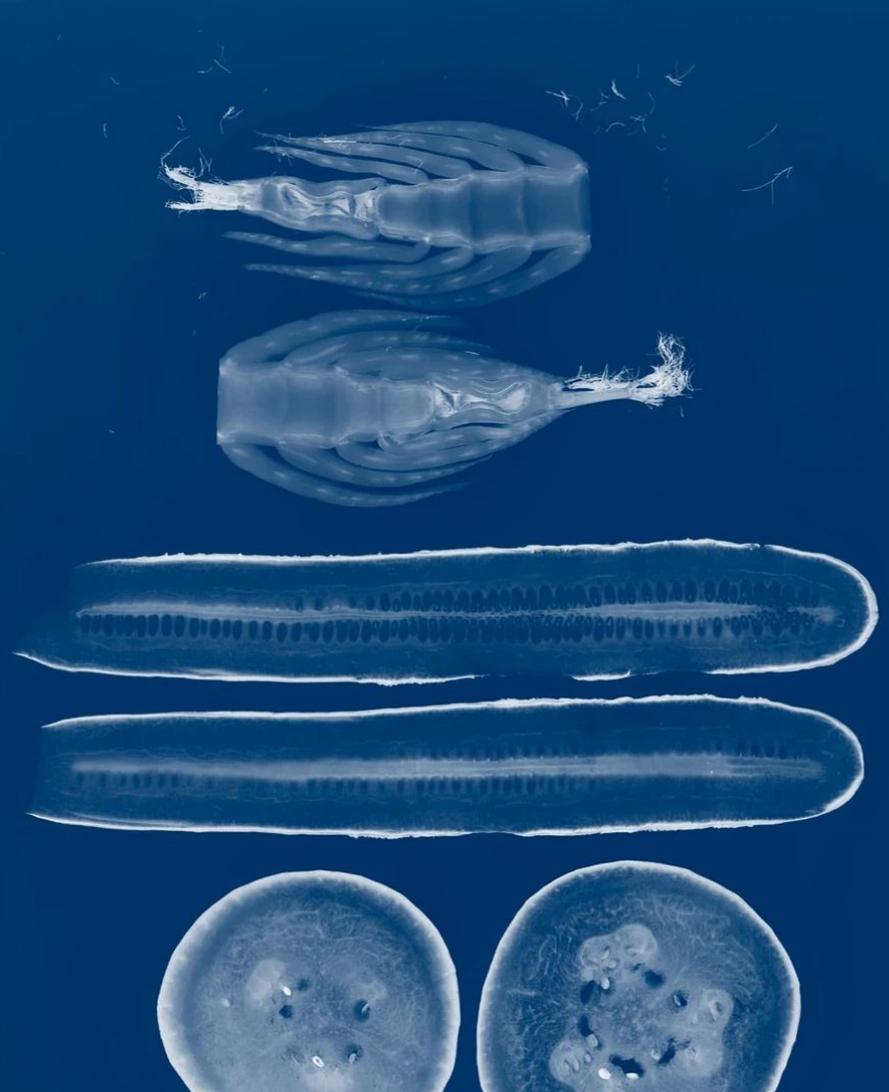


PREDICT • ZOE

# Your insights

Predict ID: predict2\_000239

Generated on: 08.06.2020



Please note

# This is research

Your results from the PREDICT 2 study were produced for research purposes and are not clinical tests. They cannot be used to treat or diagnose any medical condition.

We have not yet tested the efficacy of the food recommendations generated by the PREDICT study in a clinical trial. The recommendations do not take into account medical conditions you may have, medications you take, allergies or intolerances. Before making any changes to your diet, please consult your physician. If you share your results with any medical professional, they should be told that these tests were done for research purposes only and are not clinical tests.

Welcome to ZOE

# You're in the right place

Hello, I'm Dr. Haya!

I'm a nutritional scientist at ZOE. I led the nutrition team on PREDICT and I also prepared your test results for you.

As a nutritional scientist, I've spent countless hours in the lab studying how people respond to what they eat. During PREDICT I've learned that each body is truly unique and every body can change. So I know you have the power to change yours too.

For me food is also personal. I became a nutritional scientist after years grappling with my weight. I know what it's like to hear so many confusing messages about food and not know where to begin. I struggled so much with how to eat the foods I love, and still be able to reach my goals. Recently, my dad was also diagnosed with prediabetes, so we've been on a journey together to rediscover food.

I can't wait to share your results with you.  
Let's dive in!



**Dr. Haya Al Khatib**  
Nutritional Scientist

Our mission

# Precision nutrition

We're incredibly proud to work with world-class scientists and institutions.

We bring together the best minds – from epidemiology, microbiology and data science – on a mission to improve human health through precision nutrition, not quick fixes, fad diets, or pseudo-science.

Our research is not funded by large food companies.



**Dr. Tim Spector**

Director of TwinsUK, ZOE Co-Founder & Professor of Genetic Epidemiology at King's College London



**Dr. Sarah Berry**

Associate Professor, Department of Nutritional Sciences at King's College London



**MASSACHUSETTS  
GENERAL HOSPITAL**

**Dr. Andrew Chan**

Professor of Medicine at Harvard Medical School & Chief of Clinical Epidemiology at Massachusetts General Hospital



**Stanford  
MEDICINE**

**Prof. Christopher Gardner**

Rehnborg Farquhar Professor of Medicine at Stanford University

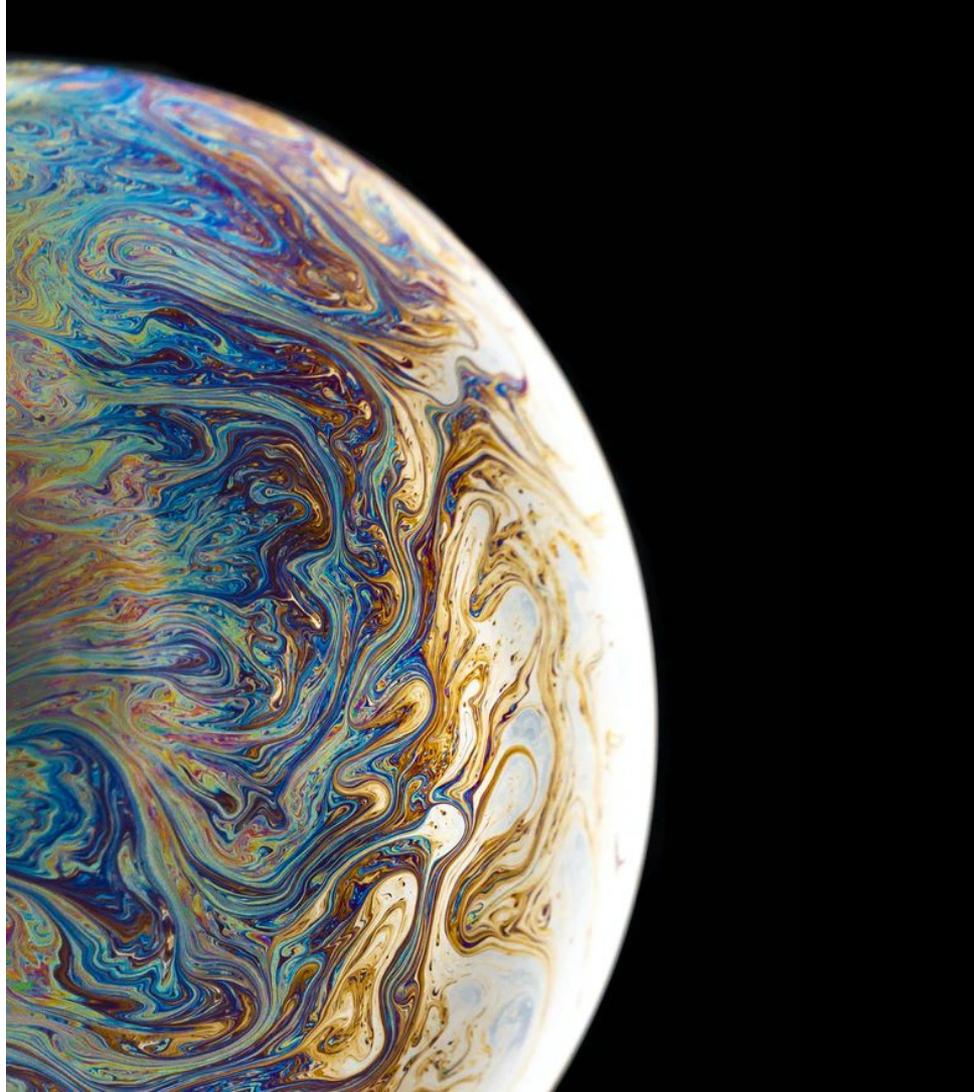
Our mission

# At the frontier

We have put a man on the moon, explored the depths of our oceans, and yet we still do not understand how our body responds to food. Until now. Our scientists are discovering a whole new world beneath our skin (and on it too).

Your participation in PREDICT has been truly groundbreaking. Thank you. It is the largest nutritional study of its kind and has already generated some amazing findings.

We're honored to help you discover your body and the trillions of bacteria that call you home.



Our mission

# For *your* body

Beyond science – we believe understanding how your body responds to food is really liberating.

We all grew up getting mixed messages about what to eat – whether from our parents, the media, the food industry or the state. Despite how well-meaning they were, navigating this advice has been hard. We're here to set you free.

We'll show that we all respond to food differently *and* that our bodies' responses to food *can* change.



## Contents

# What we'll cover

### **1. Our scientific approach**

### **1. Your inflammation risk, gut health & food insights**

1. Inflammation risk profile
  - Blood sugar control
  - Blood fat control
2. Gut health
3. Intro to your food scores
4. Personalized food insights

Today's goal

# Before we begin...

Our goal for this report is to get you to 'a ha!'

A breakthrough about your unique body and how to make smarter choices for your biology.



# Our scientific approach

You wouldn't start a medication without a diagnosis. Here's how we approach nutrition to offer you the right answer for your body.

Our scientific approach

# If you always thought your body was different, you're right.

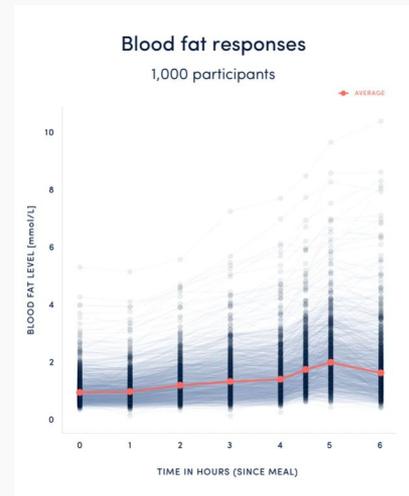
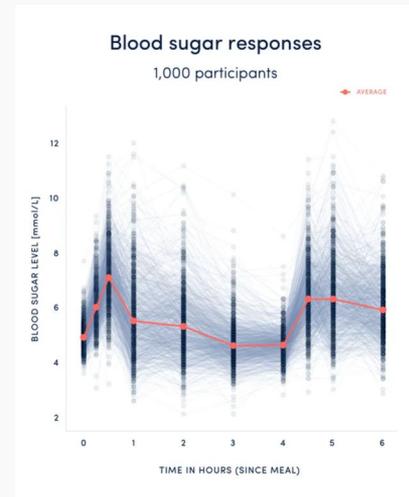
Everybody's response to food is unique. When we looked at blood sugar and fat levels across 1000 participants who ate the same meal, we could see huge differences in their bodies' response with up to 10x difference across participants.



