

# CALORIE COUNTING DEBUNKED

## INFOGRAPHIC BUNDLE

01

THE COST OF GETTING LEAN

02

THE PROBLEM WITH CALORIE COUNTING, PART 1

03

THE PROBLEM WITH CALORIE COUNTING, PART 2

04

THE PORTION CONTROL GUIDE

# THE COST OF GETTING LEAN:

IS IT REALLY WORTH THE TRADE-OFF?

**SIX-PACK ABS. TIGHT BUTTS. LEAN, VIBRANT, FLAWLESS HEALTH. THAT'S THE IMAGE THE FITNESS INDUSTRY IS SELLING.**

But have you ever wondered what it really costs to achieve that cover model look? What you have to do more of? What you have to give up?

Make no mistake, there are real trade-offs. Let's talk about what they are.

## UNHEALTHY

### Athletes at this level of body fat

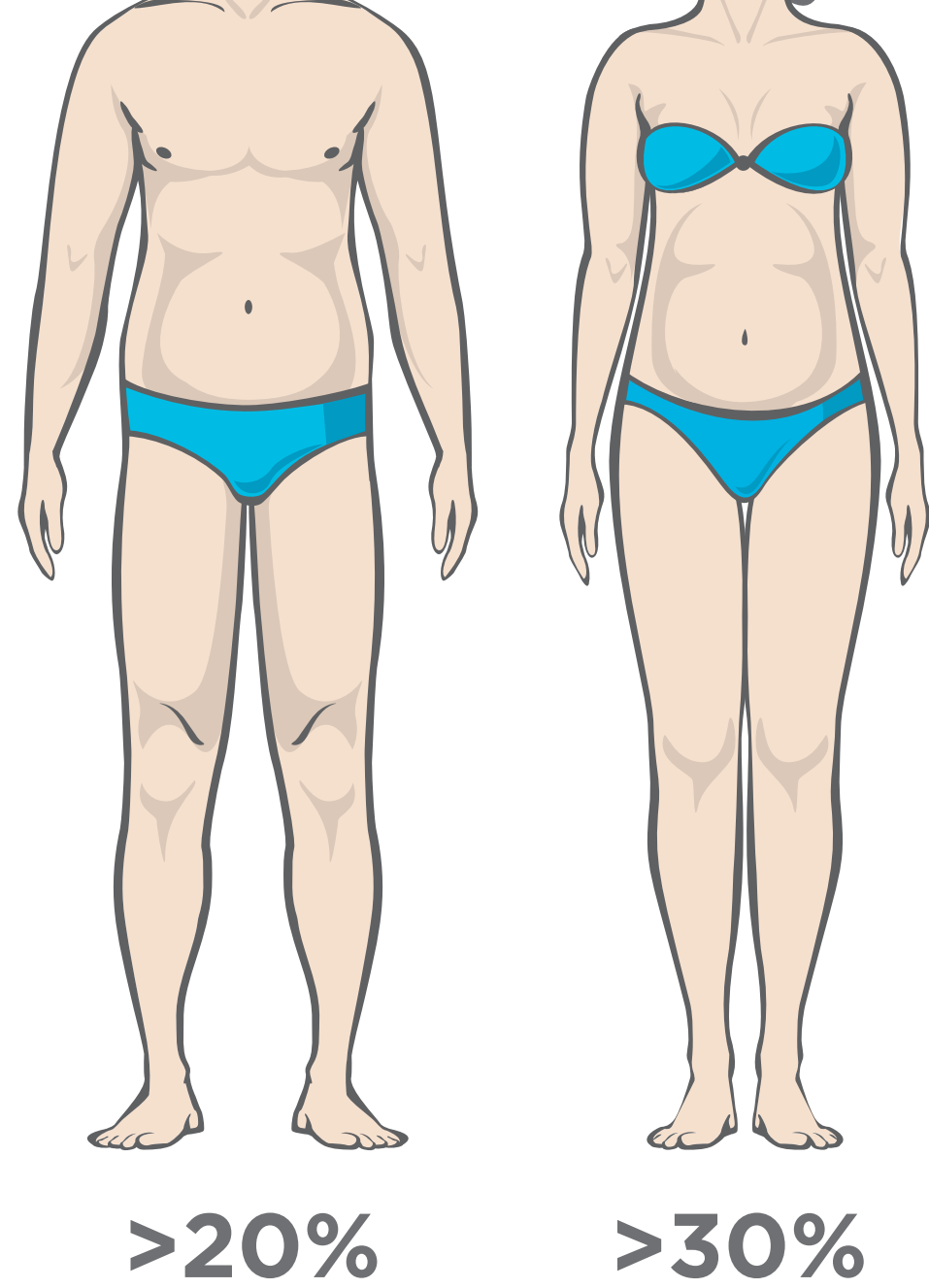
Almost none.

### Benefits

Easy fallback for some folks.  
Does not require much thought or work.

### Tradeoffs

Poor health.  
Low energy levels.  
Poorer life expectancy.  
Risks of metabolic syndrome.  
May need medications to manage various conditions.



>20%

>30%

### Do more

- Eat processed foods.
- Eat big portions.
- Eat quickly.

### Do less

- Exercise of any kind.
- Eat fewer whole foods.
- Sleep less.

VERY EASY TRANSITION

## HEALTHY

### Athletes at this level of body fat

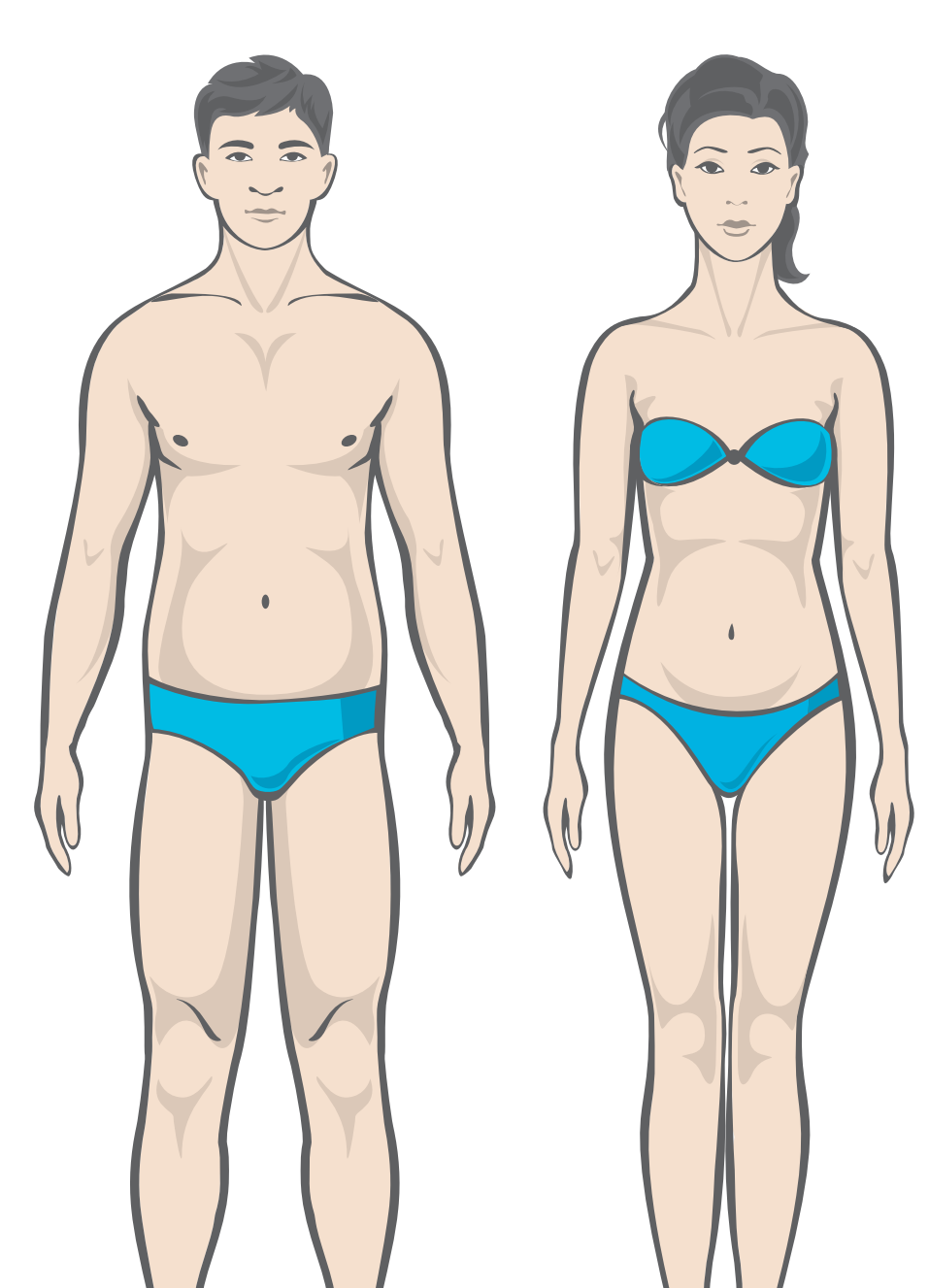
College aged athletes.  
Off-season elite bodybuilders.  
Olympic shot putters.

### Benefits

Improved health & energy.  
Improved sleep.  
Exercise is easy and enjoyable.

### Tradeoffs

Requires some thought and planning.  
You'll look good but not super lean.



15-20%

25-30%

### Do more

- Eat slowly until satisfied at 60% of your meals.
- Include 1-2 palms of protein dense foods in 1-2 meals per day.
- Include 1-2 fists of vegetables in 1-2 meals per day.
- Exercise 3-5 times per week, any activity you enjoy, any intensity level.

### Do less

- Eat fewer desserts and processed foods.
- Drink fewer caloric beverages

EASY TRANSITION

## HEALTHY

### Athletes at this level of body fat

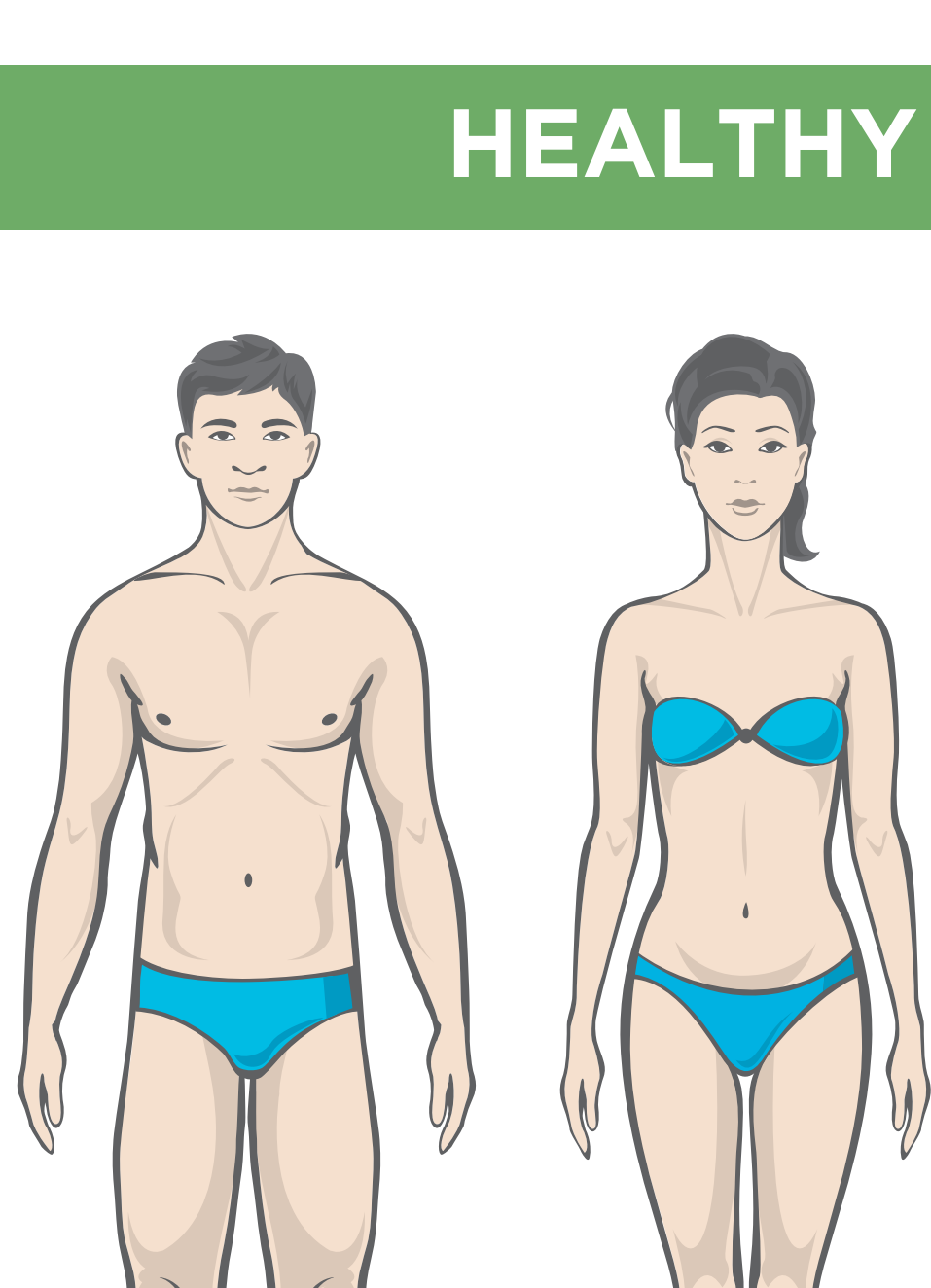
Olympic canoe and kayak athletes.  
Professional baseball players.  
Professional softball players.

### Benefits

Fairly easy to maintain.  
Energy levels will continue to improve.  
Will probably be able to reduce or eliminate many medications.

### Tradeoffs

Requires some planning and may require minor social sacrifices, e.g. exercising instead of hanging out with friends at a bar.  
May require effort and attention to maintain this much sleep.  
May require some increased food prep skills and effort.



13-15%

23-25%

### Do more

- Eat slowly until satisfied at 75% of your meals.
- Include 1-2 palms of protein dense foods in 2-3 meals per day.
- Include 1-2 fists of vegetables in 2-3 meals per day.
- Exercise 30-45 minutes daily with 1-2 sessions breaking a sweat.
- Sleep at least 7 hours per night.

### Do less

- Eat desserts / processed foods 3-5 times per week, within reason.
- Drink up to 3-5 caloric beverages per week.

