Practical Tools for Making Healthier Choices

Here are some specific suggestions that might help you make healthier choices about the risks you face. The first are general ideas for making better decisions. Then there are suggestions that are risk-specific. All of these suggestions are offered in the hope that they might help you make choices that both feel right in the context of your own life and maximize your health and safety.

Keep an Open Mind

The Affective system of Risk Response has worked pretty well so far. Your first instinct is often right. But remember, the Risk Response system we are using now evolved in earlier, simpler times. Figuring out whether that neighboring tribe was going to attack or whether to worry about that pack of wolves running toward you was easy. But the instinctive ingredients of what made something feel risky back then might not be the most precise tools for making sense of more complex technological perils and trade-offs in the modern world. Weighing the risks and benefits and scientific details about mercury in swordfish, or nuclear versus fossil fuel power, are trickier calls. They demand a little more careful thinking. So as English magician Robert Heller said, “Never ignore a gut feeling, but never believe that it's enough.” Remember, an Affective response to risk may feel right, but it also might get you into trouble. In the name of your own safety, try to keep an open mind, so that your feelings and instincts don’t smother what the facts may have to offer.
Give Yourself Time

Remember, your brain is hard-wired to fear first and think second. At first, emotions usually dominate the facts when we assess risk. And remember that the amygdala fires off its warning signal at the first hint of possible danger. And don’t forget the influence of the Framing Effect and how your initial perception of a situation shapes how you think about that situation later. So just realize that your first response is going to be powerfully influenced by emotions and instincts, which could lead to a Perception Gap, and if you can, try to give yourself a few minutes (or more) before making a judgment about a risk, to allow the analytical part of the risk perception system to share the stage with the powerful Affective side.

Get More Information

Remember a little while ago, I admitted that there were some important things about nuclear radiation that I didn’t know back when I was reporting on those issues? Don’t make the same mistake I made. I could have been more informed about the risks of nuclear power, and my viewers would have been better informed, had I challenged myself to learn a little more. Instead, I went with the information that was easiest to get. I suffered from a worse case of Bounded Rationality because I didn’t have some of the key information I needed to make a more informed judgment. In the absence of that information, my instincts and emotions played a bigger role, and there was definitely a Perception Gap between my view of the risk of nuclear power and the facts.

I’m not suggesting any heavy lifting here. Finding out more doesn’t mean finding out everything. But more information is better than less if you’re trying to make a careful judgment about something, especially something as important as your health. Few of us know as much as we need to know in order to make more fully-informed choices about most things. So just assume that you don’t know as much as you need to know to make a good decision. Fight back against the primal brain systems that let emotion and instinct dominate reason. Learn more = decide better.

Get Your Information from Neutral Sources

Do your best to get your information from neutral and reliable sources, sources that have no obvious bias. Don’t just rely on sources with which you agree. Remember, you’re trying to learn, not just reinforce what you already know. And remember, many risk issues are controversial and contentious. There are advocates on all sides, twisting and manipulating and framing the facts to support their view, trying to get you to think what they want you to think. Don’t be a victim of spin and bias. Be mildly skeptical of the motives behind any source of information, even (especially) when it’s information with which you tend to agree. Question the sources’ motivation. Check out their funding,
or the political views and connections of the people providing the information. *Ask the same hard questions of sources you agree with that you would use to challenge sources on the other side.*

With the explosion of information sources on the Internet, it’s getting harder to find information about controversial issues that hasn’t been spun, doctored, or manipulated. More and more, the suppliers of information have political, economic, cultural, religious, or other reasons to see things one way or another. So another way to empower yourself with balanced information is to deliberately seek out what both sides of an issue have to say. See how “the facts” according to one side compare with “the facts” as presented by the other side. See what Greenpeace says about nuclear power ([www.greenpeace.org/international/campaigns/nuclear](http://www.greenpeace.org/international/campaigns/nuclear)) and what the nuclear industry says ([www.nei.org](http://www.nei.org)). You may agree with one side more than the other, but seeing the same basic information presented in two different ways is a good way to help you think about the issue more carefully.

**Questions to Ask about Any Risk**

It’s obvious to suggest that you should get more information, and that you should get it from neutral sources. But what information should you get? There are a few basic things to ask about any risk that will always help you make a more informed judgment.

