General Principles

The scientific principles behind cold exposure and weight loss have been known since the 1960s. It’s not rocket science: If your body is even a little bit cold, then it needs to burn calories to stay warm.

However, we want to emphasize that The Cold Shoulder is not a magic pill. It can only help you accelerate your weight loss. The most important part of weight loss will always be your diet.

There is no magic pill for weight loss

If you want to lose weight, then you’ll need to modify your lifestyle. And by far the most important part of your lifestyle that affects your weight is your diet. If you’re not happy with your weight, then there’s something wrong with your diet -- guaranteed.¹ No amount of exercise or cold exposure can counteract a bad diet. Recently I saw a poster in a weight loss clinic showing an overweight person jogging on a treadmill. The caption read:

“You can’t outrun your fork.”

Their point was that no amount of exercise can make you thin. Diet is primary. If you put junk food in your mouth, you’re not going to lose weight, no matter what else you do. Period.

So let’s talk about diets

There are hundreds of diets out there. Some even work. But let’s talk general principles, because if you understand the principles then you can figure out the rest for yourself, and create your own healthy diet.

WHOLE FOODS

The easiest one-sentence rule that I’ve ever seen that can lead to a healthy diet is this: Eat unprocessed whole foods. By “whole foods” I mean something immediately recognizable as a plant or animal product. A carrot is a whole food. Any fresh (or flash frozen) fruits, veggies, or nuts are whole foods. Unseasoned beef, chicken, and fish (preferably lean) are all whole foods.

“Does it look like it comes from nature, or is it a product with a long list of artificial ingredients? That’s a distinction between real and fake foods that even a 5-year-old can get.”

- Dr. David Ludwig, Professor of Pediatrics, Harvard Medical School

Bread – even “whole wheat” bread – is not a whole food, because it’s not recognizable as a plant or animal. Fruit juice is not a whole food, because… well, it’s not whole! It’s just the juice, and it’s full of way too many calories, as you’ll see below.

It doesn’t matter if you’re a vegetarian, a vegan, or a carnivore… if you stick to whole foods, it’s virtually certain you’ll start losing weight.

¹ There’s a tiny fraction of the population that can have a genetic condition beyond their control that causes them to gain weight. Don’t even think of trying to use it as an excuse unless you’ve been tested.
Variety is important
Of course it’s best if you eat a variety of whole foods: lots of different fruits, veggies, and nuts… different kinds of meats and fish. Or skip the meats entirely if you’re a vegetarian/vegan. (There are other good reasons to minimize animal products in your diet, but those reasons are beyond the scope of this short guide.)

Eat your veggies!
Be skeptical of diets that recommend avoiding fruits and veggies, especially high protein + fat diets. They have come under a lot of close scrutiny by the scientific establishment and there are good reasons to be skeptical of them, for at least two reasons. (1) They don’t give you enough vitamins, and (2) most of the initial weight loss you see on such diets are caused by a loss of water, not a loss of fat. Losing water is not a healthy way to lose weight. That’s called dehydration. Proteins are great, and plant fats are fine too (high quantities of animal fats are not so good), but not if they’re the only constituents of your diet.

Avoid empty calories: Eat foods that fill you up
Sugars and most sweets are what we call “empty calories”. They contain no vitamins or minerals, and don’t make you feel full—you stay hungry. They taste good but are otherwise completely useless.

One really cool thing about whole foods is that they make you feel full, without being loaded with calories. If you eat a whole food meal that fills you up, you’ll eat way fewer total calories than an equivalent meal of non-whole foods that make you feel just as full. Just imagine the difference between eating an entire bag of cookies (which would be thousands of calories and doesn’t really fill you up at all), vs. eating a huge bunch of celery, or a big steak + veggie meal. The whole foods will fill you up much quicker, have far more vitamins, and have far fewer calories.

Myth Busters
Don’t think that just because you’re a vegan, you’re eating healthy. If you subsist on peanut butter and jelly sandwiches, you’re not getting enough vitamins. Furthermore, breads and other “white” products (grains, sugars, etc.) can spike your insulin levels, which leads immediately (like within minutes) to fat gain, and can lead to Type II Diabetes in the long term. More on that below.

