhelpful beliefs and thoughts that aren’t aligned with the results we desire.*

As an example, let’s look at two different perspectives about the process of quitting and the language that helps create very different results.

**Perspective 1:** “I am being denied something I love.”

- Something I want/need has been taken away from me.
- Why should I have to suffer?
- I feel so sorry for myself…I have lost my best friend!
- I really want to smoke…it shouldn’t be this hard!
- Why can’t I smoke just once in a while?
- I hate this.

**Perspective 2:** “I can do this!”

- This is an amazing opportunity for me to change.
- I am learning to deal with life without harming myself.
- Withdrawal symptoms are my body’s way of healing from nicotine.
- It is exhilarating to see that I am more powerful than cigarettes.
- This is the most important challenge I’ve ever taken on.

**Important Notes…**

- ⇒ Perspective 1 leads back to smoking.
- ⇒ Perspective 2 leads to a positive vision of being smoke free.

Start using positive, smoke free language even if it sounds odd, fake, or like a lie at first. Without a doubt, the four most powerful words you can say to yourself (even if it isn’t quite true yet) are…

*I AM SMOKE FREE*
WARNING!

Using the word TRY is an easy way to divert yourself from your DESTINATION

(You are allowing yourself lots of options for failure while remaining a “good” person for the effort.)
“Entitlement”
—Another Language Trap

If it is in my house (or my purse, or my car), I’m entitled to it.
The decision is already made.
I get to have it.
No more cigarettes after midnight… but right now I can smoke.
I’ll finish the pack and then quit.
I paid for it; I won’t waste it.
So I can go ahead and smoke.

Triggers

I want to smoke when…

• I wake up
• I have my morning coffee
• I have had a stressful conversation
• I see someone else smoking
• I smell a cigarette burning
• Many more …

• I’m celebrating
• I’m taking a break
• I’m switching tasks
• I’ve finished a meal
• I’m bored

List your own triggers

1. ___________________________________________________

2. ___________________________________________________

3. ___________________________________________________

4. ___________________________________________________

5. ___________________________________________________
Commit to Quit Agreement

On ______________, I will stop using tobacco.

I am agreeing to view this as a serious and important shift in my life, which may lead to changes I can’t even predict at this point.

With this commitment I am demonstrating:

• A sincere desire to stop,
• The motivation to make the necessary changes, and
• Willingness to experience discomfort during withdrawal.

I understand that there will be challenging times, and I am agreeing to do my best to meet them. I will work to be kind to myself in this process and seek support when needed.

By choosing to quit, I am taking a stand for my health, for the health of those around me, for the people who care about me, and most important, for myself.

________________________________________            ____________
My signature                                           Today’s date
Stop Date Tips

Now that you have committed to your Stop Date, it is important to plan. We have talked about it before, but it is now time to get specific. Here are some ideas that have worked for other smokers who have quit successfully. Read through them and pick out a few that would work for you. Record the ones that you’d like to try in your Stop Plan.

**Remove as many triggers as possible.**
- Make sure all cigarettes are destroyed. Do not keep any in your possession.
- Get rid of all smoking reminders such as lighters, ashtrays, etc.
- Avoid your favorite smoking spots.
- Brush your teeth frequently.

**Enlist support from the people helpful to you.**
- Talk to an ex-smoker or two. Find out how they stopped.
- Talk to a friend or relative about the kind of support you will need as you quit.
- Reach out to a group of others who have decided to stop smoking.

**Change your usual routine.**
- Drink lots of water.
- Drive a different route to work.
- Don’t sit in your favorite smoking chair.
- Keep busy and give your hands something to do.
- Eat in a different place.
- Take a brisk walk and breathe deeply.
- Get plenty of rest; go to bed early.

**Practice thinking differently about smoking.**
- Just take it one day at a time, one hour at a time, or one urge at a time.
- Review your WANT TO list; remind yourself of the benefits you are gaining.
- Remember that “just one” cigarette will undo your hard work and preparation.
- Celebrate and reward your successes…especially the small ones.
- Keep saying to yourself, “I am smoke free.”

**FOOD FOR THOUGHT:**
You might be resisting writing out your intentions. This is a common response. “Oh, I don’t need it written down.” “It is overkill.” “I can remember the important stuff.”

The truth is that writing out your intentions and goals takes your hopes and transforms them into resolve and ultimately into results. We encourage you to give yourself the best chance for success.

**Write out your Stop Plan! Just do it!**
Dealing With Urges

Some smokers report that they “just quit and didn’t have a single craving afterward.” We are sure they are very nice people, but it is hard not to hate them!

Urges and cravings are normal. By smoking, you have trained your brain and your body to expect and compensate for the regular intake of smoke and nicotine. Of course it is hard and uncomfortable…your body feels like something is wrong! It is going to take some time to convince your body to buy in and support your new smoke-free lifestyle.

Please know that many, many ex-smokers report that quitting was not nearly as hard as they had feared. Hold on to that thought. This might be your story too! So …

Planning for urges and cravings is essential. If you have no plan, a cigarette will become your only option. The good news is that all you need to remember are the five Ds.

The Five Ds!

- Drink water
- Delay the craving
- Do something else
- Deep breathe
- Discuss with a friend

Remember:
If your cravings are so strong that the five Ds are not doing the whole job, remember that you are craving nicotine, NOT a cigarette.
Reach for a nicotine replacement option! (See Lesson Two)
Rewards and Celebrations

Fact 1: Making the transition from smoker to smoke free is among the most difficult challenges a human being can ever undertake.

Fact 2: Nonsmokers do not understand Fact 1.

Fact 3: Ex-smokers often forget Fact 1.

An important part of staying smoke free is being able to remember and acknowledge all of the work it has taken to get this far. One way back to cigarettes is to allow yourself to forget everything you have accomplished and everything you have gained. If you are unwilling to wallow in your accomplishment or, perhaps, begin to think it was somehow “no big deal,” you are cheating yourself of the power of this extraordinary experience.

Being smoke free deserves and needs to be a significant and ongoing source of pride, strength, and confidence. For many people, feeling proud and confident is an odd and uncomfortable experience. An easy and enjoyable way to combat these feelings is to reward and celebrate all aspects of being smoke free … the big things … the little things … the things only you know are important!!

<table>
<thead>
<tr>
<th>When you</th>
<th>You could</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay a craving</td>
<td>Buy fresh flowers</td>
</tr>
<tr>
<td>Choose not to smoke after an argument</td>
<td>Chat with a friend</td>
</tr>
<tr>
<td>Decide not to bum a cigarette from a coworker</td>
<td>Buy new shoes</td>
</tr>
<tr>
<td>Avoid a situation where you know you’d want to smoke</td>
<td>Have a one-minute parade in your own honor with confetti and noisemakers</td>
</tr>
<tr>
<td>Say “no, thank you” when offered a cigarette</td>
<td>Eat chocolate</td>
</tr>
<tr>
<td>Recommit after a lapse</td>
<td>Plant a tree</td>
</tr>
<tr>
<td>Wait for an urge to subside on its own</td>
<td>Get a massage</td>
</tr>
<tr>
<td>Have a glass of wine without smoking</td>
<td>Listen to your favorite song</td>
</tr>
<tr>
<td>Buy a box of toothpicks instead of cigarettes</td>
<td>Take a candlelit bath</td>
</tr>
<tr>
<td>See a cigarette somewhere and don’t pick it up</td>
<td>Declare your quit date a monthly holiday</td>
</tr>
<tr>
<td>Visit your in-laws without taking a smoke break</td>
<td>Put a gold star on your bathroom mirror</td>
</tr>
<tr>
<td>Leave a party early because you might smoke</td>
<td>Play with a puppy</td>
</tr>
<tr>
<td>Really want one…but don’t do it</td>
<td>Visit a museum</td>
</tr>
<tr>
<td>Remember all the reasons you have to be smoke free</td>
<td>Feel grateful</td>
</tr>
</tbody>
</table>

