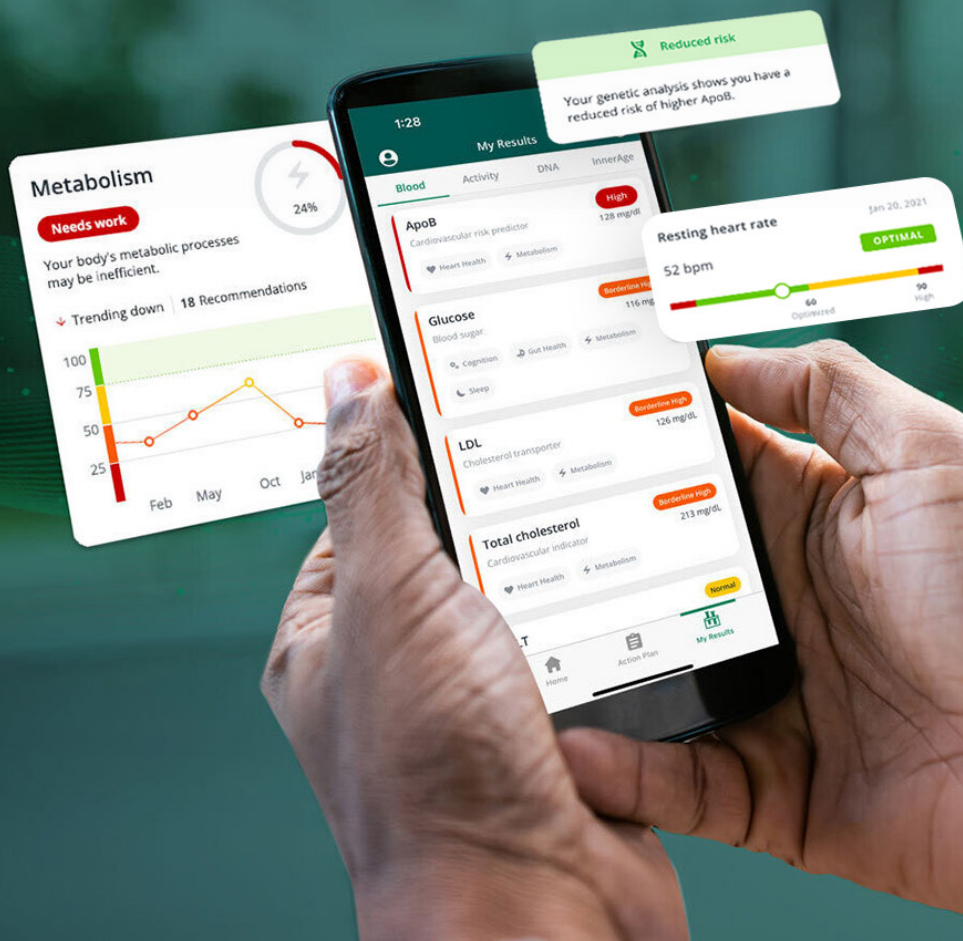


# Complete Health Analysis

Combining Blood, DNA, and Fitness Tracking Data

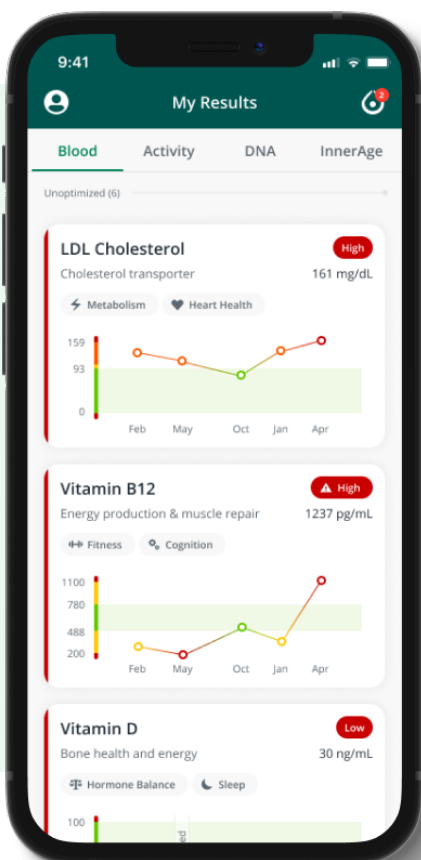


[InsideTracker.com](https://www.insidetracker.com)



