

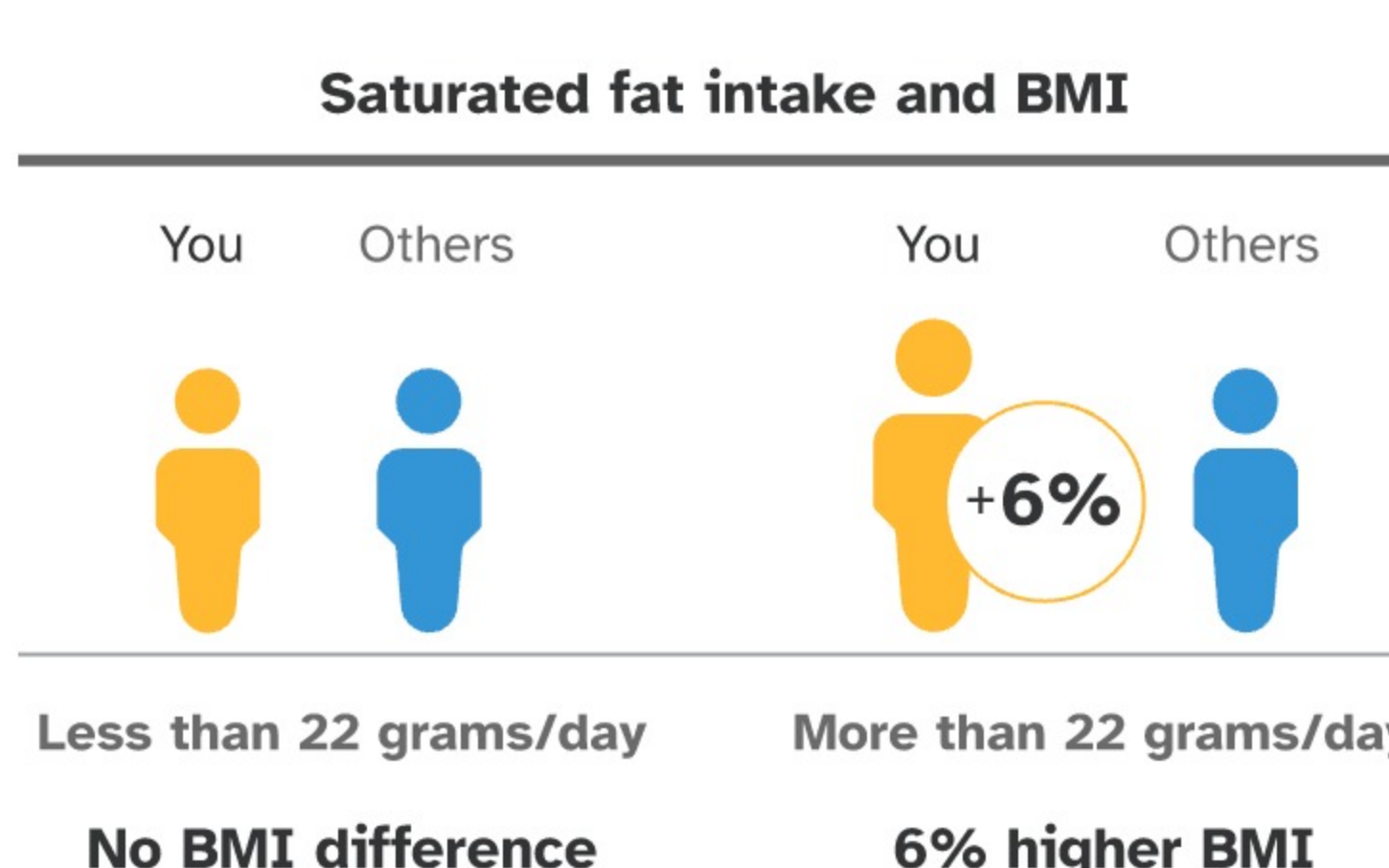
Saturated Fat and Weight

Genetic factors help explain why some people weigh more than others when their diets are high in saturated fat.

[Overview](#) [Scientific Details](#)

Jamie, you are **likely to weigh more** on a diet high in saturated fat.

Your genetic result is associated with a 6% higher BMI on diets with more than 22 grams of saturated fat per day. Diets with the same number of calories but lower in saturated fat are not associated with higher BMIs in people with your result.