Research paper to be published from **PREDICT discoveries**

*Human Postprandial Responses to Food and Potential for Precision Nutrition*

To be published June 2020 [Read the abstract now](#)

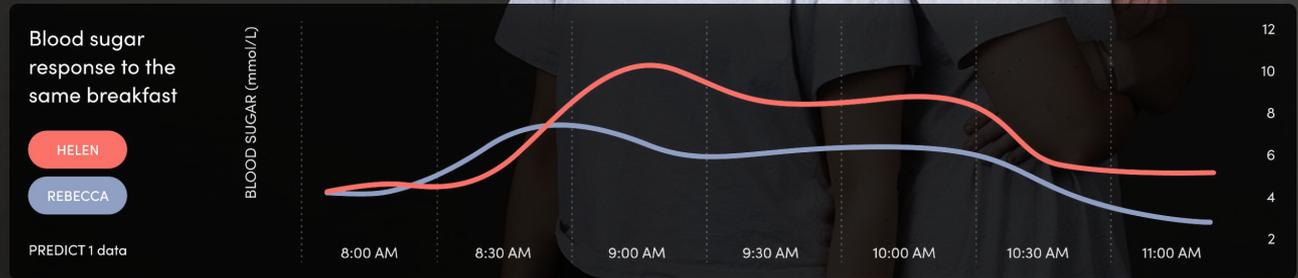


Our scientific approach

# Your genes don't define your response to food.

Our research shows that your genes play only a small role in how you respond to food. Your gut microbiome and sensitivity to food-driven inflammation have a more significant impact and the good news is – you can change them.

This is why even identical twins respond differently to the same food – in PREDICT we found that Twins share 37% of the bacteria in the gut vs. 35% between unrelated individuals.



Our scientific approach

# There are some things nutrition labels just can't explain.

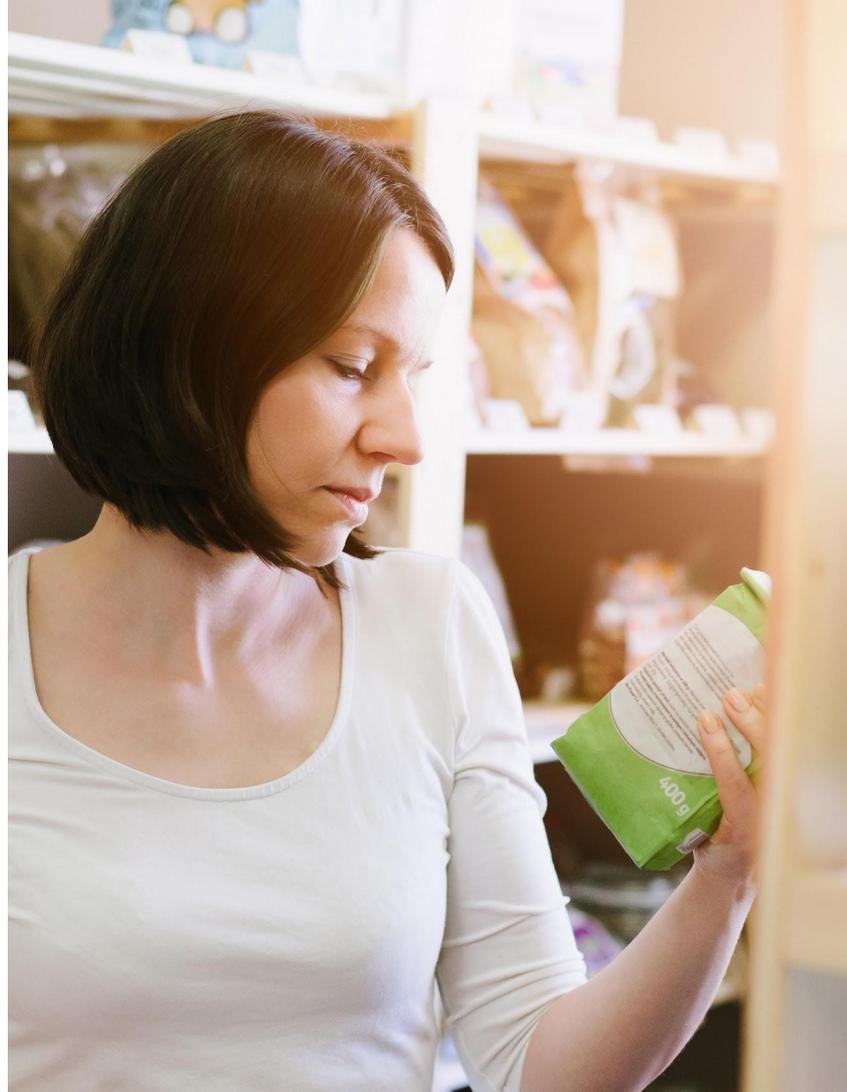
Our research found that nutrition labels only explain 40% of differences in how people respond to food. Through PREDICT we know that the bacteria in your gut ( the “microbiome”), timing of your meals and exercise all play significant roles – helping to explain why we all respond so differently.



Research paper to be published from PREDICT discoveries

*Human Postprandial Responses to Food and Potential for Precision Nutrition*

To be published June 2020 [Read the abstract now](#)

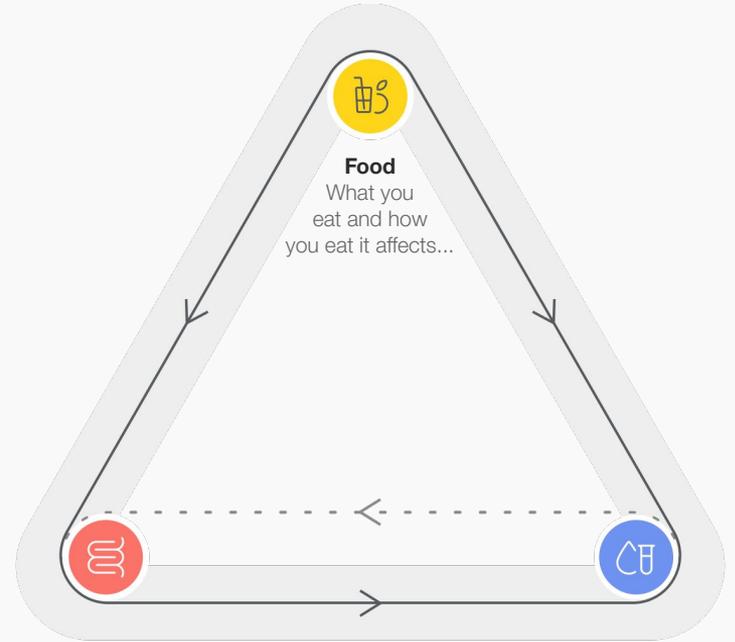


Our scientific approach

# Improving your gut & avoiding food-driven inflammation are key.

From PREDICT, we can see that the food you eat influences the bacteria in your microbiome. We also see that certain foods are linked to “good” or “bad” bacteria which can help *or* hinder your ability to metabolize fats and sugar.

Eating the right foods to balance these bacteria can improve your bodies’ response to food – reducing harmful food-driven inflammation.



## Gut microbiome

The bacteria in your gut influence how your body processes blood fat and blood sugar, and can help you to minimize inflammation.

## Food-driven inflammation

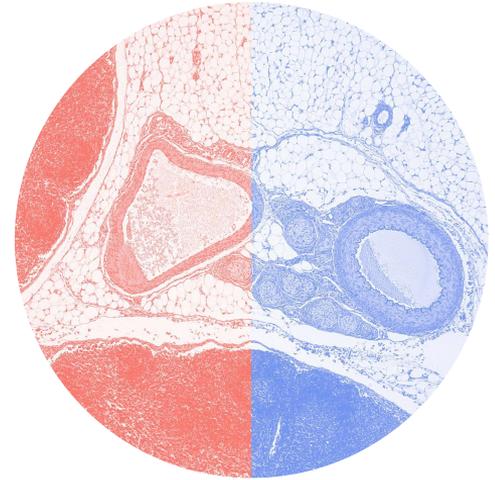
Your blood sugar and blood fat responses to the food you eat can cause harmful inflammation in your body.

Our scientific approach

# What is food-driven inflammation?

When we look at people who struggle to control blood fat and blood sugar levels – we see *inflammatory markers* in their body. It's not easy to see these internal markers in the same way you can see a sprained ankle but inflammation has widespread effects throughout your body.

If this inflammation is too high or lasts too long it can cause health problems (including heart disease, diabetes, liver disease, and cancer) and can make it difficult to manage your weight.



Research paper in preparation from PREDICT discoveries

Food-induced Inflammation: Mechanistic insights of the role of lipids from the PREDICT study

To be published in 2020

Our scientific approach

**Reduce inflammation &  
hit your healthiest weight  
by finding the best food  
for your body**



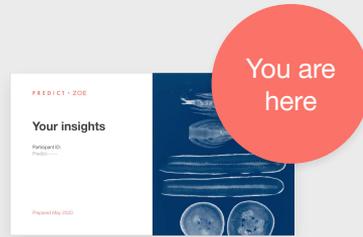
Our mission

# Hit your healthiest weight in 4 steps



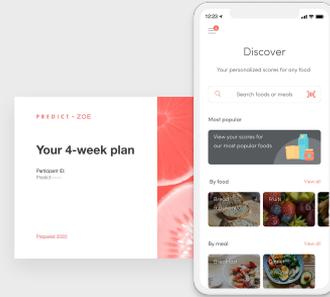
## 01: Test PREDICT study kit

Take the PREDICT Test at home including our famous muffins, blood and poop tests, glucose monitoring and food diary.



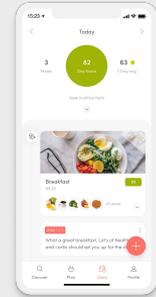
## 02: Discover Get your insights

Learn how your unique body responds to foods including your food inflammation triggers and gut health



## 03: Reset Choose your 4-week plan

Our 4-week plans teach you, in practice, to apply these findings to your own life. You'll use the ZOE app to reset your body, start improving your gut health and inflammation levels



## 04: Sustain Get 75+ scores most days

Apply the learnings for life to achieve sustainable health & weight improvement by using the ZOE app to find foods that maintain a 75+ day score most days.

# Your insights

Let's uncover your inflammation risk profile,  
gut health and food insights.

Your test results: Part 1

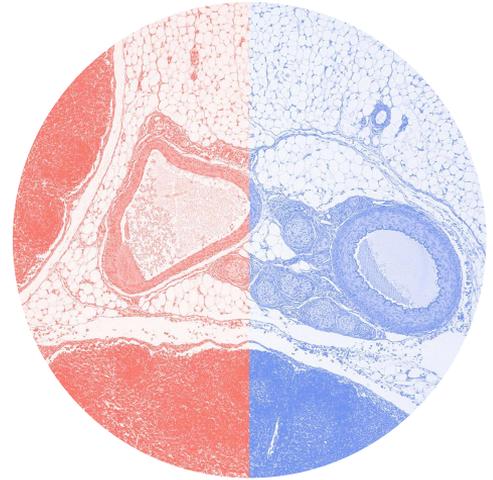
# Inflammation risk profile

Inflammation risk profile

# What is your risk for food driven inflammation?

We use your blood tests and glucose monitoring to evaluate your blood sugar and fat control.

The combination of these factors helps us understand your inflammation risk profile.



Inflammation risk profile

**Blood sugar control**

Blood sugar control

## For the love of carbs

Recent diet trends have seen a reduction in carb intake but carbohydrates actually play a crucial role in the body and can be a great source of energy.

Every body turns carbohydrates into blood sugar (glucose) but different foods release this sugar at different rates. High-quality carb sources - which release sugar slowly - can help to reduce inflammation, sustain your energy and fend off hunger.

Carb-rich foods, such as many fruits and vegetables, can also be a great source of fiber, which is vital for gut health, as well as other essential nutrients.

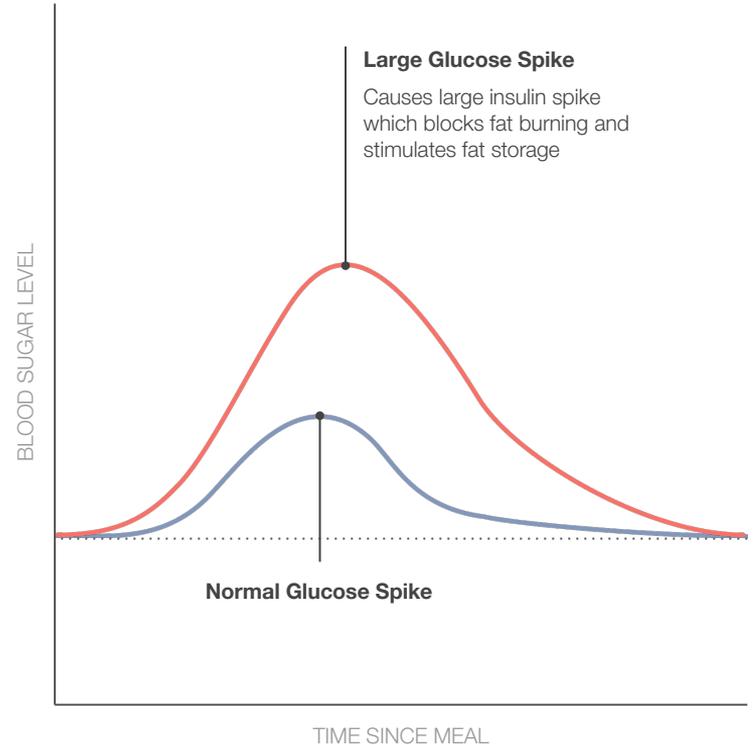


Blood sugar control

# What is blood sugar control?

When we look at blood sugar levels after a meal – we see that some foods cause large spikes and that it takes longer for the body to return to normal levels.