First things first. Just what does risk mean? In general terms, risk is simply the chance that something bad might happen. But in practical terms, risk means Hazard X Exposure. You need two things for a physical risk to exist. First, there has to be something potentially hazardous. Second, you need to be exposed to the hazard. (This is the focus of a book I wrote with George Gray, *Risk: A Practical Guide for Deciding What’s Really Safe and What’s Really Dangerous in the World Around You*, which explains the basic ideas of risk and describes in detail 48 of the risks that people most commonly worry about.) Let’s use the snake example again, and Charles Darwin and his self-experiment with the puff adder in the London Zoo. Was Darwin at risk from the snake in the cage? No, and he knew it. It felt scary, and it was a poisonous snake, which was definitely a hazard. But it wasn’t a risk to Darwin because he was not directly exposed to it. No exposure = no risk. That’s why Darwin felt dumb being afraid. (Darwin was actually doing what is proposed here. He recognized that his fear made no rational sense and was trying to figure out why, so he could make a smarter choice of not looking stupid at the zoo.)

But now let’s change two things. Let’s say the snake gets out of the cage, and it’s on the ground at Darwin’s feet! *Uh-oh?* Not necessarily. Let’s say the snake at his feet is not poisonous, and is not one of those squeeze-you-to-death constrictors. Let’s say the snake is a shy little green-and-yellow-striped garter snake, not dangerous at all. Is Darwin at risk now? He is exposed. But he is not at risk because now there is no hazard. For something to be a risk, you have to have both.

Many news stories about risks leave out information on either hazard or exposure.
Look at those early stories about MTBE, the chemical additive in gasoline that leaked out of underground tanks and got into public drinking water supplies. They made a big deal about how we are being exposed, which is important for us to know, but they carried little or no information about whether MTBE could be hazardous. So the stories might sound scary, but if you ask yourself about both hazard and exposure in those stories, you realize that you don’t know whether MTBE is actually a risk.

Sometimes the information about hazard is there, but the information about exposure is missing. I did plenty of news stories about dangerous substances, like lead paint, but sometimes I failed to include information about whether people were actually being exposed to these substances, which in the case of lead paint doesn’t happen unless the paint gets scratched into dust particles and inhaled, or flakes off and kids eat the flakes. (Kids eat lead paint because it tastes sweet. Do not use lead paint instead of sugar in your coffee!)

So always ask about both hazard and exposure. But just knowing that you have both still isn’t enough. The details matter. Even if something is hazardous, you have to know how hazardous. And hazardous to whom? And hazardous at what levels? And, of course, hazardous in what ways?

And there are key questions to ask about exposure. How much exposure is hazardous? Over what period of time? At what age? By what routes might I be exposed? (Do you eat it or drink it, inhale it, or get it on your skin?)

To lay out the details you want to ask about hazard and exposure, let’s use mercury as an example.

**The Hazard**

**What does it do?** When you are directly exposed to huge amounts of mercury, it can literally drive you nuts. It is neurotoxic. Hatters used mercury to make felt and inhaled fumes every day, thus the phrase “mad hatters.” At lower levels of exposure, mercury has been found to cause very subtle neurological damage to the cognitive abilities of the developing fetuses of pregnant women. (Given how great the concern about mercury is, it is actually stunning how little damage it does. The major study on which most of our rules about mercury are based found that the children of mothers on the Faroe Islands in the North Atlantic who had diets of fish and whale meat that were high in mercury had less than a 1-point loss of IQ, and similarly tiny deficits on other cognitive tests.10)

**A hazard to whom?** Except for acute poisoning from high levels of mercury, scientists are confident saying only that mercury is harmful to the developing fetus and to infants in the first years after birth, whose brains are still developing. There are hints of effects to adults, but the science about those possible hazards is still preliminary. There aren’t a lot of bricks in the wall of evidence on those.

**What levels are hazardous?** The current recommendations for mercury are for
pregnant women or women who may become pregnant in the next couple years
to avoid certain amounts of certain species of fish that are more likely to have
higher levels of mercury, and to reduce—but not eliminate—consumption of
other species.\textsuperscript{119}

**The Exposure**

**Am I exposed?** Mercury exposure comes mostly from seafood, and even then, only
from certain species that are likely to have higher concentrations: shark,
swordfish, king mackerel, and tilefish. Shrimp, canned light tuna, salmon,
pollock, and catfish have some mercury, but much less. If you don’t eat those
fish, you’re probably not exposed.

