

SLIM

BY

DESIGN

MINDLESS EATING SOLUTIONS
FOR EVERYDAY LIFE

BRIAN WANSINK, Ph.D.

wm

WILLIAM MORROW

An Imprint of HarperCollinsPublishers

SLIM BY DESIGN. Copyright © 2014 by Consumer Psych Labs, Inc.
All rights reserved. Printed in the United States of America.
No part of this book may be used or reproduced in any manner
whatsoever without written permission except in the case of
brief quotations embodied in critical articles and reviews. For
information address HarperCollins Publishers, 195 Broadway,
New York, NY 10007.

HarperCollins books may be purchased for educational, business,
or sales promotional use. For information please e-mail the Spe-
cial Markets Department at SPsales@harpercollins.com.

FIRST EDITION

Designed by Paul Kepple and Ralph Geroni at HEADCASE DESIGN

Illustrations by Mitch Blunt

Library of Congress Cataloging-in-Publication Data has been
applied for.

ISBN 978-0-06-213652-7

14 15 16 17 18 OV/RRD 10 9 8 7 6 5 4 3 2 1

CONTENTS



Introduction 1

ONE: MINDLESS EATING SOLUTIONS 5

Your Food Radius 8

Nobody Wants Us to Be Fat 11

Chinese Buffet Confidential 12

Starting Small to Get Slim 20

Sixteen Pounds from Happiness 23

Becoming Slim by Design 27



TWO: YOUR SLIM-FOR-LIFE HOME 29

Fat-Proofing the Rich and Famous 31

The Syracuse Study 34

Step One: The Kitchen Makeover 39

Step Two: Tablescape Redesign 46

Step Three: Snack-Proofing 53

Scoring Big at Home 57



THREE: RESTAURANT DINING BY DESIGN 65

In Praise of Leftovers 67

Show Me to a Slim Table 71

One Antidote for Fast-Food Fever 77

“Can I Take Your Order?” 80

Half-Plate Profits 87

Smaller and Taller 89

Bread and Water 92

Faster Food and Happier Meals 95

What Would Batman Eat? 99

Transforming a Town 102

Is Your Favorite Restaurant Making You Fat? 106



FOUR: SUPERMARKET MAKEOVERS 113

The Desserted Island of Denmark 116

Half-Cart Solutions 118

Healthy First and Green Line Guides 121

Wide Aisles and High Products 124

Groceries and Gum 128

Lights, Stars, Numerology! 130

Using the Half-Plate Rule 132

| | |
|------------------------------------------------|-----|
| The Three Checkouts | 135 |
| Back to Bornholm | 138 |
| How Your Grocery Store Can Make You Slim | 141 |



FIVE: OFFICE SPACE AND WORKPLACE **147**

| | |
|-----------------------------------------------|-----|
| Move Away from the Desk | 149 |
| Rethinking Corporate Wellness | 151 |
| Break-Room Makeovers | 153 |
| Trimming the Google-Plex of Food | 158 |
| Cafeteria Cuisine | 162 |
| The Company Health Club | 168 |
| Coaching and Weight-Loss Programs | 172 |
| Would You Sign a Health Conduct Code? | 175 |
| Design Your New Boss's Job Description! | 178 |
| Think Summer Camp, Not Boot Camp | 180 |



SIX: SMARTER LUNCHROOMS **185**

| | |
|-------------------------------------------------|-----|
| School Lunch 101 | 187 |
| When Chocolate Milk Attacks | 189 |
| More Fruit by Design | 193 |
| The Salad Bar Solution | 195 |
| Lunch-Line Redesign, MTV-Style | 199 |
| What's Your Lunchroom Score? | 206 |
| The Lunchtime Report Card | 211 |
| Designing a Smarter Lunchroom Tray | 213 |
| Helping Your School Become Slim by Design | 216 |



SEVEN: SLIM BY DESIGN FOR LIFE **225**

| | |
|--------------------------------|-----|
| From Can't to CAN | 229 |
| From Me to We | 231 |
| Getting Started | 235 |
| Design Trumps Discussion | 252 |
| Sample Scripts | 254 |
| Make It Happen | 265 |

| | |
|------------------------------|-----|
| <i>Acknowledgments</i> | 271 |
| <i>Notes</i> | 273 |
| <i>Index</i> | 301 |

Introduction



THIS BOOK IS BASED ON a very basic concept: Becoming slim by design works better than trying to become slim by will-power. It's easier to change your eating environment than to change your mind. *Slim by Design* is about changing your eating environment—what I call your *food radius*—so that you, your kids, and even your neighbors eat less and eat better. These are simple actions you can take to become permanently slimmer without really working at it. And you can get others to help.

NABISCO HEADQUARTERS, SPRING 1996. Two dozen Nabisco executives are staring at me with their mouths frozen open—like I was Medusa with snakes for hair or like I had just finished yodeling. Instead, I had just told them that if they sold “mini-packs” of their snacks, they’d make more money and help make people skinnier. Sell less food—make more money. Just like in a cartoon, I could see a big collective thought bubble above their heads: **SELL LESS AND MAKE MORE?**

Why was I so sure of my theory? Because I had made a mistake. But one of those good kinds of mistakes that lead to a nice surprise, and not one of those bad kinds that lead to a viral YouTube video with “Epic Failure” in the title.

For two years, my graduate students and I had been tweaking food package sizes and shapes to see how they changed how much food people ate, how much they liked it, and how much they threw away. Although we were originally interested in sustainable packaging that reduced waste, we just kept seeing the same thing over and over. The bigger the package, the more people ate and the more they liked it. This was true for everyone we tested, and it's probably true for everyone from competitive hot dog eaters in Coney Island to desperate housewives in Beverly Hills.¹

Then came the Philadelphia Experiment. We were giving Philadelphia moviegoers free food—Wheat Thins and M&Ms—to see if they realized



how much more they were eating from big packages.² We would take 440 calories' worth of snacks and repack them in large clear zipper bags to make sure they could see all they ate and all they didn't. Unfortunately, we ran out of these big bags and had to give some moviegoers four tiny, Tinkerbell-size bags I had mistakenly bought. These each held about 110 calories—about the same amount of M&Ms that are in those “fun-size” packs that some of us give disappointed trick-or-treaters on Halloween.

Our moviegoers watched the movie and munched away. Afterward, we collected and weighed their bags. What confused us was that moviegoers with the four Tinkerbell-size bags ate about half as much as those with the full 440-calorie one. When they got to the end of their first or second 110-calorie pack, they just stopped eating.³ Even crazier, more than half also said they'd pay 20 percent more money for snacks if companies put them in smaller packages.⁴ Pay more to eat less? This should be a snack company's dream come true.

At that time, I was a consumer behavior professor at the University of Pennsylvania's Wharton School, in Philadelphia. Since Philly is only four

hours away from companies like M&M/Mars and Nabisco, I called them up and said, “Hey, I found a way you could make more money by helping your customers eat less!” Within a week, I had scheduled presentations at these companies and was hopping into my Jeep Cherokee to spread the good news, feeling like the Johnny Appleseed of mini-size packs.

About thirty executives came to each of my presentations, and the first half hour would go pretty well. I'd show them how all the people in our studies ate more from bigger packages, and they'd nod and write down the numbers. But the train wreck always happened at the climactic “ta-da” moment when I revealed my conclusion: If they sold mini-size packs, people would pay more and eat less. The same thing always happened—they just froze and stared at me with confused frowns. “If we sell smaller snack packages, people would pay more . . . and eat less? I don't understand.” Every drive home was a buzz-kill disappointment.