Controlling these blood sugar spikes helps to reduce inflammation, sustain energy, control hunger, and reduces the risk of diabetes and heart disease.



Blood sugar control

# What is a blood sugar crash?

In addition to how high your blood sugar spikes after a meal, we can also look at whether you experience blood sugar crashes.

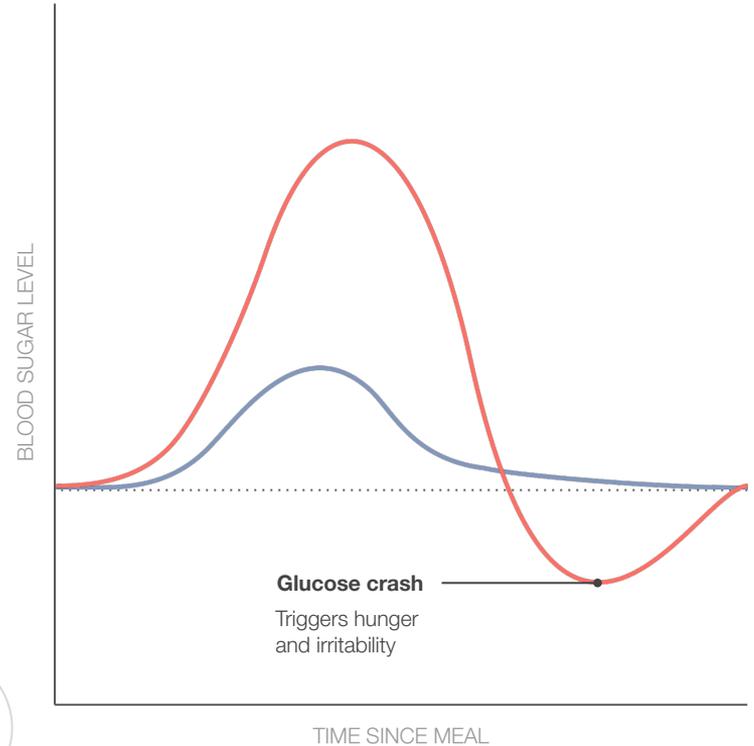
A 'crash' is when the blood sugar dips below your normal range and can cause you to feel symptoms including sweating, increased hunger, irritability and fatigue.



**Research paper in preparation from PREDICT discoveries**

*Effect of postprandial glucose dips on hunger and energy intake in 1,102 subjects in US and UK: The PREDICT 1 study*

In Press; Current Developments in Nutrition (2020)

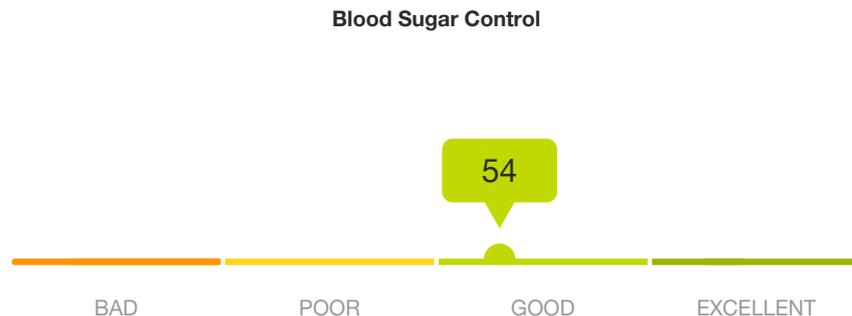


Blood sugar control

## Your results

You have good blood sugar control. This means your body manages to process most carbohydrate-rich foods without becoming inflamed. This outperforms most people of your age and gender.

However, for most people, blood sugar control will deteriorate as you age especially if you eat lots of low-quality, carb-rich food.



Calculated using your blood sugar (glucose) meter readings in response to set muffin meals, and in comparison to over 2000 other people in our studies

Your test results

# Have you felt a sugar crash before?

Pale skin, irritability, hunger and sleepiness are all symptoms of a sugar crash. In more extreme cases you may also suffer sweating or lack of coordination.

What meals have made you feel this way?



Tired



Confused



Sweaty



Hungry



Irritable



Pale

Inflammation risk profile

# **Blood fat control**

Blood fat control

# Fats are essential

Although many diets would have you believe otherwise – the body needs fats and there are many healthy sources which you can eat while controlling your blood fat levels.

Most importantly – fats enhance flavor, add texture and make a meal taste great! Fats are also an important source of energy, support cell growth, and are essential for your body to absorb some nutrients and produce important hormones.

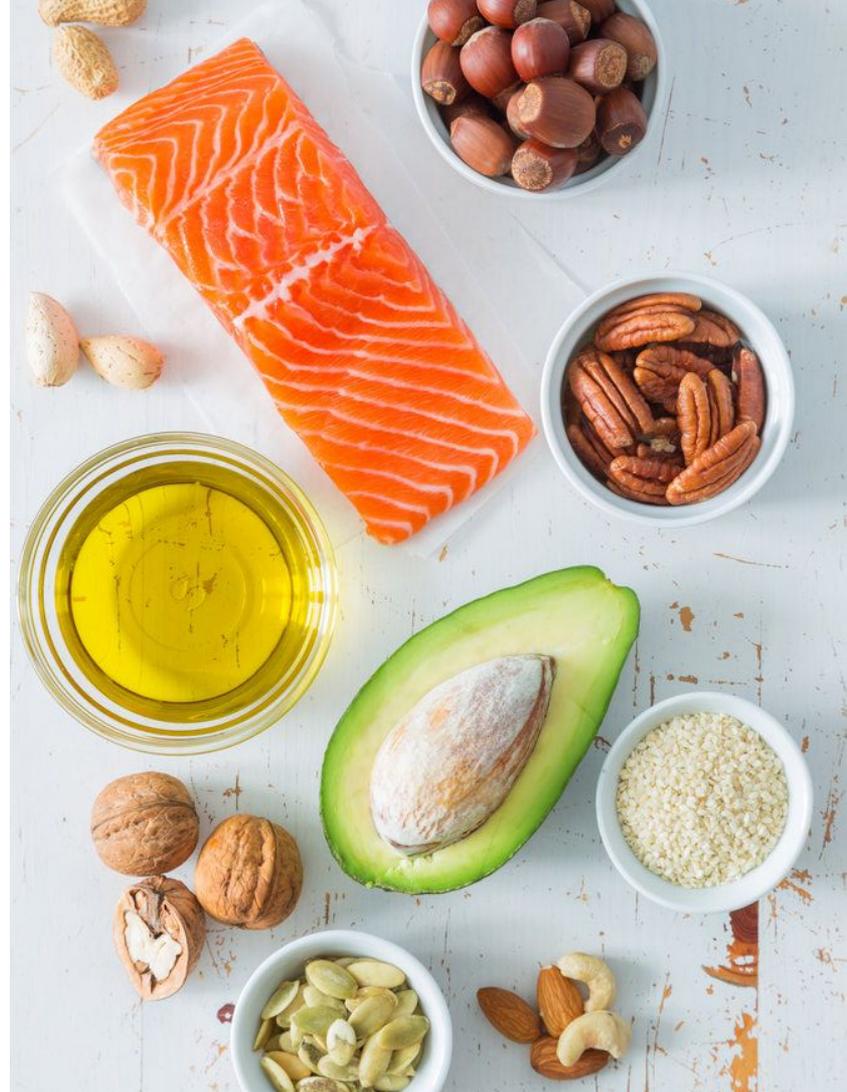
Our research also shows that having fat in a meal can help to control your blood sugar response.



**Research paper from PREDICT discoveries**

*Human Postprandial Responses to Food and Potential for Precision Nutrition.*

Under peer review. For publication 2020



Blood fat control

# What is blood fat control?

Few people understand how blood fats work. So if you've never heard of lipids or triglycerides, you're not alone. Thankfully we do.

Our scientists have discovered that certain foods release fats that circulate in your blood for longer than others. We also know that **on average it takes 6 hours for blood fats to clear** after a single meal.

Controlling your blood fat level helps to **reduce inflammation** and is better for your long-term health.



**Research paper in preparation from PREDICT discoveries**

Food-induced Inflammation: Mechanistic insights of the role of lipids from the PREDICT study

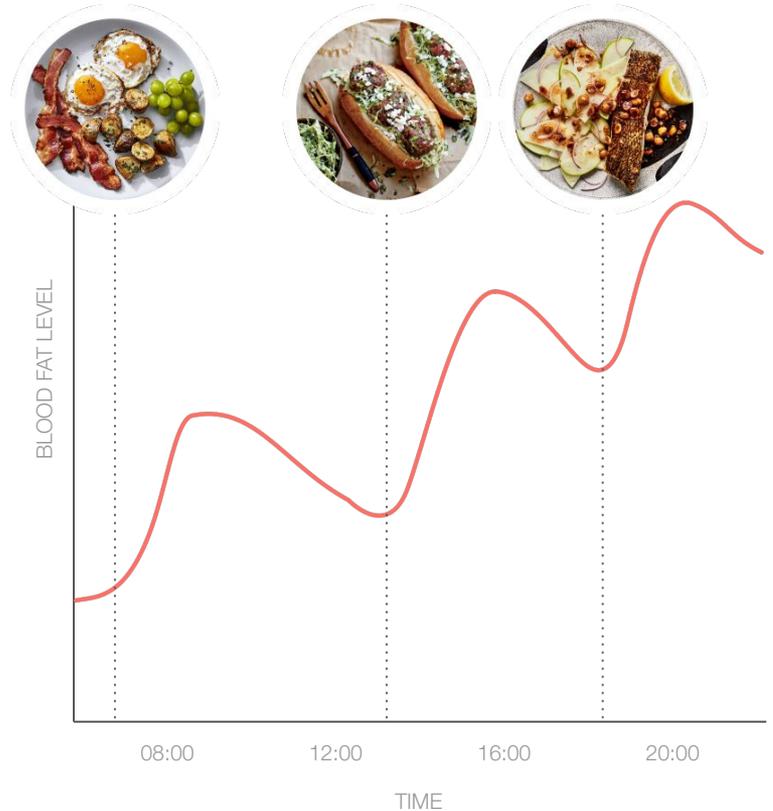
To be published in 2020

Blood fat control

# Fat can build up over several meals

Most people eat meals every 4-6 hours and many of us snack on smaller items throughout the day. As it takes on average 6 hours for fat to clear from your bloodstream – your body may still be processing fat when you next come to eat.

Controlling this build-up of blood fats can reduce food-driven inflammation and is better for your long-term heart health. The ZOE app will help you factor this into your meal planning.



## Blood fat control

# Your results

You have poor blood fat control. This means your body may become inflamed after eating certain fat-rich foods. This is in line with expectations for people your age and gender.

Most people's blood fat control will deteriorate as they age unless they improve their diet.