MEDIUM TRANSITION

## HEALTHY

### Athletes at this level of body fat

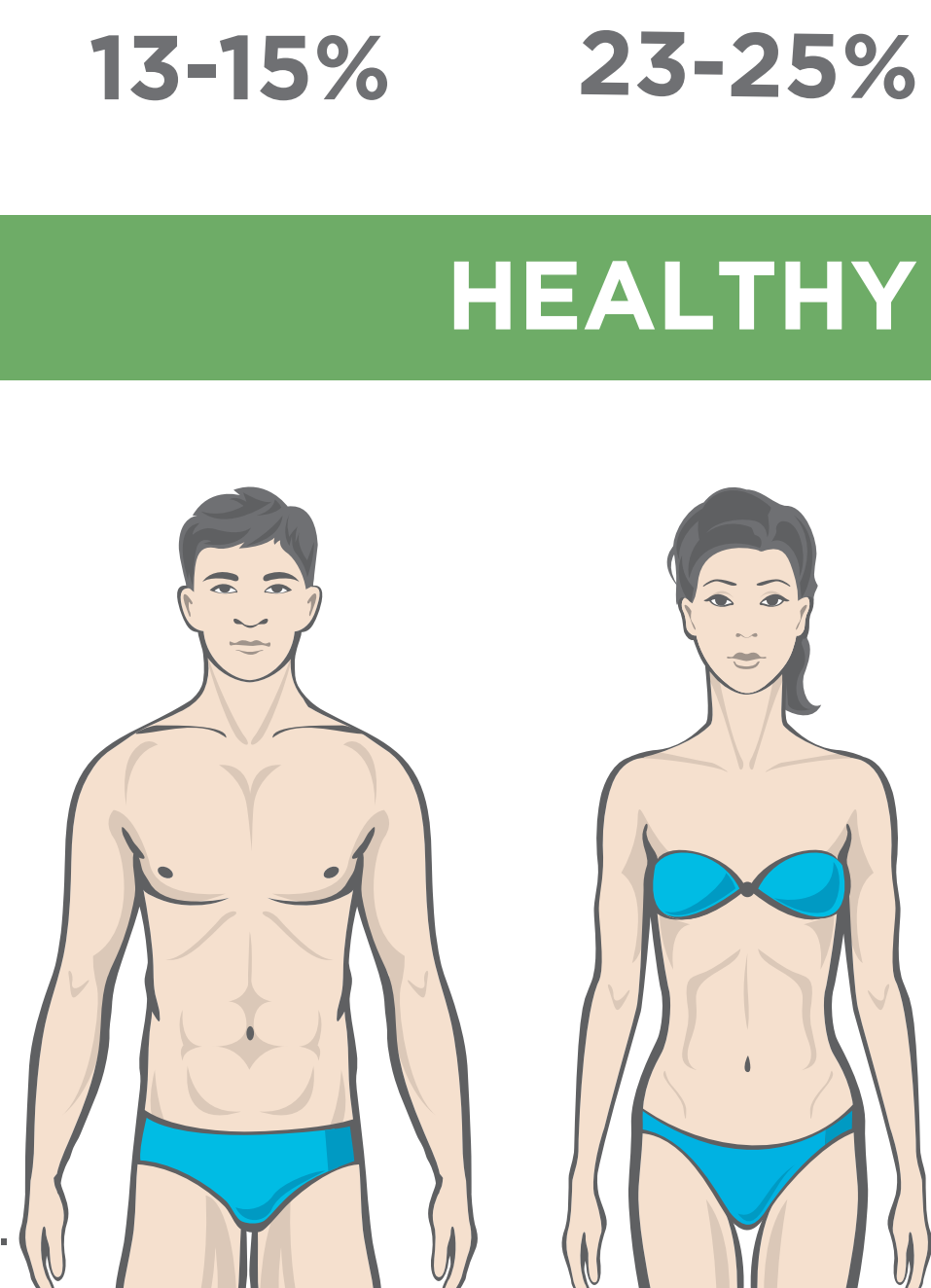
Olympic swimmers.  
Professional hockey players.  
Olympic volleyball players.

### Benefits

Fit appearance and good overall health.  
Fewer food cravings due to balanced diet and exercise regime.  
Relatively easy to maintain once practices become habitual.

### Tradeoffs

Requires more planning and greater overall attention to diet.  
Requires a greater time commitment for the more consistent exercise regime.  
May need assistance or coaching to achieve this amount of consistency.



10-12%

20-22%

### Do more

- Eat slowly until satisfied at 90% of your meals.
- Include 1-2 palms of protein dense foods in each meal.
- Include 1-2 fists of vegetables in each meal.
- Include 1-2 thumbs of healthy fats and 1-2 cupped handfuls of quality carbs at most meals.
- Exercise 45-60 minutes daily, with 3-4 sessions breaking a sweat.
- Sleep at least 7-8 hours per night.

### Do less

- Eat desserts / processed foods 1-2 times per week, within reason.
- Drink up to 1-2 caloric beverages per week.

HARD TRANSITION

## HEALTHY

### Athletes at this level of body fat

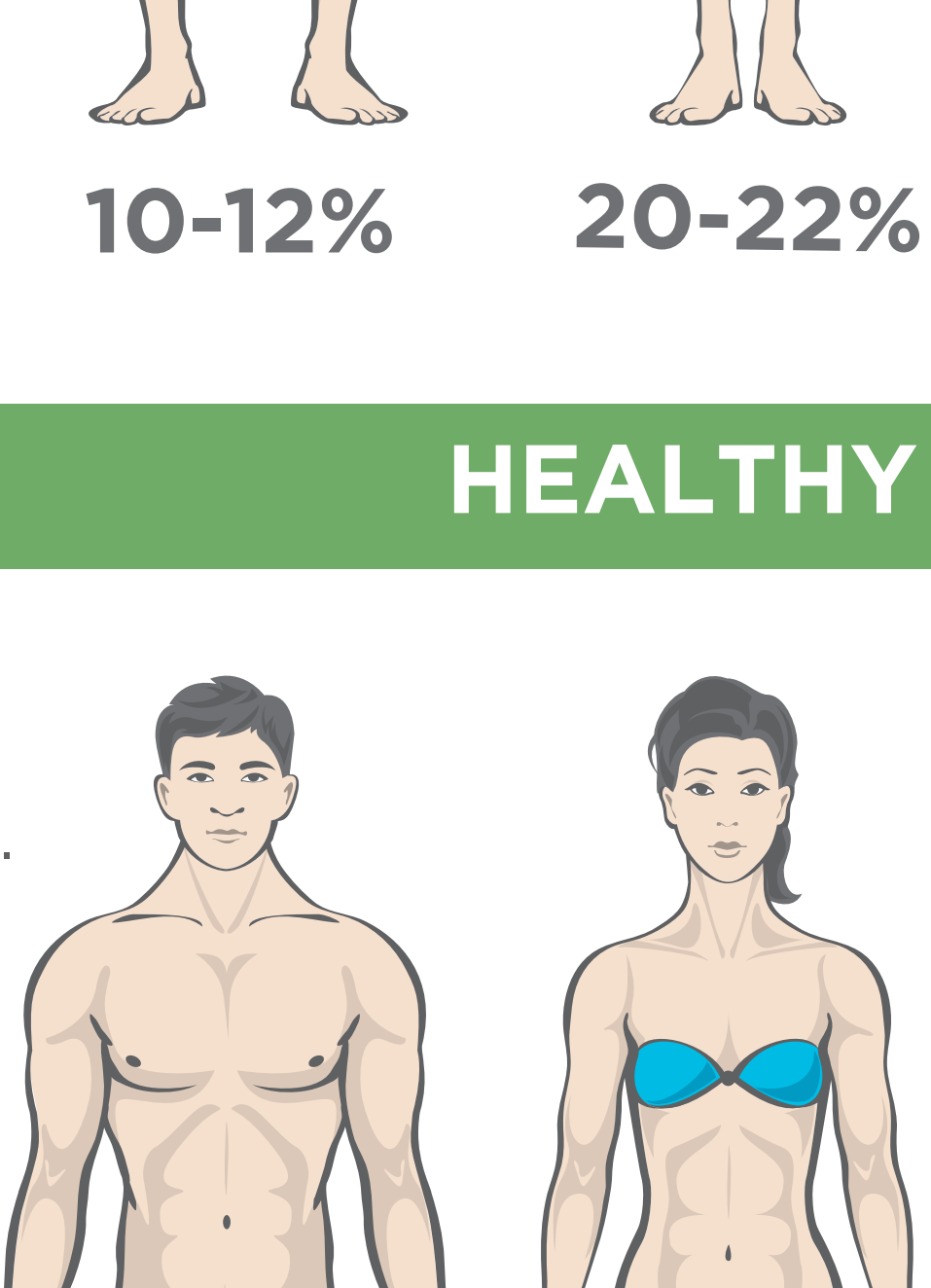
Olympic level boxers and wrestlers.  
Olympic sprinters (100-400 meters).  
Olympic level gymnasts.

### Benefits

Will probably look extremely lean; will have that six-pack.  
Overall health will probably be good due to carefully balanced and minimally processed diet.  
Will likely have high work capacity and good stamina.

### Tradeoff

May struggle in social situations, especially those involving food.  
May not have time for social opportunities outside of exercise.  
May have to give up other hobbies and interests outside fitness.



6-9%

16-19%

### Do more

- Eat slowly until satisfied at 95% of your meals.
- Include 1-2 palms of protein dense foods in each meal.
- Include 1-2 fists of fibrous vegetables in each meal.
- Include 1-2 thumbs of essential fats in each meal.
- Exercise 60-75 minutes daily, with 4-5 sessions breaking a sweat.
- Sleep at least 8 hours per night.

### Do less

- Limit carbs to post-workout or designated higher carb days.
- Eat desserts / processed foods once every 1-2 weeks, within reason.
- Drink a caloric beverage once every 1-2 weeks.

VERY HARD TRANSITION

## UNHEALTHY

### Athletes at this level of body fat

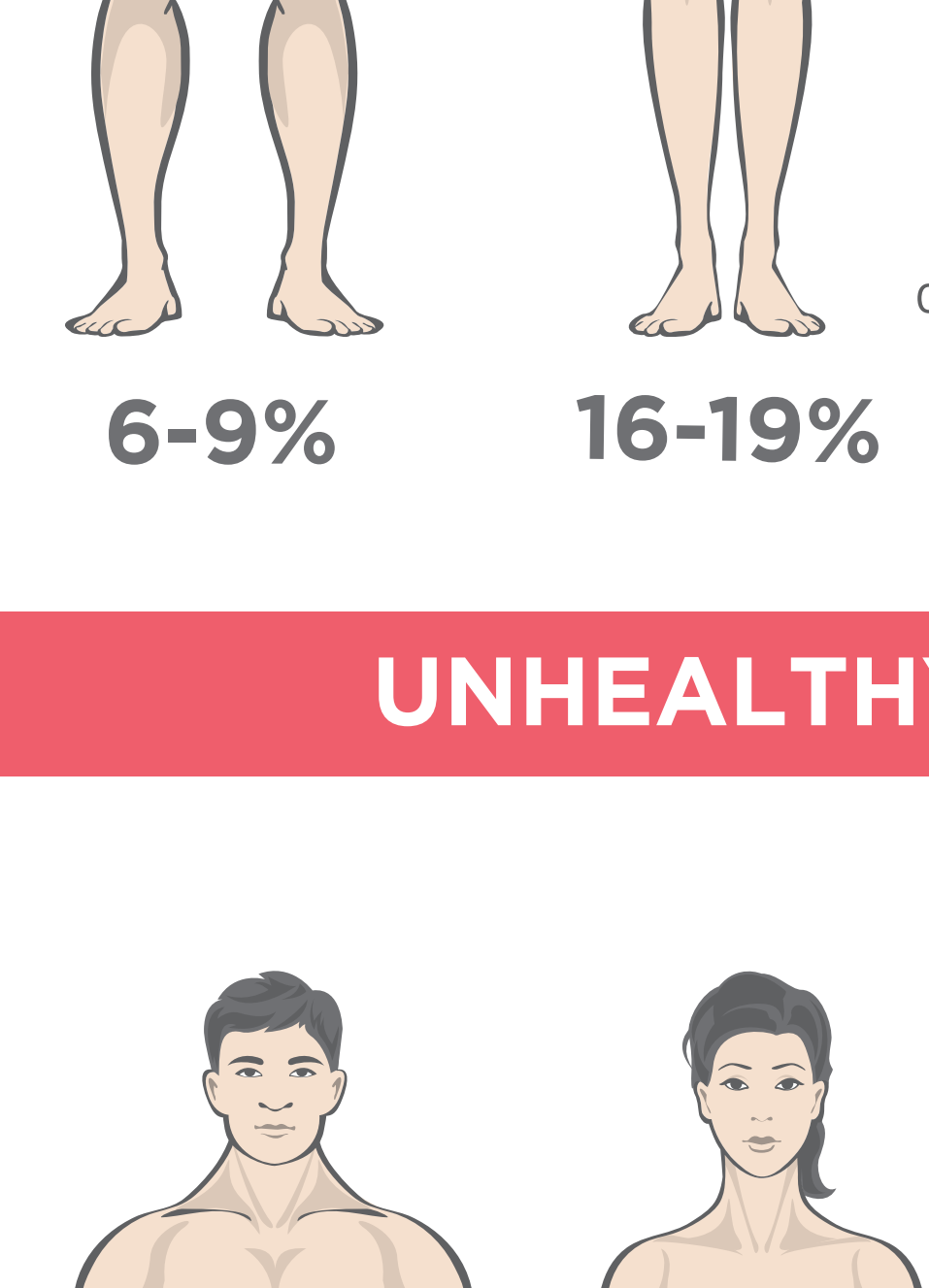
Elite bodybuilders on contest day.  
Fitness models on the day of the photoshoot.

### Benefits

May feel pride at achieving an athletic goal.

### Tradeoffs

Will have difficulty socializing in most typical situations where food is involved.  
May miss out on fun events with family and friends.  
Big time commitment to measure, weigh, and track all foods.  
Hyper focus on diet and exercise may contribute to disordered eating.  
Time required for exercise may crowd out all other pursuits and interests.