# How to combine data from blood and DNA tests with fitness trackers to improve your healthspan

Blood analysis offers a unique glance into what's actually going on inside the body. Is cholesterol elevated? Is there potential muscle damage? How well is stress being managed? Your blood will tell you. But do blood-based insights alone provide enough information to analyze, predict, and measure the inner workings of the human body, the most complex machine out there? InsideTracker—your personal health analysis and data-driven wellness guide—leverages the power of blood testing, DNA insights, and fitness tracking data to provide you with recommendations to improve health and increase longevity.



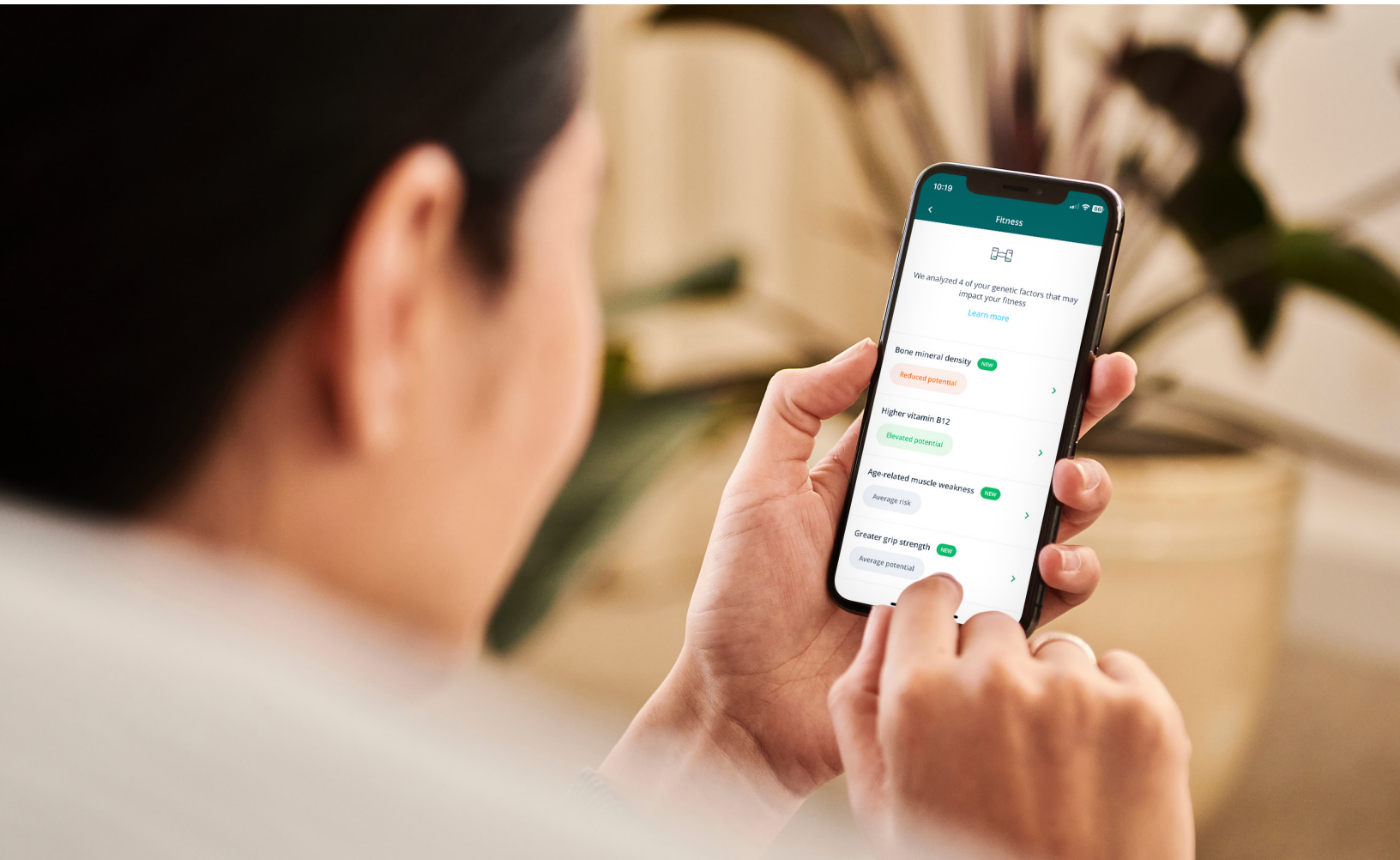
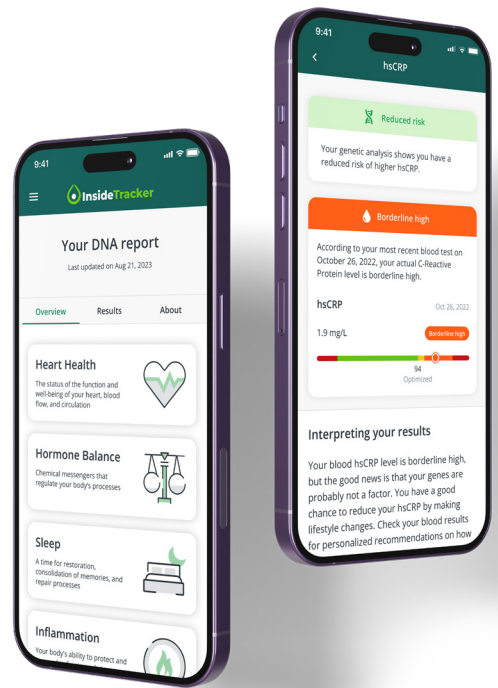
## Blood biomarkers offer a snapshot of what's happening in the body