What you can do

Limit your saturated fat intake. Your genetics make this especially important for maintaining a healthy weight.

Healthy Weight Management

Dietary Choices

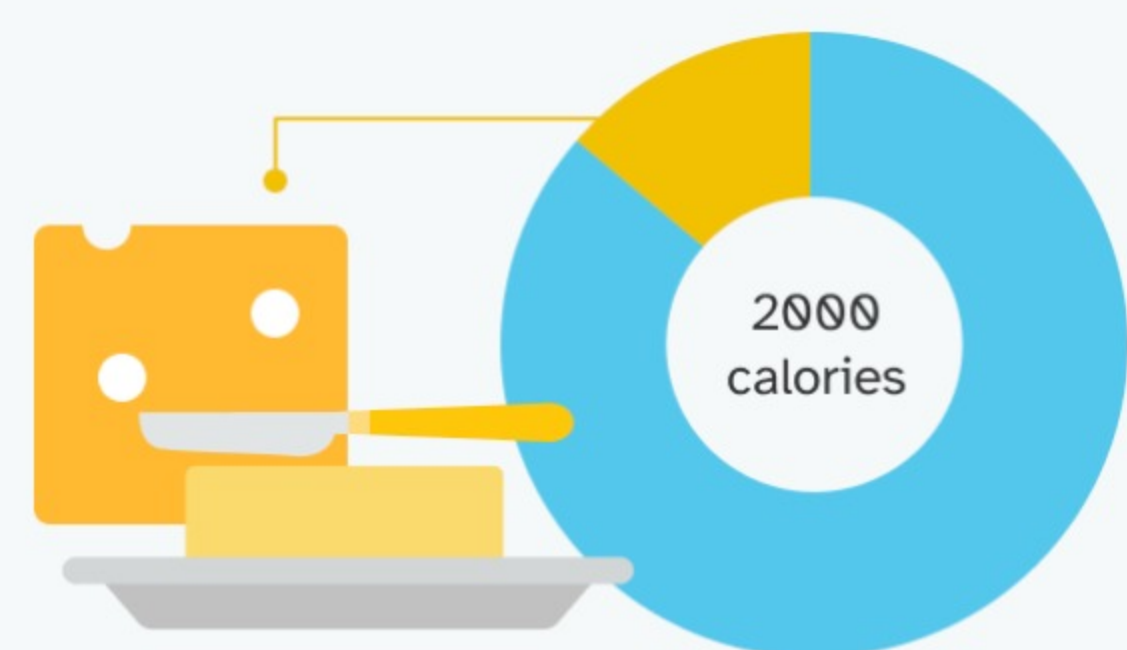
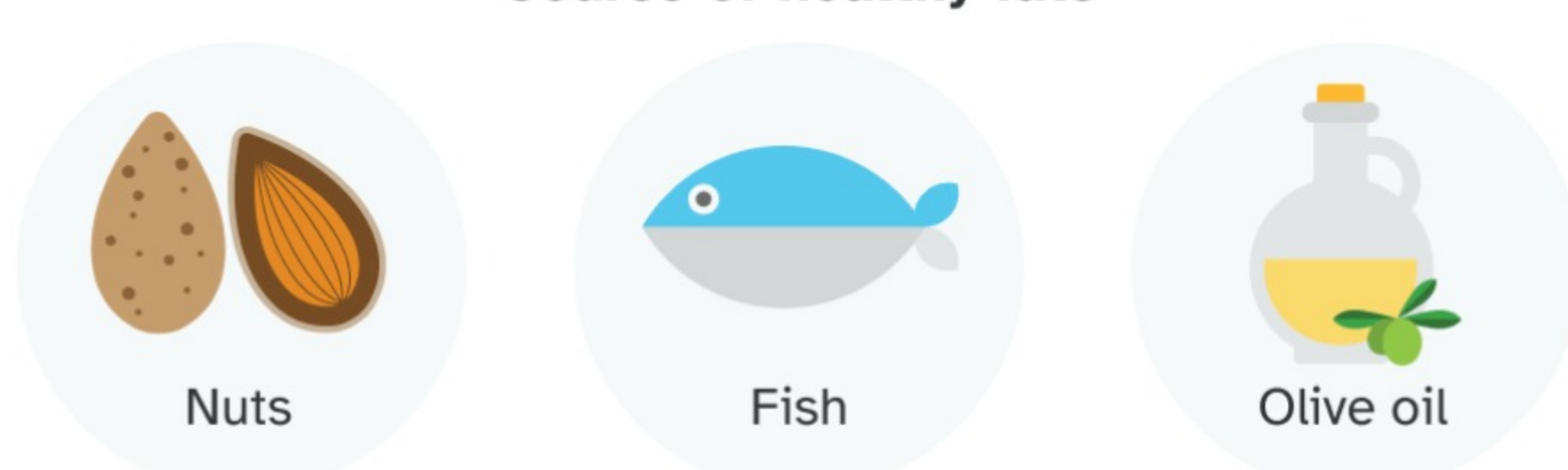
Fats are an important part of a healthy diet: they give you energy, help build your cells, and help you absorb certain vitamins. There are three main types of fats, but not all types are equally healthy.