Also, don’t believe anybody who tells you that if you only eat fruits and veggies then you won’t get enough protein. If you restrict yourself to whole foods, then pretty much any diet that provides enough calories will provide enough protein. Even if you were to eat only celery all day, you’d get enough protein. (You’d need to eat about 100 cups of celery a day, but you would get enough protein. And no, don’t try the “100 cups of celery per day” diet. You’ll get vitamin A poisoning. It’s just a hypothetical example.)

Everything in moderation, including moderation
There’s another cool idea that some of you may have heard of. It’s called a “binge day” or “cheat day”. (Traditionally Saturday or Sunday for most people following the binge day regimen). Basically it means that you should religiously follow the above principles 6 days a week, but on the 7th day… go wild. Eat whatever you want: chips, ice cream, donuts, chocolate bars, whatever you want. The idea is to get the “I must eat junk food!!!!!!” urge out of your system. It’s been shown to actually have some positive biological effects, but more importantly, it’s has a tremendous psychological effect: when you see that cookie on Tuesday, you know that the “I can’t eat that” isn’t forever: it’s only until Saturday. When you know that binge day is only a few days away, it makes it much easier to avoid “bad” foods for the other 6 days per week.

---

2 See the book The Okinawa Program. Okinawans have the longest life spans on Earth, and they eat mostly veggies + fish.

3 We’re not talking about body builders here – they need more protein. But most people get enough with normal whole foods.
**Insulin**

One other principle you also need to understand about weight control is how to control your insulin. Insulin is a hormone in your body that is activated when your blood sugar gets too high. Carbs, or carbohydrates, are digested and absorbed into your bloodstream as sugar. Some foods digest quickly (simple carbohydrates like sugar), and others take more time (complex carbohydrates like whole vegetables). Any food that digests very quickly gets into your bloodstream very quickly. If you’re running a marathon, then these fast-digesting foods will quickly get energy into your muscles where it’s needed. But if you’re not running a marathon… then the energy has nowhere to go, and it quickly builds up in your bloodstream because it’s not being used. Once the sugar content of your blood gets too high, your insulin gets activated. Insulin tells your fat cells to open up the floodgates and start storing the energy. This is the moment, literally the instant, that you start getting fat. So to avoid getting fat, you want to ensure that your insulin levels stay low.

Insulin is very effective. Once it turns on, your fat cells are very good at removing the sugar from your bloodstream. So once your insulin gets turn on, the sugar vanishes from your blood very quickly. You’re all familiar with the resulting loss of blood sugar: it’s called a “sugar crash”, because once all the sugar is gone… you suddenly get tired because your fat cells have stolen all the energy out of your bloodstream. This usually leads people to eat more sugar to get their energy back… resulting in a downward spiral of sugar spikes and sugar crashes. And the whole time, your insulin is high and your fat cells are growing. This is really bad. Gary Taubes wrote a whole book on this process, called *Why we get fat*.

**Simple carbohydrates**

Of course, since sugar is the easiest type of energy to digest, it makes sense that sugary foods get into your bloodstream very quickly. Pure sugar is the worst, as well as any candies, chocolate bars… anything that has a high amount of “sugars” or “carbohydrates” with low “fiber” content.

**Complex Carbohydrates**

Complex carbohydrates, also known as “carbs” or “starches”, are things like wholegrain bread, oats, rice, potatoes, etc. and they take longer to be digested, so don’t cause a huge blood sugar spike like simple carbohydrates do.

Rices and whole grain wheats almost qualify as whole foods, if it were not for the fact that the entire plant has been removed except the actual grain. If you were to eat the whole plant (including the chaff), it would qualify as a whole food because the chaff has all the fiber that’s good for you. But since most of the grains we eat have been separated from the chaff, they don’t qualify as whole foods. The more processed your food is (and that includes potatoes) the faster it gets into your bloodstream. And remember, fast is bad, due to the resulting insulin spike that makes your fat cells fatter.

**Fiber**

Why is fiber good for you? Because it’s not digestible, which means it “gets in the way” of digesting the carbs. In other words, it slows down the process of digestion. This is a good thing. Fast digestion is bad, due to the insulin spike it causes. That’s the primary reason fiber is good – because it slows down your digestive processes, thus avoiding the insulin spike. Fiber also makes you feel full, which stops you from eating---always a good thing when you’re trying to lose weight!