**To how much?** Like anything that might be poisonous, the dose you get matters. A
couple of aspirin are good for a headache. Too many will kill you. With mercury,
only eating large amounts of those certain species of fish will expose you to a
high enough dose that, if you are a pregnant woman or a woman who may
become pregnant in the next few years, you need to worry.

**Over what period of time?** One meal alone almost never carries a dangerous dose.
It takes consumption of mercury-bearing fish over several days or weeks before
exposure levels become potentially harmful. And while mercury stays in the
body for a while, we do metabolize it and excrete it. So the exposure has to be
continuous. (Many risks are assessed by the government based on an assumed
lifetime of exposure, getting daily doses every day for 72 years. Ask yourself if
that applies to you as you consider any specific risk.)

**At what age am I (was I) exposed?** Mercury is a great example of how important
this factor is, more important with many risks than most people realize. As you
learned, the normal kind of low dose exposure to mercury is only a risk to a
developing fetus or infant. After that, the neurotoxic effects of mercury are
caused only by unusually high “mad hatter” exposures.

**By what route am I (was I) exposed?** You ingest mercury. It doesn’t get into your
lungs, which would be worse, and although it can be absorbed through your skin,
that’s not a route of exposure that raises your risk much, either. A better example
here is anthrax. Get it on your skin and you may get a rash. Ingest it and you may
get sick. Inhale it and you could die.

So you can see that there are some important details about hazard and exposure
that can help you make a more informed judgment. There are also some details that you
need about risk numbers.

**Remember the Challenge of Innumeracy**

Number numbness can really interfere with making a healthy choice about some
potential hazards. Here are some simple number questions to ask. (They won’t make your head hurt, I promise.)

Try to find out the number for your subgroup: your gender, age, health status…the numbers for you. In 2009, the average risk of cancer for an American male younger than 40 years old was 1 in 70, but for an American male 70 and older it was 1 in 3. Subgroup matters.

Try to find out both the relative risk and the absolute risk. If you hear that the risk of something “has doubled in the last year,” that’s what the risk is now relative to what it was. Find out how many more people that means, the actual risk. Maybe the risk doubled, but it only went from one person in a million to two in a million!

The numerical risk of what outcome? Is it a one in a million risk of getting a disease (morbidity)? Or of dying from that disease (mortality)? Which disease? (There are more than 120 different kinds of cancer. Some are more treatable than others, and they each have very different health impacts.)

Is the risk per year, or for your lifetime? The lifetime risk of cancer for the average American female is 1 in 3. Some people might find that a scary number. But the chance that the average American woman will get cancer per year is much lower, and is age-dependent.

(These suggestions are simplified from a wonderful book that can help you understand numbers when judging health risks, Know Your Chances; Understanding Health Statistics by Steve Woloshin, Lisa Schwarts, and H. Gilbert Welch.) But let’s not get stuck on getting more factual information. It can really help, but remember, the Affective Risk Response is not a purely fact-based process. So here are some more practical suggestions for narrowing the Perception Gap.

Think about Trade-Offs

We are generally Loss-Averse and prone to focus on the dangers. But remember that most risk choices involve trade-offs, sometimes with benefits and sometimes with other risks. Again, let’s consider mercury. High amounts of mercury in certain species of seafood can cause very subtle cognitive impairments in children who are exposed to it in utero or during infancy, while their brains are developing. But remember that the fatty acids in the seafood improve cognitive ability in children who are exposed to it in utero or during infancy, while their brains are developing. That’s a risk/benefit trade-off.

Consider a risk/risk trade-off. Some people who are worried about industrial agricultural practices choose to drink completely natural, unpasteurized milk. They are trading one very low risk, from tiny doses of chemicals and antibiotics used in animal agriculture, for another (much higher) risk, the potentially lethal bacteria in a single serving of unpasteurized milk. So whenever there are trade-offs, and there almost always
Think for Yourself

We are often victims of what is called confirmation bias, when we seek out or listen to only information that reinforces what we already believe. I can’t think of anything more dangerous for careful risk decision making than shutting down your reasoning brain and letting someone else do your thinking for you, regardless of whether you are on the political right or left or what any of your personal views may be. Listeners to talk radio host Rush Limbaugh sometimes call themselves “Ditto Heads,” which is often shorthand for “I agree with you, Rush,” or “I agree with the last guy.” When it comes to careful thinking about risk, don’t be a Ditto Head. Remember, the objective, in the name of making healthier choices, is to learn something new, not just to reinforce what you already know and believe.