But five months later, one of the less skeptical execs who had moved from M&M/Mars to Nabisco called and said, “Do you really think we can make more money by selling mini-size packages?” I drove back to their



Sell less and make more?

headquarters and described this and other studies in more detail. Eventually Nabisco/Kraft gave my theory a try and launched the 100-calorie pack. Within two years they were followed by the other companies I'd visited, including M&M/Mars, Kellogg's, and others. These mini-size packs helped about 70 percent of all tummy-conscious snack lovers to *mindlessly* eat less, without having to count out their potato chips.⁵ This was a win-win mindless eating solution.⁶

WE'RE ALL MINDLESS EATERS. Each of us makes more than two hundred nearly subconscious food choices every day—soup or salad? A little or a lot? Finish it or leave it?⁷ We're nudged more by our eating environment and things like 100-calorie packs than by our deliberate choices.⁸ But most of these subtle nudges—the size of our cereal bowl, the distance of the candy dish, the color of our plates—push us to eat too much.

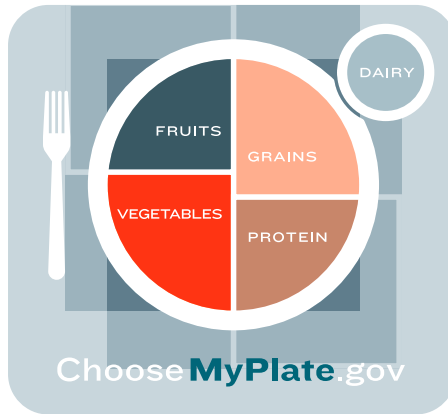
Even though I was appointed by the White House to be executive director of the U.S. Department of Agriculture's agency in charge of the 2010 United States Dietary Guidelines, and even though I am a past president of the Society for Nutrition Education and Behavior, I still don't think most nutrition education is very effective. People know that an apple is better for them than a Snickers bar, but . . . they eat the Snickers bar anyway.

Of course, it's good to understand nutrition, but it's much more effective to change our eating environment. Once you've made the right changes to your eating environment, you'll start eating better *without thinking about it*. You can make healthy decisions even when your brain's on autopilot.

This will be hard for you to believe at first. It was just as hard for the Nabisco execs to believe that the 100-calorie pack would succeed as well as it did. I know these small changes can work because my Lab has spent the past quarter century proving this repeatedly in scientific study after study.⁹ We've seen it work for people in their homes, in their favorite restaurants and grocery stores, in their offices, and in their children's

You don't need any magical skills to make these changes.





schools. Do you eat lunch at your desk, request a booth at your favorite restaurant, shop down grocery aisle 2 after you buy your vegetables, and then come home through the kitchen door? Even if you did only the last of these, our studies show you'll weigh more than your neighbor who instead comes home through their front door.¹⁰

The easiest, quickest, and most natural way to slim down ourselves, our families, our neighborhoods, and our country is to work with human nature and not against it. Willpower alone won't conquer bad eating habits for 90 percent of us. Fortunately, there are a lot of small, innovative, and proven solutions from behavioral economics and psychology that will help make us become *slim by design*.

This book is about taking small actions in the five places or zones that booby-trap most of our eating: our home, our favorite restaurants, our corner grocery store, our workplace, and our child's school lunchroom.¹¹ For each location I'll give a 100-point scorecard that uses our research-based discoveries to show whether these places are making you slim or fat, and I'll also show what you can do and how they can help to make you slim by design. Best yet, you don't need any magical skills to make these changes. All you need to know is what to do—and how to ask the people around you to help. Read on to learn the easy actions that will make us slim, hopeful, and happy.

Chapter One

MINDLESS
EATING
SOLUTIONS



ONE SENTENCE SUMMARIZES TWENTY-FIVE YEARS of my research: Becoming slim by design works better than trying to become slim by willpower. That is, it's easier to change your eating environment than to change your mind. It's easier to move your candy dish across the room than to resist it when it's on your desk. It's easier to use a small plate than to constantly remind yourself not to over-serve onto a big one. Yet while there are many solutions to mindless eating, most of them will go undiscovered because we don't look for them. Instead, we're too focused on the food and not on our surroundings. We're too focused on eating less of one thing, more of another thing, or on launching into the new "Yeast and Potting Soil Diet" we read about on the Internet.¹

I recently spoke at a convention in Washington, D.C., along with a winner of the TV show *The Biggest Loser*. During his season, he'd weighed in at over 400 pounds and weighed out at half of that. During this over-the-top drama, he lost half his weight—200 pounds—by visualizing, sweating, and starving himself thin. Fun times.

After our speeches, we grabbed a speedy buffet lunch before heading to the airport. He's a funny, positive, interesting guy, so it seemed strange that he'd sometimes stop his animated conversation in midsentence to say things like, "Hey, did you notice that I picked out the smallest piece of chicken?" or "Look, I didn't take any bread!" After a while, it became clear that he wasn't making these comments for me. He was making them for himself. He was reminding himself that he was full-time Willpower Man. But it took so much concentration that each time he made the right choice, he wanted to announce it.

I told him I was doubly impressed with his willpower around food because I have none.² For me, an "all-you-can-eat" buffet is an

The solution to mindless eating is not *mindful* eating—our lives are just too crazy and our willpower’s too wimpy.

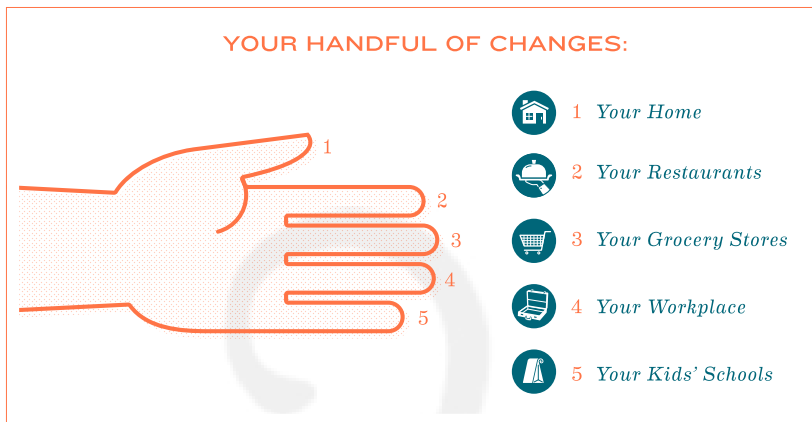
“eat-all-they’ve-got” buffet. So instead of relying on willpower, I have to change my eating environment so it helps me eat less. I take the smallest plate, serve myself salad first, move the bread basket off the table, and so on. Easy actions that help me eat less. He changed his mind. I changed my eating environment.

For 90 percent of us, the solution to mindless eating is not *mindful* eating—our lives are just too crazy and our willpower’s too wimpy. Instead, the solution is to tweak small things in our homes, favorite restaurants, supermarkets, workplaces, and schools so we mindlessly eat less and better instead of more. It’s easier to use a small plate, face away from the buffet, and Frisbee-spin the bread basket across the table than to be a martyr on a hunger strike. Willpower is hard and has to last a lifetime. Rearranging your life to be slim by design is easy. It starts with your food radius.

Your Food Radius



IF YOU'RE A TYPICAL AMERICAN, you buy or eat more than 80 percent of all your food within five miles of where you live.³ This is your food radius—your food neighborhood—and there are only a handful of places or zones that really matter in this food radius and in your eating life: your home, your “go-to” restaurants, your weekly grocery store, where you work, and where your kids go to school. That’s it. Just five places account for more than three-quarters of what we and our families eat—so these are the places that deserve our attention.⁴ Once we change the things we do in these places—or ask them to change for us—we don’t have to think about them again.



Here’s how to visualize your food radius. Print out a map of your town or neighborhood and put a big star where your home is. Then put a big “G” where your favorite grocery store is, put a big “R” on each of your two most frequented restaurants, a big “S” where your kids go to school, and a big “W” where you or your partner work. Using your home as the center of the circle, if you draw a circle that encompasses most of these letters, you’ll see your food radius.