The other bad thing about sugars (without fiber) is that they don’t make you feel full. Let’s take an extreme example. Imagine you’re feeling hungry, and you gobble up twenty teaspoons of sugar. You’d get a HUGE sugar rush---a huge influx of energy. You’d feel awake (and maybe a bit sick---that’s a lot of sugar!) But sugar doesn’t make you feel full. You’d still feel hungry, even though you just ate a whole meal’s worth of calories. The problem is
that all of those calories hit your bloodstream at the same time, thus turning on your insulin. The calories then all get shunted immediately into fat. Then you get a sugar crash. Now you’re tired and you’re still hungry, and you’ve instantly shunted about 400 calories into pure fat. Not good.

**Cut out the crap**
Sugars are bad. Really, really bad. Whether it’s a candy, a chocolate bar, a cookie, a slice of cake, ice cream, potato chips, corn chips, white bread… they’re all bad for you. You know what this stuff is called: it’s called junk food for a reason. Avoid it like the plague (except once a week, on binge day, if you choose to do one).

**Let me say that again: to avoid getting fat, avoid junk food. It’s really that simple.**

You know it’s true, and now you know why. I’ve just given you the most important information you need to start losing weight. It’s up to you to start acting on it. Now.

In fact… why not literally act on it now? Go through your house and throw out all the junk food. You need to remove temptation. Throw it in the garbage. Or, if you can’t bring yourself to do that… eat it all. Now. Today is your first binge day. And if you can’t finish all the junk food today… throw out what’s left tonight. But if you eat it all today, you must promise yourself “no more junk food for the next 6 days”. Make yourself that promise, and stick to it. You’ll be astounded at the progress you’ll make during those 6 days. (Note you’ll gain some weight on your binge day and won’t start to lose again for 1-2 days afterwards, but then you’ll have 3-4 days of solid weight loss.)

**Summary**
So, to recap our general principles:

1) Eat a variety of whole foods.
2) Avoid insulin spikes by avoiding junk food.
3) Especially avoid liquid calories—soda pop, even fruit juices should be minimized.
4) Minimize grains (bread, oats, rice, etc).
5) Allow yourself 1 binge day a week.

That’s about it. Of course there are millions of different variations on the idea, and tons of details we could get into. But if you follow the principles above 6 days a week, then you’ll be off to a great start on your weight loss.

**Hints and tips on going “whole”**
You may think that it’ll be difficult to restrict yourself to whole foods, but it’s not once you get the hang of it. For example, how will you live without bread? I admit bread is useful: where else do you put the peanut butter and jam? How else do you eat a hamburger if not with a bun? But there are ways:

- Most burger places now offer a bun-free version of their burgers. They’ll put the patty between large leaves of lettuce, and it’s just as easy to eat as if it were in a bun, and in my opinion even more delicious.
- If you have to get fries, get sweet potato fries instead of regular potato fries, they’ll cause less of an insulin spike.
- Peanut butter goes on bananas or celery.
- At home, if you don’t like to cook… learn to use a microwave. One of my favorite dishes that literally takes 2 minutes of time to prepare is to throw a big pile frozen veggies + a chicken breast or slab of fish into a bowl and then microwave on high until the meat is cooked (6-10 minutes depending upon your microwave). Or skip the meat if you’re a vegetarian. Then season to taste (sea salt is awesome). I literally survived for years on meals like this.
- Go easy on appetizers in restaurants. A bit of bread and pasta is OK, but not for the...
main course, because too much pasta or bread will cause that insulin spike.
- Avoid all liquid calories. Liquid sugar will get into your bloodstream even faster than solid junk food. Avoid all soda pop, and even fruit juices. Fruit is a whole food, fruit juice is not. Avoid.

**What about foods I haven't mentioned?**
There are plenty of foods I haven't mentioned here that are healthy and acceptable. An obvious one is olive oil. It's been shown time and again that olive oil is perfectly healthy. It's great with balsamic vinegar as a salad dressing. Technically it's not a "whole food", because... well, the olive is the whole food. The oil isn't.

So let me make one more thing clear: I'm trying to explain general principles here. Food is a very complex issue. There are some things that, absolutely for certain, you should avoid. I name some of them below. There are other foods that (barring allergies or other medical issues) are absolutely healthy to eat — as long as you keep in mind to eat a wide variety of these healthy foods.