Blood biomarkers are objective measures of molecules in the blood, like cholesterol, the stress hormone cortisol, and liver enzymes (to name a few). Whereas yearly physicals at a doctor's office typically just flag clinically high or low values, InsideTracker's algorithm determines an optimal zone for each biomarker based on your age, sex, ethnicity, and activity level. Biomarkers are a great indicator of your body's internal condition at a given time.

But, blood testing is merely a snapshot. Blood biomarkers shift in response to diet, physical activity, and lifestyle choices—and reflect the body's response to the environment it's exposed to at a given time. So if your bloodwork from a doctor's appointment three years ago showed you had high cholesterol, it doesn't mean you have high cholesterol today. That number could have increased or decreased depending on the lifestyle choices you made over the last three years.

## DNA isn't your destiny, it's your roadmap.

DNA contains predispositions for various wellness traits like bone strength, ApoB, lifespan, and cognitive aging. But your genes aren't your destiny, since lifestyle choices can impact how your genetic indications manifest. For example, a genetic risk for higher LDL levels (the bad cholesterol) doesn't mean that your LDL will be high. And even if your LDL is high, you can still bring it back down to the normal or optimized range through diet, supplements, or other daily habits.

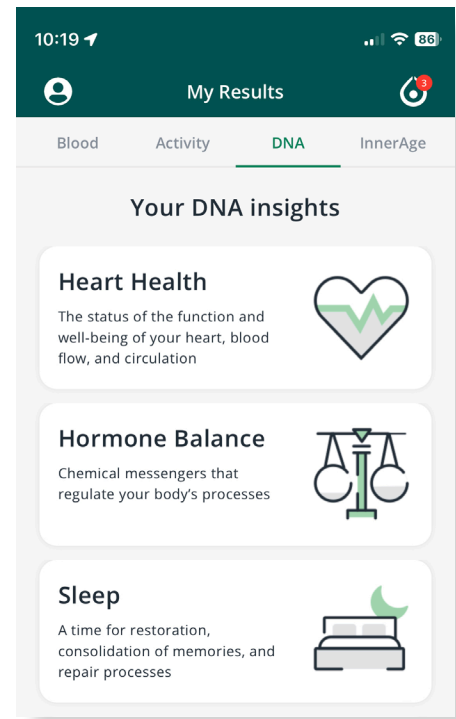




## Who is DNA testing for?

“DNA testing is beneficial for anyone who is curious about their health and wants to make informed choices to enhance their well-being. If you’re interested in understanding your genetic predispositions to traits relevant to healthspan, DNA testing can provide valuable and actionable insights. Whether you’re looking to optimize your healthspan or personalize your approach to wellness, DNA testing can offer tailored recommendations based on your unique genetic makeup.”