OUR FOOD RADIUS

5 MILES



Acme Corporation



James Woods Regional High School

1 MILE



Spend-a-lot Grocery



The Hindenburger



Krusty's Krust Pizza



Thai-tanic Café

Everyone's food radius is different. It's different for a forty-five-mile BMW-driving commuter in Los Angeles than it is for someone who walks to work in Winesburg, Ohio. It's different for a working mother than her stay-at-home spouse. After analyzing hundreds of Food Radius Maps from different countries, we found that the average food radius for most people is less than five miles.⁵ Again, we will buy or eat more than 80 percent of all our weekly calories within five miles of where we live. We don't need to immediately change the world; we can start close to home.

To make your life slim by design, you don't have to change the whole world. Just focus on these five miles. You can think globally, but you eat locally. This is doable for everyone—you don't need to have the willpower

of the *Biggest Loser*, or a fistful of dollars for a personal chef. You don't have to fight against Safeway, Dunkin' Donuts, the East High School lunchroom, or the dingy cafeteria at work. All you need to do is to (1) change what you do in each of these places and (2) let them know how they could profitably help you eat less and eat better.

Why would they change? Because they'll make more money. Some of the changes you ask them to make will bring in new custom-

ers; other changes will keep them from losing you. A restaurant doesn't want you to eat across the street; a grocery store doesn't want you to shop down the road; and your company doesn't want you to start sending out resumes during lunchtime. Nothing can make these places change faster than believing they can help make you slim and happy while they make money.



We will buy or eat more than 80 percent of all our weekly calories within five miles of where we live.

Nobody Wants Us to Be Fat



NOBODY WANTS US TO BE FAT. Bob's Burgers⁶ or the Hindenburger doesn't give us sky-high piles of French fries because they want us to be fat. They want us to think that they are a better bargain than Burger King. Extra fries get you in the door. But once you order them, they don't care whether you eat them, toss them from a parade float, feed them to honey badgers, or throw them away. Same with the Deep-Fried Snickers Man at your state fair. He only cares that you buy from him and not from Cotton Candy Lady. If you take a teeny nibble, joke about it, sneak another bite when no one's looking, and throw the rest away, it makes no difference to him.

Places that sell food don't want to make us fat; they want to make money. If a wave of veganism washed over the land, in six months there would be Broccoli Kings, Taco Bell Peppers, and McTofu Drive-Thrus.⁷ Restaurants want to make money, and we want to become slim by design. If we show them how to help us and how they can profit, it's amazing what happens—even at all-you-can-eat buffets.

Chinese Buffet Confidential

.....

RICE IS A GREAT FOOD if you're really hungry and you want to eat two thousand of something.⁸ But nobody goes to an all-you-can-eat Chinese buffet for the rice. They go there to eat as if it's their last meal. A good buffet is like a massive people magnet. Some say there's only one way to not overeat at a buffet: Don't go.

Yet here's what's strange. Visit any buffet—Chinese or pizza; breakfast, lunch, or dinner—and you'll see a lot of slim people. A third might be heavy and a third average-size, but the last third will be as slim as Victoria's Secret models. So what do slim people do at buffets that heavy people

don't? Well, they probably eat less, but how *exactly* do they do that? When we ask them this question, they almost all say, "I don't know." Most people have very little idea why they eat the way they eat. You can find this out only by carefully watching them. Maybe they can't tell us how they do it—but they can show us.

After getting permission (all our studies are preapproved and people's identities are kept anonymous),⁹ the researchers in my Lab found eleven cooperative Chinese buffets—from New

Jersey to Iowa to California—and settled into dark corners pretending to read a book while we ate. Then we proceeded to secretly observe 213 buffet-goers from their first step into the restaurant to their last step out. We noted where they sat and what direction they faced, how they served themselves food, how many times they chewed the average bite, and practically how many times they blinked, coughed, dropped their fork, and so on. We calculated their BMI (body mass index) and categorized them as slim, average, or heavy.¹⁰ Our goal: to secretly discover what the slim people did that heavy people didn't.

How did we get people to reveal their BMI stats and all that other info? If James Bond had been running this study, he'd have placed



Rice is a great food if you're really hungry and you want to eat two thousand of something.

pressure-sensitive mats by the door so that when people walked in, their weight would be silently recorded. To get their heights, he would aim a laser beam grid at the buffet to give a reading to the nearest eighth of an inch. To time their behavior, he would have multiple Swiss stopwatches with lots of clicky buttons on them. To count how many buffet trips they made or how many times they chewed, he'd use a bunch of super-expensive precision German stadium tally counters by Zeiss or Leica.

That's how James Bond would have done it. But we didn't have a genius inventor named "Q" or a limitless high-tech British budget. So instead of being James Bond, we ended up channeling Wile E. Coyote. Remember the Road Runner cartoons? Wile E. was the somewhat dopey coyote who was always trying to catch the Road Runner with the worthless gadgets he bought from the Acme Corporation.¹¹ Nothing ever, ever, ever worked—every one of them was a catastrophic failure at the worst possible time. Acme Corporation—that's where we shopped.

That pressure-sensitive mat? It might have been able to detect a car that rolled on it and parked overnight, but it couldn't detect a person walking over it at one mile per hour. That cool laser beam grid? After three consecutive nightmares that we were blinding people as they served themselves General Tso's chicken, I set up a sayonara eBay account to sell it. Swiss stopwatches? Neither Swiss, nor did they usually stop when necessary. German stadium tally counters? Couldn't afford anything German, so we bought one from a country I don't think had been invented when most of us were born. Worked perfectly.

Despite a bumpy first week, we finally settled into a two-month groove. We developed a cool way to match people's body shape to standardized charts that helped us classify their weight and height, and we developed detailed coding sheets to track 103 different visible characteristics and behaviors of each diner. Then we crunched the data to see what slim diners did differently from heavy ones.

Here's the first thing we discovered: Slim diners "scouted" out the buffet before grabbing a plate—before even picking up a plate, 71 percent of them walked around and scanned the salad bar, the steam trays holding fourteen seemingly identical chicken dishes, the sushi station, and the

What do slim people do at buffets that heavy people don't?



dessert bar. Only after they figured out the lay of the land did they grab their plate and swoop down to cherry-pick their favorites, with an eagle eye on the stir-fry. Heavier diners did the opposite. They were twice as likely to charge ahead to the nearest stack of plates, take one, and fill it up. They didn't skip to the foods they really liked. Instead they served themselves a bit of everything they didn't hate.¹²

Slim people even acted differently *after* taking their food. They trotted back to faraway booths along the walls, and—here's what's cool—73 percent faced away from the buffet. Heavy diners did the opposite. They sat at tables that were on average sixteen feet closer to the buffet. Moreover, they were three times more likely to sit facing the food, where they watched all the people who went back for seconds and thirds and fourths.¹³ Every time they saw someone take another lap around the stir-fry, it reminded them that that was “normal” behavior.

What else do slim people do? Besides scouting out the food, sitting farther away, and facing away, they were also more likely to use chopsticks, choose smaller plates, and chew each bite an average of fifteen times—three chews more than heavy people.¹⁴

Yet here's what's crazy. None of these behaviors has anything to do with counting calories or choosing the bean sprouts over the Peking

duck. They instead dealt with how they scanned the food, where they sat and faced, and which plates and utensils they picked up.

So how do slim people develop these slim-by-design habits? There are no twelve-step moo shu pork programs. When we ask buffet-goers why they sat farther away, didn't face the food, chewed more, and scouted out the buffet, almost everyone said, “I don't know.” Less than five minutes after they ate, they couldn't remember what they did or why they did it.

Without realizing it, these slim people had stumbled across tricks to eat less. Does where they sat, the direction they faced, or the number of times they chewed their Peking duck explain why they were skinnier than the person sixteen feet closer? No way. Yet maybe these people also do other things—at home, at other restaurants, at the grocery store, or at work—that have unknowingly helped them fat-proof their lives over the years.