By celebrating and rewarding your smoke-free choices, you are quickly filling up your new smoke-free file in your internal Filing Cabinet.
## My Stop Plan

<table>
<thead>
<tr>
<th>Phase</th>
<th>Actions I will take</th>
<th>Plan B (if needed)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Getting Ready</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjust environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicotine replacement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denial story</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>My Stop Date</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceremony</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urge response</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends and family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Staying on Course</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urge response</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withdrawal coping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Danger zone strategy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relapse prevention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Celebration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rewards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Important:**

If you don't outline a Plan B and you begin to struggle, Plan B will automatically be to smoke a cigarette! Plan ahead.
If children don’t like being in a smoking room, they’ll leave …
(and regarding infants who can’t leave) … at some point they begin to crawl.

—R. J. Reynolds Tobacco Company chairman
Practice and Exercises

Read

• Barbara Vos’s story, page 87
• True Emotions article, page 88

Write

• Sign the Commit to Quit Agreement, page 61
• Fill out your Quit Plan, page 65
• Track your progress and success in your Smoking Awareness Journal, page 69

Do

• Quit smoking this week.
• Add exercise to your daily routine.
• Use your Stop Plan to help with urge responses.
• Keep deep breathing and drinking water.
• Remember to celebrate and reward yourself.
Beyond the physical, most ex-smokers report that the most incredible benefit they have received by quitting is the knowledge that they could do it. Conquering cigarettes means that nothing is impossible!
# Smoking Awareness Journal

## Week Three

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of cigarettes</th>
<th>How have you modified your smoking pattern? Be as specific as possible.</th>
<th>Describe any feelings, thoughts, and anxieties you experience as you reduce and stop smoking. What makes you want to smoke? How are you handling the urges?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Smoking Awareness Journal

### Week Three

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of cigarettes</th>
<th>How have you modified your smoking pattern?</th>
<th>Describe any feelings, thoughts, and anxieties you experience as you reduce and stop smoking. What makes you want to smoke? How are you handling the urges?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This week, what did I do well?

What did I struggle with?

What do I intend to do differently next week?
Smoking harms nearly every organ of the body, causing many diseases and reducing the health of smokers in general.

—U.S. Department of Health and Human Services. The health consequences of smoking: a report of the Surgeon General. Bethesda (MD); U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2004
Lesson Four

Medical

• Benefits of stopping

Motivation

• Preventing relapse
• Setting new goals

Planning

• Quit bonus calculation
• Course evaluation
Benefits of Stopping

**Within 20 minutes of your last cigarette:**
- You stop polluting the air with dangerous second-hand smoke.
- Blood pressure drops to normal.
- Pulse rate drops to normal.
- Temperature of hands and feet increases to normal.

**24 hours:**
- Chance of heart attack decreases.

**48 hours:**
- Carbon monoxide level in blood back to normal.
- Oxygen level in blood increases to normal.
- Nerve endings adjust to the absence of nicotine.
- Ability to smell and taste things is enhanced.

**72 hours:**
- Bronchial tubes relax, making breathing easier.
- Lung capacity increases.

**2 weeks to 3 months:**
- Circulation improves.
- Walking becomes easier.
- Lung function increases up to 30%.

**1 to 9 months:**
- Coughing, sinus congestion, fatigue, and shortness of breath all decrease.
- Cilia regrow in lungs, increasing ability to clean the lungs and reduce infection.
- Body’s overall energy level increases.

**1 year:**
- Heart disease death rate is halfway back to that of a nonsmoker.

**5 years:**
- Heart disease death rate drops to the rate for nonsmokers.
- Lung cancer death rate decreases halfway back to that of nonsmokers.

**10 years:**
- Lung cancer death rate drops almost to the rate for nonsmokers.
- Precancerous cells are replaced.
- Incidence of other cancers decreases: mouth, larynx, esophagus, bladder, kidney, pancreas, etc.
Preventing Relapse

On the road to becoming truly smoke free, you might encounter bumps, roadblocks, and detours. If this happens, your job is to get back on the right road as soon as you can. Not all detours are the same, and it can be helpful to know the differences.

**A LAPSE,** also known as “Ooops!”

You decide to smoke one or maybe a few cigarettes, but within a very short period of time, you return to being smoke free. A lapse can last as little as a few minutes or up to a day or two.

**A RELAPSE,** also known as “Return to Square One”

You decide to smoke, and within a short period of time you are back to smoking at the same level as before you started the quitting process. There is a sense that you need to re-commit and start over.

**A COLLAPSE,** also known as “I can’t do this!”

In addition to deciding to smoke and quickly returning to your pre-quit level, you lose faith in yourself and your ability to quit. You use the bump in the road as proof that you can’t and might not ever be able to become smoke free. You are worse off than before you attempted to quit.

The Road to Cigarettes

1. The ex-smoker entertains the idea that there exists a vague possibility of smoking again some time in the future.

2. The ex-smoker accepts the notion that such a possibility exists and searches for those certain conditions that would provide the permission to smoke.

3. This vague possibility results in the ex-smoker anticipating, perhaps even fantasizing about the smoking experience.

4. The anticipation transforms into craving which continues to build until intolerable levels are reached.

5. The ex-smoker now reevaluates how vague the possibility to smoke really is. The criteria for smoking again becomes less vague and now includes more likely possibilities.

In conclusion…

**Vague Possibility** leads to **Craving,** which leads to **Clear Permission** which leads to **Smoking**...
Setting New Goals

Becoming smoke free often brings challenges you can’t even anticipate quite yet. As time goes on, you will need to make adjustments to old outdated patterns. As these new situations and feelings become apparent to you, you can use the following list of criteria to write results-oriented goals.

Well written goals are Words that trigger Images that trigger Feelings which are recorded as a Real Experience.

**Personal.** It has to be about you: your actions, reactions, behaviors, or standards. To goal set for a change in someone else will not work!

**Positive.** Goal set for things you want rather than what you don’t want because “you move toward and become like that which you think about.”

**Present Tense.** Your goals need to be written as if they are already complete; this is what causes your internal creativity to turn on. This point is so important that it needs to be repeated…write your goals as if they are done!!

**Precise.** One-sentence sound bites…no paragraphs! Pick words that are very clear, not general. For instance, the word *terrific* is more powerful than *good,* and *serene* is stronger than *quiet.* You can’t have what you won’t ask for!

**Motion Words.** Use words that end in *-ly* where possible. For example, try using words like *easily,* *effortlessly,* *joyfully,* *consistently,* and *freely.*

**Emotion Words.** The stronger the emotional impact of your goal statements, the better they will stick. Pick feeling words that are powerful for you…ones to which you react positively.

**Achievement Oriented.** Not ability oriented. Do not use the words *can* or *will.*

**Realistic.** Don’t set the goal so far away that you can’t even picture it or that it creates fear…but not so close that no motivation energy gets generated!