But there are plenty of foods in between "junk food" and "whole food", and not all of them are bad. In addition to olive oil, some other non-whole foods that are perfectly fine are some coconut oils, nut oils, and some vegetable oils. (But not corn oil---avoid corn products, they're only pervasive because they're dirt cheap. Corn on the cob is probably fine as a whole food, but corn oils and corn syrups — especially the high fructose corn syrup — should be avoided like the plague.)

**An even shorter summary**
So in a nutshell:

- All junk food: BAD
- All whole food: GOOD
- Everything else: learn before you eat.

Is the above simplistic? Yes. Can you go wrong by following it? No. There's definitely more to learn, and the above guidelines don't cover all bases, but you can't go wrong by starting with them.

There are a million variations on healthy diets. Go pick up a book on dieting, and if it's a good one, you'll see that the emphasis will be on whole foods. It's just that they don't phrase it that way because it's so simple it's hard to sell a book on it.

**5 so-called "healthy" foods to avoid**

1) **Whole wheat bread**
You should know now that white bread is bad, but a lot of people believe whole wheat is good. It's marginally better than white, but still doesn't qualify as a "whole food". It's still full of carbs and has tons of calories but not much fiber. What's more, these carbs are processed carbs (it is bread, after all - it doesn't grow on trees) and they are absorbed really quickly by the body, which is bad. You want slow release foods, not foods that hit your bloodstream at 200 miles an hour.

If you must eat something brown, try brown rice. It'll keep you fuller for longer so you'll be less tempted to reach for the snacks mid-afternoon.

The best advice you can follow is just to avoid processed starches entirely and eat unprocessed foods like vegetables, fruit, and nuts. Lean meats and fish are fine too, in moderation.

2) **Fruit juice**
As kids we are taught that sodas are bad but fruit juice is good, because it's full of vitamins. But in reality, fruit juice contains a ton of sugar and it contains little or no fiber. Remember, fiber slows the digestion process and helps make you feel full. Whole fruit isn't just juice, it's also fiber.
Fruit juices also contain way too much juice. You know that advertising phrase, “Contains the juice of 15 fresh oranges!!” As if that’s a good thing???
When’s the last time you ate 15 oranges? Do you know how many calories that is? And how full you’d feel if you actually ate 15 whole oranges? You’d be stuffed. You probably couldn’t eat 15 oranges.

Eat the whole fruit, don’t just drink the juice. If you want to lose weight, drink water. Liquid calories are the worst sort of calories.

3) Granola cereals
We’re brainwashed into thinking that granola is a "good" cereal but really it’s just the best out of a bad lot. Granola is high in fat, sugar, calories and carbs.

Furthermore, no one eats granola dry. You put milk on it and milk isn’t good for fat loss either (unless you’re having skimmed or 2% milk). It’s a bowl of everything you shouldn’t be eating if you want to lose fat. Forget the claims that it’s full of vitamins. Most cereals are "fortified" with vitamins, meaning the vitamins are artificially added. It’s better to just eat foods that contain vitamins naturally.

If you just can’t stomach something like eggs for breakfast, try a bowl of oatmeal instead (but not instant oatmeal - you want unprocessed oatmeal). It contains no sugars and you can top it with your favorite fruit for a healthy alternative to cereal.

Or you can just skip breakfast entirely. I do it all the time, and it’s gaining momentum even in the scientific literature as a healthy way to change our diet. Look up “intermittent fasting”. Cave men did it—they didn’t have a fridge full of food at hand in the morning. We could learn something from them.

Cereals are bad news for fat loss. Avoid them and eat foods that naturally contain vitamins and minerals.

4) Sports drinks
You’ve all seen the adverts where some sweaty sports player drinks a sports drinks and tells you, "Drink X/Y/Z to get the energy you need for your workout." The only problem is, most of us don’t do anywhere near the levels of physical exercise that professional athletes do. We have no business drinking the same high energy drinks designed for athletes. We don’t spend 8 hours a day working out like they do.

Sports drinks contain fast sugars to help athletes maintain their energy levels. But for us regular folk, fast sugars are bad news for fat loss. And as for those electrolytes? There are better, less sugary sources for those, too. If you need a boost before going to the gym, have a banana.