Remember the Influence of Cultural Cognition

This one will be hard. We tend to adopt positions on issues that confirm the thinking of the members of our group, both to strengthen the group and to increase our acceptance within the group. It’s comfortable to be a Ditto Head, and we all do it. But it can contribute to a Perception Gap that might not be good for your health. Challenge your own thinking. Second-guess yourself. Try to look at the issue the way the other side would. As René Descartes said, “If you would be a real seeker after truth, it is necessary that at least once in your life you doubt, as far as possible, all things.”

Be a Smarter News Consumer

First, just keep in mind that the news media tend to make things sound more dramatic than they are, not by lying or by making things up, but in subtle ways, like which parts of the story they emphasize, or where in the newspaper or in the broadcast or on the Web site they place the story, or even which words or pictures or graphics or tone of voice they use. This isn’t obvious, so be alert to this tendency.

Also, bear in mind that you are not hearing about things that, frankly, aren’t news. You don’t see many headlines like “Planes Didn’t Crash Today” or “Most Kids Don’t Have Autism.” Don’t let the media’s choices of what they tell you and what they don’t turn you into a Chicken Little. The media may be telling you about all those acorns falling on your head, but look up. It may not make news, but usually the sky isn’t falling.

Also remember that journalists are people, too, and, like you and me, they intuitively sense the Risk Perception Factors that make something more or less scary.
Those are precisely the aspects of the news that get played up. So, for example, in a story about the risk of cancer, the reporter might personalize the risk (which makes it scarier) by telling about a victim who is a child (which makes it scarier still). But remember that three out of four cases of cancer happen to people who are over 55 years old. The use of the child as a victim is attention-getting but not accurate about who is mostly at risk.

Or you may see news stories dramatizing a risk by emphasizing that it is being imposed, without paying much attention to how big the risk itself actually is. A Salt Lake City, Utah, newspaper did several stories about how worried people were that radioactive waste was being shipped to a site in Utah from overseas, and because of the way the law was written, there was nothing the people in Utah could do to stop it. That’s what the stories focused on. They didn’t talk much about the actual risk from the low-level waste, which was tiny.

News coverage of a risk about which a government agency or official or company has lied, or kept information secret, or fouled up will emphasize the lack of trust involved, but may not pay much attention to the actual risk itself. The news coverage of mad cow disease in Japan and of those defective defibrillators made by the now-defunct Guidant Corporation are examples where the media dramatized the risk not because of the actual danger, but because of the mistrustful way in which the Japanese government and Guidant behaved, feeding a large and dangerous perception gap in each case.

So just be aware that the psychological factors that make things scarier to you and me are likely to be emphasized in the media. Try to look past the risk perception factors and find the information about the risk itself. Trying to filter out the psychological risk perception factors that are emphasized in the news will make you a smarter, more careful news consumer.

Next, the antidote to being alarmed by the news media is not to read, watch, or listen less. Instead, read, watch, and listen more. Ignorance may be comfortable bliss, but it’s no way to know what you need to know if you want to make healthy decisions for yourself and for your family. And don’t just get more news, get it from more than one source. Relying on only a single source means relying on only one set of editors and reporters to judge for you what’s important and what’s not and how the news should be presented. If they don’t choose to report that new study on heart disease or the latest news on climate change, you just won’t know about it. Or if the reporter writing the story on mercury in fish chooses to omit the fact that it’s only a risk for the unborn children of pregnant women, you won’t know. So the more sources you use, the more diverse your information will be, and the more likely it is that you might find stories or facts in one place that reporters or editors at another news source chose to leave out.

On the other hand, don’t be a 24/7 news victim either. That will help counteract the awareness/ready recall effect, whereby the more easily a risk comes to mind, the more concerned we tend to be. When the sniper had everyone in the Washington, D.C., area scared back in 2002, people in that area might have made healthier judgments about the risk if they had turned off their TV or radio or computer, put down their smartphones, stopped reading the paper, and taken the dog for a walk.
Think about How You Think

Remember from Chapter 2 all those mental shortcuts we use to make decisions under conditions of Bounded Rationality, when we don’t have all the information, or the time required to get all the information, or the smarts necessary to understand all the information, but we have to make up our minds? Remember how those mental shortcuts can sometimes interfere with making a rational choice? Well, just knowing how you think, can help you think better.