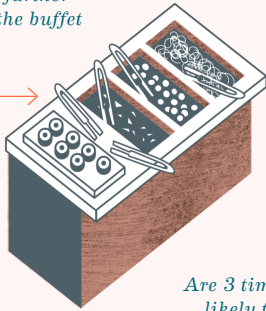
There are no twelve-step moo shu pork programs.

AT THE BUFFET

WHAT DO SLIM AND OVERWEIGHT DINERS DO DIFFERENTLY?

SLIM DINERS . . .

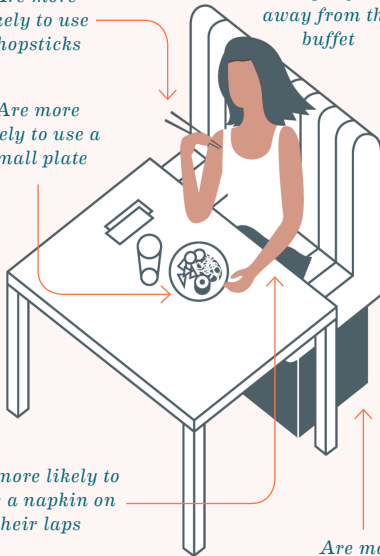
Sit 16 feet farther away from the buffet



Are more likely to use chopsticks

Are 3 times more likely to face away from the buffet

Are more likely to use a small plate



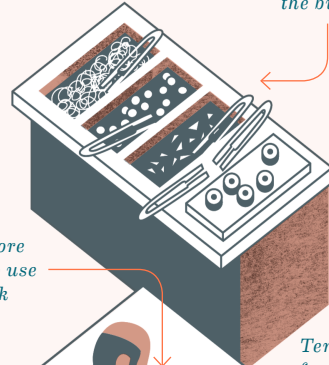
Are more likely to have a napkin on their laps

Are more likely to sit in a booth

* Slim diners scout out the buffet before they pick up a plate.

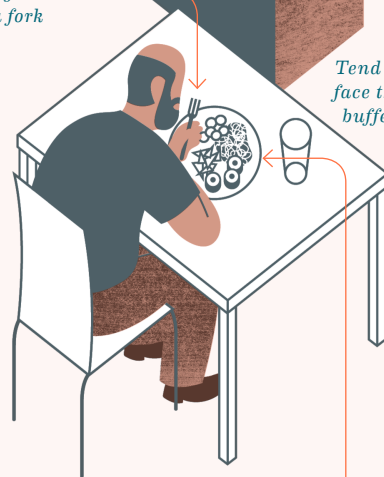
OVERWEIGHT DINERS . . .

Sit closer to the buffet



Are more likely to use a fork

Tend to face the buffet



Are more likely to use a large plate

Are more likely to sit at a table

* Overweight diners tend to pick up a plate and go directly to the food.

These hidden habits are useful if we want to avoid polishing off the Peking duck, but they're also very useful to someone else: the buffet owner. Buffet owners don't want us to gorge ourselves; it costs them money every time we belly up to the buffet. They want us to eat enough to be happy and to think this was a tasty steal of a deal. They don't want us to load our plates, waste food, and eat until we are regretful and can't breathe.

This point was made vividly one day when a young man contacted me, saying, "My father owns some Chinese buffets in central Pennsylvania." He went on to say that he and his dad heard about this study and figured that if they could get their buffet-goers to eat less—to eat like slim people—they'd save on food expenses and make more money. Sounded like a win-win plan for both the buffet-goers as well as the owner, so we agreed to help. Since slim people tend to use smaller plates, eat with chopsticks, sit far from the buffet, and scout the buffet before serving themselves, they decided to rearrange—to redesign—their buffets so that all the diners would *have* to act like slim people.

- * **The buffet owner bought smaller plates for the serving line, downsized from 11 inches to just under 10. Portions looked bigger, and diners never noticed.**
- * **He had the waitstaff seat people farthest from the buffet. It made the food less convenient and less tempting.**
- * **He set chopsticks at every place setting. If you wanted a fork, you had to ask.**
- * **He put all the plates *behind* the buffet. People had to walk around the buffet—encouraging them to scout out their favorite dishes before serving.**
- * **He strategically placed plants and folding Chinese screens between the buffet and the tables to help block some of the food from sight.**

Again, the father-and-son restaurant team didn't do this out of benevolence. They did it to make money. If they could nudge diners to take and waste less food, they could bump up their profits. Suppose they own four buffets, and these changes save them \$25 in food costs per restaurant per day. At the end of the year, they would have saved more than \$36,000. Ka-ching.¹⁵

A few months later the son made a trip to my Lab to introduce himself in person. He said everything was going great, but that it had been overly time-consuming to make those changes. He'd worked on it six days a week for three months—even skipping a family vacation to finish on schedule. This seemed odd—they were only making five changes to each restaurant. Unless he was taking slow-motion pills, I couldn't see it taking more than a couple weeks. I asked, "Why do you think it took so long?"

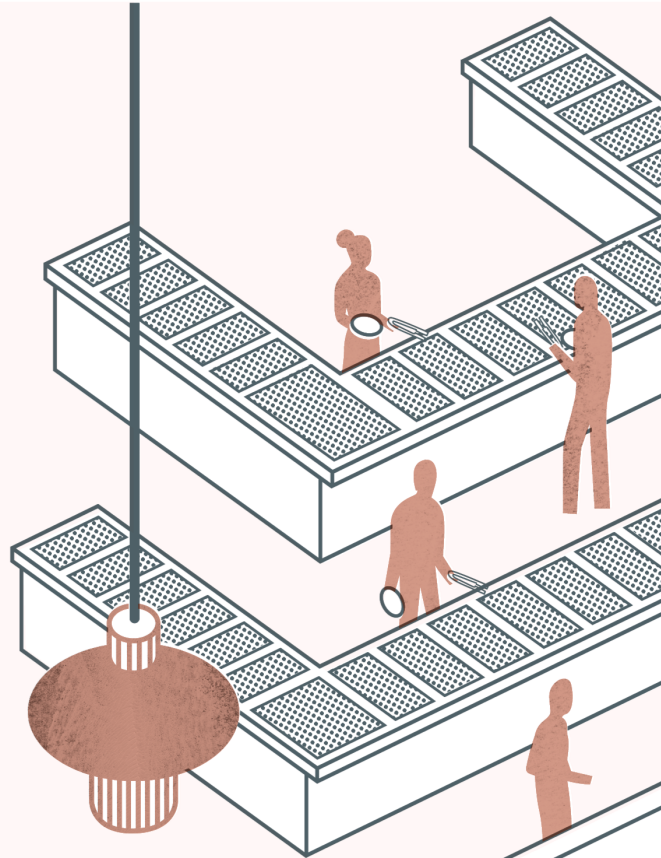
He replied, "My dad owns sixty-three of these buffets."

That's a lot of ka-chings. Watch out, P. F. Chang's.

Buffet owners don't want us to gorge ourselves; it costs them money every time we belly up to the buffet.