**Examples:**

- *Being smoke free clearly demonstrates my love for my family and myself.*
- *My trust in myself allows me to easily meet all challenges with grace and confidence.*
- *I enjoy keeping my desk organized and feeling the pride and effectiveness that follows.*
- *Because of the way I love and appreciate my kids, they learn to love and appreciate each other.*
- *My most nurturing relationship is with myself.*
- *I am smoke free.*
**Quit Bonus Calculation**

Stopping smoking puts more money in your pocket.  
Consider it your quit bonus!  
How much will you get?

**Amount I Smoke per Day**

<table>
<thead>
<tr>
<th>Price I Pay PER PACK</th>
<th>1/2 pack</th>
<th>1 pack</th>
<th>2 packs</th>
<th>3 packs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>month</td>
<td>year</td>
<td>month</td>
<td>year</td>
</tr>
<tr>
<td>$3.00</td>
<td>$45</td>
<td>$540</td>
<td>$90</td>
<td>$1,080</td>
</tr>
<tr>
<td>$3.50</td>
<td>$53</td>
<td>$630</td>
<td>$105</td>
<td>$1,260</td>
</tr>
<tr>
<td>$4.00</td>
<td>$60</td>
<td>$720</td>
<td>$120</td>
<td>$1,440</td>
</tr>
<tr>
<td>$4.50</td>
<td>$68</td>
<td>$810</td>
<td>$135</td>
<td>$1,620</td>
</tr>
<tr>
<td>$5.00</td>
<td>$75</td>
<td>$900</td>
<td>$150</td>
<td>$1,800</td>
</tr>
<tr>
<td>$5.50</td>
<td>$83</td>
<td>$990</td>
<td>$165</td>
<td>$1,980</td>
</tr>
<tr>
<td>$6.00</td>
<td>$90</td>
<td>$1,080</td>
<td>$180</td>
<td>$2,160</td>
</tr>
<tr>
<td>$6.50</td>
<td>$98</td>
<td>$1,170</td>
<td>$195</td>
<td>$2,340</td>
</tr>
<tr>
<td>$7.00</td>
<td>$105</td>
<td>$1,260</td>
<td>$210</td>
<td>$2,520</td>
</tr>
<tr>
<td>$7.50</td>
<td>$113</td>
<td>$1,350</td>
<td>$225</td>
<td>$2,700</td>
</tr>
<tr>
<td>$8.00</td>
<td>$120</td>
<td>$1,440</td>
<td>$240</td>
<td>$2,880</td>
</tr>
</tbody>
</table>

I plan to use my quit bonus to …
Practice and Exercises

Read

• Review binder and personal notations periodically.

Write

• Set goals to support staying smoke free.
• Continue to document your progress and feelings.

Do

• Practice deep breathing.
• Keep exercising and drinking water.
• Use your Stop Plan to help with urge control.
• Celebrate and reward yourself.
• Join the Relapse Prevention Support Group.
  • Community
  • Relapse prevention
  • Coping skills
  • Success sharing
# Smoking Awareness Journal
## Week Four

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of cigarettes</th>
<th>How have you modified your smoking pattern?</th>
<th>Describe any feelings, thoughts, and anxieties you experience as you reduce and stop smoking. What makes you want to smoke? How are you handling the urges?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Smoking Awareness Journal  
Week Four

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of cigarettes</th>
<th>How have you modified your smoking pattern?</th>
<th>Describe any feelings, thoughts, and anxieties you experience as you reduce and stop smoking. What makes you want to smoke? How are you handling the urges?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This week, what did I do well?

What did I struggle with?

What do I intend to do differently next week?
Roger Sako

“The Pleasure Isn’t Worth It”

When I first started smoking, there wasn’t no warnings about lung cancer, about nicotine being the most addictive substance on earth. And you get gum disease and you can die from smoking. Back in the ‘50s, they [tobacco companies] used to advertise in everything: TV, billboards, radio, everything, but they never mentioned anything about it could kill you.

When I started smoking, I was 15 or 16. Everybody, all the people I ran around with, we smoked. We used to play poker, and we didn’t have that much money, so we would play for cigarettes. Five or six of us would all sit around and play poker with cigarettes.

I always thought: I’ll never get cancer, my dad smoked all his life, he never got cancer, I’m not going to get it. And then boom: I started losing weight, I had pain in my chest, couldn’t swallow, and I went down and had a chest X-ray. That’s when the lung tumor showed up. This came right out of the blue. Boom, it just hit me just like that. No warning. I was in the hospital eight days. The last day I was there, I had my first chemotherapy. And then I started my radiation therapy, and the brain tumors shrunk. Those brain tumors I got from the lung cancer spreading. They shrunk but the doctor tells me they can always come back.

I try not to think about dying, but it’s hard because I’m run down, tired all the time, it hurts to breathe or swallow, and I have trouble maintaining my weight. I have to take pills in order to get an appetite. It’s hard to make yourself eat when you don’t feel like eating, it’s probably one of the hardest things to do.

Every day, I’m just surviving. I take my medication, and hope it’s doing good. It’s been almost six months since I’ve been diagnosed, doctors have told me six to eight months, max. In August, I asked: “Will I see another Superbowl?” I want to see the 49’ers win one more Superbowl. But that six to eight month period, it’s coming pretty quick now.

I think half the reason people don’t believe what’s bad about smoking is because it took 35 years for me to develop that cancer. 100,000 men and 100,000 women get lung cancer every year, small-cell lung cancer. It’s gotta be all from smoking. I went back to the Smoking Cessation group to see if I can get through to people because they could end up like me. Three people who heard me tell my story quit smoking.
If you want to quit smoking, you have to be disciplined, you have to really commit yourself. Right off, when you wake up, you want that cigarette. And you think it’s pleasure you get from smoking it. That pleasure you get from smoking, I think it’s kind of real and kind of an illusion: It’s real because you know you’re satisfied, but it’s an illusion because all you’re doing is satisfying your nicotine urge, to get that nicotine level back up in your blood.

My dad smoked like a chimney. I remember him going to a vending machine: He stuck in a quarter, and then inside the pack there was like two or three pennies, inside the cellophane wrapper. You stick a quarter in and your change was already in the pack. What he’d do is give the pennies to me and my two sisters. Back in them days, that was the late ‘40s and early ‘50s, a couple pennies and you were rich. I was so young I didn’t think about smoking, I wanted the money.

If you’re smoking, get your head straight and quit. It’s just not worth it to go through the pain and the misery that I’m going through. Once you have cancer, your whole life is completely turned around. It’s only geared to survive for the time that you have left. Nothing is normal anymore. The pleasure you get versus what I have...there’s just no comparison, it’s just not worth it. Me, it’s gonna cost me my life.

Small-Cell Lung Cancer

How can we measure a single person’s worth to his or her friends, family, and society? What is the value of years of life lost to cancer, and what would people do if they had a second chance?

Roger Sako was one of more than 150,000 people who died from lung cancer in the United States in 1996. This number means that more than 400 people every day lose their battle with this disease. We know that 80–90% of these cases are linked to prolonged tobacco exposure,¹ making lung cancer largely a preventable disease.

In the late 1800s, before cigarettes were factory manufactured and easily available in large quantities, lung cancer was a rare disease.² It was so uncommon that if a lung cancer was observed at autopsy in a university hospital, the medical students would be told to gather around to observe this “oddiity.” Smoking rates increased dramatically beginning in the 1920s and did not begin to decline until the Surgeon General’s report was published in 1964. This report clearly linked cigarette smoking with lung cancer, but the first written warning about lung cancer did not appear on a pack of cigarettes
until the mid 1980s, almost 20 years later. Why was there such a long delay? Recently, an alarming increase in teenage smoking rates is beginning to alter this downward American trend in smoking.