**-Dr. Barktek Nogel, Principal Scientist**



## Get more with blood + DNA

Your DNA doesn't change, but your blood biomarkers do. Combine DNA with a blood test for more powerful insights, including targeted lifestyle recommendations. You'll receive:

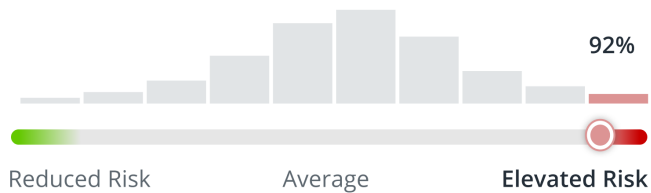
- Personalized DNA insights revealing your genetic potential for aspects of healthspan including metabolism, hormone balance, fitness, recovery, endurance, inflammation, sleep, heart health, cognition, and gut health
- Secure, online portal with a customized dashboard



# Add-on a DNA Kit to any blood plan for deeper insights

## Borderline elevated risk of high ApoB

Based on 16848 out of 16907 genetic variants.



## InsideTracker DNA Kit

Easy, at-home DNA test kit and analysis of hundreds of gene variants



## How it works



Step 1

### Get your DNA kit in the mail

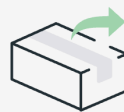
When you receive your kit, visit our website and register your kit ID before collecting your sample.



Step 2

### Collect your DNA sample

Follow the instructions provided in your kit. Collect your sample using the swab provided.



Step 3

### Mail your sample to our lab

Place the biohazard bag containing your sample into the prepaid envelope and drop it in the mail.



Step 4

### Your DNA will be processed

We'll run a quality control check and determine your genotypes for over 3 dozen health traits.



Step 5

### Receive your report and analysis

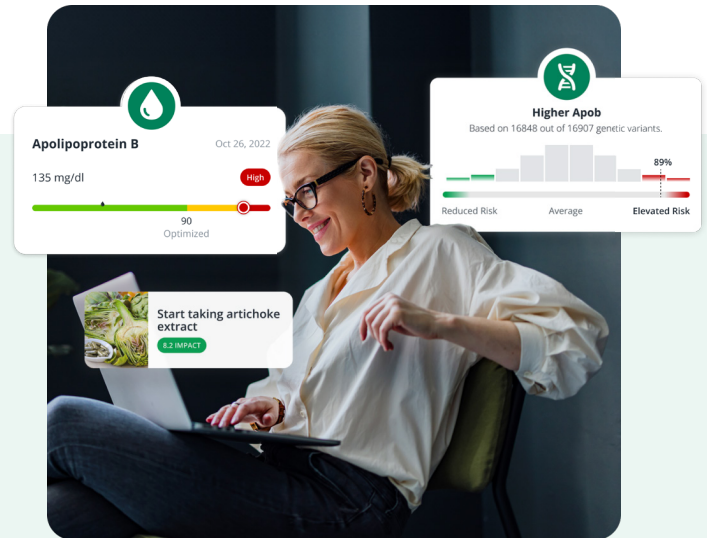
We'll email you as soon as your results are ready. View your report online and download the PDF.

## DNA Results Upload

- Included with InsideTracker Membership
- Analysis of your existing DNA test results from 23andMe or AncestryDNA

• Your DNA report may not be as comprehensive as it would be if you took an InsideTracker DNA test. This is because, depending on when your DNA was tested with 23andMe or AncestryDNA, less genetic data may have been available for analysis. Due to advances in genetic technology, more recent tests provide more data, while older tests provide less data.