Calculated from your blood spot tests in comparison to over 2000 other people in our studies

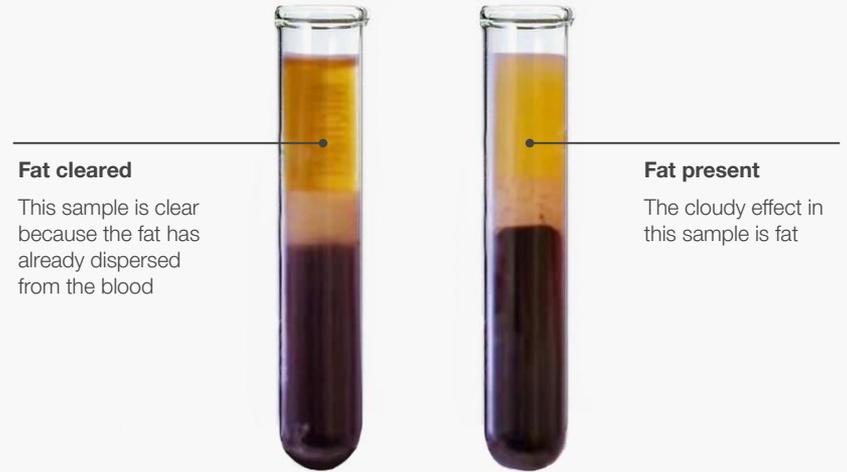
Blood fat control

# What does your blood look like?

Did you know that when we look at blood samples from our research participants we can actually see the fats?

When we separate plasma from the blood – fats (lipids) create a cloudy effect. These lipids indicate that the fat from your meal is still in your blood.

Though this is a normal part of the digestion process, too much fat in your blood can trigger inflammation and is linked to poor heart health. So it's important to eat meals containing fats that your body is able to clear quickly.



Your test results: Part 2

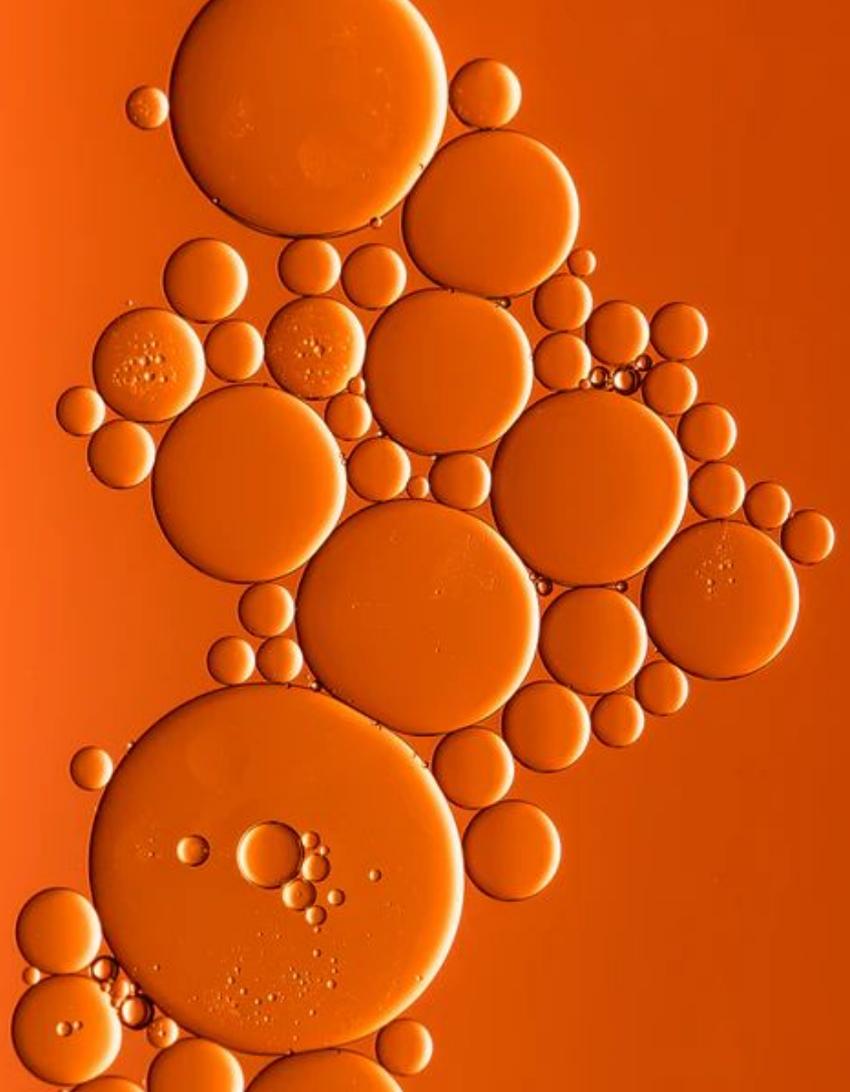
# Gut health

Gut health

# What is the gut microbiome?

Our gut is inhabited by a complex ecosystem of trillions of microbes that comprises bacteria but also viruses or fungi collectively called the gut microbiome.

- We have more bacteria in our microbiome than human cells in the body.
- The number of genes in all the microbes in our body is also 100x the number of genes in the human DNA.
- If we weighed all your microbiome it would be almost 8 ounces!



Gut health

# Why is your gut health important?

The gut microbiome can play important roles in our body such as maintaining the health of our immune system and brain function, and affecting how we break down food.

The gut gets colonized by many microbes at birth, and the composition of the gut microbiome is mostly dictated by what we eat but also by other factors, such as where we live, who we interact with, the medication we take, hygiene conditions and our level of exercise and stress.

By eating the right foods and living the right lifestyle we can partly shape the composition of our gut microbiome, and as a result affect our health and weight.



Gut health

## With you, we've made amazing discoveries

During PREDICT, three of the world's top gut microbiome scientists, Nicola Segata, Curtis Huttenhower and Tim Spector, discovered new connections between the microbiome, diet and metabolism. These include new links with 30 key bacteria that can be found in the gut and that could play a role in how we biologically respond to food.

Our scientists were also able to discover positive and negative links between certain foods and these bacteria, which make it possible to give you insights about what you can eat to positively affect your microbiome & metabolism.



### Research paper from PREDICT discoveries

*Microbiome connections with host metabolism and habitual diet from the PREDICT 1 metagenomic study*

Under peer review



Gut health

## Your results

Your results will detail which of the 30 key bacteria you have in your gut.

It will also show the relative abundance for each bacteria and how that compares to other PREDICT participants.



## Gut health

# Your results

Your results will show which of 30 key good & bad bacteria you have in your gut.

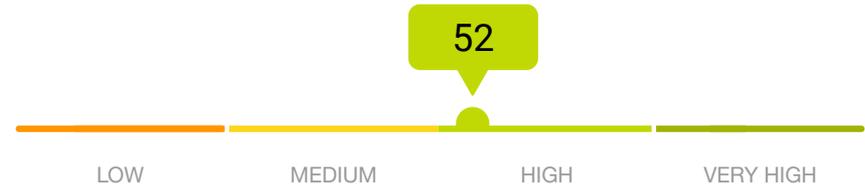
Most microbiome test just look at diversity, but we've discovered new associations between the microbiome & metabolism which go much further. These key bacteria play a role in how we respond to food. We call this your 'ZOE Microbiome Health Index'.

**Why it matters?** The better the ratio of good vs. bad bacteria, the more likely your microbiome is an ally in keeping your blood sugar and blood fat under control. For example, it provides an indication of how prone you are to prolonged elevations of blood sugar and fat levels after eating meals.

**How can I improve it?** We have discovered that certain foods are linked to increased prevalence and abundance of these 'good' bacteria in the gut. We call these foods potential 'gut boosters'. Likewise, some other foods could promote the presence of bacteria linked with 'bad' health parameters.

### ZOE Microbiome Health Index

Relative abundance of good vs. bad key bacteria



Calculated by analyzing your poop sample in comparison to over 2000 other people in our PREDICT studies

Gut health

## Why are certain bacteria 'good'?

In PREDICT, we discovered positive health associations for 15 'good bugs'. These bacteria are associated with strong metabolism, lower blood pressure, and better blood sugar control.

People with these bacteria tend to have less signs of inflammation, lower levels of triglycerides and bad cholesterol, and less abdominal fat mass.

These bacteria are also associated with better fat sources which are high in polyunsaturated fatty acids such as omega-6.



<h2>15 'Good bugs'</h2> <p>Top 15 'good' bacteria species &amp; descriptions of their impact on health</p>	<h2>Relative abundance</h2> <p>Percent of total species abundance in your gut &amp; comparison to average of PREDICT participants</p>	<h2>How rare is this species?</h2> <p>Percent of PREDICT participants who have this species</p>
<p><b>Hannah</b> (<i>Haemophilus parainfluenzae</i>) Associated with higher omega-3 levels &amp; less abdominal fat</p>	<p>0.00% YOU <span style="color: red;">●</span> vs 0.02% PREDICT</p>	<p>Observed in 47.74% of participants</p>
<p><b>Freddy</b> (<i>Firmicutes bacterium CAG 95</i>) Associated with higher omega-3 levels &amp; lower triglycerides</p>	<p>0.00% YOU <span style="color: red;">●</span> vs 0.07% PREDICT</p>	<p>Observed in 45.92% of participants</p>
<p><b>Billy</b> (<i>Bifidobacterium animalis</i>) Associated with increased (good) cholesterol &amp; lower Insulin levels</p>	<p>0.00% YOU <span style="color: red;">●</span> vs 0.14% PREDICT</p>	<p>Observed in 31.24% of participants</p>
<p><b>Oscar</b> (<i>Oscillibacter sp 57 20</i>) Associated with higher omega-3 levels &amp; lower (bad) cholesterol levels</p>	<p>0.64% YOU <span style="color: green;">●</span> vs 0.86% PREDICT</p>	<p>Observed in 83.95% of participants</p>
<p><b>Rosie</b> (<i>Roseburia sp CAG 182</i>) Associated with higher omega-3 levels &amp; lower triglycerides</p>	<p>0.00% YOU <span style="color: red;">●</span> vs 0.06% PREDICT</p>	<p>Observed in 33.58% of participants</p>

Your relative abundance of good bacteria compared to all PREDICT participants

● You don't have this bacterium or very low
 ● Low
 ● High
 ● Very high

<h2>15 'Good bugs'</h2> <p>Top 15 'good' bacteria species &amp; descriptions of their impact on health</p>	<h2>Relative abundance</h2> <p>Percent of total species abundance in your gut &amp; comparison to average of PREDICT participants</p>	<h2>How rare is this species?</h2> <p>Percent of PREDICT participants who have this species</p>
<p><b>Veronica</b> (<i>Veillonella dispar</i>) Associated with higher omega-3 levels &amp; less abdominal fat</p>	<p>0.00% YOU <span style="color: red;">●</span> vs 0.01% PREDICT</p>	<p>Observed in 38.32% of participants</p>
<p><b>Ellie</b> (<i>Eubacterium eligens</i>) Associated with increased (good) cholesterol &amp; lower (bad) cholesterol levels</p>	<p>4.96% YOU <span style="color: green;">●</span> vs 1.30% PREDICT</p>	<p>Observed in 89.32% of participants</p>
<p><b>Finn</b> (<i>Firmicutes bacterium CAG 170</i>) Associated with higher omega-3 levels &amp; lower (bad) cholesterol levels</p>	<p>0.00% YOU <span style="color: red;">●</span> vs 0.05% PREDICT</p>	<p>Observed in 25.47% of participants</p>
<p><b>Ruth</b> (<i>Rothia mucilaginosa</i>) Associated with higher insulin sensitivity &amp; less abdominal fat</p>	<p>0.00% YOU <span style="color: red;">●</span> vs 0.00% PREDICT</p>	<p>Observed in 30.95% of participants</p>
<p><b>Valentina</b> (<i>Veillonella infantium</i>) Associated with higher insulin sensitivity &amp; less abdominal fat</p>	<p>0.00% YOU <span style="color: red;">●</span> vs 0.00% PREDICT</p>	<p>Observed in 29.70% of participants</p>

Your relative abundance of good bacteria compared to all PREDICT participants

● You don't have this bacterium or very low
 ● Low
 ● High
 ● Very high

<h2>15 'Good bugs'</h2> <p>Top 15 'good' bacteria species &amp; descriptions of their impact on health</p>	<h2>Relative abundance</h2> <p>Percent of total species abundance in your gut &amp; comparison to average of PREDICT participants</p>	<h2>How rare is this species?</h2> <p>Percent of PREDICT participants who have this species</p>
<p><b>Rohan</b> (<i>Roseburia hominis</i>) Associated with higher omega-3 levels &amp; lower (bad) cholesterol levels</p>	<p>0.09% YOU <span style="color: yellow;">●</span> vs 0.31% PREDICT</p>	<p>Observed in 92.98% of participants</p>
<p><b>Otis</b> (<i>Oscillibacter sp PC13</i>) Associated with increased (good) cholesterol &amp; lower (bad) cholesterol levels</p>	<p>0.00% YOU <span style="color: red;">●</span> vs 0.00% PREDICT</p>	<p>Observed in 47.00% of participants</p>
<p><b>Claude</b> (<i>Clostridium sp CAG 167</i>) Associated with higher omega-3 levels &amp; higher insulin sensitivity</p>	<p>0.69% YOU <span style="color: green;">●</span> vs 0.12% PREDICT</p>	<p>Observed in 37.24% of participants</p>
<p><b>Rumi</b> (<i>Ruminococcaceae bacterium D5</i>) Associated with increased (good) cholesterol &amp; lower (bad) cholesterol levels</p>	<p>0.51% YOU <span style="color: green;">●</span> vs 0.03% PREDICT</p>	<p>Observed in 44.66% of participants</p>
<p><b>Patrick</b> (<i>Paraprevotella xylaniphila</i>) Associated with higher insulin sensitivity</p>	<p>0.00% YOU <span style="color: red;">●</span> vs 0.16% PREDICT</p>	<p>Observed in 27.70% of participants</p>

Your relative abundance of good bacteria compared to all PREDICT participants

● You don't have this bacterium or very low
 ● Low
 ● High
 ● Very high

Gut health

## Why are certain bacteria 'bad'?

With the 15 'bad bugs', we observed the opposite effect. These bacteria are associated with higher risk of food-driven inflammation, higher blood pressure, and poorer glycemetic responses.