Globally, over a billion people smoke. Because of this epidemic of cigarette use, lung cancer is now estimated to be the most common cancer in the world. The World Health Organization estimates that lung cancer and AIDS will be the two leading causes of premature death in adults in the 21st century.

Doctors don’t routinely screen for lung cancer, the way they do for other cancers, including cervical (Pap smear), breast (mammogram), prostate (PSA test), and others. The National Cancer Institute studied screening for lung cancer with chest X-rays and sputum tests in male smokers and found no benefit in reducing deaths from lung cancers that were detected. Most smokers who develop lung cancer only see a physician when the tumor is large enough to cause chest pain, weight loss, increased cough, blood in their sputum, or other symptoms. In fact, only about 10% of these cancers are spotted in people who have no symptoms and get a chest X-ray for some other reason. If you are smoker with any of these symptoms, see your physician for an evaluation.

How do lung cancers develop? Over many years, tobacco smoke causes inflammation and damage in the airways. Tobacco carcinogens (cancer-causing substances) bind to the DNA in millions of lung cells and cause multiple mutations to accumulate. These DNA-carcinogen complexes (adducts) may prevent the usual repair of damaged DNA, leading to abnormal cell behavior and unrestricted growth. Normal, delicate lung cells are altered until, after 20 to 30 years, a population of cells with many mutations multiplies out of control and is able to develop a blood supply, digest through local tissue, and then break away and travel to other sites in the body (metastasis). Early lung cancers remain small and stay in place for years without causing symptoms, until eventually they get large enough (lemon sized) to cause discomfort. Only approximately 30% of people who get lung cancer have it caught early enough to benefit from surgery—the rest have metastatic disease that has traveled beyond the small area a surgeon can remove in an attempt to cure the patient.

Lung cancer is divided into two main categories—small-cell and non-small-cell lung cancer. Small-cell lung cancer accounts for about 20% of all cases and is believed to originate from nerve cells present in lung tissue that are important in cell-to-cell communication. As Roger’s story describes, it’s a cancer that travels quickly to brain and
bone and is only rarely detected early enough to be cured by surgery. In comparison to non-small-cell lung cancer, these tumors have a rapid tumor doubling time that is measured on average at about 30 days. This means that the total number of cancer cells in a tumor doubles every month, explaining why this disease is often rapidly fatal if left untreated. The majority of patients with small-cell lung cancer will initially respond to chemotherapy with improvement in symptoms, quality of life, and short-term survival. Radiation therapy is an important part of treatment for patients that have disease confined to one part of their chest. Overall, the earlier this cancer is noticed and treated, the better the chance is for response to treatment and for survival. If you’re a long-term smoker and notice new symptoms such as cough, blood in your sputum, chest pain, shortness of breath, or others, seek medical attention right away.

We can’t fully predict which smokers will get lung cancer, and we don’t have a proven screening test to detect it in its early stages. Recent data suggest that chest CT (computed tomography) scanning may significantly improve early detection of this disease and enhance surgical removal. The best means of ridding ourselves of this epidemic is through prevention and smoking cessation. The good news is that quitting will dramatically reduce your lifetime risk of getting lung cancer, but only after many years of being smoke free. Many of the mutations found in the airways of most smokers are reversible. So the earlier you quit, the more benefit you get.

Roger Sako was 52 years old when he died, with years of productive life to look forward to. Roger always thought he’d never get lung cancer—perhaps it was too terrifying to think about, or perhaps the risk seemed low enough that it wasn’t worth the effort to quit.

What would he say now?

References:
Smoking cigarettes with lower machine-measured yields of tar and nicotine provides no clear benefit to health.

—U.S. Department of Health and Human Services,
The Health Consequences of Smoking:
Barbara Vos

I was born in Long Island, New York, but I grew up in Brooklyn. I’ve lived in San Francisco since 1976, the year after my mother died. I went back to take care of her when she found out that she had a rare form of cancer. It killed her in six months. She was a smoker and she never quit. A pack and a half, two packs a day, that was how she smoked; she was in a cloud all the time. I was breathing second-hand smoke my whole life. Of course, I thought I’d never smoke, because I hated my mother’s smoking.

When I was in art school, I started rolling cigarettes for this friend of mine. I’m very dexterous and I like doing things with my hands. I smoked just one cigarette that was rolled and I felt tough, tomboyish. On my own, 17, in college, I was scared. Smoking definitely has a lot to do with maintaining a stance to stave off fear. You leave for college and two months later you’re smoking, the first time you’re away from the person that smokes a lot.

I hold a lot of anxieties in my upper respiratory system and my shoulders. Whenever I focused on my breath, I would have anxiety because of all the years of smoking, but also because I had asthma. I remember having an asthma attack and my mother smoking at the same time. I remember walking in the country in some pristine beautiful place, and the fog, the mist in the morning, something so frail and beautiful, so fragrant, beautiful, and fine, and having that smell of smoke. I remember it being so depressing to have her trailing behind everybody to hide that she was smoking. My mother had a lot of shame and she just added smoking into that big lot of shame that she had. If you already have shame in you then smoking is a pretty handy way to feel it, but it isn’t a way of dealing with it; it’s just a way of letting that pain be there and suffering with it.

She always wanted to quit. She never could and in that pattern of wanting to quit and not being able to, I felt like I was doing the same thing that she was doing. I was keeping her alive by smoking. What made it so hard for me to quit was letting go of her and doing something that she hadn’t done.

What really shifted it for me was having a steady stable place, with all kinds of people with different stories; everybody’s trying to be truthful and open, and trying to get help to do something that they need to do and want to do. It is what got me to quit: going through all of the practice, doing all the exercises and really letting it be the focus. You have to really focus on not smoking, and do good things for yourself that help you not smoke. When you’re troubled, it’s hard to do those good things for yourself instead of
smoke. It could never be a negative, it has to be like lifting up out of something, and it means taking care of yourself, which was hard for me to do.

Before, I used to go, “Oh well, I think I’ll exercise,” and then I’d go have a cigarette. You can’t exercise right after you have a cigarette. I never did aerobic exercise before about three months ago. I never knew what it was really like to sweat. Deep abdominal breathing if you’re smoking is too scary. You just couldn’t, because when you’re taking abdominal breaths, you’re really thinking about your body. I have another chance now to have another body, to have a healthy body. My breathing has changed a lot. I can relax. My diaphragm used to hurt all the time; now I can relax it. I feel a spaciousness in my lungs. That is just one of the best things about quitting smoking. Only now am I even just beginning to know what it really feels like to be relaxed. Smoking is the fool’s relaxation; it’s like fool’s gold.

There’s so much pain in smoking, it reminds you of your pain. If you have had a terrible thing happen, a crisis, and you start smoking, then it just keeps reminding you of that crisis. I used to think there was something wrong about being in a bad mood and that I should have a cigarette. Now I get in bad moods and I don’t like it, but I’m more willing to not be perfect and not think that I better smoke a cigarette because I should be perfect. I feel so much freer from that repetition of anxiety and pain.