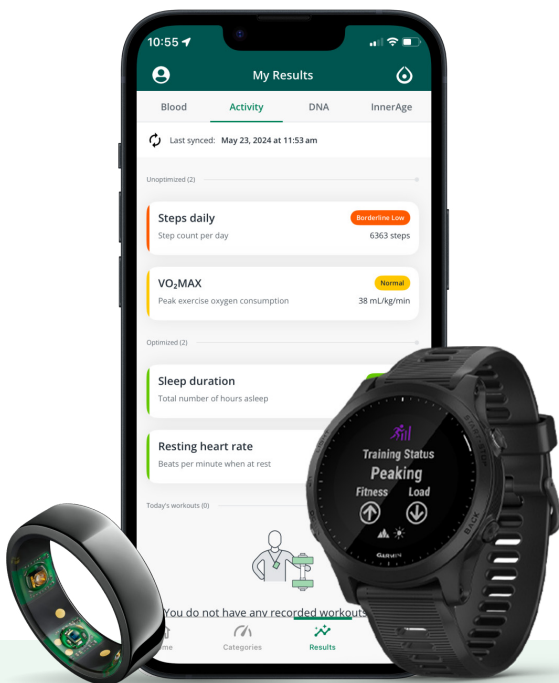
• Your DNA report may not include any information on Sleep. This is because the genetic markers used to generate sleep insights are often unavailable in 23andMe or AncestryDNA data.



## Fitness tracking data for immediate, personalized feedback

InsideTracker can currently pull sleep, heart rate, and fitness data from Garmin smartwatches, Fitbits, Oura Rings, and Apple Health and incorporate these insights into your action plan.

For example, if your resting heart rate is slightly higher than normal one day, InsideTracker can alert you and may provide a recommendation for lowering it.



## How does all this data work together?

InsideTracker provides you with a lot of data about yourself. So how does it all come together into actual, actionable insights?

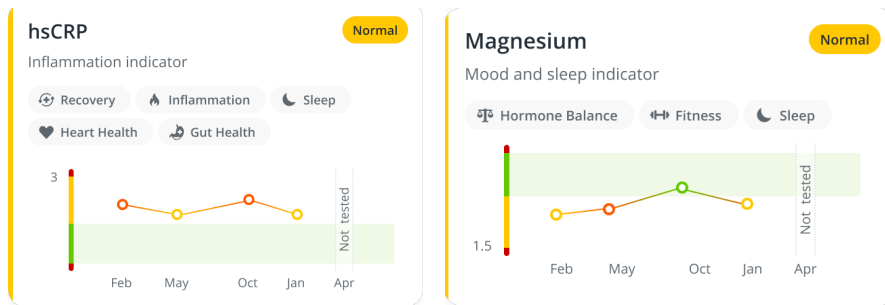
# Case study:

## Mary personalized her diet and is aging healthfully using blood, DNA, and activity tracker data

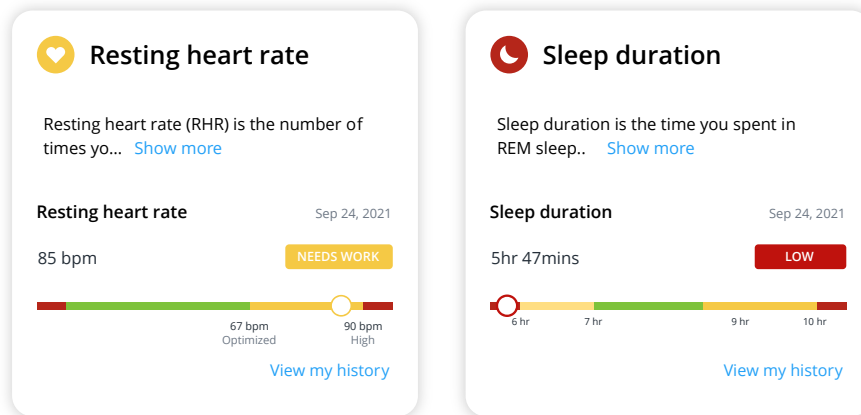
Mary is in her 60s, and has recently been struggling with low energy, brain fog, sleeplessness, and weight management. She came to InsideTracker with the goals of boosting energy and learning how to personalize her diet to regain her vigor and vitality.