<6%

<16%

### Do more

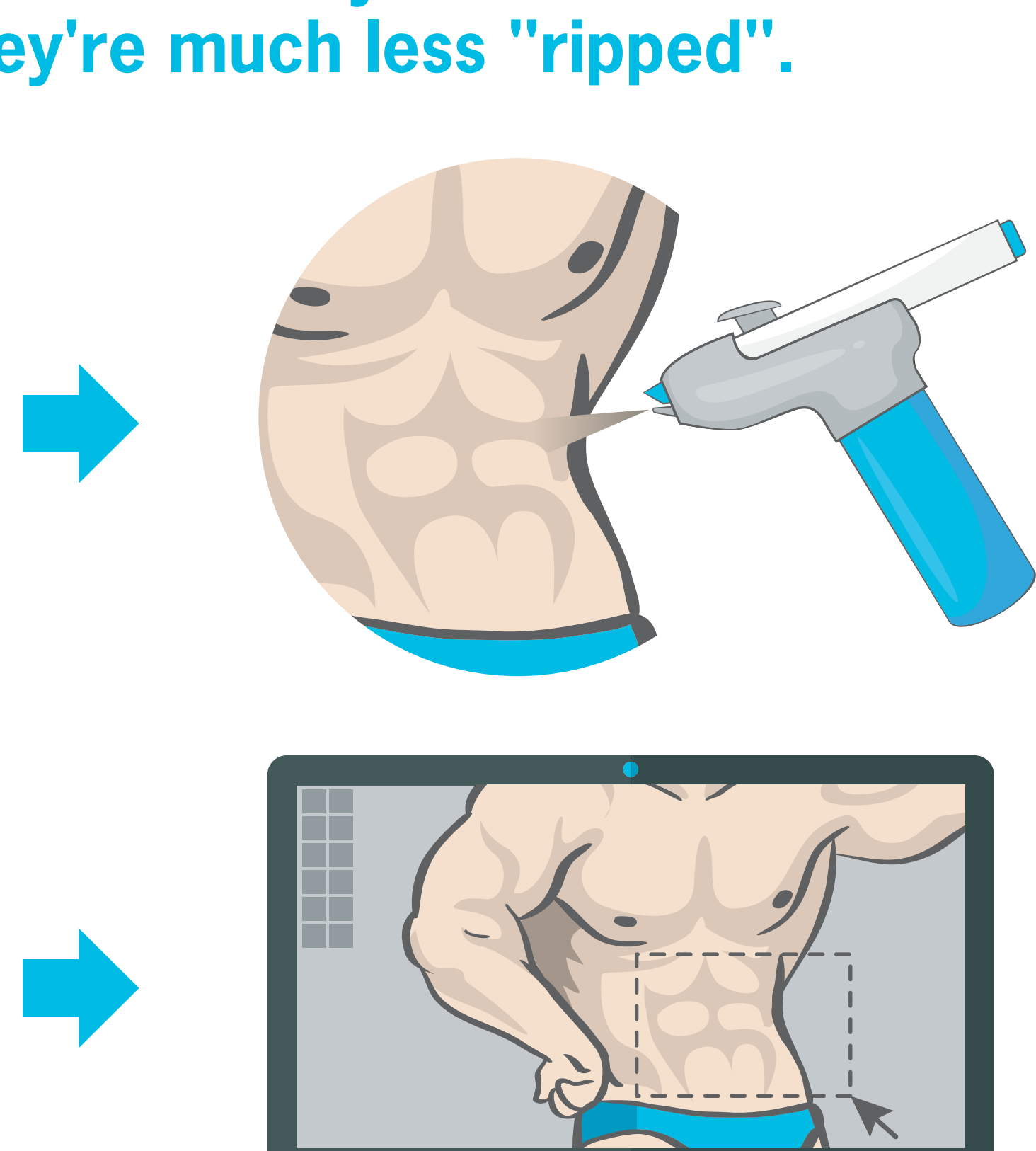
- Eat slowly until satisfied at 99.9% of your meals.
- Incorporate calorie/carb cycling.
- Follow meal plan with predetermined foods and amounts, and measure food specifically.
- Include exact amount of lean proteins, fibrous veggies, and healthy fats in each meal.
- Exercise 45-75 minutes, twice daily, with 6-7 sessions breaking a sweat.
- Sleep at least 8-9 hours per night.

### Do less

- Limit carbs to post-workout or designated higher carb days.
- Eat desserts / processed foods once every 10-12 weeks.
- Avoid caloric beverages.

## SIX-PACK ABS: A LOOK BEHIND THE SCENES

Aside from the heavy airbrushing and photoshop done in most magazines, cover models often diet strictly for photo shoots. This means they only look "cover-ready" for a short time. The rest of the time they're much less "ripped".



THE LEVELS OF LEANNESS SEEN ON COVER MODELS ISN'T NECESSARILY HEALTHY.

In fact, the type of severe dieting they often use can lead to:

- LOSS OF SEX DRIVE
- DISORDERED EATING
- SOCIAL ISOLATION
- AMENORRHEA (IN WOMEN)
- LOW TESTOSTERONE (IN MEN)
- AN UNBALANCED LIFE

HEALTHY, ATHLETICALLY LEAN, OR SUPER LEAN? IT ALL DEPENDS ON YOUR PRIORITIES AND GOALS.

- FIRST, FIGURE THEM OUT.**  
If you don't know what your priorities are, now's a great time to explore that.
- NEXT, DECIDE WHAT YOU'RE WILLING TO DO.**  
What will you do to serve those goals and priorities? Why?
- NEXT, DECIDE FREQUENCY.**  
How often, how consistently, and how precisely, are you willing to do those things?
- NEXT, DECIDE WHAT YOU'RE NOT WILLING TO DO.**  
What are you unwilling to do? To trade off? To give up?

Now you can make better decisions, leading to the body you really want, while living the life you really enjoy.

# THE SURPRISING PROBLEM WITH CALORIE COUNTING

## PART 1: 'CALORIES IN'

Most people who count calories for weight management assume it's an exact science. Here, 5 reasons why tracking the calories in your food is a flawed approach.

# 1

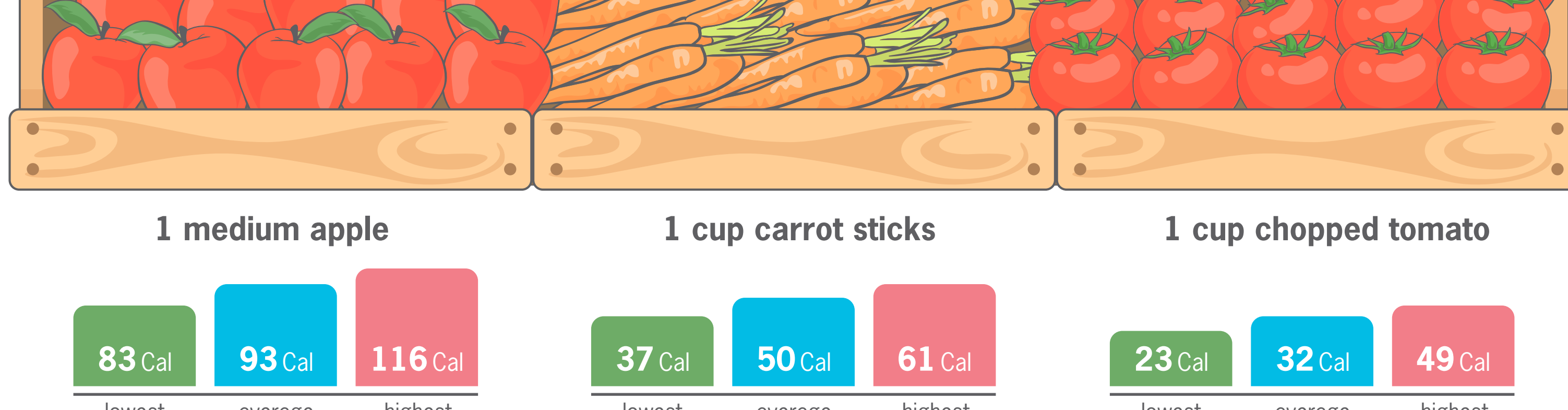
### CALORIE COUNTS ARE IMPRECISE.

The calorie counts on food labels and in databases are averages. Research shows that the true calorie content of what you're eating is often significantly higher or lower.

#### APPLES

#### CARROTS

#### TOMATOES



1 medium apple

1 cup carrot sticks

1 cup chopped tomato

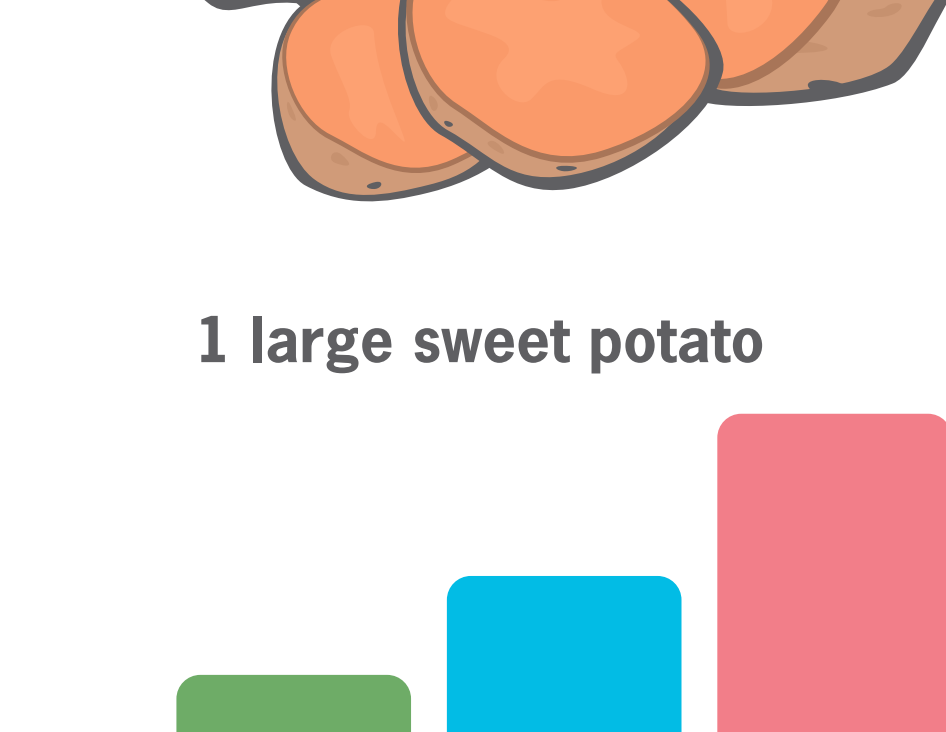
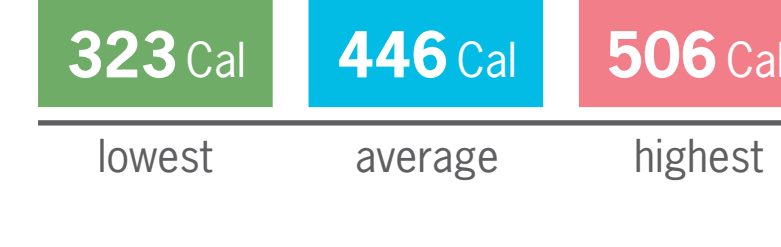


#### LEAN BEEF LOIN

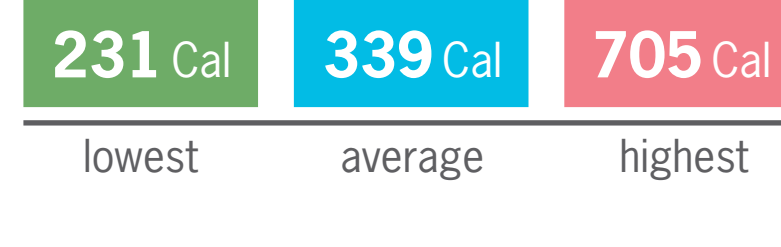
#### SWEET POTATO



1 6-oz filet mignon

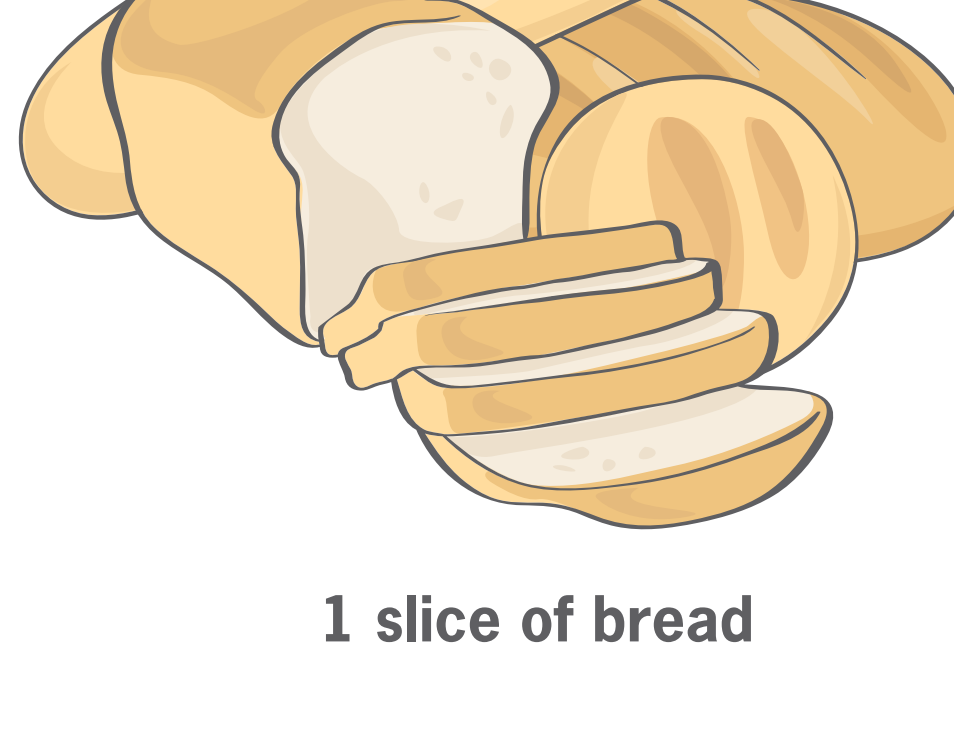


1 large sweet potato

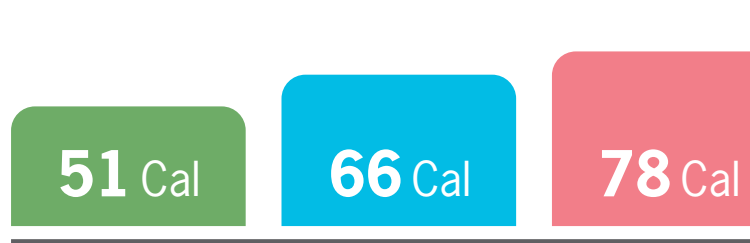


#### WHITE BREAD

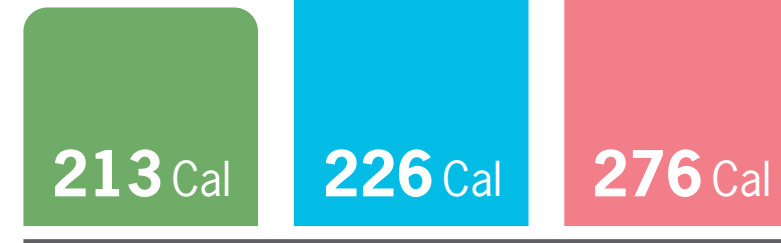
#### PEANUTS



1 slice of bread



1/3 cup chopped peanuts



Food companies may use any of 5 different methods to estimate calories, so the FDA permits inaccuracies of up to 20%.