As a nonsmoker, you can focus and be in something longer, so it pushes your limits a little bit more. Your anxiety might come and then it goes down, but you’re still staying with it. It does let you develop more feelings, like feeling lonely. Things that would be controlled by having a cigarette can be explored more and then solved in some way. To realize that you’re mad at somebody and to let it be fluid, not keep it at a certain point, not decide “okay, well I’m mad,” and just puff away at a cigarette, but to say “I’m mad” and then let it be, see what’s gonna happen next.

That’s such an amazing thing: to let the natural course of an emotion go free, without trying to control it with cigarettes.

**True Emotions**

Smokers frequently light up to relieve stress and anxiety and eventually use cigarettes to control their moods and reactions. We all face stressful situations and deal with them in different ways. The routine of taking a break, removing yourself from stress, and lighting up can provide such immediate relief that for many people it’s hard to imagine not having this outlet. In fact, cigarettes are so readily available that many smoking adults may have never faced stressful
situations without cigarettes. In this way, smokers use nicotine to adapt to their changing environment, but it may also inhibit their ability to deal with stress in a natural way.

How does this happen? Nicotine is a water-soluble chemical, and since 90% of your body is made of water the nicotine is distributed to all tissues. It is structurally similar to acetylcholine, one of the most common and important neurotransmitters in the brain. Neurotransmitters are chemicals produced and released by nerve cells that serve as signals to other nerve cells, directing their behavior.

When you light up a cigarette and inhale deeply, nicotine is attached to tar droplets and is immediately distributed to the millions of small air sacs in your lungs. Your lungs have a huge surface area the size of a tennis court, and like rain on a tennis court, even a short downfall saturates this surface area very quickly. Nicotine enters the bloodstream and is pumped to the left side of the heart and then sent directly to the brain. This massive and rapid upswing in nicotine is part of the reason that nicotine is so addictive and so effective at calming smokers. Once nicotine is distributed in the brain, it binds to millions of receptors and changes nerve cell activity, causing the release of many other neurotransmitters. Nicotine has a surprising number of properties, as seen below. Few drugs available today have as many profound effects.

<table>
<thead>
<tr>
<th>Neurotransmitter</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dopamine</td>
<td>Pleasure, appetite suppression</td>
</tr>
<tr>
<td>Acetylcholine</td>
<td>Arousal, cognitive enhancement</td>
</tr>
<tr>
<td>Beta-endorphin</td>
<td>Reduction of anxiety, tension</td>
</tr>
<tr>
<td>Serotonin</td>
<td>Mood modulation, appetite suppression</td>
</tr>
<tr>
<td>Vasopressin</td>
<td>Memory improvement</td>
</tr>
<tr>
<td>Noradrenaline</td>
<td>Arousal, appetite suppression</td>
</tr>
</tbody>
</table>

Once the brain is exposed regularly to nicotine, nerve cell receptors are changed and create symptoms of withdrawal if a constant level of the addicting substance is not
maintained. Nicotine has a half-life of two hours, meaning that half of it is gone after two hours. When you sleep overnight, the constant high level of nicotine in your bloodstream during the day drops to a low level until that first cigarette of the morning, when nicotine levels shoot upward again.³ This explains why the first cigarette is often the most pleasurable for smokers, and the one they feel they can’t do without. If levels drop during the day, intense cravings, mood swings, and sometimes anxiety may develop until this discomfort is relieved with the next cigarette. This discomfort may be caused by the release of noradrenaline from a withdrawal center (locus coeruleus) in the brain stem that gets activated if chemicals like cocaine, nicotine, alcohol, or opiates are not present.⁴ Feeling bad and knowing relief is immediately available only solidifies the central role smoking plays in so many lives.

Multiple studies confirm that nicotine causes a sudden release of dopamine (another neurotransmitter) in the brain.⁴,⁵ This release appears highest in the nucleus accumbens, a cluster of cells in the reward pathway of the brain that is important for pleasure and mood regulation. Dopamine is also released by other stimuli—such as sex, chocolate, or exercise—that can cause intense pleasure. This “dopamine hypothesis” is very important in the regulation of mood, and people with depression may have chronically low levels or abnormal regulation of dopamine, serotonin, or noradrenaline. Cigarette smoking is more common among people with depression, and depressed smokers have a significantly harder time quitting.⁶,⁷ Recent studies have also demonstrated that smokers have reduced levels of a major enzyme that breaks down dopamine in the brain after its release. This enzyme, monoamine oxidase (MAO) B, is not inhibited by nicotine itself, so some other compound in cigarette smoke is causing this change.⁸ Inhibitors of this enzyme (MAO inhibitors) are used as an effective class of antidepressants and function by maintaining higher levels of dopamine in the brain (as smoking does). Rarely, smokers can develop profound depression during attempts to quit. This rationale helps to explain why an antidepressant medication (Wellbutrin SR) was found to significantly improve smoking cessation, and why another antidepressant (nortriptyline) may also be effective. Wellbutrin SR, now called Zyban, selectively increases dopamine production in the brain and appears as effective as nicotine replacement therapy even when used by smokers without documented depression.⁹ This medication is well tolerated and easy to use, and may have minor side effects such as insomnia or headache. Rarely, patients may experience seizures if they’re predisposed to them, so the medication should be taken only under the guidance of a physician.
The effect that nicotine has on your brain is dramatic and self-reinforcing. Approximately 25% of adult Americans smoke, compared to the 60–90% of people with schizophrenia who smoke.\textsuperscript{10, 11} Perhaps these patients are “self-medicating” the distress caused by their illness. What’s more, people with other psychiatric problems such as anxiety, depression, or other addictions have a lower rate of quitting successfully, and they too may use nicotine in an attempt to maintain an emotional balance.\textsuperscript{7} Counseling and medications should be sought in these cases to maximize the chance of quitting.

Only you understand your thoughts and feelings and the stress you face at home or at work. As Barbara says, imagine the natural course of an emotion taking place if you don’t blunt your true self with cigarettes. In Barbara’s work as an artist, the full range of creative passion is expressed through her senses and mind and hands. In the photograph, Barbara is sitting in front of a painting she created as a nonsmoker, and each stroke of her brush and choice of color was influenced by mood and emotion and memory. Allowing herself to feel without blunting this process is reflected in the beauty of her art and affects all other parts of her life. As long as perceptive systems are flooded by nicotine, the unique expression of one’s creative process is disturbed.

If you are smoking now, take a moment to imagine the potential for new experience and expression that will be available to you when you become more completely available to yourself, undistorted by a chemical that artificially represses and stimulates.

No other brain in the world reacts like yours or has your specific memories and means of adapting to your surroundings. While stress and tension may seem like feelings you want to avoid, they’re also a central driving force for creative expression. Consider the possibilities that could arise when you are no longer chemically altering your thoughts and feelings and can live and express yourself more fully.

Who knows what you can create without nicotine!

References


A tobacco product is, in essence, a vehicle for delivery of nicotine.

—R. J. Reynolds research memorandum
Breathing, Smoking,
and the Stress Response

Breathing is the foundation of life. The quality of our breath directly affects the quality of our lives. When something like smoking cigarettes leads to breathing problems, the effects on daily life can be substantial. For example, people who suffer from chronic obstructive pulmonary disease (COPD) may need to carry an oxygen tank. They become limited in how far or quickly they can move, their movement is impeded by the inconvenience of carrying or pulling a bulky tank, and they may feel self-conscious about being dependent on oxygen.