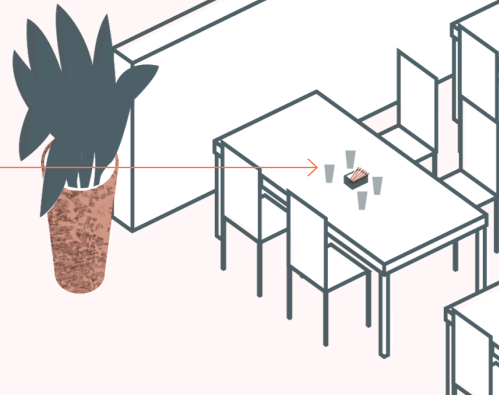
A PROFITABLE SLIM-BY-DESIGN CHINESE BUFFET

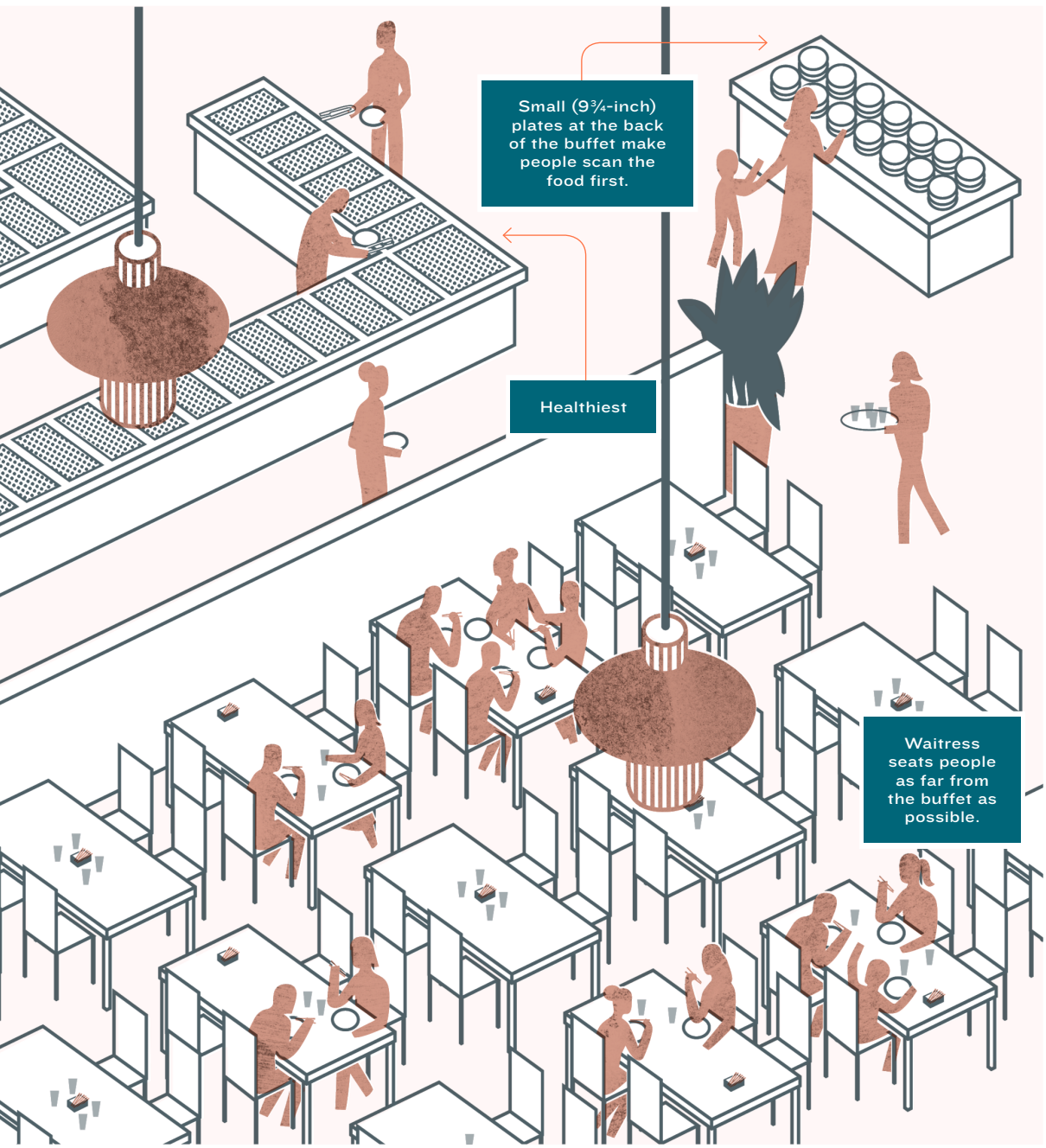
- * Seats people farthest from food, and facing away from it when possible
- * Uses plants to block sightlines to the food
- * Decreases the size of plates to 9¾ inches
- * Offers chopsticks and makes people ask if they want a fork
- * Puts plates on the far side of the buffet so people have to look at all the food first
- * Gives 12-ounce (versus 20-ounce) drinks and lets customers refill for themselves



Screen and plants partially block the buffet from diners.

All tables are given chopsticks and water.





Small (9¼-inch) plates at the back of the buffet make people scan the food first.

Healthiest

Waitress seats people as far from the buffet as possible.

Starting Small to Get Slim

.....

SOME PEOPLE—LIKE MANY SLIM FANS of Chinese buffets—don't know how they stumbled across habits that either made or kept them slim. Other people are much more deliberate about finding their secret key. After *Mindless Eating* came out, people would tell me about one or two little changes or new habits that led them to mindlessly lose a lot of weight. Most people had chosen one change—using smaller plates, moving the candy dish, using the Restaurant Rule of Two, and so on. But hundreds of other people surprised me with strangely unique changes that they had invented because it fit with their unique lifestyle:

- * **Eating eggs and chocolate chips every morning for breakfast**
- * **Snacking only after walking the dog**
- * **Eating cottage cheese after work**
- * **Never using the microwave**

While these things may sound a little crazy, they all made perfect sense after they were explained: Eggs were filling and prevented a midmorning snack (and the chocolate chips made them “easier” to eat); walking the dog (and carrying the doggie bag) made snacking less appetizing; eating cottage cheese pushed dinner back and prevented late-night snacking; and not using the microwave led to smaller but better-planned meals, which used less-processed food. What is key here is that these idiosyncratic habits worked effortlessly well for these individuals because they fit with their lifestyle.

Why were these people weight losers and others not? Over the past few years we've tracked more than 1,500 struggling dieters who eventually either lost or gained weight. Some of the differences between the two groups were obvious; others weren't.¹⁶ For example, some people made lots of dramatic changes to their eating habits and some—like

WHAT SLIM PEOPLE DON'T DO

It's not just what slim people do; it's also what they don't do. Slim people act differently from heavy people at buffets and beyond.

In 1983, Barbara Florio Graham wrote a clever article for *McCall's* titled "Thin People Don't." She explained that after living for fourteen years with a slim man who never gained weight, she came to believe it was just because he thinks differently. Here's a sample of what she observed of her husband:

Slim people:

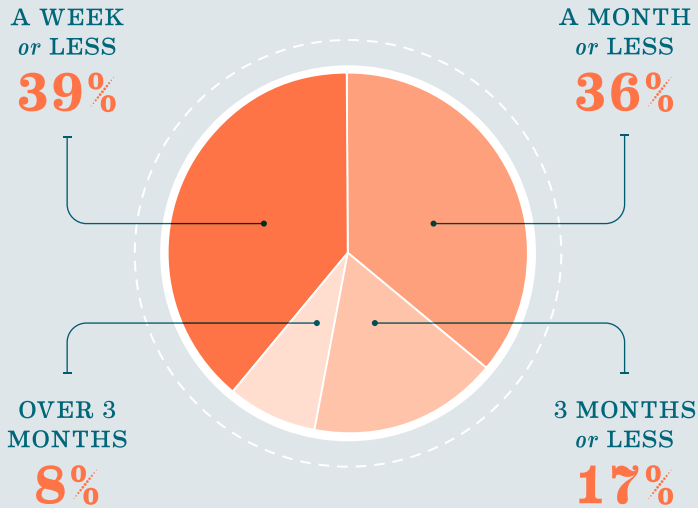
- * **become so absorbed in a weekend project they forget to have lunch;**
- * **fill the candy dish on their desks with paper clips;**
- * **counteract the midafternoon slump by grabbing a nap instead of cookies;**
- * **throw out stale potato chips;**
- * **try all the buffet salads (except the white ones), leaving room for only one dessert;**
- * **seek out interesting party conversations instead of the hors d'oeuvres;**
- * **bring four cookies into the TV room instead of a box**

There's a Slim-by-Design Registry that tracks and quantifies the secrets and habits of slim people around the world (SlimByDesign.org). Its goal is to use some of these secrets of slim people to help others become the same way—and to help the slim people stay slim. Check out what other slim people do, or add your own slim-by-design secret.

those above—made only one or two small ones. The more changes you make, the more you would expect to lose, right? Except that's not how things work.