So "150 calories" actually means 130-180 calories.

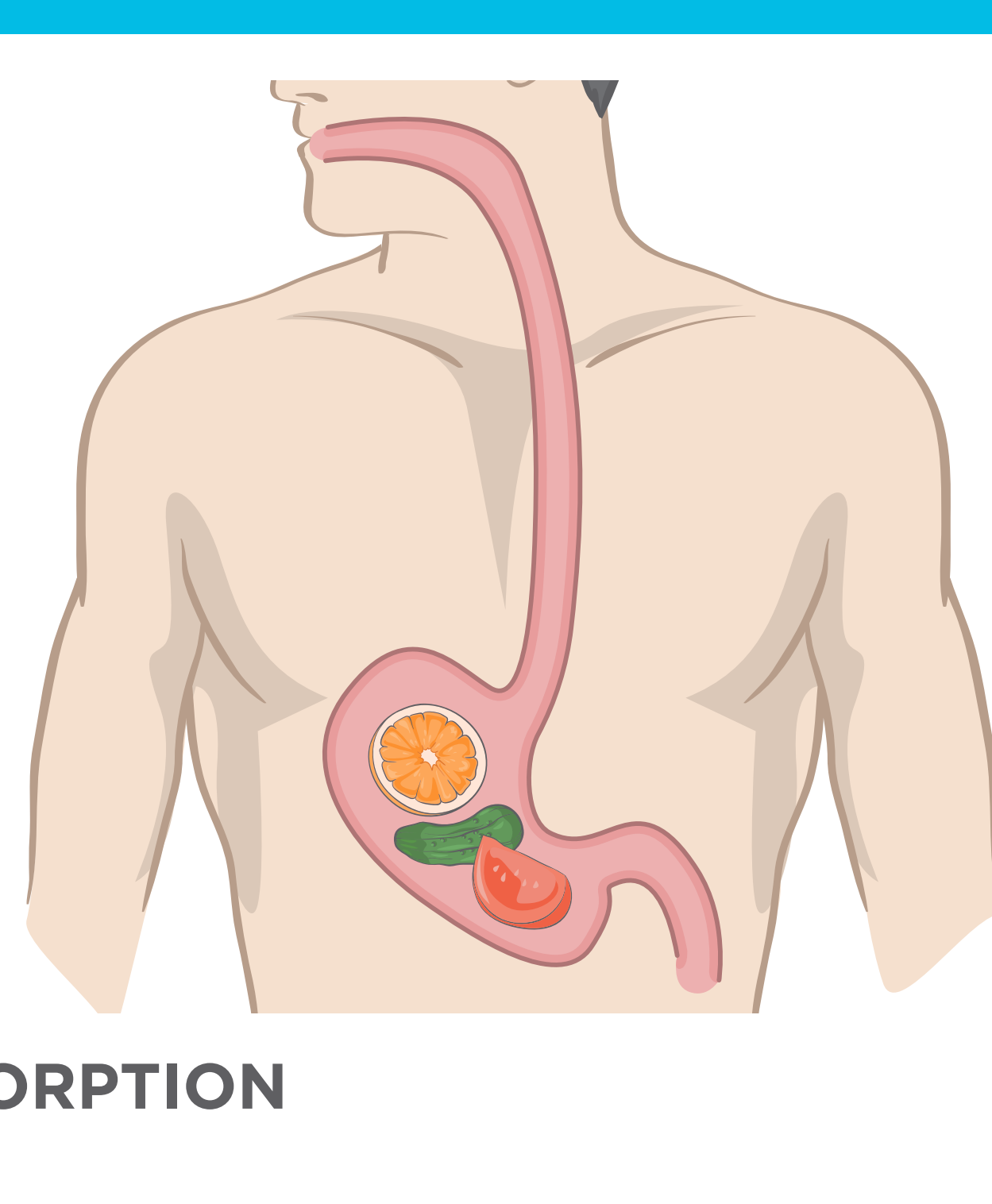
**ERROR: UP TO 50%\***

# 2

### WE DON'T ABSORB ALL OF THE CALORIES WE CONSUME.

Some calories pass through us undigested, and this varies from food to food.

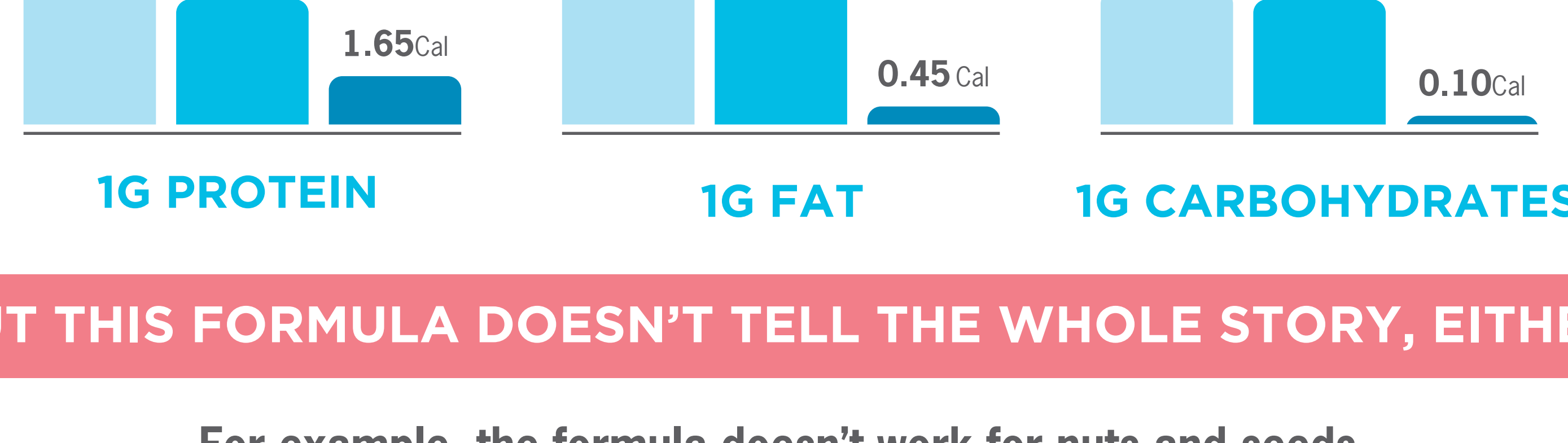
For decades, scientists have used this formula to come up with calorie counts that reflect only what we'll absorb:



● TOTAL CALORIES PER 1 GRAM OF MACRONUTRIENT

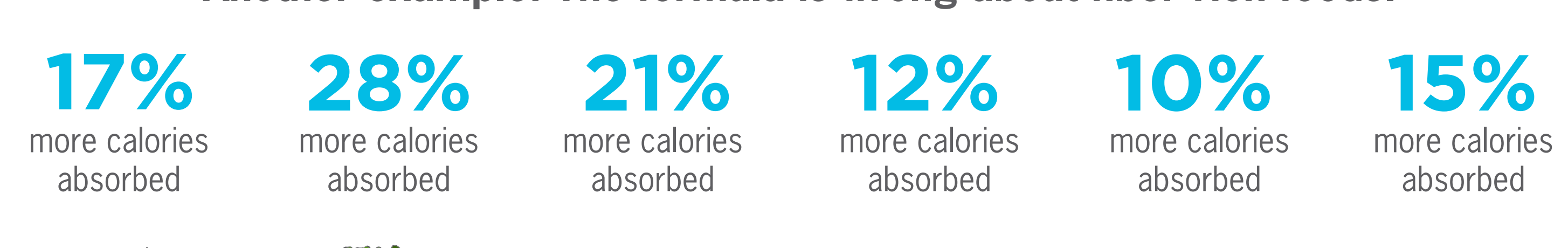
● CALORIES AVAILABLE FOR ABSORPTION

● CALORIES NOT ABSORBED

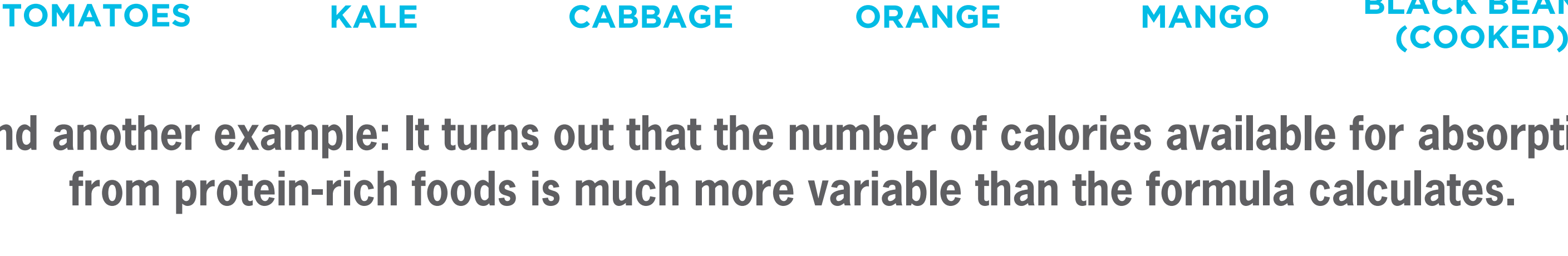


**BUT THIS FORMULA DOESN'T TELL THE WHOLE STORY, EITHER.**

For example, the formula doesn't work for nuts and seeds, because we absorb fewer calories from them than calculated.



Another example: The formula is wrong about fiber-rich foods.



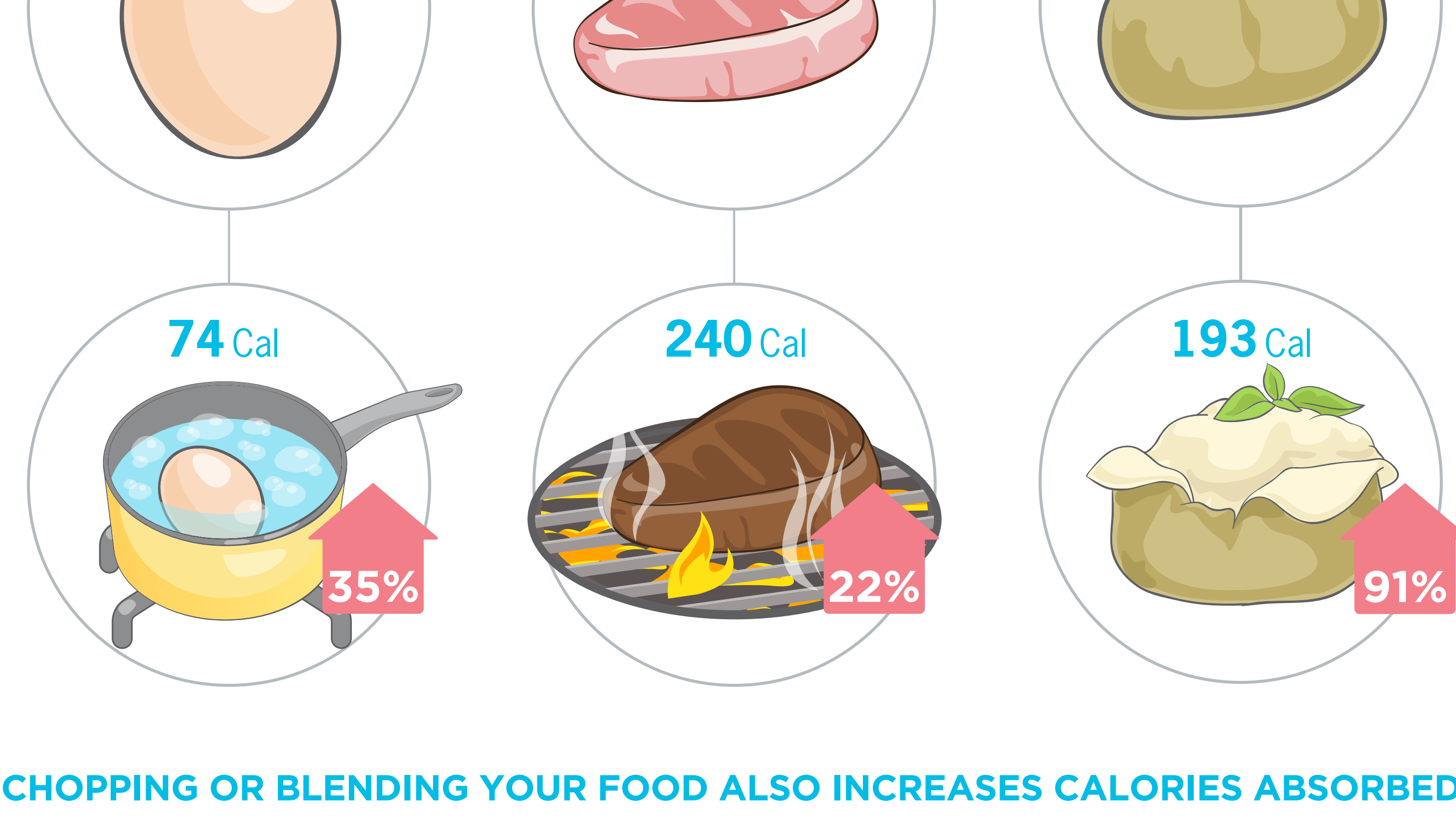
And another example: It turns out that the number of calories available for absorption from protein-rich foods is much more variable than the formula calculates.

**ERROR: 10% ON AVERAGE**

# 3

### HOW YOU PREPARE FOOD CHANGES ITS CALORIE LOAD.

Cooking your food generally makes more of the calories available for absorption, and food labels don't always reflect that.



**CHOPPING OR BLENDING YOUR FOOD ALSO INCREASES CALORIES ABSORBED.**

**ERROR: UP TO 90%**

# 4

### INDIVIDUALS ABSORB CALORIES UNIQUELY (AND VARIABLY).

Our own individual gut bacteria can increase or decrease the calories we absorb.



People with a higher proportion of Firmicutes bacteria absorb an average of

**150 PER DAY MORE** calories

than those with a higher proportion of Bacteroidetes.

# 5

### PEOPLE AREN'T GREAT AT EYEBALLING PORTION SIZES.

Studies show that people mis-measure portions about two thirds of the time, so it's easy to accidentally consume a lot more calories than you intend to.