Every cell and system in the body needs oxygen to function. If there is a shortage of oxygen caused by lung obstruction, digestion can be affected, muscles cramp more easily, and fatigue, depression and anxiety may be experienced. The lungs are organs of elimination, helping the body to rid itself of toxins. Better breathing therefore also helps to prevent toxic overload.

Smokers may try to ignore symptoms related to smoking in order to maintain enough comfortable denial to smoke. They may avoid exercise because it, too, can exacerbate shortness of breath or muscle cramping, calling uncomfortable attention to the toll tobacco smoke is taking on their health. Lack of exercise can then lead to problems with muscle tone, joint and flexibility problems, constipation, etc.

Becoming aware of a problem or a disturbing symptom is an important step in breaking out of denial and addressing and overcoming the problem. In working to become smoke free, you may find it useful to include breath awareness in a plan of action. Pay attention to how you feel when you are inhaling the cigarette smoke. Notice what you are feeling in your chest and your throat. Bring as much awareness to what you are doing as possible. Be aware of any breathing problems and consider the improvements that can occur with smoking cessation.

Many smokers also report using cigarettes to manage symptoms of stress. When a threat is perceived, whether real or imagined, the body goes into survival mode to either fight or flee from the danger. The stress response includes dramatic physiologic
changes. The heart beats faster to get blood to the necessary tissues quickly in order to deliver oxygen and nutrients and clear waste products. Blood pressure rises. Breathing becomes rapid and shallow. The pupils dilate. Muscles tense for flight or protection. Blood flow to digestive organs is constricted, and flow to the brain and major muscles is increased. Adrenaline and cortisone are released into the circulation. The liver releases stored sugar into the blood to meet the need for increased energy. Blood flow to the extremities is constricted, and the hands and feet become cold. The body perspires to cool itself.

The relaxation response is the physiologic opposite of the stress response. Breathing becomes deep and slow, heart rate decreases, blood flow to the extremities increases, the metabolism slows down, and muscles relax. Eliciting just one characteristic of the relaxation response can reverse the stress response and lead to relaxation and rejuvenation. The easiest and most powerful tool for reversing the stress response is to practice deep breathing. Slowing down and deepening the breath into the belly or abdomen creates a bridge from the stress to the relaxation response. As the heart slows and blood pressure becomes normalized, sleep deepens; energy, concentration, focus, and memory increase; and digestion improves.

Our natural state of breathing is to take the breath deep into the abdomen. As the diaphragm (the muscle separating the lung and abdominal cavities) moves down to create a vacuum in the lung cavity, this movement pushes the abdomen forward. When our breathing becomes shallow, stale air stagnates in the lower portion of the lungs. In chest or thoracic breathing, the abdomen never completely relaxes. Breathing takes more effort and the rate increases.

Blood flow in the lower portion of the lungs is greater because of gravity. Also, compared with the upper part of the lungs, the lower third has almost two times the airflow. Abdominal breathing helps to lower the breathing rate, and because the most efficient part of the lungs is being used for richer and easier oxygenation of blood, the lungs don’t have to work as hard.

For many people, deep breathing is a skill that needs to be relearned. Reclaiming how to breathe deeply and efficiently enhances relaxation and generally improves health. For smokers, it can also be an effective technique to delay and ultimately quit smoking cigarettes.

Here are some exercises to get you started.
Breathing Exercises

Deep abdominal breathing:
Sit comfortably tall in a chair with your feet flat on the floor, about shoulder width apart.
Purse your lips and exhale as though you were blowing out a candle. Keep blowing until you can no longer exhale and then allow the breath to come back in naturally and effortlessly. The inhalation will be deep and go to the abdomen. Practice this exercise a minimum of three times daily with 5-10 deep breaths each time. Experiment using this practice to postpone or eliminate cigarettes.

Cleansing breath:
Sit or stand tall.
Take in as full a breath as you can, first filling the lower section of your lungs, then the middle, and then the top.
Puff a small breath out between pursed lips; pause and hold the breath and then puff out another breath.
Keep puffing and pausing until all the breath is exhaled.
Repeat three or four times.

Relaxing sigh:
Take in a breath and, at the same time, raise your shoulders up to your ears.
Hold the breath and the position of your shoulders for a few seconds.
Let your shoulders drop as you exhale the breath with a loud sigh. Repeat 8–10 times.

Deep breathing at the post office:
Sometimes we tell ourselves that there just isn’t time to learn and practice a new skill. It can be helpful to find ways to incorporate new habits into daily activities. A good example is using time when we must stand in line or wait for a bus or an appointment to practice a few deep breaths. Play with welcoming unexpected delays as an opportunity to practice the relaxing effects of slowing down and feeling grateful for the ability to revitalize by breathing fresh, smoke-free air.
Smoking Cessation:
Advice for Clinicians and Patients

The Problem
Tobacco use is an enormous public health issue and drains the US economy of greater than $80 billion in health care costs and lost productivity every year. Cigarettes are the leading cause of preventable cardiovascular disease, cause 1 out of every 3 cancers, and are the cause of the now most common cancer in the world - lung cancer. Lung cancer rates are increased even in patients smoking less than 5 cigarettes per day. Substantially more women die every year from lung cancer (<15% 5 year survival) than breast cancer (>60% 5 year survival). Furthermore, cigarettes cause the vast majority of cases of Chronic Obstructive Pulmonary Disease (COPD) which is significantly disabling, the 4th leading cause of death in the US and increasing in epidemic proportions.

Beyond these staggering and preventable health problems, the average smoker starts cigarette use as a teenager—a time of stress and search for self-identity and general lack of caring about long term health consequences. Many adults trying to quit have been a smoker longer than a non-smoker, and may not have developed significant skills in stress management or anxiety or anger control. These issues may surface with quit attempts and present a challenge for those actively engaged in this process. How do we help people facing these threats and move them toward successful cessation?

Nicotine addiction is a disease: cigarette smoking is the symptom.
It is now widely accepted that nicotine is as addictive as heroin and causes release of the “pleasure chemical” dopamine and other neurotransmitters in the brain within minutes of the first puff. Nicotine Withdrawal Syndrome is a well studied disorder in psychiatry and is characterized by anxiety, irritability, restlessness, cravings and in some cases depression—even in those without a prior history of depression.1 Put another way, smokers that are quitting and experience this syndrome have developed an acute psychiatric disorder and should receive medications (nicotine replacement therapy, Zyban, Chantix) to ease this discomfort just as any other patient with temporary acute symptoms would. If patients and physicians can recognize this simple fact and act accordingly it will ease the burden of this problem and speed smokers toward suc-
cessful quitting. Unfortunately, many medical schools don’t have a dedicated tobacco related disease curriculum, and many physicians subsequently don’t feel comfortable using these medications.

A “cold turkey” attempt at quitting is only likely to be 5% successful at 1 year—medications increase this success rate 5 to 7 fold or more and are safe. Why struggle without medications that are proven to be of benefit? Attitude is crucial to successful quitting. Patients must recognize that this is the single most important thing they’ll ever do for their health—it’s simply too important to give up on even if an attempt at quitting failed. The Wright Brothers crashed three times before flying successfully—they never gave up on their dream and carefully studied why they were unsuccessful with their earlier attempts. This analogy is used frequently at the Fontana Tobacco Treatment Center. Behavioral therapy to identify triggers and modify routines is an important part of the quitting process, and alcohol use or exposure to other people that smoke are clear risk factors for relapse. Smoking a single cigarette after quitting is highly predictive of full return to regular smoking. Patients who have underlying anxiety, depression or other disorders may need more intense intervention and active recognition and attention to these issues.