For people with these bacteria, we see more inflammation, higher levels of triglycerides and bad cholesterol, and greater abdominal fat mass.

These bacteria are also associated with poorer fat sources which are low in polyunsaturated fatty acids such as omega-3 & 6.



<h2>15 'Bad bugs'</h2> <p>Top 15 'bad' bacteria species &amp; descriptions of their impact on health</p>	<h2>Relative abundance</h2> <p>Percent of total species abundance in your gut &amp; comparison to average of PREDICT participants</p>	<h2>How rare is this species?</h2> <p>Percent of PREDICT participants who have this species</p>
<p><b>Bobby</b> (<i>Blautia obeum</i>) Associated with increased cardiovascular disease risk &amp; decreased insulin sensitivity</p>	<p>0.40% YOU  vs 1.14% PREDICT</p>	<p>Observed in 97.32% of participants</p>
<p><b>Ronald</b> (<i>Roseburia inulinivorans</i>) Associated with higher abdominal fat &amp; lower (good) cholesterol levels</p>	<p>0.65% YOU  vs 0.53% PREDICT</p>	<p>Observed in 92.98% of participants</p>
<p><b>Flavio</b> (<i>Flavonifractor plautii</i>) Associated with higher triglyceride levels &amp; lower omega-3 levels</p>	<p>0.03% YOU  vs 0.21% PREDICT</p>	<p>Observed in 94.75% of participants</p>
<p><b>Euan</b> (<i>Eubacterium ventriosum</i>) Associated with increased (bad) cholesterol &amp; lower (good) cholesterol levels</p>	<p>0.00% YOU  vs 0.11% PREDICT</p>	<p>Observed in 69.67% of participants</p>
<p><b>Colin</b> (<i>Collinsella intestinalis</i>) Associated with high blood pressure &amp; lower omega-3 levels</p>	<p>0.00% YOU  vs 0.03% PREDICT</p>	<p>Observed in 67.16% of participants</p>

Your relative abundance of bad bacteria compared to all PREDICT participants

 Very high  
  High  
  Low  
  You don't have this bacterium or it's very low

<h2>15 'Bad bugs'</h2> <p>Top 15 'bad' bacteria species &amp; descriptions of their impact on health</p>	<h2>Relative abundance</h2> <p>Percent of total species abundance in your gut &amp; comparison to average of PREDICT participants</p>	<h2>How rare is this species?</h2> <p>Percent of PREDICT participants who have this species</p>
<p><b>Colton</b> (<i>Clostridium</i> sp CAG 58) Associated with higher abdominal fat levels &amp; lower omega-3 levels</p>	<p>0.17% YOU <span style="color: red;">●</span> vs 0.13% PREDICT</p>	<p>Observed in 72.24% of participants</p>
<p><b>Edgar</b> (<i>Eggerthella lenta</i>) Associated with higher triglyceride levels &amp; lower omega-3 levels</p>	<p>0.01% YOU <span style="color: green;">●</span> vs 0.06% PREDICT</p>	<p>Observed in 68.53% of participants</p>
<p><b>Ana</b> (<i>Anaerotruncus colihominis</i>) Associated with higher triglyceride levels &amp; lower omega-3 levels</p>	<p>0.01% YOU <span style="color: yellow;">●</span> vs 0.02% PREDICT</p>	<p>Observed in 59.28% of participants</p>
<p><b>Clarissa</b> (<i>Clostridium bolteae</i>) Associated with higher triglycerides &amp; lower omega-3 levels</p>	<p>0.01% YOU <span style="color: yellow;">●</span> vs 0.02% PREDICT</p>	<p>Observed in 61.56% of participants</p>
<p><b>Clotilde</b> (<i>Clostridium spiroforme</i>) Associated with higher triglyceride levels &amp; lower omega-3 levels</p>	<p>0.04% YOU <span style="color: red;">●</span> vs 0.03% PREDICT</p>	<p>Observed in 50.43% of participants</p>

Your relative abundance of bad bacteria compared to all PREDICT participants

● Very high  
 ● High  
 ● Low  
 ● You don't have this bacterium or it's very low

<h2>15 'Bad bugs'</h2> <p>Top 15 'bad' bacteria species &amp; descriptions of their impact on health</p>	<h2>Relative abundance</h2> <p>Percent of total species abundance in your gut &amp; comparison to average of PREDICT participants</p>	<h2>How rare is this species?</h2> <p>Percent of PREDICT participants who have this species</p>
<p><b>Rudolf</b> (<i>Ruminococcus gnavus</i>) Associated with higher triglyceride levels &amp; lower omega-3 levels</p>	<p>0.00% YOU  vs 0.22% PREDICT</p>	<p>Observed in 52.26% of participants</p>
<p><b>Clara</b> (<i>Clostridium innocuum</i>) Associated with higher triglyceride levels &amp; lower omega-3 levels</p>	<p>0.00% YOU  vs 0.02% PREDICT</p>	<p>Observed in 48.94% of participants</p>
<p><b>Blake</b> (<i>Blautia hydrogenotrophica</i>) Associated with increased (bad) cholesterol</p>	<p>0.00% YOU  vs 0.03% PREDICT</p>	<p>Observed in 43.23% of participants</p>
<p><b>Clair</b> (<i>Clostridium symbiosum</i>) Associated with increased insulin &amp; lower omega-3 levels</p>	<p>0.00% YOU  vs 0.02% PREDICT</p>	<p>Observed in 39.46% of participants</p>
<p><b>Cleo</b> (<i>Clostridium bolteae</i> CAG 59) Associated with higher triglyceride levels &amp; lower omega-3 levels</p>	<p>0.00% YOU  vs 0.01% PREDICT</p>	<p>Observed in 35.47% of participants</p>

Your relative abundance of bad bacteria compared to all PREDICT participants

 Very high  
  High  
  Low  
  You don't have this bacterium or it's very low

Gut health

# What is the ‘beneficial parasite’ *Blastocystis*?

*Blastocystis* is a microorganism formed of one single *Eukaryotic* cell that colonizes the gut. Although the term parasite doesn’t sound very appealing, our results show that it is correlated with less abdominal fat<sup>1</sup> and better metabolism. Only **31% of PREDICT participants**<sup>2</sup> have a gut which is colonized with *Blastocystis*.

<sup>1</sup> This abdominal fat is called “visceral fat” and is an found inside the body around the vital organs such as the liver, stomach and intestines. Higher visceral fat levels put you at greater risk of diseases including diabetes, heart disease and cancer.

<sup>2</sup> Out of 1000 participants, 309 had *Blastocystis* and 691 did not.



**Abdominal Fat:** Visceral Adipose Tissue Mass in grams

● Participants with *Blastocystis* ● Participants without *Blastocystis*

*Blastocystis*

## Your *Blastocystis* result

You **do not** have *Blastocystis*. This is not necessarily a bad thing. A lot of different factors contribute to good digestive health, and *Blastocystis* is just one part of a very complex system.

Your microbiome composition *can* change, and your diet will play a key role in how your microbiome evolves.

You can use the ZOE app to find the right foods for your body and have the best chance of improving your microbiome and ZOE Microbiome Health Index.



**Negative**

You do not have the *Blastocystis* parasite in your gut

Gut health

# Your personalized gut boosters

We have discovered that certain foods are associated with these key bacteria.

We call the beneficial foods 'gut boosters'. Participants whom eat these foods tend to have microbes which thrive. These boosters include a wide variety of plants and high-fiber foods.

We also identified some negative foods which we call 'gut suppressors'. These include many ultra-processed items which can damage the microbiome and cause inflammation in our bodies.



# Your personalized gut boosters

**Recommended foods** that may help you boost the number of good bacteria in your gut



## Apples

To increase: Hannah ● Rosie ● Veronica ●  
Valentina ●



## Peppers

To increase: Freddy ● Billy ● Rosie ● Rohan ●  
Also helps: Ellie ●



## Avocado

To increase: Billy ● Rosie ● Rohan ● Otis ●  
Also helps: Oscar ●



## Lentils

To increase: Hannah ● Freddy ● Rosie ● Rohan ●  
Also helps: Ellie ● Claude ●



## Spinach

To increase: Rosie ● Rohan ● Otis ● Patrick ●  
Also helps: Ellie ●



## Bean sprouts

To increase: Freddy ● Rosie ● Otis ●  
Also helps: Claude ● Rumi ●

Your relative abundance of good bacteria compared to all PREDICT participants

● You don't have this bacterium or it's very low ● Low ● High ● Very high

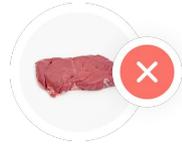
## Your personalized gut suppressors

**Foods to avoid** as they will likely increase the number of bad bacteria present in your gut



### Bacon

To decrease: Ronald ● Colton ● Clotilde ●



### Beef

To decrease: Colton ● Clotilde ●  
Also helps decrease: Edgar ● Blake ● Claire ●



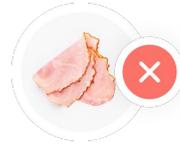
### Sausages

To decrease: Colton ●  
Also helps decrease: Ana ● Clarissa ●



### Chicken

To decrease: Colton ● Clotilde ●



### Ham

To decrease: Colton ● Clotilde ●



### Heavy Cream

To decrease: Ronald ●  
Also helps decrease: Flavio ●

Your relative abundance of bad bacteria compared to all PREDICT participants

● Very high ● High ● Low ● You don't have this bacterium or it's very low

Food for thought

# What foods will you eat to feed the bacteria in your gut?



In summary

# The body is complex. We make it simple.

We have given you a high-level overview of how your body responds to food. In reality, there are more complex and interesting dynamics involved.

For example, blood fat levels also influence your blood sugar responses. The health of your microbiome, sequence of meals, time of day, and combination of foods all impact your body's response to meals.