### PUTTING IT ALL TOGETHER

**Because...**

- Calorie counts are imprecise;
- We don't absorb all of the calories we consume;
- How you prepare food changes its calorie load;
- Individuals absorb calories uniquely and variably; and
- People aren't great at eyeballing portion sizes...

**...calorie counting may not be worth the work.**

**TOTAL ERROR WHEN COUNTING 'CALORIES IN': UP TO 25%**

### SO, WHAT'S THE SOLUTION?

For a much easier portion measurement system, see [The Problem with Calorie Counting, Part 2](#)



# THE SURPRISING PROBLEM WITH CALORIE COUNTING

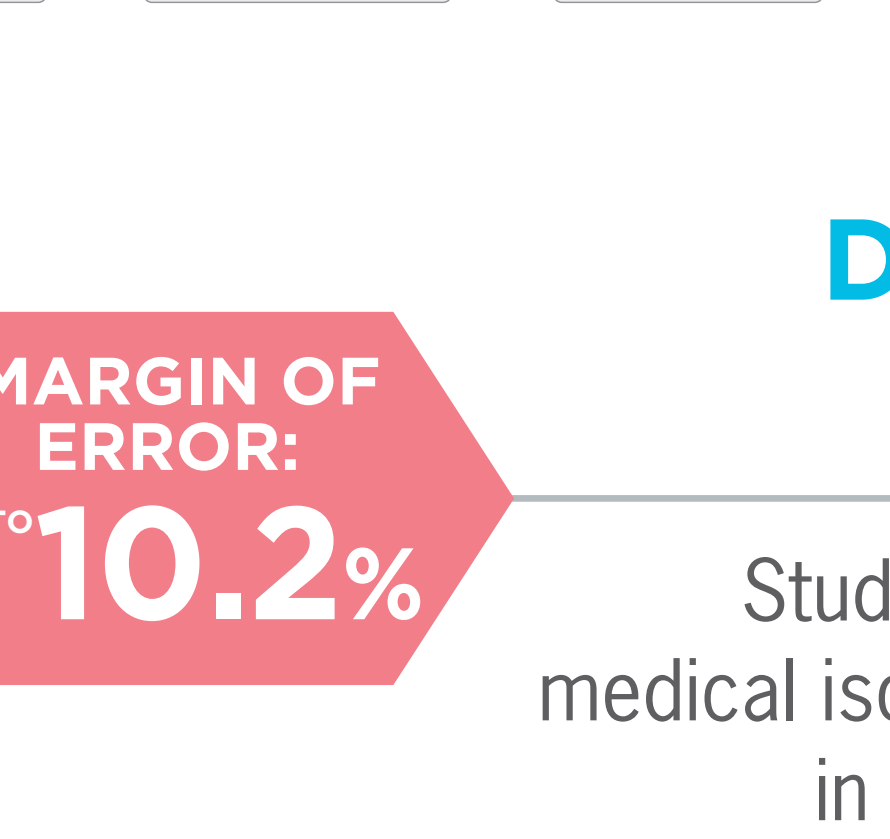
## PART 2: 'CALORIES OUT'

Most people who count calories for weight management assume it's an exact science. Here, 4 reasons why tracking the calories you burn can be problematic.

# 1

### CALORIE BURN ESTIMATES ARE IMPRECISE.

The calorie expenditure figures you see in lifestyle publications, online calculators, and fitness trackers are based on laboratory averages with large margins of error.



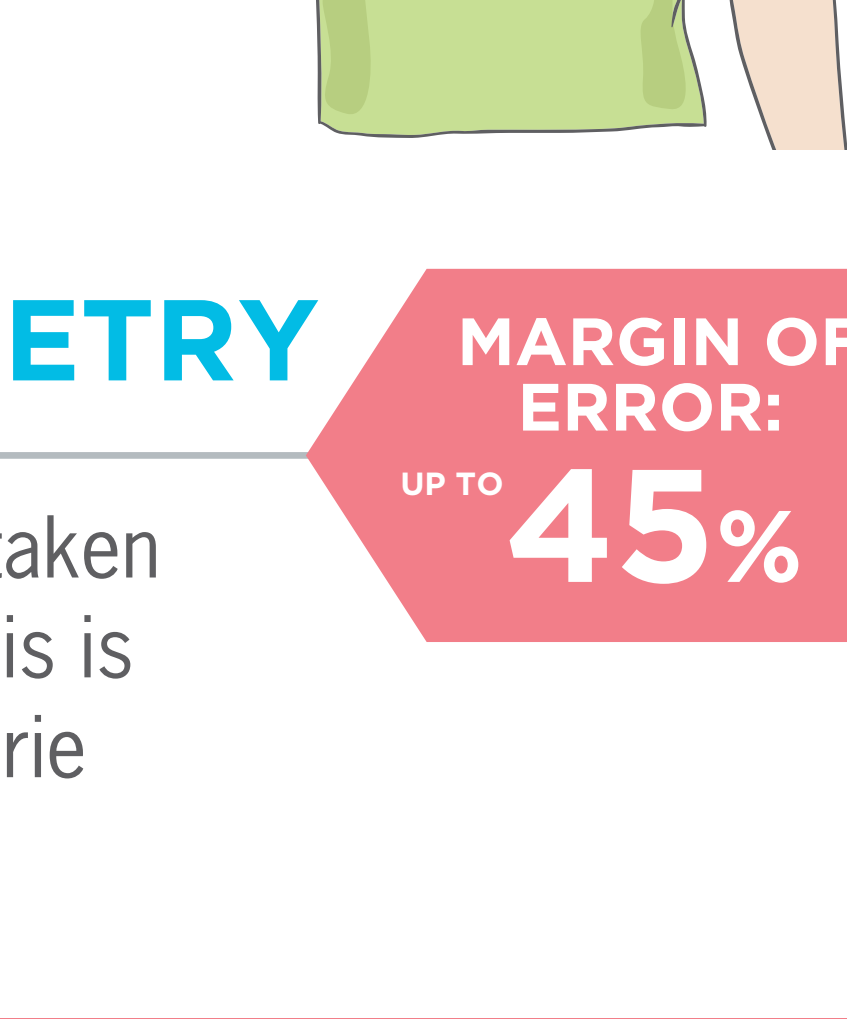
#### DIRECT CALORIMETRY

Scientists use a hermetically sealed isolation chamber to measure energy burned. It's the most expensive method, so it's rarely used.

MARGIN OF ERROR: UP TO **3.3%**

#### DOUBLY LABELLED WATER METHOD

Study subjects drink water containing medical isotopes, which scientists measure in body fluids over time to estimate average daily metabolic rate.



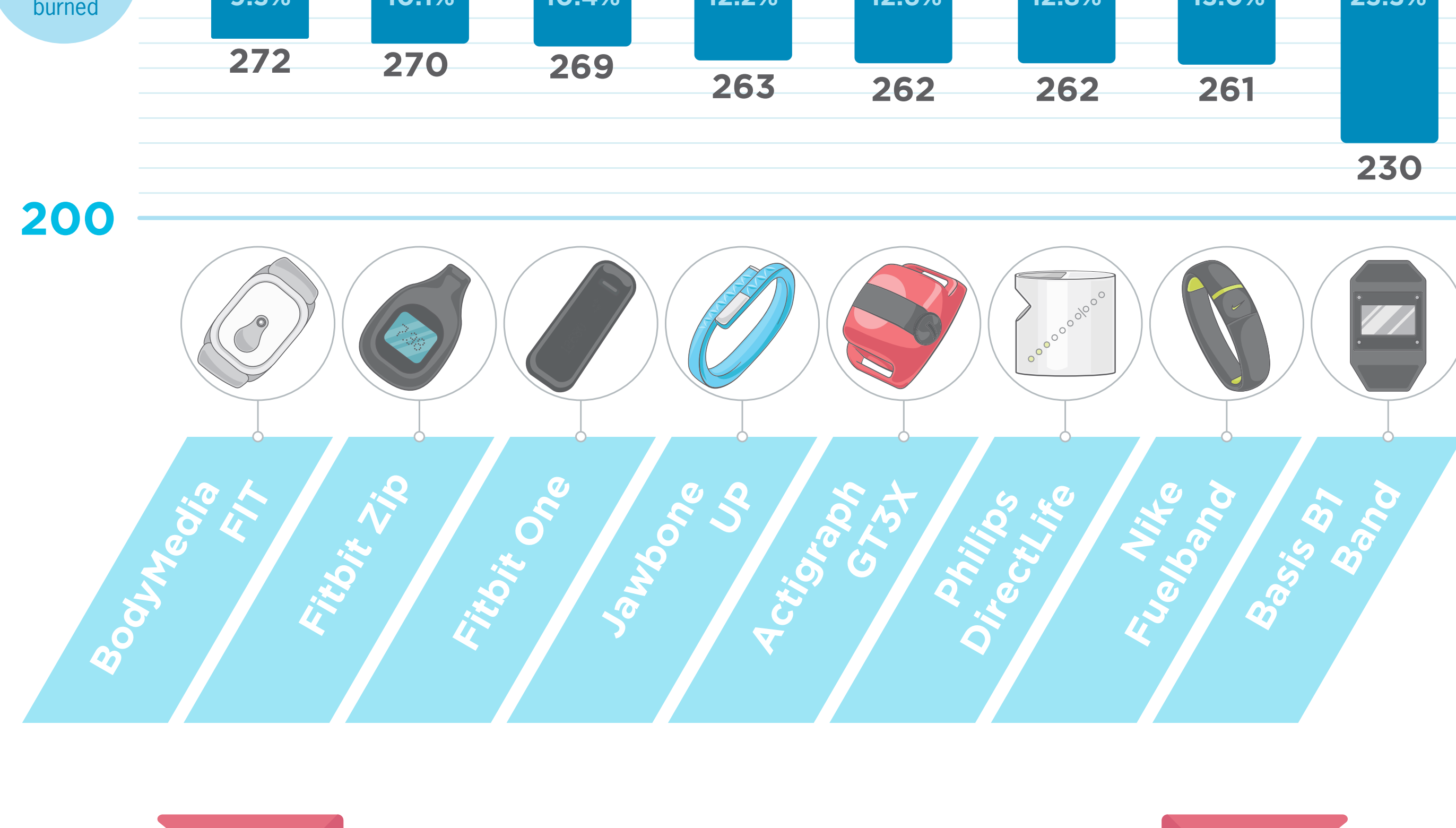
MARGIN OF ERROR: UP TO **10.2%**

#### INDIRECT CALORIMETRY

Gas exchange measurements are taken to estimate energy expenditure. This is the method behind 99% of the calorie burn estimates you see.

MARGIN OF ERROR: UP TO **45%**

Consumer fitness trackers are off by about 30% for total daily calorie expenditure. And for aerobic exercise, the devices show errors between 9% and 23%. Here's what that looks like for a 300-calorie workout.

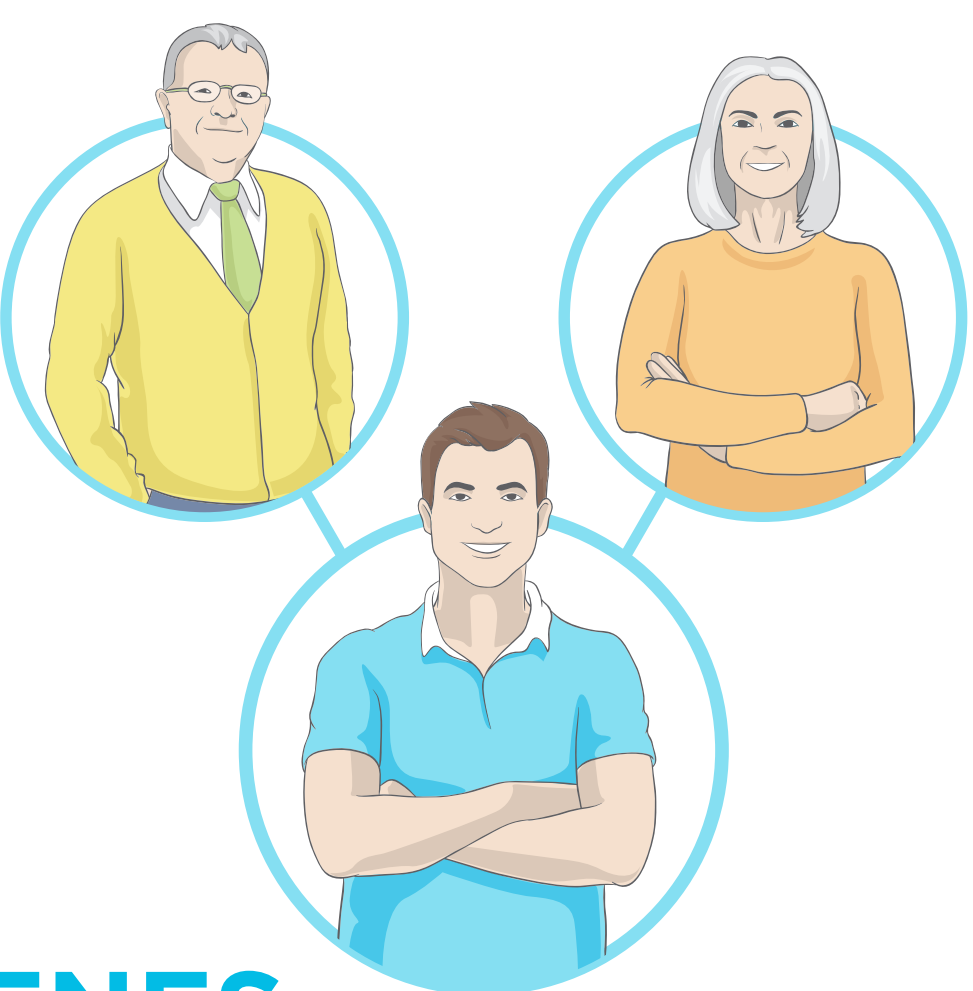


**ERROR: AT LEAST 10%\***

# 2

### INDIVIDUALS BURN CALORIES UNIQUELY AND VARIABLY.

Many factors affect the true number of calories you'll burn during exercise and at rest.