People who most successfully lost weight made only one or two changes but stuck with them day after day—an average of at least twenty-five days a month.¹⁷ Unfortunately, the people who didn't lose weight often tried to tackle too much all at once. They tried to change everything, and most gave

HOW LONG DID YOUR MOST RECENT DIET LAST?



up within a month. Making huge changes to your eating life is too tough. If we decided we wanted to start training for a marathon, we wouldn't expect ourselves to run twenty miles during our first workout. It wouldn't last. Yet that's the equivalent of what most dieters do when they start a diet. A new study of ours found that 75 percent of dieters gave up within the first month—and 39 percent didn't even make it past a week.¹⁸ What they didn't realize is that if they'd made only one or two of the *right* changes, it wouldn't take long before they'd be a lot happier with their weight.

Sixteen Pounds from Happiness



IN THE LAND OF SENSATIONALISTIC TV SHOWS like *The Biggest Loser* or *Bridezillas*, it's easy to believe there's little hope for our national waistline. Some claim that half the people in the United States—including our children—are overweight. Given this trend, they predict an upcoming plague-like Apocalypse of Fat. On bad days, I picture the year 2025 looking like the map on the next spread.¹⁹

Of course, the media fuel this fear. Some spin fat-pocalyptic stories that frighten us into believing that in ten years most of us will be spending our Saturdays riding little Wal-Mart scooters so we can be the first one to the candy aisle. The more we see these headlines, the easier it is to feel hopeless. Movie seats, stadium seats, and caskets are all bigger than they were forty years ago.²⁰

But before we throw in the towel, let me ask you this: How many pounds would *you* have to lose to feel happy about your weight?

We've asked this question to thousands of people of all shapes and sizes. Some don't want to lose any weight, some a lot; some want to lose seven pounds, some seventy. What's surprising is how *little* weight the average person says they want to lose before they'd be happy. Our recent surveys of more than 1,500 women found that four out of five said they would be happy if they could lose an average of less than sixteen pounds.²¹ This ranged from twenty-five-year-old hipsters in Brooklyn to sixty-five-year-old grandmothers from Topeka to all of us who skim those supermarket diet magazines while we're waiting in the checkout line.

Sixteen pounds? That's doable. We don't have to join a reality show, eat cork-flavored rice cakes, or bug our friends with a play-by-play of our latest diet. Sixteen pounds is hopeful. That's not much more than a pound a month for a year. Each day it's one less candy bar, or two fewer Cokes, or three more miles of walking—and all within your food radius.

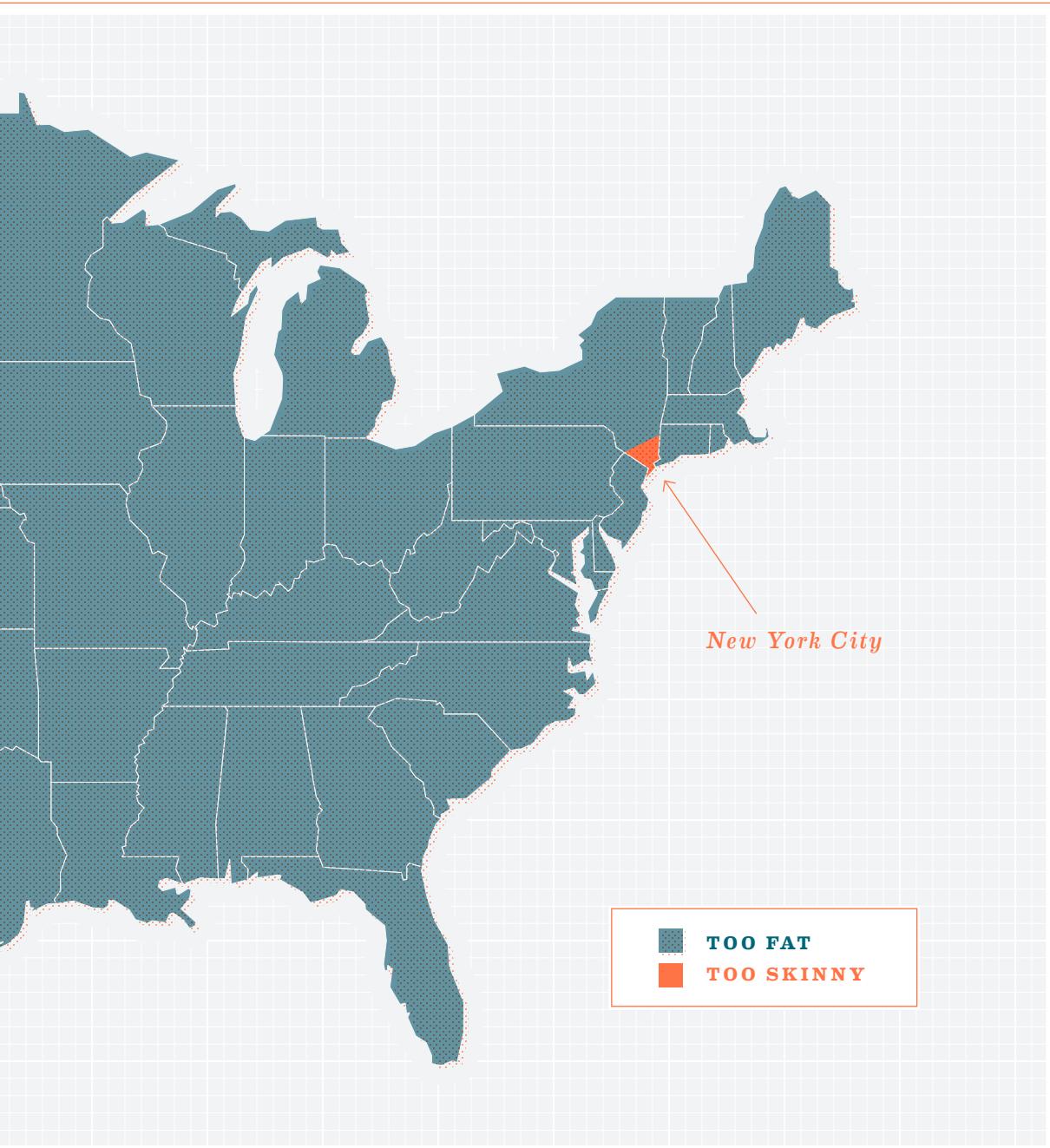
For normal people, the winning solution is not to count calories and eat nothing but steamed fish and peas—it's just too hard to do if you're a real person with a real job.²² We drag ourselves home at seven o'clock with seven



PREDICTING THE AMERICAN LIFE IN 2025



Los Angeles



things still left on the day's to-do list. We try to change our clothes while the phone's ringing, the microwave's beeping, and the kids are turning feral. There's no way most of us can Zen out, savor the taste of one pea at a time, and contemplate whether we're full or not.²³ Our lives are just too crazy.