5) Organic junk food
For some reason, because something contains the label "organic" we assume it’s healthy. Organic pizza, muffins, donuts, cookies, agave sugar, raw sugar... etc. They’re just as bad for fat loss as regular junk food. Don’t let the labels fool you. Organic and gluten-free does not mean something is healthy. If you want to lose fat, accept that you shouldn’t be having "treats" every day like you used to, regardless of their label. You should be eating vegetables, fruits, nuts, and lean meats / fish. Don’t get sucked in by the marketing. Organic food may be better than non-organic, but it still needs to be actual food, and cookies don’t qualify.

If you really want to lose weight, junk food is off limits until you’ve reached your goal weight (except for cheat days / binge days, once a week but no more).

My friend Ken Liu created an inspirational video about our friend Jay, who lost 100 lbs in 100 days using diet advice similar to the above. See here: https://www.youtube.com/watch?v=Ny1Ks6MnG9E.
## Exercise

We have been force-fed the notion that you can eat whatever you want and not gain weight as long as you burn off the equivalent number of calories by exercising. This approach also suggests that exercise alone can cause you to lose weight, that it’s easy to burn off calories in the gym. Nothing could be further from the truth.

It’s totally true that, if you could do enough exercise to burn off that bag of cookies, then exercise would be a viable way to lose weight. The problem is that exercise – even vigorous exercise – burns calories far more slowly than you can eat them. **You can’t outrun your fork.** Most people cannot create a dramatic deficit from an hour at the gym. For a person of average fitness, an hour at the gym will burn only a few hundred calories---equivalent to a few medium-sized chocolate chip cookies, or one of those huge ones (you know, the ones in the cafe that you could hide a baby behind).

Even a very fit person can burn only about 1,000 calories in an hour at the gym---about one slice of decadent chocolate cake. However, many people think that because they go to the gym they are entitled to polish off a whole tub of chocapocalypse ice cream, because they “earned it.”

Exercise is an important part of maintaining lean mass\(^5\) and cardiovascular health (we didn’t evolve to sit in front of a desk all day long, we are designed to be mobile) but if you are eating the wrong foods, then exercise alone will not make you lean. It will help you maintain cardiovascular fitness, but it will not make you thin.

Weight loss starts first and foremost with what you eat. Remember: **you can’t outrun your fork.**

---

\(^5\) Also known as fat-free mass, *i.e.*, muscle, bones, connective tissue etc. Exercise helps you keep your muscle; it does *not* help you lose much fat.
The great thing about it is that you don’t have to feel too cold in order for the mechanism to work. Sure, to make it work wonders, you can immerse yourself in an ice bath. But such extreme measures are not necessary to get decent results. And mild cold exposure is not as uncomfortable as you may think.

There are many ways to get cold exposure, some obvious, some not-too-obvious.

**Drink lots of ice water**
This is probably the absolute simplest case, and anybody can do it as long as you have access to lots of ice water. If you were to drink a gallon of ice water per day (i.e. satisfy all your water needs for the whole day using only ice water), you could burn a few hundred calories per day.

**Go for a cold walk outside in winter**
This is not possible for those who live in places like California, Florida, or Texas, but for those who actually live in a climate that gets cold in winter, you can go for a winter “chill walk”. Ray Cronise, a former NASA scientist who has been doing research on cold exposure since the early 2000s, recommends this. He suggests that you want to keep your extremities warm (hands, feet, head), since cold extremities are a signal to the brain to get worried. So you should wear gloves, shoes, and ear muffs or a headband or a hat to keep your ears and head warm. If the temperature is below freezing or it’s windy you should probably also wear long sleeves and long trousers. But other than that, you could go with just a T-shirt, or even shirtless, and with shorts. You should start with limited time walks: start with 5 minutes or less, and see how your body reacts. Slowly increase the time up to 20-30 minutes, at most once a day, at first.

For those who live in California, Texas, Florida… it can still get chilly in the evenings. Try walking your
dog in the evening without a jacket. Just shorts and a T-shirt, and maybe a hat and gloves. Going for a walk outside when it’s 60 F (about 15C) with just shorts and a T-shirt is a good introduction to mild cold exposure.

**Swimming in warm water**
You don’t need to swim in cold water to get the benefits of mild cold exposure. Even swimming in a nice, heated pool (78F or about 24C) will cause your body to burn extra calories. This is because water is about 25 times more heat conductive than air, which means that water extracts heat from your body 25 times more quickly than air of the same temperature. So swimming in water at 78F will have the same calorie-burning effect as a cold winter walk, without the discomfort. Simply floating in such balmy water could burn 500-1000 calories per hour. And if you actually swim rather than just float, you’ll also get the benefit of exercise.