- Saturated fats:** Found primarily in red meat and dairy products, saturated fat has been linked to increased LDL ("bad") cholesterol and total cholesterol, which are risk factors for heart disease. Researchers are still working to understand the complex relationship between saturated fat and health.
- Trans fats:** Found in processed foods like cookies and frozen pizza, trans fats can increase your risk of heart disease. Experts agree that we should avoid trans fats.
- Unsaturated fats:** Found in nuts, fish, and most vegetable oils, unsaturated fats may improve your cholesterol levels and are commonly thought of as healthy fats.

Examples of foods high in saturated fat

- 19 grams** saturated fat in an 8-ounce steak
- 5 grams** saturated fat per slice of a 14" pizza
- 9 grams** saturated fat per 1 cup of ice cream

Source of healthy fats



Goal: Less than 22 grams of saturated fat per day

Recommendation

Saturated fat intake is something many of us should keep an eye on; about 70% of Americans eat more than the recommended daily amount of saturated fat. Try to consume less than 10% of your daily calories from saturated fat, which is 22 grams for a 2000 calorie-per-day diet.

Source: [2015-2020 Dietary Guidelines for Americans](#)

Maintaining a Healthy Weight

Maintaining a healthy body weight can be difficult; more than 70% of Americans are overweight or obese. One way to assess whether you're at a healthy weight is by calculating your BMI, or body mass index, which is based on your height and weight.

Here's what BMI usually means:

- Underweight:** <18.5
- Normal weight:** 18.5-24.9
- Overweight:** 25-29.9
- Obese:** ≥30

Body mass index (BMI) calculator

Weight lbs

Height ft in

[Calculate BMI](#)

Recommendation

It's important to maintain a healthy body weight to reduce the risk of conditions like heart disease and diabetes. One strategy is to make healthy choices a daily habit. To get started, try using a paper or electronic food journal to keep track of what you eat for one week. By learning about your daily eating habits, you can pinpoint specific food choices that you'd like to improve.

Source: [U.S. National Library of Medicine](#)

Genetics

In addition to diet and exercise, genetics plays a role in determining your body weight. People with two copies of the variant in this report tend to weigh more on a high saturated fat diet. This variant is near a gene called APOA2, which contains instructions for making a protein called apolipoprotein A-II (apo A-II). People with two copies of the variant produce less apo A-II protein than people with zero or one variant. Scientists are working to understand how apo A-II affects our body's response to saturated fat.

	Genetic result	What it means
You	GG	Likely to weigh more on a diet high in saturated fat
	AG	Likely similar weight on diets high or low in saturated fat
	AA	Likely similar weight on diets high or low in saturated fat

[See the percentage of customers with these variants](#)

This report does not diagnose any health conditions or provide medical advice. Consult with a healthcare professional before making any major lifestyle changes or if you have any other concerns about your results.

How To Use This Test

This test does not diagnose any health conditions or provide medical advice. Consult with a healthcare professional before making any major lifestyle changes or if you have any other concerns about your results.

[Review the Wellness tutorial](#)

[See Scientific Details](#)

Intended Uses

- Tests for the rs5082 variant near the APOA2 gene.
- Provides information about how this variant may affect weight in response to dietary saturated fat.

Limitations

- Does **not** test for all possible variants that may affect weight or response to saturated fat.
- Does **not** account for lifestyle or other factors that may affect weight or response to saturated fat.