**Medications**

**Chantix (varenicline):** Chantix is available by prescription only, and is a nicotinic receptor binding medication. The drug both activates the receptor and blocks the effects of nicotine on the receptor. As a consequence of the receptor stimulation, nicotine withdrawal symptoms are relieved, and as a consequence of receptor blockade the rewarding effects of cigarettes that are smoked is diminished. The latter effect reduces the desire to smoke and, in the case of a lapse, may prevent continued smoking. Varenicline has also been shown to be effective in preventing relapse over 6 months.

The major side effects of varenicline are nausea, vomiting and insomnia. A variety of neuropsychiatric side effects including depression, psychosis and suicide have been reported, but the causal relationship between varenicline and these neuropsychiatric events has not been established as smoking cessation itself can be associated with mood disturbances. Smokers treated with varenicline should be advised about possible neuropsychiatric effects and monitored for events during treatment.

**Varenicline** is initiated in a dose of 0.5 mg per day for 3 days, then 0.5 mg twice
daily for 4 days, followed by a maintenance dose of 1 mg twice daily. Lower doses may be used if nausea is a problem at higher doses. Because varenicline is eliminated by the kidneys, dose reductions are required in the presence of severe kidney disease. The approved duration of treatment is 3 months, with another 3 months optional for prevention of relapse.

**Zyban (bupropion, Wellbutrin SR):** is an important antidepressant that also effectively alters dopamine levels in the brain and has demonstrated success rates of 44% or higher when studied in non-depressed patients. The pill is dosed at 150 mg for 3 days, then increased to 150 mg twice per day for 4 days before the quit date and continued for 8 to 12 weeks thereafter. It can be associated with a rare risk of seizure, and is only obtained by prescription. The most common side effects can be headache and insomnia, and it can easily be used with other nicotine replacement therapies (NRTs).

**Nicotine Patch:** this medication slowly releases nicotine and is available over the counter in strengths that vary from 7 to 21 mg/day. Patches come as 16 or 24 hour formulations, and patients typically start at the highest strength (21 mg) and taper over 8 to 12 weeks. The main side effects from patch can be local skin irritation and vivid dreams that require changing to a 16 hour formulation. The patch location should be rotated every day—never cut the patch as this will cause nicotine to evaporate. Nicotine levels are elevated in 1 to 2 hours after application—an important fact for highly dependent smokers that have intense morning cravings. For this scenario, short acting NRT (gum, nasal spray, inhaler) can be added to the patch with supervision. A study demonstrated that patch plus nasal spray was 51% successful at 6 weeks—greater than either modality alone. Further recent research demonstrates that multiple patches may be used at the same time for high dependency smokers that have failed other interventions. This approach is becoming more popular in the US and Europe and requires careful follow-up by a professional with experience treating nicotine addiction.

**Nicotine Gum:** The first NRT to be released, it comes in 2 and 4 mg strengths and has been proven to be effective. (4 mg the suggested starting dose at the FTTC). It can be combined with patch for patients experiencing intense cravings. This medication is often used incorrectly, and the instructions can be carefully reviewed with a pharmacist or other health care professional to maximize its effectiveness. Patients with jaw disorders or significant dental work should not use this medication, and reported side effects can include nausea or hiccups.
Nicotine oral inhaler. This effective therapy\(^5\) has the benefit of satisfying hand-to-mouth and oral activity that many smokers feel is important. Cartridges containing nicotine and menthol are placed inside a plastic holder that resembles a cigarette and puffed into the mouth and throat where nicotine is absorbed. Patients can use between 6 and 16 cartridges per day, and this can be combined with other forms of NRT particularly with nicotine patch. This method, if used alone, may be more effective with patients smoking < 10 cigarettes per day. Correct use is crucial—like other short acting NRT it should be used every 1 to 2 hours on a regular basis after the quit date to avoid overwhelming urges. Cough and throat soreness are reported side effects.

Nicotine Lozenges: lozenges are available in 2 mg and 4 mg strengths, and are placed in the mouth and dissolve so the nicotine is slowly absorbed over approximately 30 minutes. Smokers are instructed to choose their dose according to how long after awakening in the morning they smoked their first cigarette—those who smoke within 30 minutes are advised to use the 4 mg lozenge, while those who smoke their first cigarette at 30 or more minutes are advised to use the 2 mg lozenges. Use is recommended every 1 to 2 hours. The main side effects can be nausea, headaches or hiccups.

Nicotine nasal spray: This form of nicotine reaches the brain much faster than the gum and can be used alone or with the patch. The side effects can include nasal and sinus irritation and watery eyes, but this usually improves rapidly. Our clinical experience suggests this is most effective in highly addicted smokers, those smoking > 2 packs per day and those that have not responded to other therapies. Spray is available by prescription alone and can be used on an hourly basis and as needed with intense cravings.

Underdosing: The majority of smokers who are unsuccessful at quitting will relapse within the first 2 weeks—usually due to intense cravings. The medications listed above are aids to cessation—they ease the process and help it change from seemingly impossible to difficult but attainable (in many cases “easier than I thought!”) If patients relapse or slip within the first 2 weeks due to craving, our strategy and that of others\(^6\) has been to substantially increase nicotine replacement under supervision. Using this approach resulted an 80% complete abstinence rate while on therapy.\(^4\) This is important for patients to understand—that there are many ways to successfully re-treat a patient after they’ve failed in the past and that it’s never “too late to quit.”

Other Therapies: While there are many options for patients to choose from (hypnotherapy, acupuncture, aversion therapy, yoga, others), there is little data to suggest
that these are any better than medications alone. Our general approach has been to try not to steer patients away from options they may be interested in, but rather to suggest proven medication in addition to their other choices. Exercise is an important part of successful cessation for stress reduction and reclaiming health, and can include as little as walking just 10 blocks 3 times per week. Excellent stress management workshops are available for those that identify stress as an undeniable element in smoking, and Relapse Prevention Programs can help patients stay on track. Ultimately, successful quitters seem to replace smoking with something else they can enjoy, and this has ranged from exercise to knitting to volunteer work to a multitude of other creative options. The public library is a great smoke free place to investigate new hobbies or activities that can keep new ex-smokers on track.

A Word on Motivation: Quitting is the single most important action that smokers can accomplish for their health. Too many people wait until a significant tobacco-related disease spurs them to activity. For many cancer, infarction and stroke patients this can be a rapidly fatal mistake. Quitting represents release from an addictive substance that controls behavior every day and can substantially limit personal growth. It’s remarkable to see the transformations people achieve after quitting, often accompanied by a new sense of power and feeling that “if I can do this, I can do anything.” From a monetary standpoint, a 1 pack per day smoker who started at age 18 and quit at 48 ($7/pack = $2555/year) would have spent $76,650 over these 30 years. Even if cessation medications or counseling are infrequently covered by regular insurance, don’t allow this small hurdle to prevent you from substantial near and long term savings. Ultimately, quitting is something you should feel you want to do, rather than feel you have to do, and physicians, nurses and other health care workers can play an important role in helping patients down this crucial path toward better health, control and the dramatic prevention of frequently lethal diseases.