**Swimming in cold(er) water**
Of course, swimming in colder water will have an even greater effect on calorie burn than swimming in warm water. Swimming in the ocean without a wetsuit, swimming in an unheated pool or river or lake, or being a member of a “polar bear club,” are all options here. However, extreme caution is warranted here since if you’re not careful, hypothermia may result. If you try this, do not try it alone and consult your doctor beforehand.

Start with very short swims, 2-3 minutes at the most, until you ascertain how your body reacts. Use your common sense. The last thing we want to hear is that somebody read this and went swimming in freezing water with tragic consequences. Be careful, and don’t do anything stupid.

---

6 However, too much cold exposure, such as taking an ice bath, can make you feel hungry, which is counter-productive. Stick to mild cold exposure for the best results.

7 I once stayed with a friend who had a hot tub. I tried sleeping in it one night, with the temperature of the hot tub set to 97 degrees (F), just one degree below body temperature. I woke up at about 4am feeling cold. That one degree was enough to extract enough heat from my body while sleeping to make me feel cold, since it was equivalent to sleeping naked without sheets in a room at an air temperature of about 73 (F).
swimming in an unheated pool in California in winter. The water was bloody cold, although I didn’t bring a thermometer to measure it. I couldn’t even put my head under. I resorted to breast stroke, head above the water, for about 10 minutes, before getting out and shivering. It was not fun, and I only tried it twice.

In addition, research suggests that full body immersion in cold water increases ghrelin (a hormone that makes you hungry), so expect to come out feeling hungry. Not a good sensation if your goal is to lose weight.  (Of course you could follow the freezing swim with some interval training to reduce the feelings of hunger… but that’s only if you’re truly desperate to burn fat fast.  Read John Romaniello’s awesome book *Engineering the Alpha* for more about that.)

**Immersion in an ice bath**
Of course, cold water will induce even more calorie burn than warm water, but it’s far less comfortable. Tim Ferriss, in *The Four Hour Body*, suggests 20-minute ice baths in which you slowly immerse yourself over a 20-minute span, starting with just your legs for the first few minutes, then your torso for a few minutes, then up to your neck for the last 5 minutes, and then your hands for the last 1-2 minutes. (Immersing your hands is the hardest part, because your palms are connected directly to your inner core body and immersing your hands causes a quick heat transfer from your core body---more on that below.)

Full-body immersion in ice water takes courage. Most people – and that includes me – have not tried it and probably never will. And, just like swimming in cold water, expect to come out feeling hungry. Again, not a good thing if your goal is weight loss.

**Taking a cold(-ish) shower**
This actually isn’t as bad as it sounds. I actually take a 10 minute cold showers pretty much every morning now. It takes a bit of a Zen-like state for about the first 30 seconds, but after the initial shock it’s really not so bad. It takes about 30 seconds to wet your entire body. Then you spend most of the time with your upper back in the cold stream, as you lather up your head and body with soap. Within a minute or two you hardly notice the cold water on your back. Once you turn around to rinse the soap off, it can be a bit cold on the front of your body, but again not too bad. I am usually done rinsing after about 5 minutes, and then I just stand in the cold stream for an additional 5 minutes, for a total of 10.

And of course the definition of “cold” water from the tap varies depending upon where you live. In California, the “cold” water tap in summer is really just tepid, hardly qualifying as “cold”.  In winter it’s colder, but still not really all that cold. If, however, you live in Canada, or the UK, or any place where there’s snow outside in winter… expect the water coming out of the “cold” tap to be bloody freaking freezing. In this case it really does take a bit more courage to stand in the stream of freezing water for 10 minutes, as the water is so cold your back will start to go numb by the end of it. As with all cold exposure regimens, start with short exposures (2-3 minutes) to see how your body reacts before trying anything longer.

A cold shower is a great way to wake up without coffee. I guarantee you’ll be wide awake after your morning cold shower. In addition, if you do it before breakfast, on an empty stomach, your insulin levels will be very low and your fat cells will be more willing to give up their energy to be burned as heat. So, it’s best recommended to have a cold shower in the morning before breakfast, if your goal is weight loss.