Relevant Populations

- The variant in this report has been studied the most in people of European or Latino descent who are overweight or obese. It is not yet known how well these results apply to people of other ethnicities or people with weights in the normal range.

Keep exploring your Wellness results.



[Learn more](#)

Learn more about maintaining a healthy weight.



[Compare](#)

Compare your results to your family and friends.

Did you find this interesting?

[Yes](#) [No](#)



Give the gift of DNA discovery.

[Gift a kit](#)

Refer friends, earn rewards.

[Get reward](#)

ANCESTRY

- [Ancestry Overview](#)
- [All Ancestry Reports](#)
- [Ancestry Composition](#)
- [DNA Relatives](#)
- [Order Your DNA Book](#)

HEALTH & TRAITS

- [Health & Traits Overview](#)
- [All Health & Traits Reports](#)
- [My Health Action Plan](#)
- [Health Predisposition](#)
- [Pharmacogenetics](#)
- [Carrier Status](#)
- [Wellness](#)
- [Traits](#)

RESEARCH

- [Research Overview](#)
- [Surveys and Studies](#)
- [Edit Answers](#)
- [Publications](#)

FAMILY & FRIENDS

- [View all DNA Relatives](#)
- [Family Tree](#)
- [Your Connections](#)
- [GrandTree](#)
- [Advanced DNA Comparison](#)

Saturated Fat and Weight

Genetic factors help explain why some people weigh more than others when their diets are high in saturated fat.