Consider the first of the shortcuts we talked about, the Framing Effect, how the first way we hear about something colors how we think about that issue subsequently. When you’re considering a risk issue, try to frame it in a different way. If, as in the case of building new nuclear power plants, the risk is framed in terms of past events like Chernobyl and Three Mile Island, ask yourself whether the design and operation of those plants are the same for the ones being proposed now. If the risk is framed as “chemical,” reframe your thinking and ask yourself those specific questions about exposure and hazard. If the issue of mercury in seafood comes up in a way that emphasizes the risks involved, try to reframe the question of whether to eat seafood in terms of both the risks and the benefits.

Reframing is a good way to keep trade-offs in mind. Consider the news in 2007 about drug-coated stents, those metal devices that doctors put into clogged veins and arteries to open them up and keep them open longer than the bare metal kind. That reduces the need for follow-up procedures to reopen vessels that close up again, and since each procedure to place a stent carries risk, the fewer procedures that have to be done, the safer you are. But when the news media reported a study that suggested that patients with drug-coated stents might have a higher rate of blood clots than patients with bare metal stents, thousands of people started opting for bare metal stents to avoid the risk of the clots, forgetting the risk-reduction benefits of the drug-coated kind. (Research presented at an American College of Cardiology conference in March 2009 found that the clot risk of both is about the same.) They might have made more thorough decisions had they reframed a threat presented in terms of risk, in terms of it’s potential benefits.

This works the other way too. If a choice is framed in terms of benefits, like hormone replacement therapy (HRT) for postmenopausal women, reframe the issue and ask yourself about the risks. HRT may help you avoid those hot flashes and mood swings, but you have to compare that against the small possibility of raising your risk of heart disease, breast cancer, blood clots, and stroke.

Here’s another reframing suggestion. Risks are often described in terms of how many people might be victims. So reframe the question and ask yourself, out of the total population at risk, how many won’t suffer. If someone says, “The risk of dying in a fall for the average American is 1 in 20,000,” reframe things so that you think about the 19,999 people who don’t die, not just the one person who does.

The example of the drug-coated stents mentioned above also illustrates one of the dangers of the Categorization/Representativeness mental shortcut that we use to categorize partial information by comparing it against patterns into which the partial
information seems to fit. The stent study was only one piece of evidence, but because of the Fallacy of the Small Sample, where we assume that what is true for one piece of evidence is true in general, many people made choices about their health using only this partial information and categorizing it in a way that seemed to make sense but may have actually raised their risk.

What can you do? Just think about how you think. As with all the mental shortcuts that we use for snap decision making that can contribute to a Perception Gap, be aware of the danger of the Categorization Effect. Try to catch yourself at it, and ask yourself if you are jumping to conclusions based on incomplete information. Are you judging a risk book by its cover, without at least opening the book? Try not to rush to judgments; get into the habit of keeping an open mind and getting more information, to give the rational part of the Affective process more say in the choices you make.

To deal with the distorting effects of Anchoring and Adjustment, try to think about the absolute risk, not the risk the context of some other value. Remember the example about Chernobyl used in Chapter 2, where two stories presented statistics about the overall death toll? The second sentence was the same in each, but the stories began with different initial values, different anchors.

1. “More than 5,000,000 people lived in areas contaminated by radioactive fallout from the Chernobyl nuclear accident. Considerable controversy remains over the lifetime death toll among all those exposed, with estimates ranging from 4,000 to more than 100,000.”

2. “To date, authorities believe that 56 people were killed by the Chernobyl accident. Considerable controversy remains over the lifetime death toll among all those exposed, with estimates ranging from 4,000 to more than 100,000.”

If you want to avoid the Anchoring and Adjustment Effect on how you think about the overall death toll from the Chernobyl accident, just take out the first sentence of both stories, the anchor that might distort how you adjust your thinking about the value in the second sentence, and just pay attention to the second sentence.

To avoid the distortions of Optimism Bias, remember the advice of psychologist Daniel Gilbert and avoid the “illusion of foresight,” which leads us to see things through rose-colored glasses the further off in the future they are, and try “nexting,” or thinking about the future as if it were tomorrow, which leads to more realistic judgments about how things might turn out.