About the Fontana Tobacco Treatment Center (FTTC)

The UCSF Tobacco Education Center (TEC) was founded in 1999 by Paul Brunetta, MD., and Suzanne Harris, RN, CTTS. Since then, the center has offered comprehensive stop smoking and relapse prevention services. In 2007, Jeanne Fontana, a UCSF Medical Center patient, joined the stop smoking program. She was 61 years of age and suffered from a number of smoking-related diseases which required her to carry an oxygen tank.

Jeanne found the non-judgmental non fear-based approach of the program effective for her and she stopped smoking by the fourth week of the program. She became a regular participant in the relapse prevention support group including through a period where she did in fact go back to smoking. She was inspired in particular by Clarence Brown’s story to persist in working to become smoke free and lived without cigarettes for more than a year before she died in 2009.

Grateful to the center for helping her to overcome her dependence on cigarettes, Jeanne named the TEC as one of her beneficiaries. Her generous bequest will be used to honor the intentions she wrote in her trust: “My desire is to have the program continue to provide the help that I received to as many people as possible.”

Jeanne knew as well as any person who has experienced tobacco dependence what an incredibly powerful addition it is. Thanks to her generosity, the lives of hundreds of smokers who pass through the program may be saved. To honor her memory, the TEC has been renamed The Fontana Tobacco Treatment Center.
Services available at the FTTC include:

**The Stop Smoking Program:**
- Meets once a week for four consecutive weeks.
- Sessions present issues related to smoking and health, information on medications to ease withdrawal, an overview of neurobiology and dependence, and tools for building and sustaining motivation.

**The Relapse Prevention Support Group:**
- An ongoing drop-in group provides support to become and remain smoke free.
- Meets weekly for an hour and a quarter.
- Available to graduates of the Cessation Program, whether or not they are smoke free.
- “The aftercare group means we don’t get dropped; we get help building a smoke-free life.”

Contact resources for more information or to enroll in programs:
(415) 885-7895

www.ucsfhealth.org/tobaccotreatment
Biographies

Paul Brunetta, MD, is a clinical scientist at Genentech, Inc. Previously, he was a lung specialist and assistant clinical professor at the University of California, San Francisco (UCSF). His research and clinical interest were the diagnosis and treatment of lung cancer. Dr. Brunetta received undergraduate training in biology at Johns Hopkins University and his medical degree from Tufts University School of Medicine. He completed his medical, pulmonary, and critical care training at UCSF and served as medical chief resident at San Francisco General Hospital, where he began his friendship and collaboration with Suzanne Harris.

Suzanne Harris, RN, CTTS, is the nurse administrator of FTTC, which she cofounded with Dr. Brunetta in 1999. She is a former smoker with nearly 30 years of experience facilitating stop smoking and relapse prevention programs. Because she witnesses remarkable improvements in health and well-being when people stop using tobacco as well as the devastating impact of continued use, she has a passionate and long-term commitment to working with smokers. She holds certification as a Tobacco Treatment Specialist from the Mayo Clinic Nicotine Dependence Center in Rochester, Minnesota.

Dianne Derby, MS, was the vice president for Corporate Training and Development of Choice Performance, Inc. Her 15 years of experience as a corporate consultant, executive management coach, and experiential learning designer included the 10 years she spent as an internal consultant and trainer with the National Aeronautics and Space Administration (NASA). Her graduate work in organizational psychology at San Francisco State University led to her job at NASA, where she found herself coaching senior managers and executives through a series of significant organizational changes. In January 2002, Dianne, a lifelong nonsmoker, was diagnosed with lung cancer. Her medical journey led her to bring her corporate learning skills to those surviving cancer. In addition, she was committed to helping others avoid lung cancer, which meant helping as many as she could to stop smoking. Her generosity and determination live on in the pages of this workbook.

Lisa Kroon, Pharm.D. is a pharmacist and Professor of Clinical Pharmacy in the Department of Clinical Pharmacy in the School of Pharmacy at UCSF. She is the Medical Director of Smoking Cessation for the UCSF Medical Center. She practices in the UCSF Medical Center’s Adult Diabetes Clinic, Diabetes Teaching Center, and Adult Primary Care Clinic, where she cares for people with diabetes, chronic illnesses, and tobacco dependence. She teaches smoking cessation to pharmacy, medical and dental students at UCSF, preparing them to take an active role in tobacco treatment. Dr. Kroon's primary research and practice activities have been in the area of diabetes and smoking cessation. Other research interests include interprofessional health education and innovative models of patient care in the community pharmacy setting.

Robin Corelli, Pharm.D. is a pharmacist and Professor in the School of Pharmacy at UCSF. For the past 13 years, Dr. Corelli's primary research and practice activities have been in the area of smoking cessation. During this time, she has been actively involved as a smoking cessation counselor and has trained more than 4,000 health care providers (students and licensed clinicians in medicine, nursing, pharmacy, dentistry and respiratory therapy) to provide cessation assistance to their patients who smoke.
Resources

Web Sites and Phone Numbers
American Cancer Society: www.cancer.org/QuitTobacco
American Heart Association Smoking Cessation Resources: www.americanheart.org/smokingcessation
American Legacy Foundation: www.americanlegacy.org
American Legacy Foundation and Mayo Clinic Nicotine Dependence Center: www.becomeanex.org
American Lung Association of California: www.californialung.org/support/quitsmoking.shtml or call (800) LUNG-USA
California Department of Health Services
  • Smokers’ Helpline: www.nobutts.org
  • Telephone numbers:
    • English (800) NO-BUTTS
    • Spanish (800) 45-NO-FUME
    • Korean (800) 556-5564
    • Chew (800) 844-CHEW
    • Vietnamese (800) 778-8440
    • Cantonese/Mandarin (800) 838-8917
    • Hearing impaired (800) 933-4700
Or contact your local health department.
Foundation for a Smokefree America: www.tobaccofree.org
Mayo Clinic Nicotine Dependence Center: www.mayoclinic.org/ndc-rst
QuitNet (Boston University School of Public Health): www.quitnet.com
UCSF Center for Tobacco Control, Research & Education: www.tobacco.ucsf.edu

Recommended Reading and Viewing
*The Relaxation & Stress Reduction Workbook.* by Martha Davis, PhD, Elizabeth Robbins Eshelman, MSW, and Matthew McKay, PhD, New Harbinger Publications, Oakland, CA.

*Smoke Free Stress Management.* DVD available through the UCSF Tobacco Education Center. Please call (415) 885-7895 for more information.

UCSF Resources
The UCSF Habit Abatement Clinic is a research-based clinic that evaluates free, innovative smoking cessation treatments. For information about current studies, please call (415) 476-7453.
Course Evaluation and Feedback

Use the scale above to rate your answers to the next two questions.

1. Before the course started, how confident were you that you would become smoke free? _______

2. How confident are you now that you’ll become and remain smoke free? _______

On a scale of 0–5 (5 is the highest), please rate how helpful the following aspects of the course were to you:

_____Medical information
   (tobacco-related disease, nicotine replacement, withdrawal, quitting benefits, etc.)

_____Motivational information
   (fear vs. denial, change, thought process, language, setting goals, etc.)

_____Planning tools
   (smoking behavior awareness, urge response options, quit plan, journal, etc.)

_____Being with other smokers wanting to quit

_____Instructor(s)
1. What were the most valuable and/or helpful things you learned?

2. What things were of little value to you? What would you suggest instead?

3. Did you have any needs or expectations that we did not meet?

4. How would you describe this course to others who are looking to quit?

5. Would you recommend this course to others wanting to quit? ________

6. Any additional comments?

Name______________________________________________

Date ________________