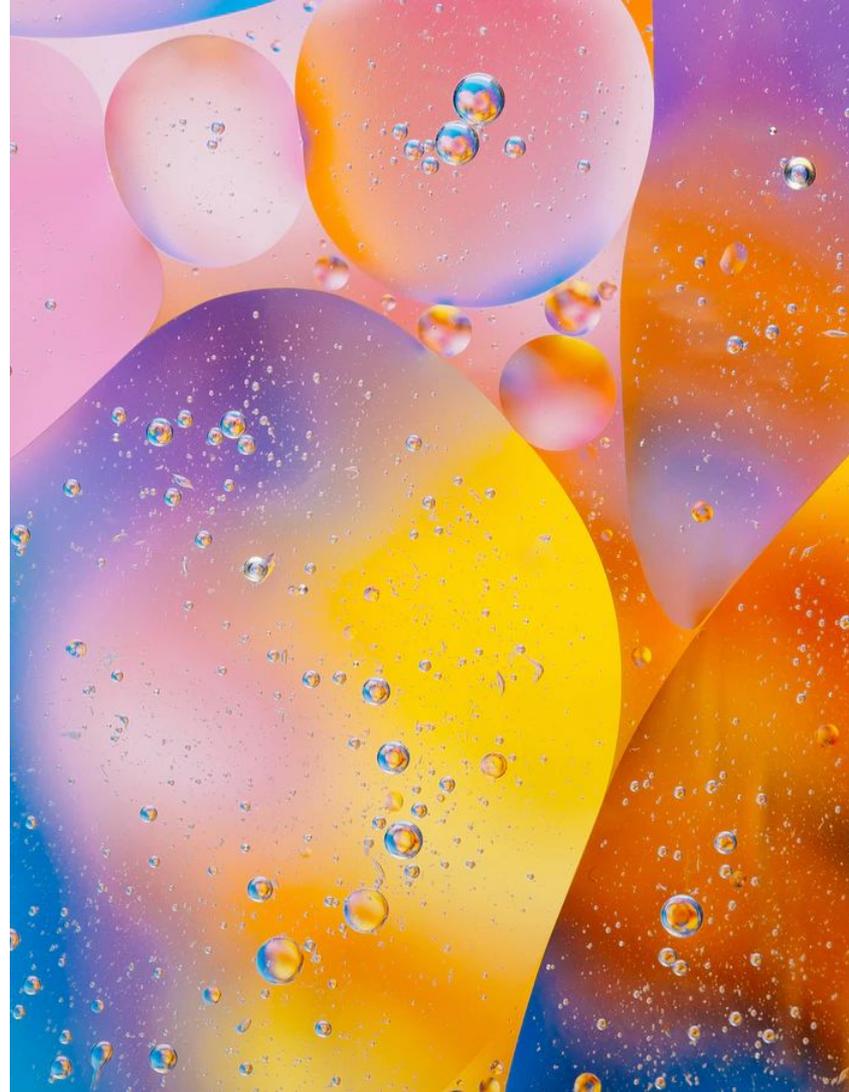
Our mission is to make it simple for you to eat in the best way for your unique body.



In summary

# You can change. For good.

The exciting news is that research shows early signs that you can change your microbiome for the better and therefore reduce your risk for food-driven inflammation.



Your insights: Part 4

# **Intro to food scores**

Intro to food scores

# First things first. Here is the science behind your personalized food scores.

Our scores are built on science which has compared you with thousands of people (different age, ethnicity, sex, health, etc.) in the largest nutritional research program in the world open to the public, with scientists from Harvard University, Massachusetts General Hospital, Stanford University and King's College London.

This ground-breaking research allows us to predict how you will respond to food, including items you've never tried, helping you find the best food for *your* body.

---

Built by scientists at:



ZOE

Intro to food scores

# Calories are not created equal

It makes sense that you should eat an orange instead of a donut. But even when they have the same amount of calories – it's the 'quality' that really matters.

Quality foods help you develop a healthy gut, manage blood sugar control and clear blood fat effectively.

The ZOE app will help you find quality foods for your body.



$\frac{3}{4}$  Donut = 200 calories



1  $\frac{1}{2}$  Oranges = 200 calories

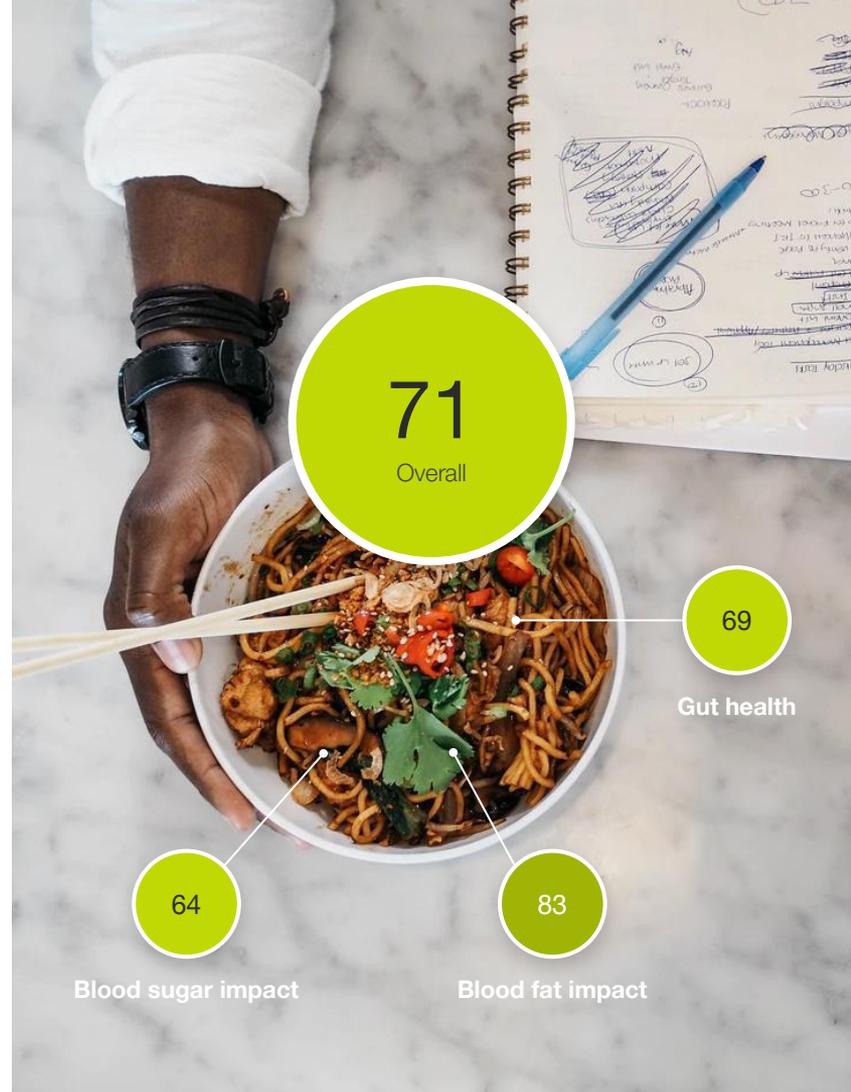
Intro to food scores

# Our scores do the hard work for you

As we've already discussed – blood sugar control, blood fat control and gut health are all interrelated.

So, when you start to build meals with many ingredients it can get complicated.

Thankfully, your scores put the best minds of nutritional science right there in your pocket to help you decide.



Intro to food scores

# Using ZOE scores

We've scored millions of foods for you including all the whole foods you can imagine as well as thousands of recipes and branded products.

We split your scores into 4 color-coded ranges to guide you on how much and how frequently you should eat them.



## Intro to food scores

# Using ZOE scores



Once in a while

0-24

There are no foods you can *never* eat. It's ok to eat these items but you should have them rarely or in small quantities.



Enjoy in moderation

25-49

There are healthier swaps for these foods but having them from time to time (2-3 times per week) in normal quantities is fine.



Enjoy regularly

50-74

You can eat these foods regularly (every other day). However, large quantities may have a negative impact.



Enjoy freely!

75-100

These foods are predicted to be the best for your metabolism. You can have these frequently (everyday) and in significant quantities.

Intro to food scores

# Scan a barcode to find the score of your favorite food

You can browse, search or scan foods in the ZOE app. What surprising scores can you find for yourself?

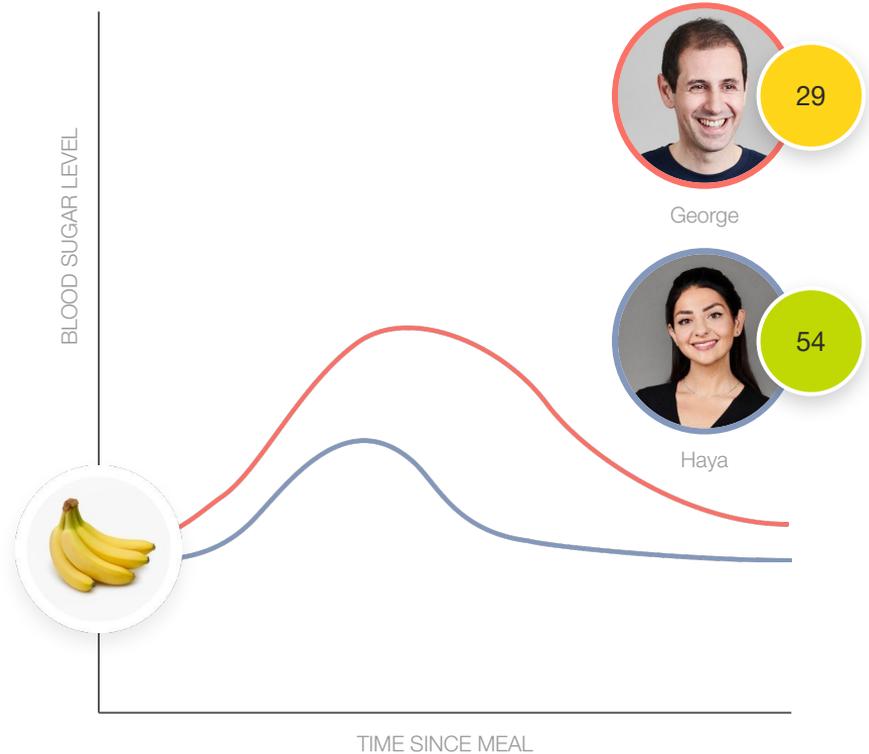


Intro to food scores

# Our science shows that we all respond to food differently

Let's look at an example. Haya and George (ZOE's co-founder) have very different blood sugar responses to bananas. So they have different scores.

Our research looked at millions of readings like this from over 2,100 participants. We use this blood sugar data, alongside your blood fat control and gut health to generate your unique food scores.



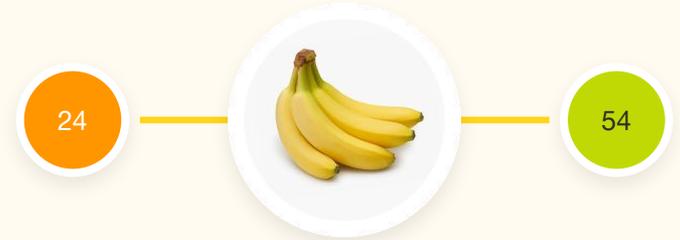
Intro to food scores

# So your scores can vary significantly from your friends

Something as common as a banana can have very different scores for different people.

Ranging from 24 to 54 – it can be an occasional treat for some while a regular food for others.

Understanding your body's response helps us generate a score just for you.



Intro to food scores

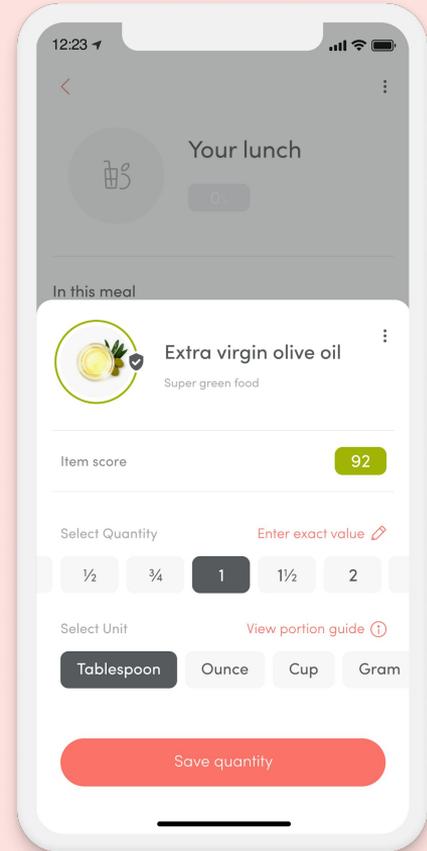
# Your scores are sensitive to brand and quantity

You can use the ZOE app to find scores for your specific item by scanning the barcode or searching. You may find surprising score variation across different brands.

Adjusting the quantity of your serving is also a great way to improve your score.



We're always improving our database and your scores may change. Items with this symbol have verified nutritional information and are more reliable.