**Put some ice in a bag in a towel on your neck or back while sitting down.**
This method is recommended in Tim Ferriss’s book *The Four Hour Body*. He recommends putting a bag of frozen peas, or ice, in a towel, and then sitting down on the couch for 30 minutes, 5 times a week.
This is best done on an empty stomach (when your insulin levels are low), so either in the morning before breakfast, or perhaps in the evening either before dinner or several hours afterwards. Tim finds that 30 minutes of ice on the back of the neck, 5 times a week, is about 60% as effective as 20-minute ice baths three times a week. In other words, it’s 40% less effective, but much less painful. Not a bad return for a much less painful investment.

**Wear a garment designed for cold exposure**
Here we shamelessly recommend our own ice vest, called *The Cold Shoulder™* (www.ColdSh.com). We designed it specifically for weight loss, because we found all the other options (above) to be less convenient, less comfortable, or too time consuming. If you don’t have a swimming pool nearby, or you live in a warm climate, or if you don’t have the courage for an ice bath or cold shower, or if you are too impatient to sit immobile on a couch with an ice pack on your neck for 30 minutes, then an ice vest is a much better option.

*The Cold Shoulder™* specifically targets brown fat in your shoulders, back, and neck, and initial tests demonstrate that it burns up to a pound of fat per week if worn twice a day from the freezer until it melts. This is equivalent to about two chocolate bar’s worth of calories per day—not bad for taking just 2 minutes out of your busy schedule. But it’s not a miracle worker, and it’s best worn at the same times you’d take a cold shower: in the morning before breakfast, or before bed, when your insulin levels are at their lowest. (Remember: insulin causes your fat cells to *absorb* energy, so to get them to *give up* their energy requires the absence of insulin, which only happens after several hours of no eating. Morning upon waking is best since it’s been 8-12 hours since your previous meal.)

In addition to fat loss, some users have reported that wearing *The Cold Shoulder™* in the evening improves their sleep. Others have reported that helps relieve sore muscles in the neck, back, and shoulders. No surprise, since icing has long been used as a way to reduce pain and inflammation.

*The Cold Shoulder™* is optimal for weight loss because it specifically targets brown fat locations in your body. It’s also comfortable and fashionable enough that you can wear in a formal office setting:

And in any case, dressy vests are making a fashion comeback anyway. When the ice has warmed up to your body temperature, just take it off and throw it back in the freezer. One of our early testers works at a hedge fund in Los Angeles, and he wears it on his morning commute work and for the first 30-60 minutes in the bank. That’s how fashionable it is.

**Won’t I only lose fat from my shoulders?**
No. You cannot “spot reduce” fat. Fat loss is a systemic thing (i.e. happens over the whole body). Unless you have targeted fat loss treatments such as liposuction then you cannot choose where you lose fat from. Once your cold-induced calorie burn is activated, your bloodstream quickly moves the energy from your white fat tissue (on your tummy, hips, whatever) to where it’s needed to generate heat (your brown fat in your shoulders and back).
**Cooling the palms of the hands**

It turns out that the palms of your hands and the soles of your feet are very efficient radiators of heat. The blood vessels in your palms go directly to the heart, and so if you cool the palms, it’s an efficient way to move heat out of the core body quickly. This is one reason why, if you take an ice bath, you don’t want to immerse your hands until the very last point, and only for a minute or two: there is a risk of hypothermia when your entire body is immersed in water, and that risk is increased when the palms of your hands are also immersed. (The soles of your feet are in from the first second, so you’re already cooling the core body that way, but your feet are a lot further from your core than your hands, and so the blood warms a bit as it passes through the legs before getting to your core. With your hands... not so much.)

There are several ways to cool your hands: put them in a sink full of cold water, hold a bag of ice cubes in your palms... Stanford University has developed a special glove that costs $900 and has ice water running through it, attached to a machine that pumps the water and cools it. It’s for professional athletes, and has been shown to increase athletic performance by quickly extracting heat from the body of an athlete in the midst of a heavy workout. However... it costs $900, and the cooling contraption is about the size and weight of a bar fridge. Not very economical, fashionable, or portable. A much cheaper option is a hand-held sphere of ice or frozen gel. Our company, The Cold Shoulder LLC, is currently developing such a gel that can be strapped to your palm and provide cooling. It’ll be useful both during workouts, to cool your body, and for weight loss, by activating your body’s fat-burning mechanism if you’re sitting at rest.