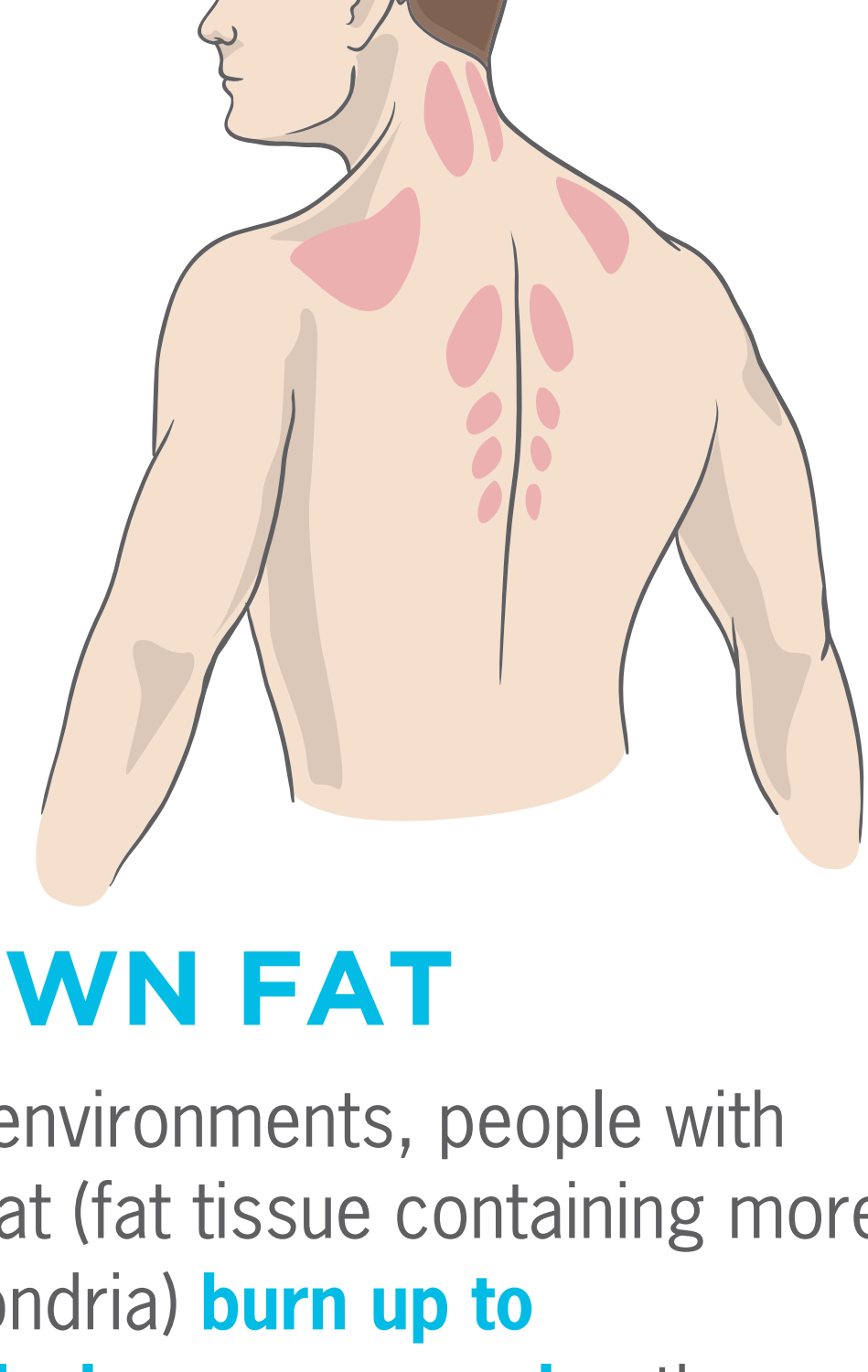


#### GENES

A single variation in the FTO gene can cause you to **burn 160 fewer calories per day**.

#### EPIGENETICS

External factors affect how genes are expressed. In mice, when a mother eats more of a specific nutrient (methyl donors) during pregnancy, her offspring **burn 5% more calories per day** than others. Human studies indicate the potential for similar findings.



#### BROWN FAT

In cold environments, people with brown fat (fat tissue containing more mitochondria) **burn up to 400 calories more per day** than people without it. Diet is also a factor: In one study, people who ate capsaicin burned 120 more calories per day via brown fat activation.



#### SLEEP

Sleep deprivation for a single night may **decrease calories burned by 5-20%**.

#### HORMONES

Women's menstrual cycle affects their resting metabolic rate.



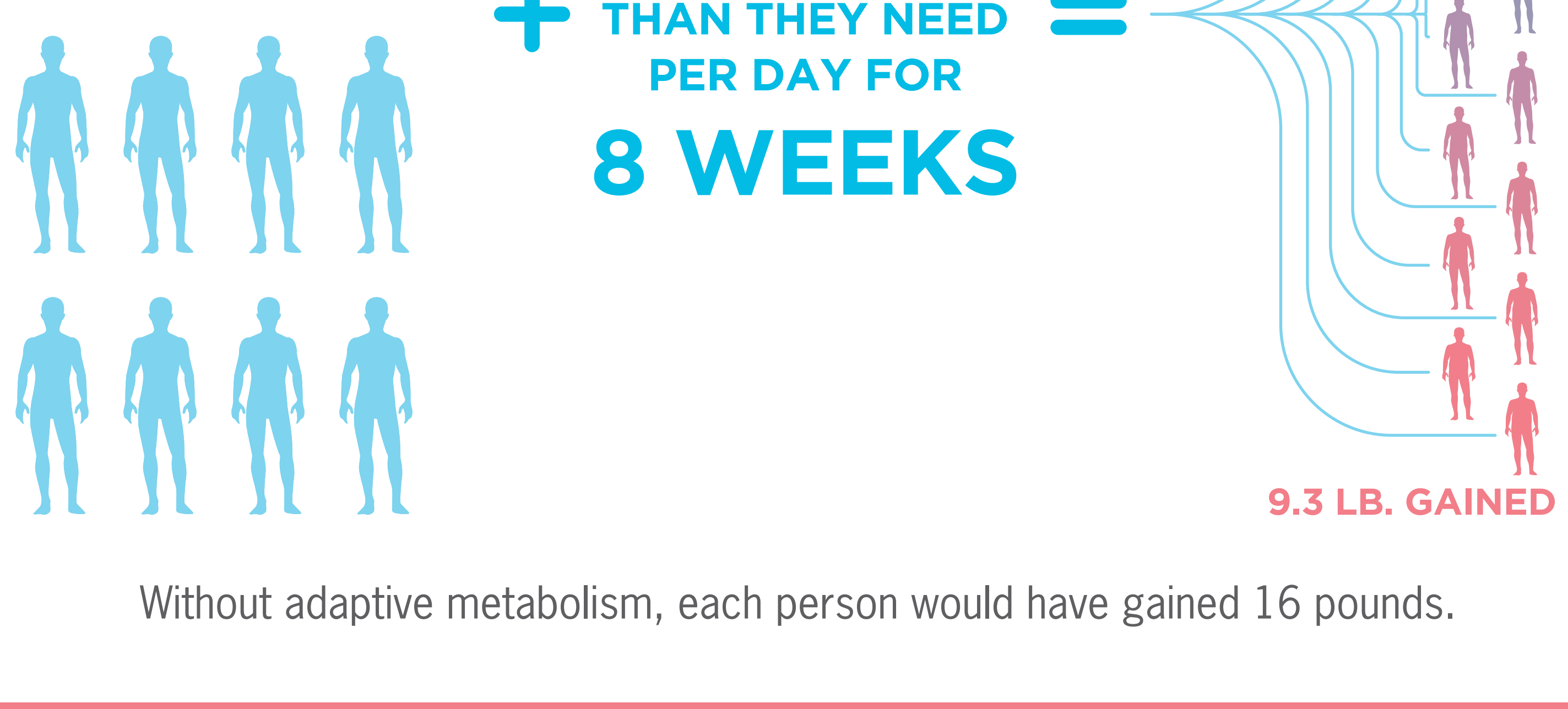
Overall, it's not unusual for an individual's metabolic rate to vary by 100 calories from day to day.

**ERROR: UP TO 20%**

# 3

### WHAT AND HOW MUCH YOU EAT INFLUENCES HOW MANY CALORIES YOU'LL BURN.

For example, in response to overeating, metabolism increases. However, some people's metabolism will adapt more than others'.



Importantly, you'll burn more energy digesting some macronutrients than others.

#### PERCENTAGE OF A MACRONUTRIENT'S CALORIES YOU'LL BURN VIA DIGESTION

##### PROTEIN



##### CARBOHYDRATES



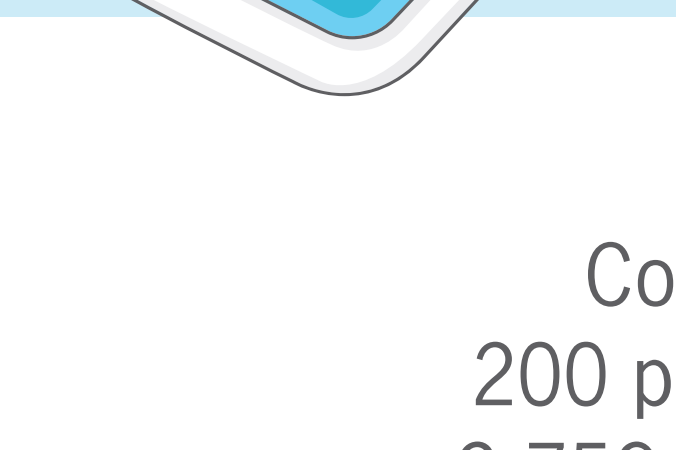
##### FATS



**ERROR: UP TO 20%**

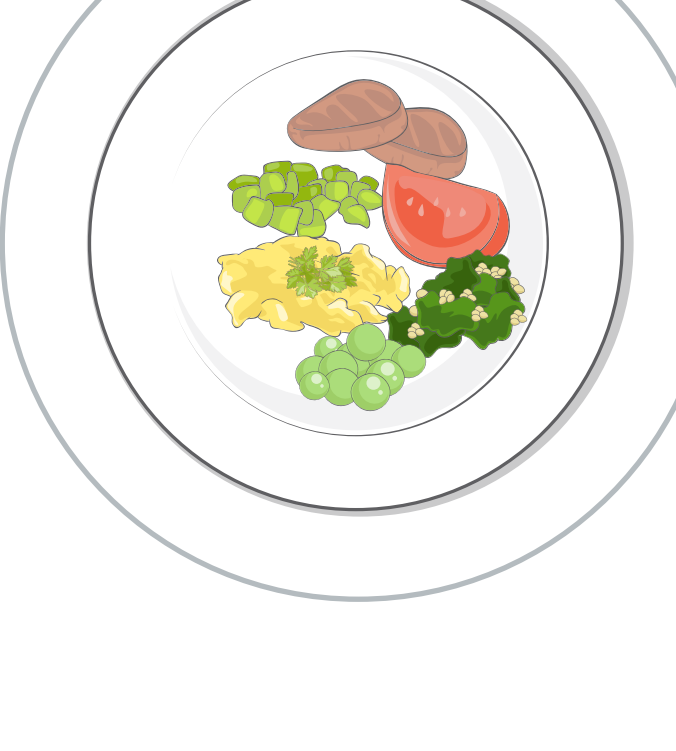
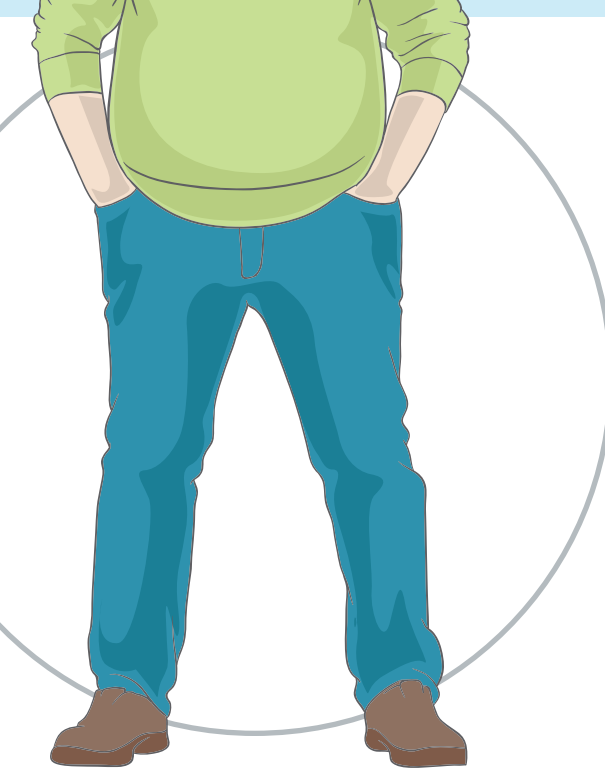
# 4

### YOUR WEIGHT HISTORY INFLUENCES HOW MANY CALORIES YOU'LL BURN.



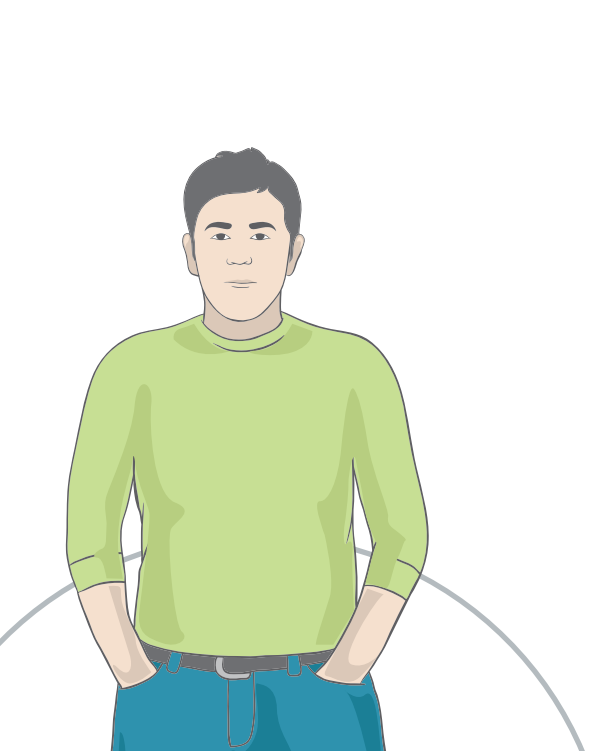
If you've ever been overweight / obese, your metabolic rate may be lower than equations predict due to something called adaptive thermogenesis.

Consider a 40-year-old man who weighs 200 pounds. Equations predict he'll require 2,759 calories / day to maintain his weight.