Framing. Loss Aversion. Categorization. We need such mental tools to make quick judgments under conditions of Bounded Rationality. But being self-aware of how they are coloring our perceptions can help keep them from causing judgments that lead to a potentially harmful Perception Gap. And so can self-awareness about how specific Risk Perception Factors lead to judgments that feel right, but that raise your risk.
Understanding the Risk Response to Control the Risk Response

So now let’s consider some ways to use what you learned about those Risk Perception Factors in Chapter 3 and about the social and cultural forces that feed our fears in Chapter 4, to reduce the dangers of the Perception Gap.

Remember Linda, who is still worried about radiation from the Three Mile Island accident in 1979, and who lives above some of the most uranium-rich/radon-producing bedrock in North America, but still hasn’t had her own house tested for radon because “it’s not a manmade thing”? Linda is at risk because of a Perception Gap. As a result of the psychological Risk Perception Factor that makes things scarier when they are Human-Made and less worrisome when they are Natural, Linda is probably being exposed to, and not doing anything to remediate, potentially carcinogenic levels of ionizing radiation.

But suppose Linda has learned that sometimes we’re too afraid of some things, or not afraid enough of others, because specific Risk Perception Factors make some risks feel bigger or smaller, regardless of the scientific evidence, and Linda has learned that one of those factors is whether the risk is Natural or Human-Made, and she realizes, “Hey, that’s me about radon!” Now Linda can ask herself the next question, the really important question, the question that can help her balance the emotional/instinctive part of the Risk Response system with more objective consideration of the factual evidence: “Does whether radon comes from a natural source or a human-made source have anything to do with how risky it is to me?” Linda can challenge her own thinking and reframe the risk by temporarily filtering out the Risk Perception Factor that is part of her Affective response so she can get a clearer view of the facts.

Consciously realizing which specific Risk Perception Factors may be making you more or less afraid can help you test your own thinking to see how much those factors, rather than the facts, are the basis for your fears. You can try this yourself. Pick some risk that you’re worried about. Let’s say it’s that chemical bisphenol A (BpA) that we talked about earlier. Ask yourself which of the psychological Risk Perception Factors from Chapter 3 might be involved in your feelings about the threat from BpA. Make a list:

- It’s Human-Made. That makes it scarier.
- It comes from an industry that most people don’t Trust. That makes it scarier.
- We can’t detect it with our own senses, which is a form of Uncertainty, adding further to the fear.
- It’s imposed on you, not a risk you take by Choice. That makes it scarier.

Those components of the Affective response are all probably part of your concern about BpA. But now that you can see how they may play a role in your perception, just mentally put them aside for a second and ask yourself those separate questions about hazard and exposure. “What sort of actual harm does BpA do to us? At what dose? Am I exposed? By what route? To how much?” Ask yourself some other basic factual questions that you’d want the answers to. “Is it a risk for me or for people in some other
particular subgroup? Is the likelihood of the risk big or small? How strong or weak is the evidence?” It might take a little bit of homework to answer these questions, but remember: learn more = decide better.

But more than just getting additional information, you have identified and temporarily set aside the emotional/instinctive components of your Risk Response. That can help you see the facts a bit more clearly. Your overall response will still include those Affective factors— you only set them aside temporarily— but now the facts can play a bigger role, and that should lead to a more informed and healthier choice.

Now try it the other way. Pick some risk that you’ve heard about that doesn’t worry you personally too much, let’s say the risk of using your mobile phone while you drive. Go through the same process. Make a list of the Risk Perception Factors that explain why you feel the way you do about the risk:

- Certainly you feel that you have Control over things while you’re DWP (driving while phoning), which makes it seem like less of a risk.
- You get a Benefit out of being able to connect to people by phone while you’re driving, and that makes you play down the Risk in your mind.
- You are taking the risk Voluntarily. That makes it feel less risky.

Those are valid reasons why the risk you’re taking doesn’t feel all that scary—and they help you understand the Perception Gap that is increasing your risk! So now you can see both parts of the risk, the one from the phone and the one from your feelings. Set aside those feeling factors just for a moment and consider honestly that it’s dangerous to use your mobile phone while you drive, probably more dangerous than you’re willing to admit, and see how your emotion might be clouding your reason and leading to a dangerous Perception Gap. (Do not do this exercise while you’re driving!)