Intro to food scores

# Your food scores may change

Please note – your personalized food recommendations are based on an algorithm developed from data collected in the PREDICT study.

As our team continues to develop this algorithm our accuracy will improve and your food scores may change. Up-to-date results will be available in the ZOE app.



Intro to food scores

## Why are *super green* foods so great?

We call the top scoring items 'super green foods'. The beauty of these items is that you can enjoy them freely. There is no need for calorie counting or obsessively weighing them.

Super green foods tend to sustain your energy for longer which can naturally help to fight hunger. So you're free to enjoy these foods as much as you like.



Enjoy freely!

75-100

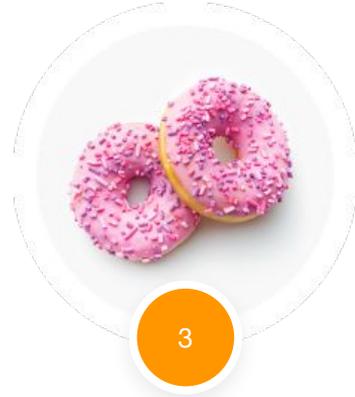
Intro to food scores

# Don't expect miracles here

Some of these food scores may be more obvious than others.

The best and worst foods are likely to include things you've heard to not eat and avoid before.

Unfortunately, doughnuts will not be getting a great score for anyone anytime soon!



Once in a while

0-24

Intro to food scores

# Magic happens in the middle

What may be less familiar is how your body responds to the foods in the middle.

Knowing which of these are better or worse for you is key to unlocking your metabolism.

We'll also teach you how to combine different scoring items together to create great, well-balanced meals.



Enjoy in moderation

25-50



Enjoy regularly

50-74

Intro to food scores

# What do you think?

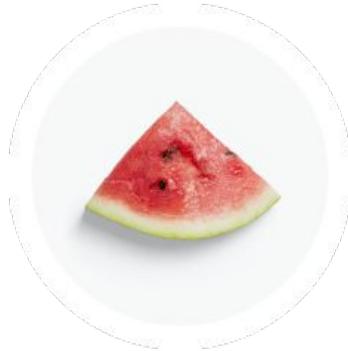


George

Which of these foods would be green, yellow, or orange for George?



Sushi



Watermelon



Gluten-free bread

## Intro to food scores

# Wow!



George

For George, all these foods are orange, or foods that should be eaten in moderation



**Why?** The white rice in most sushi can spike your blood sugar more than other rice



**Why?** Even though this is a fruit, watermelon is high in sugar and also low in fiber



**Why?** Gluten-free bread is often made from rice or tapioca flour. They spike blood sugar like most other breads

Intro to food scores

# Play this game one more time...



George

Which of these foods would be green, yellow, or orange for George?



Peanut butter



Olive oil



Whole-wheat pasta

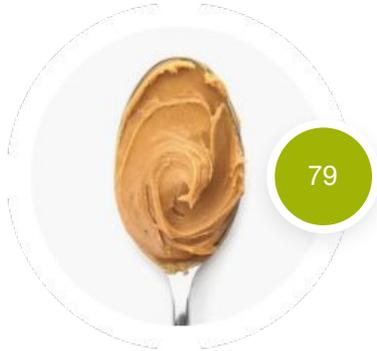
Intro to food scores

# All super green!



George

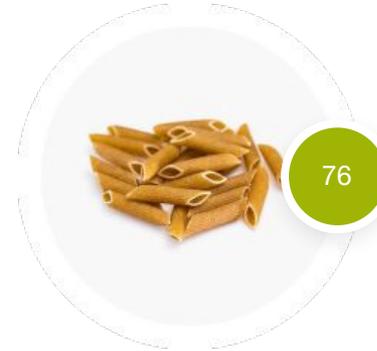
All these foods score 75+ and George can enjoy them freely.



**Why?** Unsweetened peanut or almond butter has healthy fats and protein, as well as fiber for your gut



**Why?** Olive oil is a healthy fat and a great substitution for butter



**Why?** Whole-wheat pasta is a healthier carb and has plenty of fiber as well

## Intro to food scores

# The power of combining foods

Let's take a peek inside the magic of combining foods.

Take a simple sandwich. There are many ways you could cut this. When we score these different sandwich combos for you we get very different scores.

The combination of fats to carbs, as well as their quality and quantity, all contribute to the score.

	No filling	 Bacon, Lettuce & Tomato	 Tuna Mayo & Lettuce	 Peanut Butter & Jelly	 Avocado, hummus & lettuce
No bread		24	53	70	100
 English Muffin	14	20	25	46	63
 Bagel	23	24	33	50	63
 Baguette	24	24	36	52	66
 Whole-wheat	52	39	53	61	75

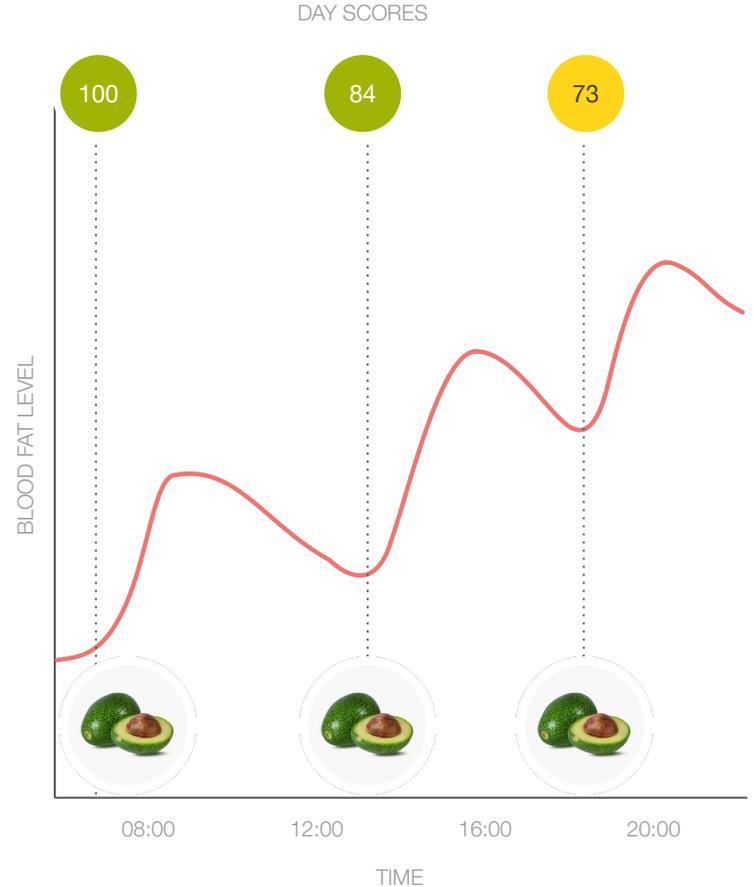
Intro to food scores

# The impact of meal sequencing

Remember that 6-hour fat clearance? We score days to cover that too.

This doesn't mean you need to wait 6 hours between every bite! But even healthy fats like avocado take time to clear from your blood.

The ZOE Insights app will factor this into your day score and help you understand when to have less. It's a great way to learn how to sequence your meals and get the most from your food and body.



Your insights: Part 5

# **Your personalized food insights**

Personalized food insights

# Your average meal scored 20

Don't worry if your scores during PREDICT aren't what you would expect. We know you may have been experimenting during your logging.

The key is using this data to inform what you want to eat going forward.

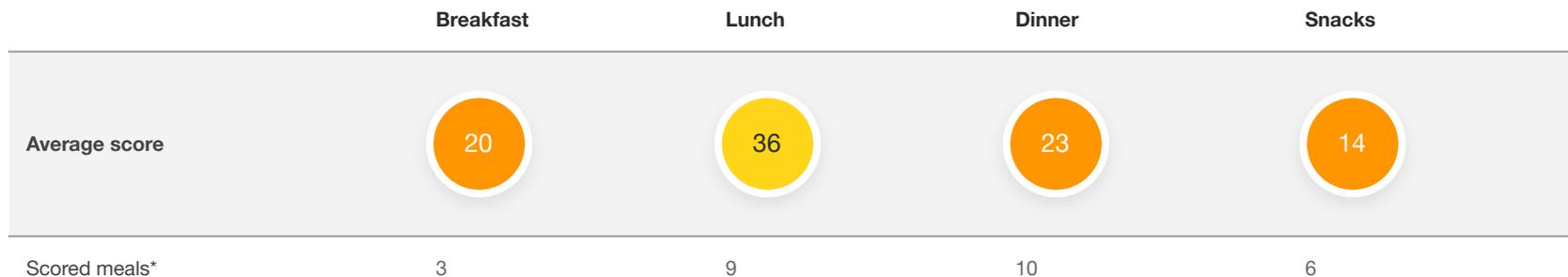
Average meal score on PREDICT



Calculated by evaluating your logged meals alongside your blood, glucose and poop tests

Personalized food insights

# Your meal scores by category



\* Some of your meals could not be scored because the nutrition information was missing, the meal was inaccurately logged or it did not match our database.

Personalized food insights

# Your breakfasts



## Breakfast

24th October 2019

Ingredient	Amount	Score
Blueberries, frozen, unsweetened	143g	83
Banana, without peel	79g	61
Almond milk, unsweetened	1.5cup	42
Earthly Choice Superfood Blend	37g	79

# Personalized food insights

## Your breakfasts



**Breakfast**  
26th October 2019

Ingredient	Amount	Score
Peanut Butter, smooth	144g	● 69
Banana, without peel	79g	● 61
Almond milk, unsweetened	1.5cup	● 42
Earthly Choice Superfood Blend	3tbsp	● 79

Your overall meal score appears lower than the combination of ingredients. This is because the quantity of ingredients exceeds your fat threshold. The Zoe app takes into account quantity and fat throughout the day and adjusts your score accordingly!

# Personalized food insights

## Your breakfasts



**Breakfast**  
22nd October 2019

Ingredient	Amount	Score
Peanut Butter, smooth	140g	69
Earthy Choice Superfood Blend	3 Tablespoons	79
Banana, without peel	78g	61
Almond milk, unsweetened	1.5cup	42

Your overall meal score appears lower than the combination of ingredients. This is because the quantity of ingredients exceeds your fat threshold. The Zoe app takes into account quantity and fat throughout the day and adjusts your score accordingly!

Personalized food insights

# Your lunches



**Lunch**

21st October 2019

**Ingredient**

**Amount**

**Score**

Blue Diamond Almonds

59g

● 100

Personalized food insights

# Your lunches



## Lunch

23rd October 2019

Ingredient	Amount	Score
Mann's Fresh Veggie Noodles, Spicy Thai	276g	84
Wholly Avocado smashed	57g	100
Synergy Kombucha, Passionberry Bliss	16fl oz	25

Personalized food insights

# Your lunches



## Lunch

26th October 2019

Ingredient	Amount	Score
Cheese, parmesan, grated	10g	51
Giant Cannellini Beans	50g	81
Brussels sprouts, boiled with salt	90g	86

# Personalized food insights

## Your lunches



### Lunch

22nd October 2019

Ingredient	Amount	Score
Blue Hill Bay Herring in Wine Sauce	110g	● 52

# Personalized food insights

## Your lunches



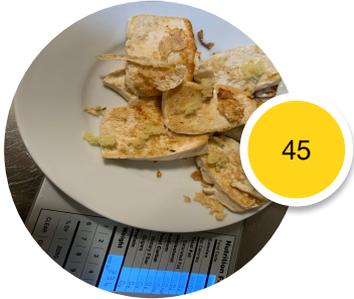
### Lunch

25th October 2019

Ingredient	Amount	Score
Pasta, cooked, enriched, without added salt	253g	● 52
Trader Giotto's Bolognese Pomodoro Meat Pasta Sauce	129g	● 28

Personalized food insights

# Your lunches



## Lunch

21st October 2019

Ingredient	Amount	Score
Tofu, hard, prepared with nigari	230g	61
Butter, salted	2tbsp	53
Soy sauce made from soy and wheat (shoyu)	8g	38

Personalized food insights

# Your lunches



**Lunch**

26th October 2019

**Ingredient**

**Amount**

**Score**

---

Cedarlane Organic Chopped Vegetable & Barley Soup

443g

● 30

# Personalized food insights

## Your lunches



**Lunch**  
20th October 2019

Ingredient	Amount	Score
Sausage, chicken or turkey, Italian style, lower sodium	100g	● 22
Kroger Bread, Wheat Honey	60g	● 18
Mushrooms, portabella, grilled	125g	● 100
Cheese, mozzarella, nonfat	5g	● 81

\* We are less confident in your score for this meal. This may be because the logged quantities were unclear or some ingredients did not match our database.