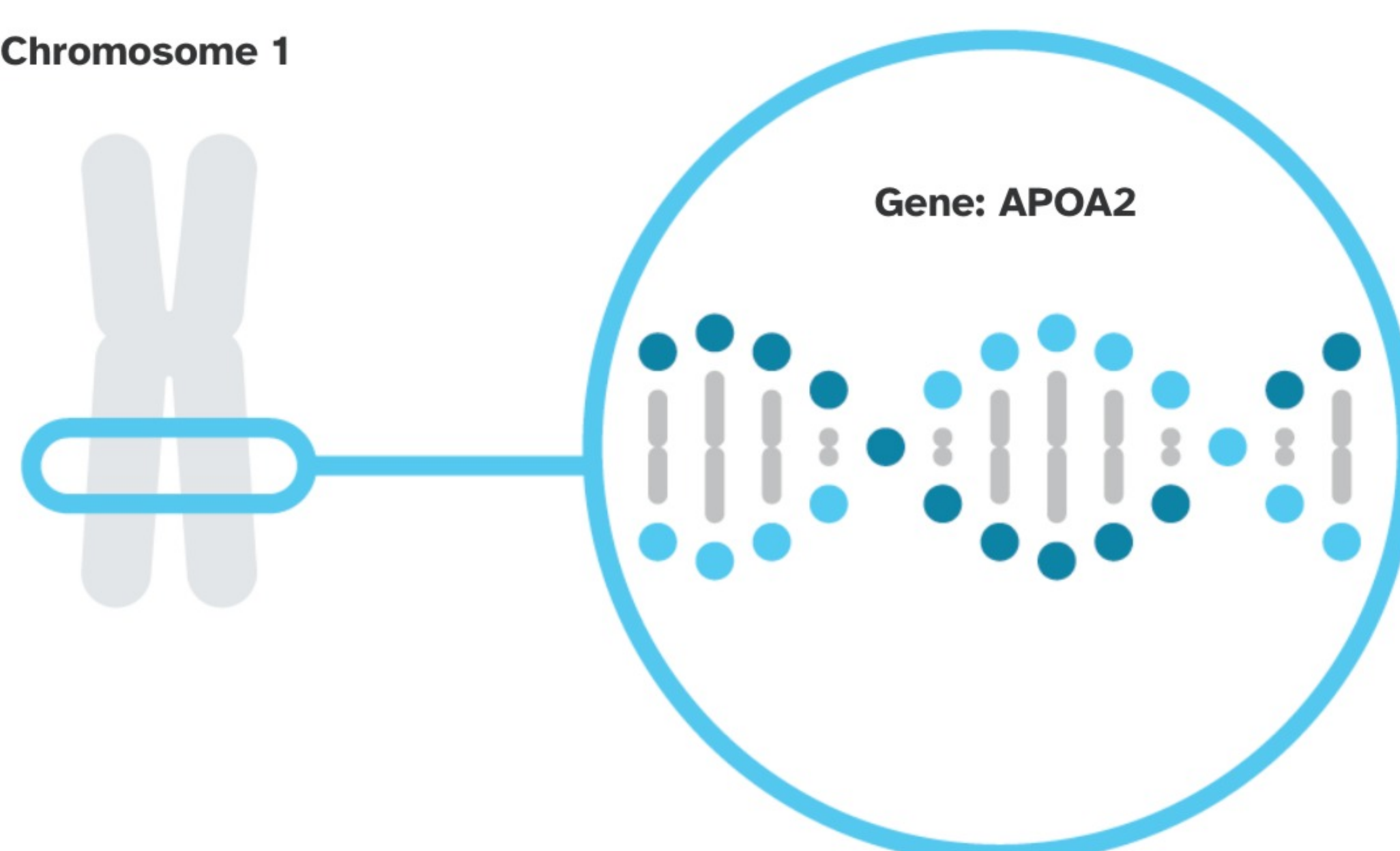
Overview **Scientific Details**

The effect of dietary saturated fat on BMI is associated with a variant near the APOA2 gene.

APOA2

The APOA2 gene contains instructions for making a protein called apolipoprotein A-II, which is found in high-density lipoprotein (HDL) cholesterol particles. The role of apolipoprotein A-II in the body's response to saturated fat is not yet well understood.

Chromosome 1



You have two variants included in this report.

Variants Detected

View All Tested Markers

Marker Tested	Genotype*	Additional Information
<p>rs5082</p> <p>Gene: Near APOA2</p> <p>Marker: rs5082</p>	<p>G</p> <p>Variant copy from one of your parents</p>	<p>G</p> <p>Variant copy from your other parent</p> <ul style="list-style-type: none"> Biological explanation Typical vs. variant DNA sequence(s) Percent of 23andMe customers with variant References [1, 2]

*This test cannot distinguish which copy you received from which parent. This test also cannot determine whether multiple variants, if detected, were inherited from only one parent or from both parents. This may impact how these variants are passed down.

23andMe always reports genotypes based on the 'positive' strand of the human genome reference sequence (build 37). Other sources sometimes report genotypes using the opposite strand.

References

- Corella D et al. (2009). "APOA2, dietary fat, and body mass index: replication of a gene-diet interaction in 3 independent populations." *Arch Intern Med.* 169(20):1897-906. ↗
- Corella D et al. (2011). "Association between the APOA2 promoter polymorphism and body weight in Mediterranean and Asian populations: replication of a gene-saturated fat interaction." *Int J Obes (Lond).* 35(5):666-75. ↗
- Eckel, RH et al. (2014). "2013 AHA/ACC guideline on lifestyle management to reduce cardiovascular risk: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines." *J Am Coll Cardiol.* 63(25 Pt B):2960-84. ↗
- Hooper L et al. (2015). "Reduction in saturated fat intake for cardiovascular disease." *Cochrane Database Syst Rev.* 6:CD011737. ↗
- U.S. Department of Agriculture, Agricultural Research Service. "USDA Food Composition Database." ↗
- U.S. Department of Health and Human Services and U.S. Department of Agriculture. "2015-2020 Dietary Guidelines for Americans." 8th Edition. December 2015. ↗

Change Log

Your report may occasionally be updated based on new information. This Change Log describes updates and revisions to this report.

Date	Change
July 20, 2016	Saturated Fat and Weight report created.



Give the gift of DNA discovery.

Gift a kit

Refer friends, earn rewards.

Get reward

ANCESTRY

- Ancestry Overview
- All Ancestry Reports
- Ancestry Composition
- DNA Relatives
- Order Your DNA Book

HEALTH & TRAITS

- Health & Traits Overview
- All Health & Traits Reports
- My Health Action Plan
- Health Predisposition
- Pharmacogenetics
- Carrier Status
- Wellness
- Traits

RESEARCH

- Research Overview
- Surveys and Studies
- Edit Answers
- Publications

FAMILY & FRIENDS

- View all DNA Relatives
- Family Tree
- Your Connections
- GrandTree
- Advanced DNA Comparison