But here's good news. For most of us, the solution to our weight problem is not *mindful* eating. The solution is to make a few changes in our food radius so we can mindlessly eat *better*. The ringing phone, undone to-do list, and feral kids will still be there, but we can deal with them better when our life's been set up to be slim by design. This starts with our home. It's where you inhale a handful of granola for breakfast, pack lunches for your kids, microwave leftovers for dinner, or call Krusty Krust's Pizza for delivery. It's where you might pour a late-night glass of red wine or sneak a couple of spoonfuls of Ben & Jerry's Chubby Hubby ice cream by the light of the freezer. Even if we think we eat out a lot, most of what we eat is either made at home, delivered to our home, or brought into the home for feasting.²⁴

What's the first room you walk into when you get home? If it's the kitchen—and if you happen to have even one box of breakfast cereal anywhere in sight—our research shows you'll weigh twenty-one pounds more than your neighbor who doesn't.²⁵ Why? The first thing you see when you walk through the door is yummy, convenient food. Now, the kitchen door you walked through didn't make you fat, but doing so did make that free-range cereal box much more visible and reachable.²⁶

One solution would be to frantically seal up your kitchen entryway with boards and nails, like in those late-night zombie movies. A second solution would be to come home through the front door (and not the kitchen door). But an even easier solution would be to vanquish all breakfast cereal from your kitchen counter so that Tony the Tiger and Count Chocula can't tempt you with their fiendish, come-hither cartoon eyes.²⁷

But here's what won't work. Telling yourself, *Now that I know this, it won't happen to me*. My Lab has researched tens of thousands of people, and it's clear that even the smartest, most disciplined, calorie-counting, twigs-'n'-tofu dieters are as easily influenced by their surroundings as the rest of us—even when they know what's happening. Fortunately, there's an easier, more permanent solution for all of us.

Becoming Slim by Design



AS WE GET OLDER, wiser, and lazier, we gradually arrange our homes to make our favorite tasty foods easier to find and eat. Meanwhile, the same thing has been happening all around us. Restaurants have made it easier to order tasty foods. Supermarkets have made them easier to buy. Workplaces have made them easier to eat at our desks. School lunchrooms have made them easier to pile onto a tray. It has all helped to make us “fat by design.”

But in the same way that the 100-calorie pack helped snackers eat less (and companies make more money), and in the same way the buffet owner was able to tweak his sixty-three Chinese buffets to get diners to eat less, there are easy changes we can make to eat less everywhere in our food radius. Right now, our homes, restaurants, workplaces, grocery stores, and schools are set up in ways that lead us to pick up a cookie rather than an apple. But just as they’ve evolved to make us overeat, we can easily redesign them to make us slim.

Again, someone might wryly announce that the only way to not overeat at a buffet is never to go to one—but he’d be wrong. As we learned, a better solution would be to redesign the buffet visit to be slimming rather than sinning—and the buffet owner could profitably help.

This book is about solutions—concrete, actionable solutions that my Lab has developed, tested, analyzed, and tweaked in dozens of towns and cities across the United States and abroad. This book shows how you—the private citizen-muncher—can help your kids eat better, control your eating at restaurants, shop like a slim person, and eat less at home without having to think twice. In other words, it specifically shows how you can help yourself and your family become slim by design. But equally important, this book will show you how to get all of these places and people around you to help.

But let’s start closer to home . . .



Notes



INTRODUCTION

1. While we didn't do packaging size studies with competitive eaters, we have done other studies with them, and they won't be much different than the rest of the world when it comes to overeating during a nonwork day. Brian Wansink, "Can Package Size Accelerate Usage Volume?," *Journal of Marketing* 60, no. 3 (July 1996): 1–14.
2. This same theater was also one we used a couple of years later when I showed that people would eat 34 percent more popcorn from large buckets even if it was five days old and tasted like rancid Styrofoam.
3. In reality, the large size we gave them was closer to 437 calories and the smaller ones were 109 calories. I called these "mini-size packaging" during the presentations, but the executives shortened these to 100-calorie packages in our discussions. We published a similar study for validation: Brian Wansink, Collin R. Payne, and Mitsuru Shimizu, "The 100-Calorie Semi-Solution: Sub-Packaging Most Reduces Intake Among the Heaviest," *Obesity* 19, no. 5 (Spring 2011): 1098–100.
4. This same study was replicated in a lab study at Wharton with similar results. While lab studies are a lot more boring than studies in bargain movie theaters, they're tighter. Nobody comes in late, asks for different snacks, or makes out in the back row.
5. This varies depending on the type of snack and type of person, which is why, thankfully, no company has tried to use this as a claim. Our studies usually show that about 70 percent of the people given these smaller packages eat less during that occasion. For the other 30 percent, some eat about the same and others eat slightly more. If they want about 270 calories of a snack, two packages give them too little and three give them a bit too much, but they choose them anyway. Thankfully, the people who seem to benefit most from 100-calorie packages are those who need it most—overweight people and dieters. The 30 percent who don't eat less (and some eat more) have been studied by others: Maura L. Scott, Stephen M. Nowlis, Naomi Mandel, and Andrea C. Morales, "The effects of reduced food size and package size on the consumption behavior of restrained and unrestrained eaters," *Journal of Consumer Research* 35, no. 3 (2008): 391–405.
6. More ideas at Brian Wansink and Mike Huckabee, "De-Marketing Obesity," *California Management Review*, 47, no. 4 (Summer 2005): 6–18; also Brian Wansink, "Can Package Size Accelerate Usage Volume?," *Journal of Marketing* 60, no. 3 (July 1996): 1–14.



7. See more at Brian Wansink and Jeffrey Sobal, “Mindless Eating: The 200 Daily Food Decisions We Overlook,” *Environment and Behavior* 39, no. 1 (January 2007): 106–23.
8. Interestingly, the people who make the most decisions about food every day are the people on the extremes. Slim people make about 225 and heavy people make about 250. The difference is that the answers are different. Slim people might be more likely to say, “No,” and heavy people, “Yes.” This is nicely covered in the article by Sobal and me cited in the previous note.
9. These articles have been published in some of the best medical, psychology, nutrition, obesity, consumer behavior, marketing, and economic journals. Most of these won’t show up in a PubMed search because they aren’t indexed there. Check out Web of Science and other resources for lots of other great things scholars have done in this area.
10. They weigh seven pounds more when there is food like cereal that is visible in the kitchen. Brian Wansink, Andrew S. Hanks, and Kirsikka Kaipainen, “Kitchen Counter Correlates of Obesity: An Observational Study,” forthcoming.
11. Once we know these, we can work to change them ourselves, and we know how the places around us can help us eat better.

CHAPTER ONE: MINDLESS EATING SOLUTIONS

1. Because I used to write a bimonthly column in *AARP* magazine called “Chew on This,” I got a close look at the interviews for the magazine. The “Yeast and Potting Soil Diet” was mentioned in a funny interview by the witty NBC News anchor Brian Williams. It’s equally effective and ill-advised as the “cardboard only” diet.
2. There’s a saying among psychology and consumer behavior researchers that “Research is me-search.”
3. More at Kathryn Hoy and B. Wansink, “Our Food Radius: Americans Purchase or Eat 75% of Their Food within Three Miles of Home,” *Journal of Nutrition Education and Behavior* 45, no. 4S (2013): 47.
4. They all move us in the direction of becoming more slim by design. A lot of enlightened companies want to do what’s right and they want to do it profitably. My government service, as executive director of the USDA’s agency in charge of the Dietary Guidelines, made me realize that there are many win-win ways to do this if we think win-win instead of the more common win-lose or us-them mentality.
5. From my working paper, Brian Wansink, “The Food Radius of an American,” under review.
6. *Bob’s Burgers* is a *Family Guy*-like animated series whose title character is voiced by H. Jon Benjamin (the voice of Archer). If you don’t mind snorting milk out of your nose as you watch it, it’s a must-see for anyone who loves fast food and the animated spy series *Archer*.