# Personalized food insights

## Your lunches



### Lunch

24th October 2019

Ingredient	Amount	Score
Pasta, cooked, enriched, without added salt	437g	52
Kirkland Signature Basil Pesto	122g	51

Your overall meal score appears lower than the combination of ingredients. This is because the quantity of ingredients exceeds your fat threshold. The Zoe app takes into account quantity and fat throughout the day and adjusts your score accordingly!

Personalized food insights

# Your dinners



## Dinner

17th October 2019

Ingredient	Amount	Score
Wholly Avocado smashed	114g	● 100

Personalized food insights

# Your dinners



**Dinner**

20th October 2019

Ingredient	Amount	Score
Avocados, california	73g	● 100
Onion vinaigrette	2tbsp	● 38
Spinach, raw	44g	● 100
Suntastic Roma Tomatoes	49g	● 30

Personalized food insights

# Your dinners



## Dinner

21st October 2019

Ingredient	Amount	Score
Apples, without skin	45g	● 86
Pepper, bell, yellow, raw	45g	● 87
Squash, zucchini, baby, raw	44g	● 100
Spinach, raw	10g	● 100
Suntastic Roma Tomatoes	30g	● 30

Personalized food insights

# Your dinners



**Dinner**

22nd October 2019

**Ingredient**

**Amount**

**Score**

---

Giovanni Rana Tagliatelle Grilled White Chicken  
& Portabello Mushroom Sauce

2cup

● 86

Personalized food insights

# Your dinners



**Dinner**

17th October 2019

Ingredient	Amount	Score
Kroger Nacho & Taco Cheese Blend	23g	 63

# Personalized food insights

## Your dinners



**Dinner**  
19th October 2019

Ingredient	Amount	Score
Safeway Chocolate Cupcakes	80g	● 28
Wild rice, cooked	180g	● 42
Bacon, baked	20g	● 12
Crab, dungeness, cooked	60g	● 78
Brussels sprouts, boiled with salt	150g	● 86
Giant Cannellini Beans	40g	● 81

# Personalized food insights

## Your dinners



**Dinner**

21st October 2019

Ingredient	Amount	Score
Rice, white, long-grain, unenriched, cooked	2cup	● 30
Sukhi's Chicken Tikka Masala	5oz	● 38

# Personalized food insights

## Your dinners



**Dinner**  
17th October 2019

\* We are less confident in your score for this meal. This may be because the logged quantities were unclear or some ingredients did not match our database.

Ingredient	Amount	Score
Mission Hill Bistro: Seasoned Chicken Breast	232g	● 48
Wholly Avocado smashed	114g	● 100
Butter, salted	2tbsp	● 53
Kroger Nacho & Taco Cheese Blend	23g	● 63
Mission Street Tacos	41g	● 43

Your overall meal score appears lower than the combination of ingredients. This is because the quantity of ingredients exceeds your fat threshold. The Zoe app takes into account quantity and fat throughout the day and adjusts your score accordingly!

# Personalized food insights

## Your dinners



### Dinner

24th October 2019

\* We are less confident in your score for this meal. This may be because the logged quantities were unclear or some ingredients did not match our database.

Ingredient	Amount	Score
Fried Chicken, fast food	389g	● 16
Broccoli, raw	45g	● 100

Your overall meal score appears lower than the combination of ingredients. This is because the quantity of ingredients exceeds your fat threshold. The Zoe app takes into account quantity and fat throughout the day and adjusts your score accordingly!

Personalized food insights

# Your snacks



## Snack

19th October 2019

Ingredient	Amount	Score
Peanut Butter, smooth	42g	69
Apples, with skin	196g	89

Personalized food insights

# Your snacks



**Snack**

24th October 2019

Ingredient	Amount	Score
Banana, without peel	84g	● 61

Personalized food insights

# Your snacks



## Snack

22nd October 2019

### Ingredient

### Amount

### Score

Hippeas Organic Chickpea Puffs, Vegan White Cheddar

57g

● 44

Personalized food insights

# Your snacks



## Snack

25th October 2019

Ingredient	Amount	Score
Hippeas Organic Chickpea Puffs, Vegan White Cheddar	56g	● 44

Personalized food insights

# Your snacks



**Snack**

20th October 2019

Ingredient	Amount	Score
Safeway Chocolate Cupcakes	97g	● 28
Twin Brook Creamery Jersey Milk	244g	● 55

Personalized food insights

# Your snacks



## Snack

23rd October 2019

Ingredient	Amount	Score
Peanut Butter, smooth	167g	69
Banana, without peel	163g	61

Your overall meal score appears lower than the combination of ingredients. This is because the quantity of ingredients exceeds your fat threshold. The Zoe app takes into account quantity and fat throughout the day and adjusts your score accordingly!

Food for thought

# How did your meal scores compare to what you expected?



Your insights: Part 5

**What's next?**

Food for thought

# Think of any skill you have learned. Were you a master from the beginning?

Or did you practice? It could even be learning to walk. Did your parents expect you to just stand-up one day and walk? No way.

Learning to eat for your body is the same. Many people think they should already be a master, but you need to learn this skill like any other.



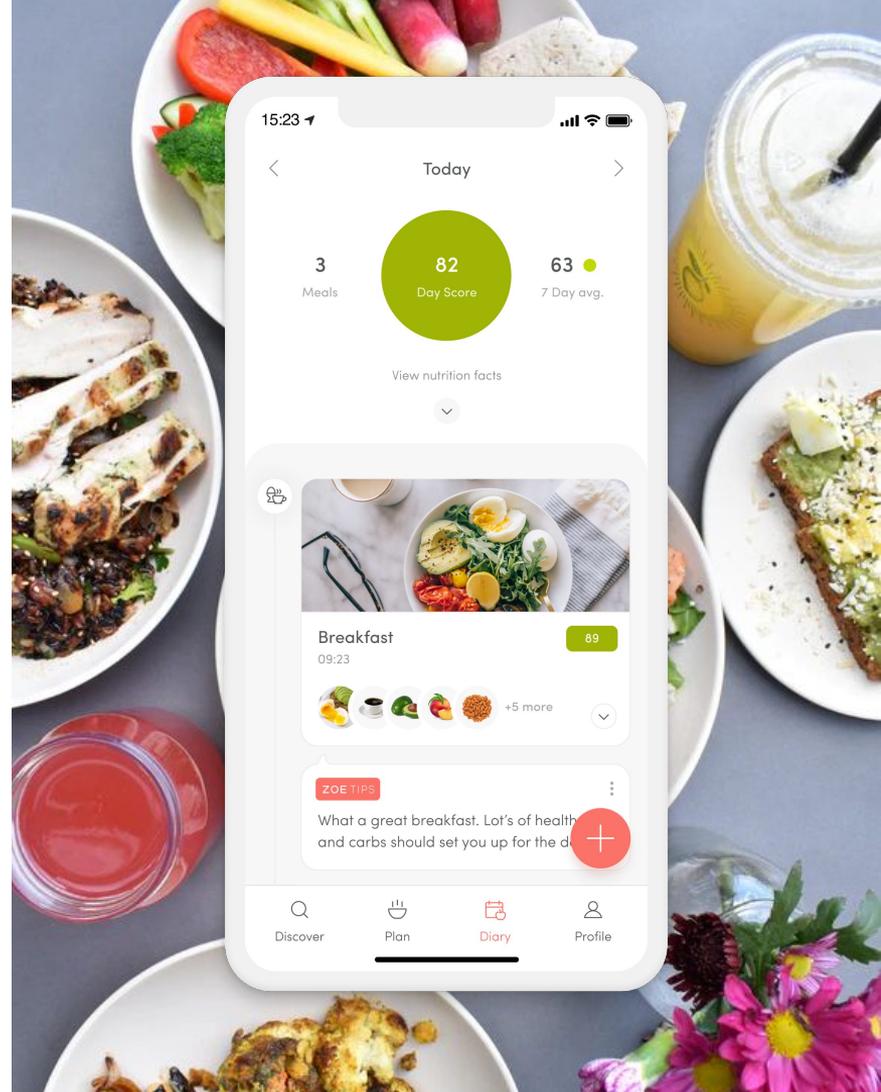
Improve with ZOE

# Goal: Get a 75+ score most days

ZOE means 'life'! We believe that you should live your life and not fixate on food every day.

Our goal is for you to build intuition and know how to eat for a 75+ day most days – based on both what and how you eat.

You can do that with the app and to help you kickstart your journey we have developed a personalized 4-week plan for you to apply the insights and start feeling the difference in your health and weight.



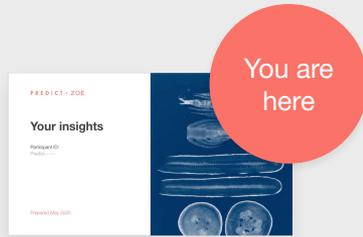
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# What comes next?



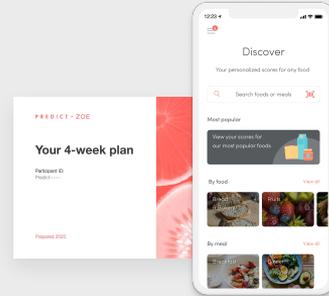
## 01: Test PREDICT Study Kit

Take the PREDICT Nutrition Test at home including our famous muffins, blood and poop tests, glucose monitoring and food diary.



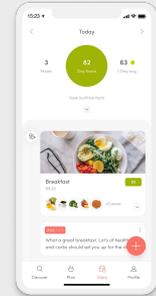
## 02: Discover Get your insights

Learn how your unique body responds to foods including your metabolic, gut health and food insights.



## 03: Reset Choose your 4-week plan

Our 4-week plans teach you, in practice, to apply these findings to your own life. You'll use the ZOE app to reset your body, start improving your metabolism and boost your gut health.



## 04: Sustain Get 75+ scores most days

Apply the learnings for life to achieve sustainable health & weight improvement by using the ZOE app to find foods that maintain a 75+ day score most days.

Improve with ZOE

# Are you ready to improve your health?

Our 4-week plans are built to put your test results into action and will help you discover great foods for your body.

With your plan, we'll guide you through diet changes week by week.

By the end, you'll know how to eat for your body, *for life*.



Improve with ZOE

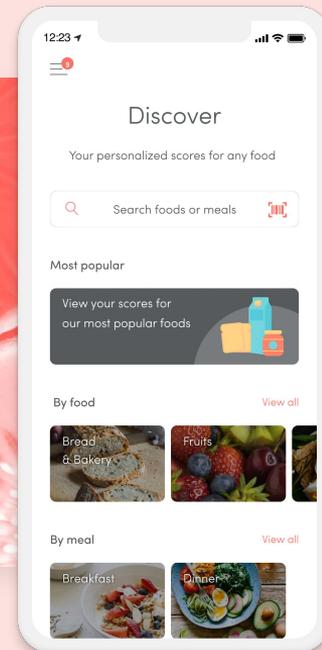
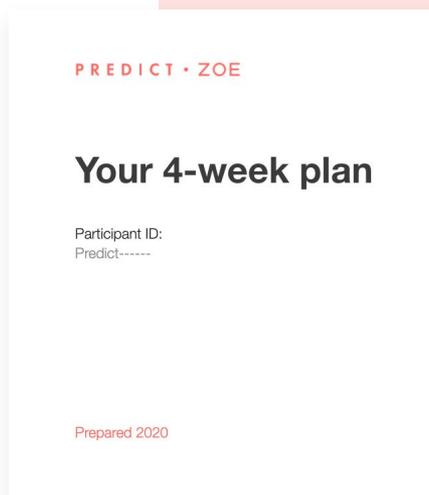
# Pick your plan & get the ZOE app

You can read more about your personalized plan in the other document we sent to you.

Download the ZOE app now to put your insights to work.



Download link: [App Store](#)





### Contact Us

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