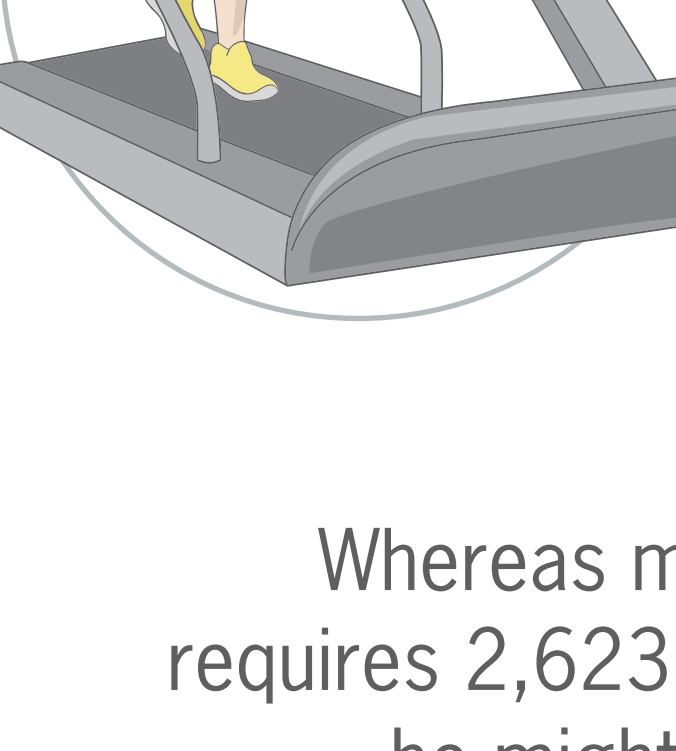
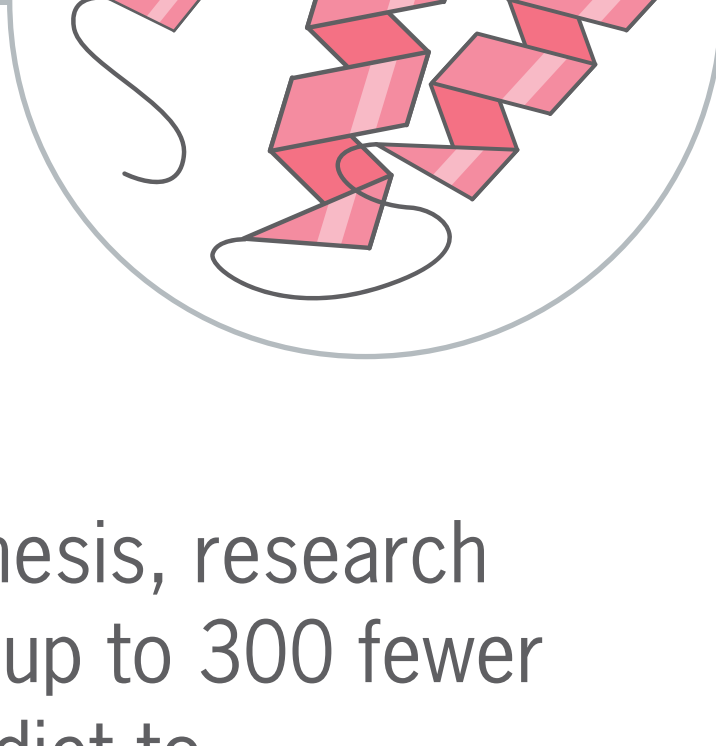
He starts to eat less in an effort to lose weight.

Over time, he loses 20 lb., or 10% of his previous body weight. Since a smaller body needs to process fewer calories to live, his total caloric output goes down.



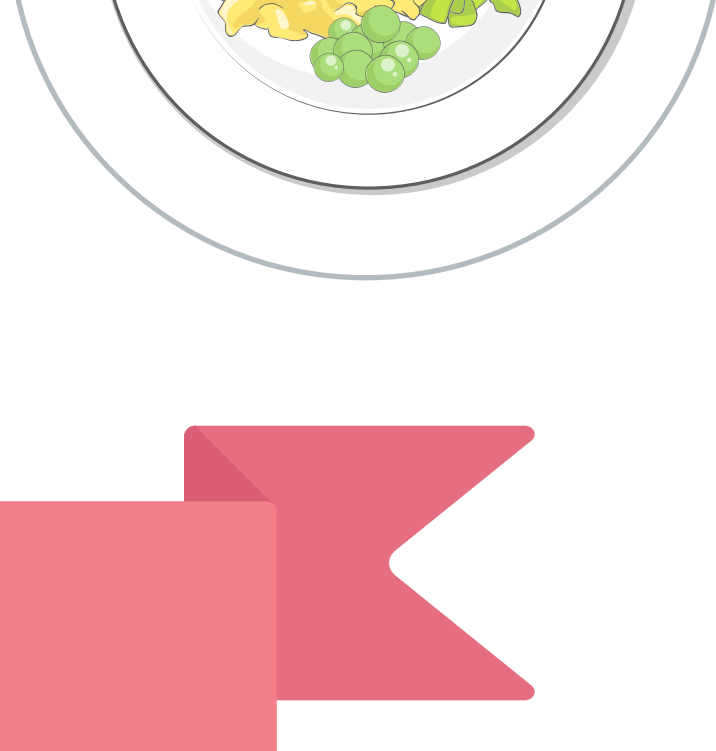
Because the man has been living on a calorie deficit and lost significant weight, his brain thinks he's in danger of starving to death. His fat cells release less leptin, a hormone that influences hunger and activity cues.

This sends the body into calorie conservation mode, causing the man to subconsciously move less (via a drop in non-exercise activity thermogenesis, or NEAT) and making his muscles more efficient so he burns fewer calories even when he exercises.



Because of this adaptive thermogenesis, research shows the man may always require up to 300 fewer calories per day than equations predict to maintain his new weight.

Whereas most equations would predict the man requires 2,623 calories per day to maintain 180 lb., he might actually need as few as 2,323 daily.



**ERROR: UP TO 10%**

### PUTTING IT ALL TOGETHER

Because...

- Calorie burn estimates are imprecise;
- Individuals burn calories uniquely and variably;
- What and how much you eat influences the calories you'll burn; and
- Your weight history influences how many calories you'll burn...

...counting 'calories out' may be less reliable than you think.

**TOTAL ERROR WHEN COUNTING 'CALORIES OUT': UP TO 25%**

### WHERE DO WE GO FROM HERE?

Tracking [calorie intake](#) and [calorie output](#) is imprecise and variable. Until science comes up with a better way, we like to keep things simple: Commit to a daily movement practice and ballpark food portions using a hand measurement system.



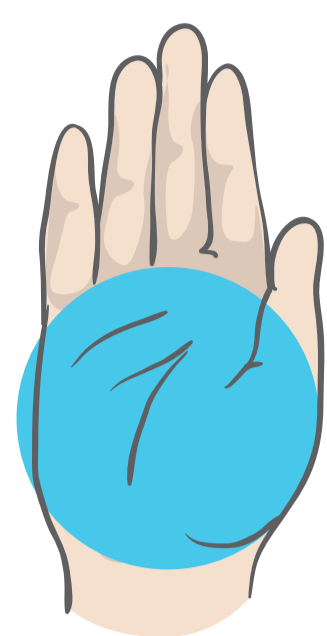
# PORTION CONTROL GUIDE

## FORGET CALORIE COUNTING. TRY THIS METHOD INSTEAD.

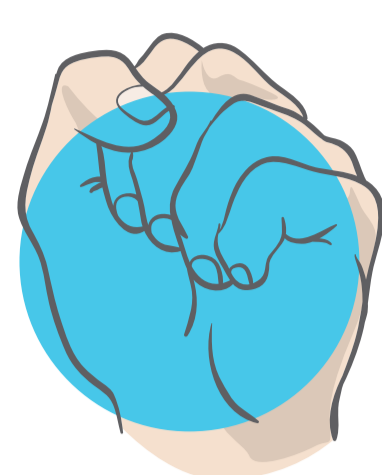
Most people think controlling portions means counting calories, but we think there's a better way. Try our (much easier) Hand Measure system instead.

### YOUR HAND IS ALL YOU NEED

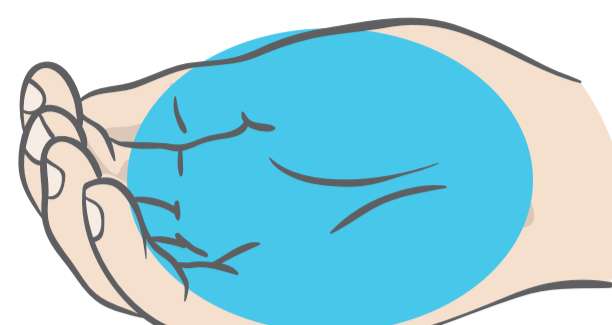
Your hand is proportionate to your body, its size never changes, and it's always with you, making it the perfect tool for measuring food and nutrients - minimal counting required.