### Here's what Mary's personalized data revealed:

#### BLOOD



#### ACTIVITY



#### DNA

Mary's genetic report revealed...

##### An elevated risk of:

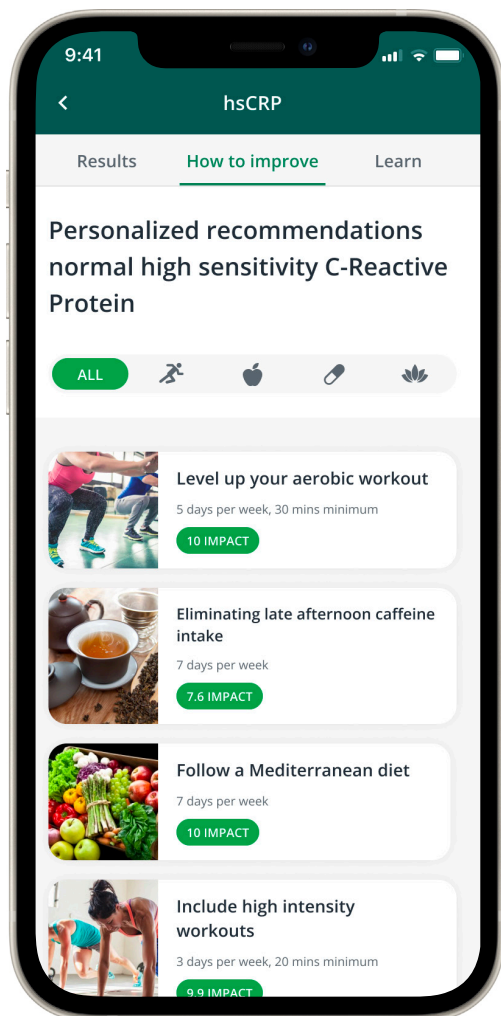
- Gaining weight easily
- Having low magnesium levels
- Losing the most weight with a higher-protein, Mediterranean diet
- Having a high RHR
- Drinking more caffeine

##### A reduced potential of:

- Having elevated inflammation like hsCRP
- Having low vitamin D
- Having high blood pressure

The raw data alone show that Mary is predisposed to have lower magnesium levels, and her blood work reveals that her magnesium is below optimized. A similar correlation is seen with her resting heart rate. However, Mary's DNA also shows that she does not have a predisposition for higher levels of inflammation, indicating that a lifestyle maybe the culprit for her elevated blood inflammation levels.

# InsideTracker recommends Mary take these steps to achieve her goals



## How InsideTracker blood, DNA, and fitness tracking data to create personalized recommendations

By having all of these data points, InsideTracker was able to draw a complete picture of Mary's wellness. For example, blood data revealed Mary was experiencing some inflammation. The Mediterranean diet is associated with lower levels of inflammation.<sup>1</sup> Mary's DNA showed that Mary is likely to respond well to a Mediterranean diet and that she loses weight more easily by following a higher-protein diet. So following a Mediterranean eating pattern (particularly one that is higher in protein than what she's currently eating) is the best option for Mary.

Her DNA also revealed that her sleep is highly impacted by caffeine intake, and her fitness tracker showed that she wasn't sleeping long each night. Poor sleep can also impact inflammation levels, so eliminating late afternoon caffeine intake is another way that Mary can improve inflammation.<sup>2</sup>

## The bottom line

Without the guidance on how to integrate her blood, DNA, and fitness data, Mary may not have taken the most direct or effective route to improving her wellness. Access to personalized data can play a vital role in achieving optimal wellness—if you know what to do with it.





# Ready to get started?

[Click here](#) to learn more about  
InsideTracker plans and find  
the right one for you.

[InsideTracker.com](https://www.insidetracker.com)



# References

1. <https://pubmed.ncbi.nlm.nih.gov/29558396/>
2. <https://pubmed.ncbi.nlm.nih.gov/25024651/>