Are you concerned about nuclear power? Identify the Risk Perception Factors that might be contributing to those concerns—the risk is Human-Made, with high potential Pain and Suffering (cancer); it’s not detectable or easy to understand, so there is high Uncertainty; if things go wrong, they could be Catastrophic—and try to look at the facts about nuclear power without those Affective lenses coloring your view.

You aren’t worried as much about heart disease as everybody says you should be? Ask yourself why. Perhaps it’s because the risk factors for heart disease seem like the result of behaviors you choose, so the risk of heart disease feels Voluntary, or you think you can start dieting and exercising when you want to, so you have a sense of Control, or the risk is Chronic and seems like it involves less Pain and Suffering. Try to consider the scientific facts about your risk of heart disease without those Affective lenses coloring your view.

You can apply this same suggestion to what you learned in Chapter 4 about the social components of the Risk Response. Consider the risk of nuclear waste. Among the many factors that make that risk scarier for many people is the social Stigma attached to it. Nuclear waste is so widely thought to be a big risk that the fears of the many tend to sweep others along. Few of us have probably actually looked into the facts of whether such waste can actually be handled, transported, and stored safely. We just take the
group’s word for it that it can’t. So try to separate out what everybody else thinks and think for yourself. After all, it’s your health you usually care about most.

Remember that we are tribal, and we tend to adopt positions that confirm the underlying worldviews of the social groups to which we belong. (Remember Cultural Cognition from Chapter 4, with its Hierarchists ↔ Egalitarians and its Individualists ↔ Communitarians? If you took the quiz back then, you have an idea of where you sit on those continua.) We are powerfully influenced by the leaders of our tribes. Take climate change. Al Gore is a tribal leader of one side. Rush Limbaugh proudly carries the banner for the opposite tribe. When Al and Rush speak, they’re not just discussing the facts about climate change. They are also carrying their tribe’s banner into the underlying culture clash that the disagreement over climate change is really all about. They selectively cite the facts that support their underlying cultural views about how society is supposed to be organized as it deals with issues like climate change.

If you just want to follow the leader who’s waving the most appealing flag, fine. But remember, what feels fine may not be what is actually best for your health. If you want to think for yourself and make the most appropriate choice for your life, the challenge is to try to step outside the social pressure of your tribe(s) and think about the risk independently. This gets way back to the first suggestion: keep an open mind. This may not make you popular. But it may help make you healthier.

And remember, as you try to think for yourself, that risk issues are controversial and hit at the heart of powerful economic and political interests, so social advocates twist and spin and manipulate information about those risks to advance their own interests. This happens on both the right and the left and across a whole range of issues. Climate change serves as a particularly sinister example. In the name of economic gain or partisan political advantage, businesspeople and politicians have deliberately emphasized doubt about the mountains of evidence and overwhelming scientific consensus that global warming/climate change is not only real, but it’s happening now. (My personal favorites are the people on the political right who dismiss concern about the effects of rising industrial production of CO₂ because it’s something that we naturally breathe out of our lungs. This can only be a deliberate effort to sway public perceptions because I have too much respect for the intelligence of these people to think that they would say something so dumb out of simple ignorance.)

To counteract the manipulations of social forces that are constantly trying to control what you believe, just apply a little skepticism to the information you get about any risk. Who is the source? What might that source’s financial or political motivation be? How fair does the source seem to be with the facts? How open-minded is the source about alternative points of view? (Remember, you have to be a little questioning even of sources with which you agree.) A dose of healthy skepticism about the honesty and validity of information on contentious risk issues will probably get you closer to the sort of independent thinking that should help you end up the healthiest.
Narrowing the Perception Gap between our fears and the facts, and doing a better job of getting risk “right,” is no easy thing. It means thinking more carefully and more rationally, and that runs counter to the more powerful emotional and instinctive parts of the overall Affective Risk Response. But by understanding the social forces that influence our perception of risk, the specific psychological Risk Perception Factors that make threats feel more or less scary, and the underlying mental shortcuts that we use to make decisions about anything, we can at least begin to separate out those Affective inputs while we consider the facts a bit more clearly and carefully. Doing this won’t make you perfectly rational. That’s not possible, as Darwin realized. But by seeing how all those Affective influences color how you see the facts, you can give the rational part of the Risk Response system a bit more say in the choices you make, and hopefully, those choices will help keep you healthier and safer.