A serving of protein  
= 1 palm



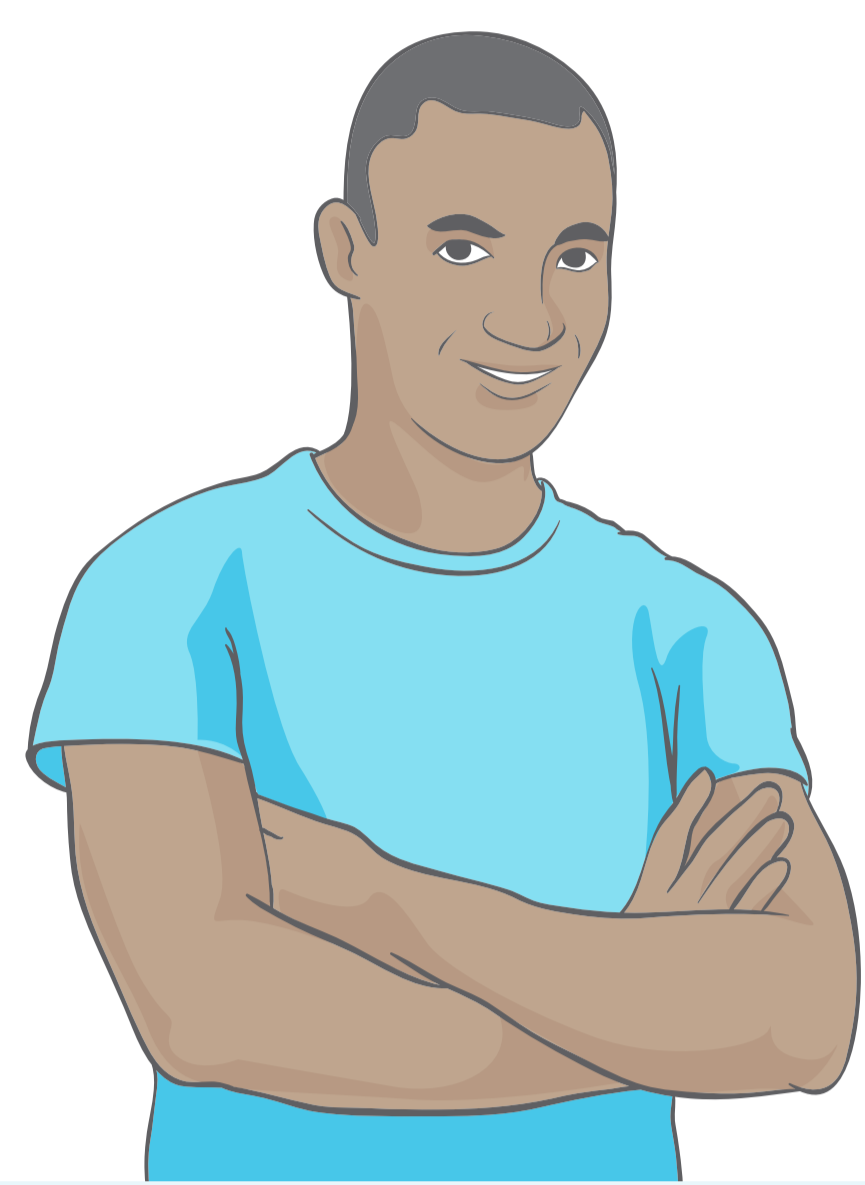
A serving of  
vegetables = 1 fist



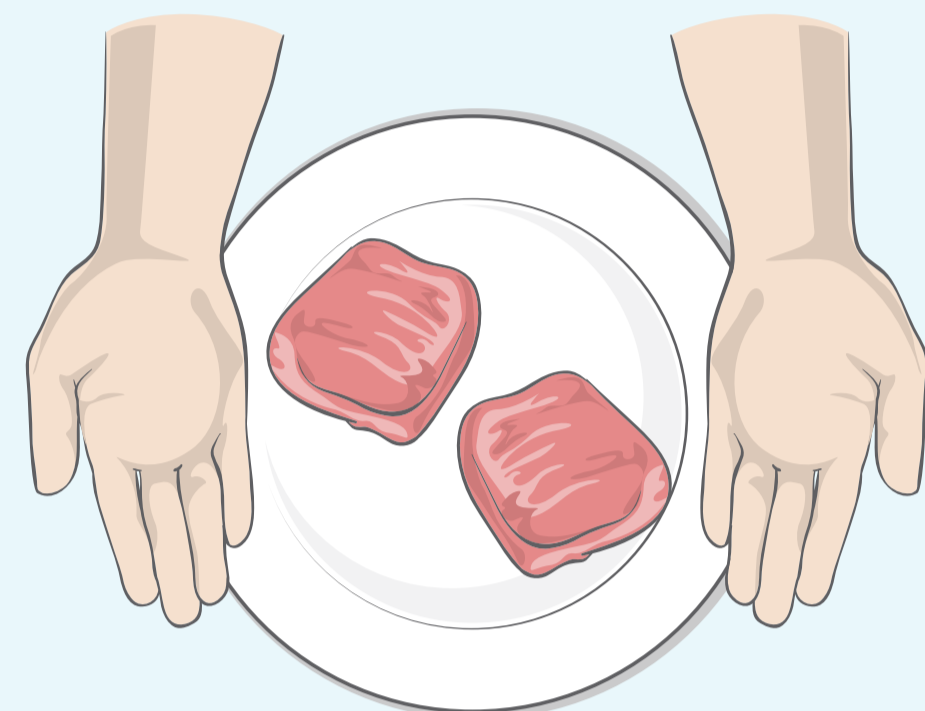
A serving of carbs  
= 1 cupped hand



A serving of  
fats = 1 thumb



### HERE'S HOW TO USE THIS METHOD TO BUILD A PLATE

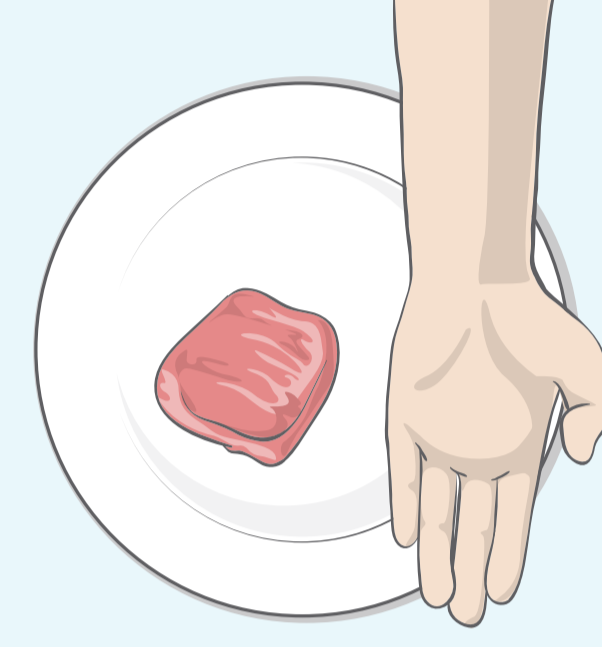


**Men:**  
Two palm-sized portions  
(~ 40-60 g protein)

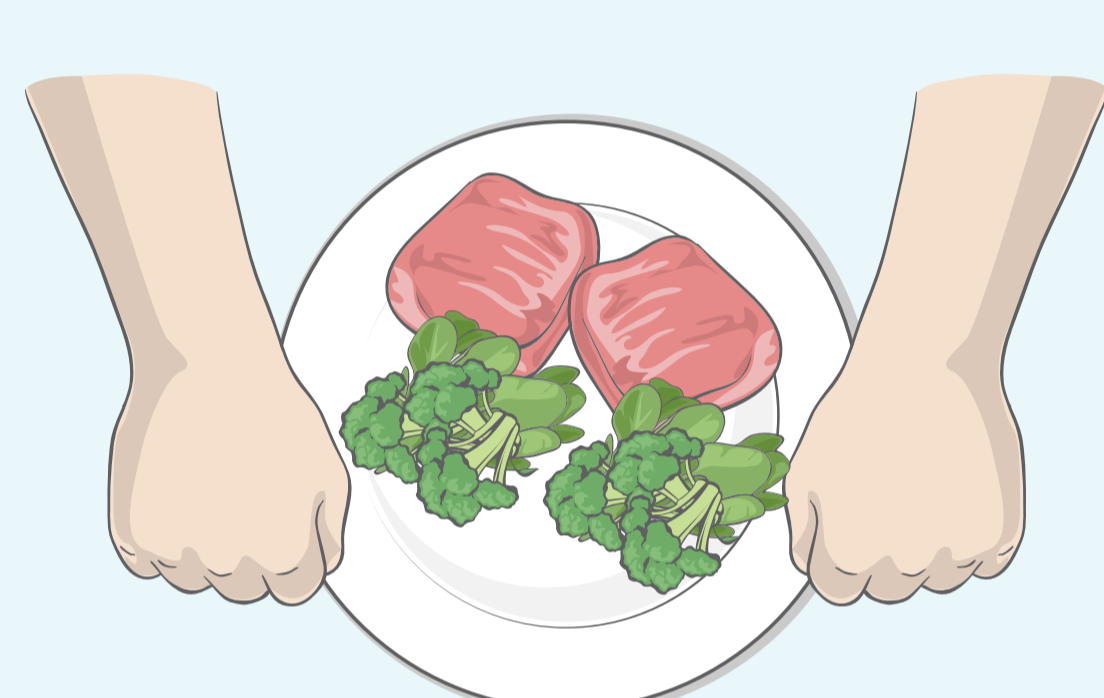
#### STEP 1

#### PROTEIN

Meat, fish, eggs,  
cottage cheese,  
and Greek yogurt



**Women:**  
One palm-sized portion  
(~ 20-30 g protein)

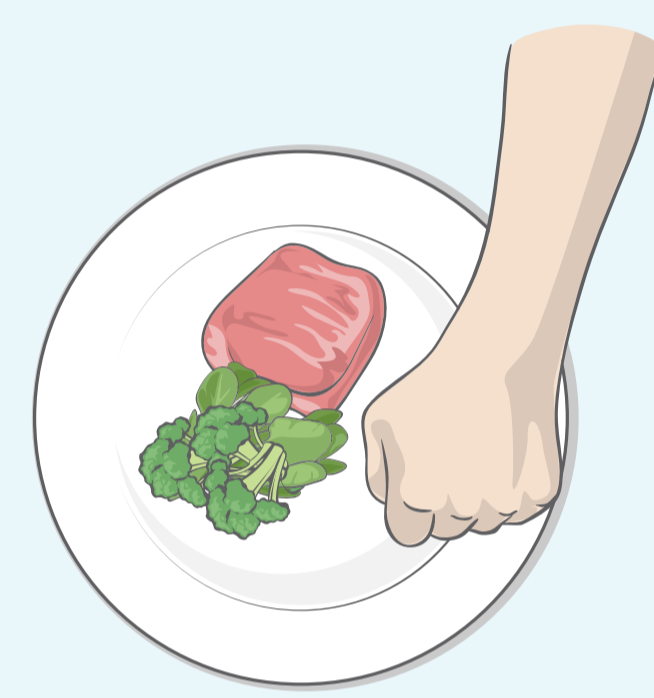


**Men:**  
Two fist-sized portions

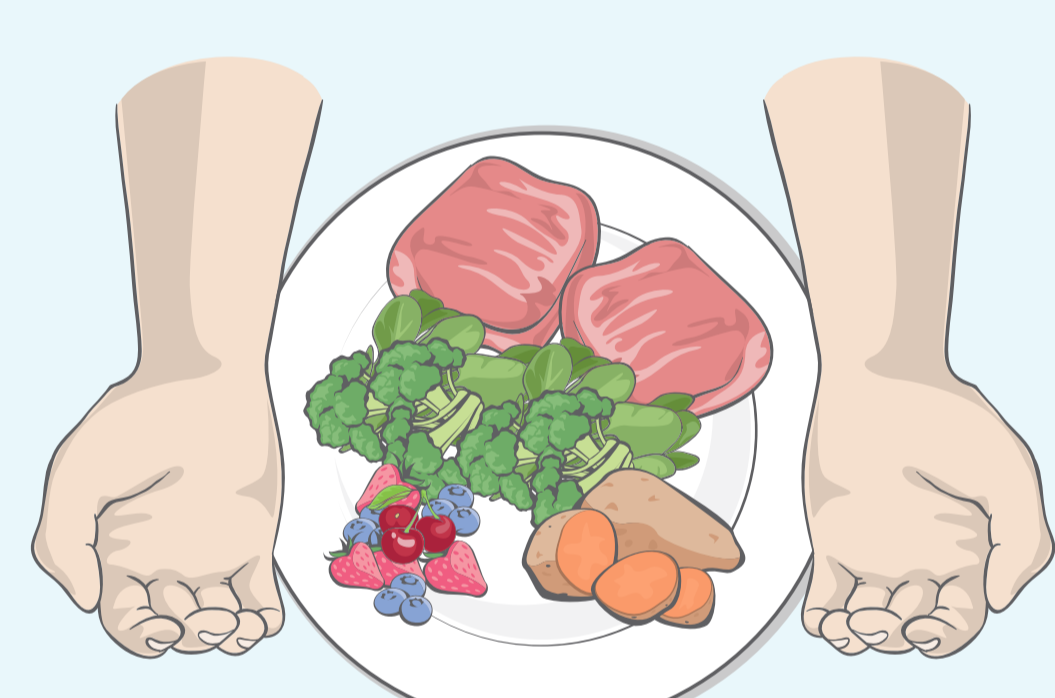
#### STEP 2

#### VEGETABLES

Broccoli, spinach,  
salad, carrots, etc.



**Women:**  
One fist-sized portion

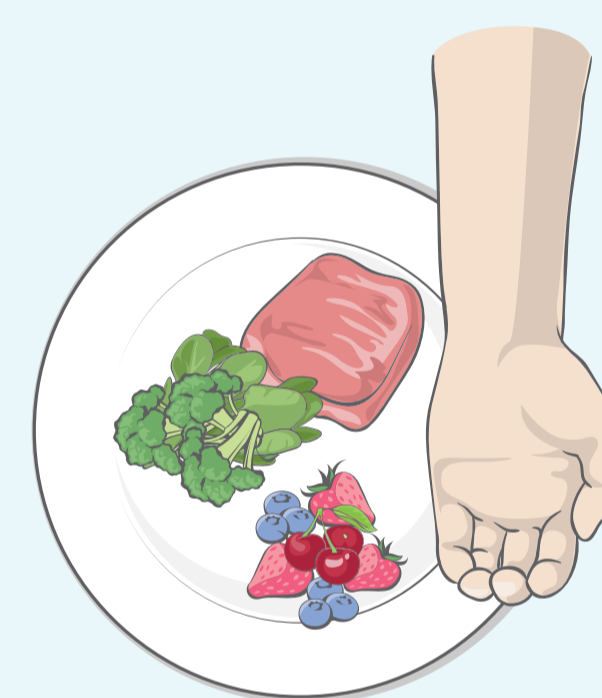


**Men:**  
Two cupped-hand sized portions  
(~ 40-60 g carbs)

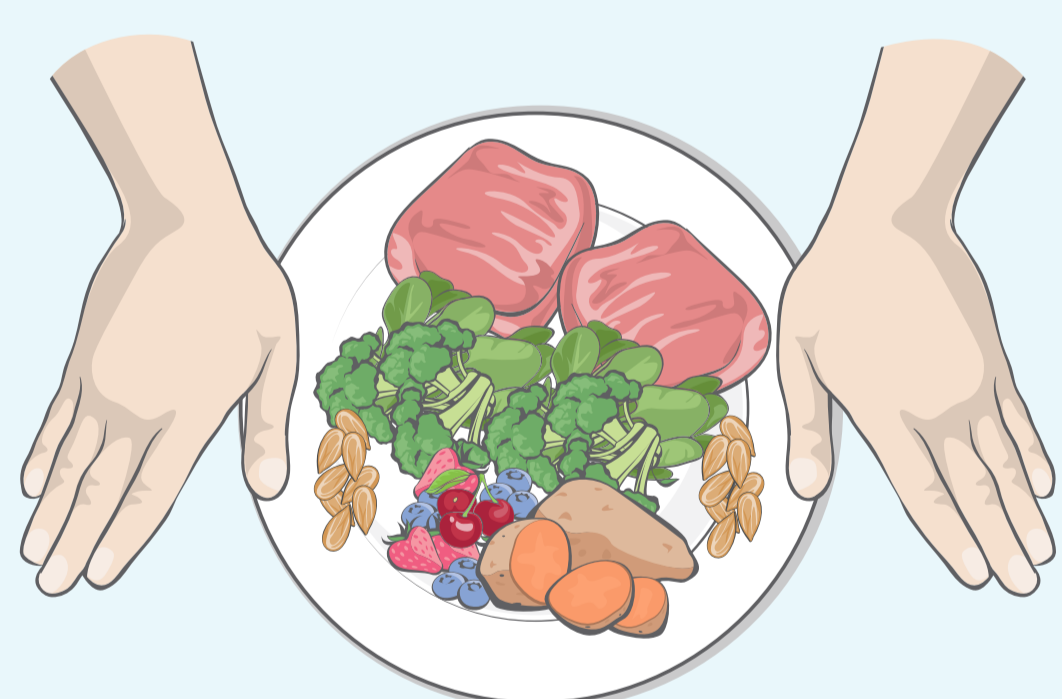
#### STEP 3

#### CARBOHYDRATES

Grains, starches,  
beans, and fruits



**Women:**  
One cupped-hand sized portion  
(~ 20-30 g carbs)

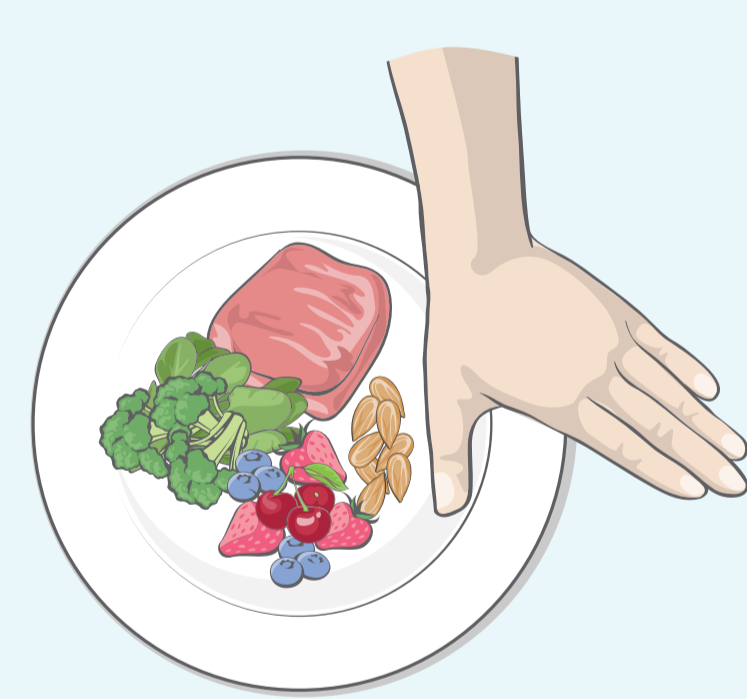


**Men:**  
Two thumb-sized portions  
(~ 15-25 g fat)

#### STEP 4

#### FATS

Oils, butters,  
nut butters, nuts,  
and seeds



**Women:**  
One thumb-sized portion  
(~ 7-12 g fat)

**Men eating 3-4 meals as outlined would get around 2,300 - 3,000 calories each day. Women eating 3-4 meals as outlined would get around 1,200 - 1,500 calories each day.**

### NOW, CUSTOMIZE THE PLAN FOR YOU

Active men do best with 6-8 servings of each food group per day (~2,300-3,000 kcal). Active women do best with 4-6 servings of each food group per day (~1,500 - 2,100 kcal).

From there, adjust the number of portions to meet your personal needs and goals.

#### IF YOU NEED MORE FOOD BECAUSE YOU...

- Are larger in stature
- Aren't feeling satisfied at meals
- Eat less frequently throughout the day
- Are very active
- Are trying to gain muscle
- Aren't getting muscle-gain results

#### IF YOU NEED LESS FOOD BECAUSE YOU...

- Are smaller in stature
- Are feeling too full at meals
- Eat more frequently throughout the day
- Are not very active
- Are trying to lose weight
- Aren't getting weight-loss results

#### ...THEN START BY ADDING...

**Men:** 1 cupped handful of carbs and/or 1 thumb of fat to a few meals each day.

**Women:** 1/2 cupped handful of carbs and/or 1/2 thumb of fat to a few meals each day.

#### ...THEN START BY REMOVING...

**Men:** 1 cupped handful of carbs and/or 1 thumb of fat from a few meals each day.

**Women:** 1/2 cupped handful of carbs and/or 1/2 thumb of fat from a few meals each day.

**This system is easier than counting calories and nearly as accurate. Just like with counting, though, pay attention to results and adjust as needed.**