7. More on this can be found in chapter 9, “Fast Food Fever,” of Brian Wansink, *Mindless Eating: Why We Eat More than We Think* (New York: Bantam-Dell, 2006).
8. This line is compliments of the late, great Minneapolis comedian Mitch Hedberg, who also made the comment that if you’re a fish and want to be a fish stick, you have to have really good posture, otherwise you’d be a fish clump, and nobody will take you to parties.
9. Incidentally, all of these studies are preapproved. Today, each study planned by university researchers must be submitted to that university’s Institutional Review Board to ensure it will not harm the participants. Why would someone participate? If they are college students, they usually get extra credit. If they are “real people,” they are usually paid \$10–\$30, or given free food, movie tickets, and so on. Their identity is always protected, whatever they say and do is anonymous, and any record of their participation is eliminated once we analyze the data. Until a few years ago, most research in business schools, and often that related to sensory studies and food intake, was given a general class of approval or exemption. This was given as long as the research did not threaten the participants, and as long as they gave their consent and could quit the study at any time. Because of litigation related to medical-school research, such exemptions are no longer possible. Everything from a laddering interview to an observation study at a restaurant now needs detailed prior approval by the Institutional Review Board at most schools.
10. This is a standard way of assessing the extent to which a person is overweight. Following the guidelines of the World Health Organization, people are classified as overweight if their body mass index (BMI) is greater than 25 and obese if their BMI is greater than 30. Body mass index is computed as the ratio of weight, measured in kilograms, to squared height, measured in meters. Those with a BMI over 30 are considered obese, between 25 and 30 is considered overweight, and under 25 is considered normal. Since the word “normal” is a little bit off-putting to some, I’m using the word “slim” as a shortcut, although “slimmer” would be geekily accurate.
11. The Acme Corporation name in these *Road Runner* cartoons is especially ironic, since the Greek word *akme* meant peak or prime, and Acme’s products are total generic pieces of garbage.
12. Many of the details of this can be found at Brian Wansink and Collin R. Payne, “Eating Behavior and Obesity at Chinese Buffets,” *Obesity* 16, no. 8 (August 2008): 1957–60. To better nail down the distance slim versus heavy diners sit from the buffet, the sixteen-foot distance was determined in a separate study of two buffets (one in Washington, D.C., and one in Cortland, New York) that allowed diners to seat themselves.
13. It wasn’t just how they served themselves and where they sat: the thinner people were three times as likely to use chopsticks (23.5 versus 7 percent) and nine times as likely to use a small plate (13.7 versus 1.4 percent), and they even chewed their food 24 percent more. Thinner people chewed their average mouthful of food 14.8 times, compared to 11.9 times for the heavier people.

14. Buffet connoisseurs might also find two of our other buffet studies of interest: Brian Wansink and Mitsuru Shimizu, “Eating Behaviors Predict the Number of Buffet Trips: An Observational Study at All-You-Can-Eat Chinese Restaurants,” *American Journal of Preventive Medicine* 44, no. 4 (April 2013): e49–e50; David R. Just and Brian Wansink, “The Flat-rate Pricing Paradox: Conflicting Effects of ‘All-You-Can-Eat’ Buffet Pricing,” *Review of Economics and Statistics* 93, no. 1 (February 2011): 193–200; and Brian Wansink and Andrew S. Hanks, “Slim by Design: Serving Healthy Foods First in Buffet Lines Improves Overall Meal Selection,” *PLoS One* 8, no. 10 (2013): e77055.
15. A person eating an \$8.00 buffet might eat \$2.50–\$3.00 worth of food. If they waste even one-tenth of what they take (25¢–30¢ worth of food), and if there are 100 total people who eat there for lunch and for dinner, that’s a conservative \$25/day.
16. Except at the real extremes, how heavy we are doesn’t have to do with how often we eat fast food or drink soft drinks: David R. Just and Brian Wansink, “Why Isn’t Fast Food Intake Frequency Related to BMI Except at the Extremes?,” under review.
17. One of the more notable of these studies traced people in the National Mindless Eating Challenge. Keeping consistent—regardless of the advice one’s been given—was a huge predictor in weight loss. See Kirsikka Kaipainen, Collin R. Payne, and Brian Wansink, “The Mindless Eating Challenge: Retention, Weight Outcomes, and Barriers for Changes in a Public Web-based Healthy Eating and Weight Loss Program,” *Journal of Medical Internet Research* 14, no. 6 (2012): e168.
18. Brian Wansink, Aner Tal, and Mitsuru Shimizu, “The Wichita ‘One-Ton’ Weight Loss Program: Community Weight Loss and the National Mindless Eating Challenge,” *FASEB Journal* 25 (2011): 974.2.
19. Special thanks for Dr. Bill Dietz, formally of the Centers for Disease Control, for this joke.
20. Lots of great examples of this can be found in Lisa R. Young’s book *The Portion Teller* (New York: Morgan Road Books, 2005). Also see Lisa R. Young and Marion Nestle, “The Contribution of Expanding Portion Sizes to the US Obesity Epidemic,” *American Journal of Public Health* 92 (2002): 246–49.
21. This is slightly more for women than for men. Brian Wansink and Simone Dohle, “‘Little to Lose’: Surprising Weight Loss Aspirations of American Women,” under review; and Brian Wansink, Simone Dohle, and Katherine I. Hoy, “Fifteen Pounds to Happiness: The Personal Obesity Crisis and Weight Loss Ideals of American Women,” *Journal of Nutrition Education and Behavior* 45 (2013): 4S, 41.
22. I used to say that counting calories doesn’t work for 90 percent of the population, but 90 percent is probably low. It only includes the people who have tried to diet. There’s a sizable population who have never needed to, tried to, or cared to.
23. I am also a big believer in the research and clinical work done around mindful eating by wonderful people such as Drs. Susan Albers, Jean Krisilis, and Jan Chozen Bays, and I’ve been honored to write introductions for their books and blurbs for their covers. It’s worked well for many people, and there are great

- insights for anyone willing to take a little bit of effort and discipline to do it as it should be done. It's also one of the best and easiest ways to both appreciate the food and enjoy its taste.
24. Some studies suggest that 50 percent of our food is eaten away from home. What that doesn't account for is how much of that came from the home in the form of a packed lunch, snack, or granola bar that was grabbed on our way out the door. Even much of the food purchased outside the home—such as carry-out or home delivery—is eaten in the home.
 25. More details of this can be found in chapter 7, but the whole article is Brian Wansink, Andrew S. Hanks, and Kirsikka Kaipainen, “Kitchen Correlates of Obesity,” under review.
 26. Seeing a food is one of the biggest triggers of eating bouts. The first study of mine to attract popular attention: Brian Wansink, “Antecedents and Mediators of Eating Bouts,” *Family and Consumer Sciences Research Journal* 23, no. 2 (December 1994): 166–82.
 27. Actually eye contact, even with these freakish little two-dimensional characters, makes you feel more connected with the brand and prefer it more. In a recent study, we showed that 51 of 57 cartoon characters end up—at least incidentally—making eye contact as you and your children walk down the cereal aisle. They might be looking more at the cereal than you, but the damage is done. It's a fun study and one that has key lessons for how cereal companies can sell the healthier stuff, too. More at Aviva Musicus, Aner Tal, and Brian Wansink, “Eyes in the Aisles: Why Is Cap'n Crunch Looking Down at My Child?,” *Environment & Behavior*, 0013916514528793, first published on April 2, 2014.

CHAPTER TWO: YOUR SLIM-FOR-LIFE HOME

1. The whole key is to have high contrast between the color of the food you serve and the color of the plate you use. Since we're most in danger of overserving starches, and since most starches are white—pasta, rice, potatoes—it's easy to just have a set of darker plates for those foods. We used red plates in the study, which took place at a Cornell Alumni Reunion. “Look . . . a free pasta lunch!” More at Koert van Ittersum and Brian Wansink, “Plate Size and Color Suggestibility: The Delboeuf Illusion's Bias on Serving and Eating Behavior,” *Journal of Consumer Research* 39 (August 2012): 215–28.
2. More at Brian Wansink, “Slim By Design: Kitchen Layouts of the Thin or Famous,” *Journal of Nutrition Education and Behavior* 44, no. 4 (July–August 2012): S21.
3. People who have succeeded in being slim all their life end up learning some amazing secrets. Often each person only has one or two rules of thumb that pretty much keep them on track. If you're one of these people, consider joining the Slim-by-Design Registry. You can keep yourself on track and help others also. Sign up at SlimByDesignRegistry.org.