**Other sources of Cold Exposure Info**

In addition to our own page [http://ColdSh.com](http://ColdSh.com), one awesome source of original research and ideas on cold exposure is the website of Ray Cronise, an ex-NASA scientist who was also the guy who’s story was chronicled in the “Ice Age” chapter of Tim Ferriss’s book, *The Four Hour Body*. Ray’s website is [http://hypothermics.com](http://hypothermics.com).

**A final word on your weight loss journey**

We are proud to be able to help you achieve your weight loss goals but we’re not going to pretend our product is the answer to all your weight loss expectations. If you have a lot of weight to lose, then you **MUST** change the way you look at food. There’s no two ways about it, your diet will have to change.

The Cold Shoulder™ product will help you lose weight faster than dieting alone, but unless you significantly change the way you eat, you’re likely to get caught in a yo-yo diet cycle (and we don’t want that for you – we want lasting success for you).

One of the first hurdles you will face in changing your diet will be getting over junk food and sugar addictions. However, if you manage that (and well done if you do!) and find you’re still struggling to live without the foods you used to eat then we would suggest you consider a support group or a therapist to help you break any emotional ties you have to certain foods.

To some of us, food is highly emotional. If you are someone who needs a cookie or ice cream to “make you feel better” after something bad happens, you may need a little extra help in giving up sugary junk food. Support forums or a therapist will be able to help you address any psychological ties you have to “comfort foods.”

Similarly, if you struggle to show any self-control whatsoever with food and find yourself surrounded in a small mountain of empty packets of cookies and chips at the end of the day, you may have a food addiction (yes, it’s a real thing and it’s different

---

8 Yes, addiction. It’s been shown that sugar can be as addictive as cocaine. So expect an uphill battle, and expect a few setbacks. Don’t worry, just keep trying. Stick with it!
from simply being greedy or lacking self control. Again, you should consider a support group or a professional to help you overcome a food addiction.

Finally... everybody falls “off the wagon” occasionally. I’ve always had a sweet tooth. I usually find it difficult to avoid reaching for the chocolate bar or bag of chips at the supermarket checkout. I love my Haagen Dazs chocolate ice cream. It took me a lot of effort to get over my sugar addiction... but eventually I did. Now I can look at the Doritos and Snickers bars and ice cream, and I remember what they taste like... but I don’t usually crave them much anymore. In fact, I hardly even do binge days any more. I allow myself a treat sometimes, or if I go to a party at a friend’s place, I’ll treat it as a binge day and eat whatever they’re offering. But I don’t need binge days any more. I look at treats as... well, as treats. Occasionally, but not as a source of food... because they’re not really food.

To me, the word “food” now means “whole food”. I don’t even bother using the word “whole” any more. I don’t even think of processed “foods” as food any more. Bread, pre-packaged meals, junk “food”... I’ve trained myself to think of those things as basically being the same as the container that holds them. Not edible. Not food.

Once you start to think carefully about what happens to food when it goes into your stomach, it becomes pretty natural to avoid crap. When you see that bag of chips or that chocolate bar or that bottle of soda pop with 300 calories... think about the insulin spike that you know will occur. Think about the sugar rampaging through your system and being converted immediately into fat. Think of the sugar crash that will follow.

View junk food items as they really are: poisonous substances that make you fat and unhealthy, don’t provide any vitamins or minerals, and don’t even make you feel full. That chocolate bar, that bag of chips, may provide a temporary relief to your addiction, but it won’t make you feel full, and you’ll be craving it again in another half hour, in the midst of your sugar crash.

Losing weight takes effort. You need to prepare yourself. It’s an all-out war, not just against your addiction, but against the gargantuan marketing campaigns led by the corporations trying to sell you junk food. It’s a hard battle to fight. But you can win.

Our slogan is, of course, a bit of a shameless plug. But even without referring to our product, we think that it’s time we all start to expend the time and effort required to... say it with me...

Give Fat
The Cold Shoulder!™

Please feel free to distribute this booklet far and wide. We want to spread the message of good food, good health, and cold exposure to as many people as possible.

Visit us at http://ColdSh.com!

Questions or comments? Contact us at info@ColdSh.com.