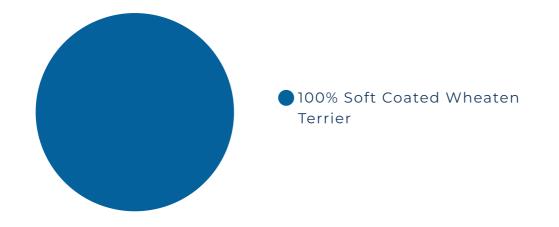
DISCOVER ALL ABOUT MADDIE

The results are in! Let's take a look at what the DNA told us about Maddie's ancestry...

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MADDIE'S BREED BY PERCENTAGE



Exciting news, the results are in! Here's what makes Maddie so unique. Using the data generated from Maddie's DNA, our sophisticated computer algorithm performed over 17 million calculations! What you see here is Maddie's ancestry by percentage.

SOFT COATED WHEATEN TERRIER

INTRODUCED TO THE UNITED STATES IN 1946.

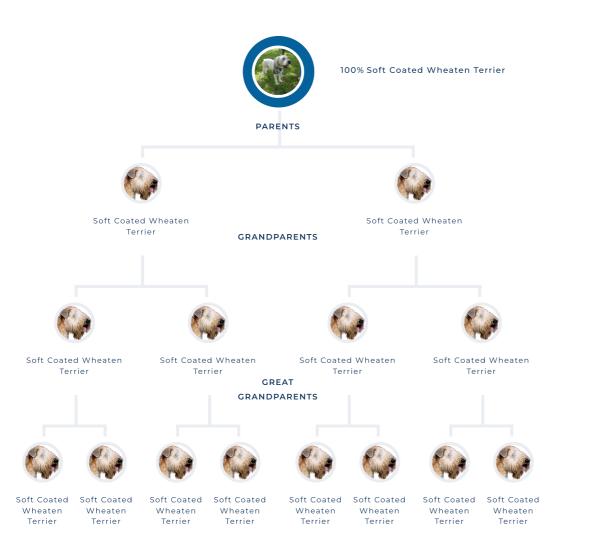
- May chase wildlife or motor vehicles or be tenacious or difficult to disengage from an activity.
- Soft Coated Wheaten Terriers enjoy dog sports such as agility, flyball, tracking, and obedience.
- Often sensitive and stubborn, they respond to reward-based obedience training that uses motivational tools such as treats and favorite toys.
- Active, alert, and watchful dogs, with a unique ability to bounce or leap straight up off the floor when greeting or excited.



DID YOU KNOW?

Believed to be one of the oldest terrier breeds from Ireland, the Soft Coated Wheaten Terrier emerged there sometime between the late 18th century and early 19th century. Spirited and playful, they were bred to be all-purpose farm dogs as well as companions. Their intelligence and alertness make them pretty skilled at a variety of farm related work, including herding and watching over livestock. What's more, they kept the vermin away too. The breed was introduced to the United States in 1946. Although their fan base grew slowly, it still grew until, in 1962, the Soft Coated Wheaten Terrier Club of America was formed. It's a club that, much like this terrier itself, is still popular today.

MADDIE'S FAMILY TREE



MADDIE'S HEALTH RESULTS

SAMPLE ID: H029557

We have tested Maddie's DNA for more than 150 disease-causing mutations. Below is a summary of our findings. For more detailed information on each of these diseases, please log into your account and review your comprehensive health results.



Being "At Risk" means Maddie may show or develop signs of one of the following genetic diseases. Please be sure to read the condition information carefully and share these results with your veterinarian.



Carrier status is where a dog Maddie inherited zero copies has inherited one copy of a disease-causing mutation, when two copies are usually needed for disease signs to occur. The good news is that carriers are unlikely to show disease signs, but there may disease for some conditions. Please be sure to read the condition information carefully and share these results with your veterinarian.



of these disease mutations. Be sure to use our share feature to let your veterinarian know about Maddie's results. For some of the conditions there may still be undiscovered mutations be a slight increase in risk of and/or environmental factors that could lead to similar disease signs. These clear results will help narrow down a future diagnosis if Maddie ever gets sick.

MADDIE'S TRAITS

SAMPLE ID: H029557

Furnishings	Maddie carries the gene for 'furnishings', which means they are likely to have a fuzzy beard and eyebrows. This trait is commonly associated with terriers, but is carried by many other breeds as well, including the Poodle. It may also have come from many generations back in their ancestry.
Leg Length Genotype: DD	Maddie's legs should be relatively long in length, based on this marker (though there can be other genes that affect leg length). Did you know different dogs can have different leg lengths even if they are the same breed?
Ear Carriage Genotype: TT	A lot of factors can decide the shape of a dog's ear. But as far as we can tell, Maddie probably has perk or upright ears. Did you know this type of ear is recessive (which means you need a copy from each parent to show it)? Common breeds with upright ears include German Shepherd, Chihuahua and Husky.
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Tail Length Genotype: CC	Maddie likely was born with a long tail - although the exact length can vary from dog to dog. Long tails are sometimes known as 'coffee table clearers'. (If you've ever seen a long-tailed dog get excited near one, you'll know exactly why.)
Base Pigment Color Genotype: B/B	Maddie carries the gene for the 'expression' of black pigment. This means that even though their overall coat color may not be black, they are still able to make black pigment. They will also likely have black around their eyes, a black nose, and may even have black pads on their feet.
Coat Color Main Possibilities Genotype: ay/ay E m/Em ky/ky wt/wt	Maddie probably has a coat color known as 'sable' - light overall, but with some dark-tipped patches of fur. They probably also have marking around the face that looks like a 'mask'. (It is very common for sable dogs to also carry the gene for a dark facial mask, but scientists still don't know what the link is.)

MADDIE'S TRAITS CONTINUED

SAMPLE ID: H029557

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Coat Length and Type Genotype: TT CC	Maddie's coat is probably on the long side. The exact length of a dog's coat is down to several factors so it can vary. Did you know long hair is actually a recessive trait and results from inheriting two 'broken' copies of the gene that tells hairs to stop growing and shed?
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IDEAL WEIGHT

SAMPLE ID: H029557

Based on our findings, we've calculated that Maddie's ideal, adult weight should be:



We've factored everything we know about Maddie in predicting a healthy, adult weight. However environmental factors such as the nutrition of Maddie's mom during pregnancy and nursing, Maddie's nutrition during critical growth months, illness/parasites/ticks/fleas, and exercise levels can affect the actual weight of Maddie.

CALCULATING WEIGHT

Our weight-predictive algorithm uses a combination of the following to calculate Maddie's ideal, adult weight:

- The published weight ranges of more than 200 purebred dogs.
- The observed weights of purebred dogs, each with an ideal Body Condition Score, from the Banfield® Pet Hospital database.
- Breeds the WISDOM PANEL[™] test analysis has identified that reflect a dog's true heritage and genetic complexity.
- A genetic algorithm based on mixed-breed data that calculates the contribution of each set of chromosomal genetic markers.

ENVIRONMENTAL EFFECTS ON WEIGHT

A dog's early life is very important in determining how they will grow and develop. They can fail to reach their ideal weight for a number of reasons, including the diet of their mother during pregnancy and nursing (as well as their own diet as puppies). Illness and disease can play a part too, as can having parasites like roundworms or fleas and ticks. For dogs who are adopted after they are fully-grown, it may be harder to find the historical background on these factors.

Maintaining a healthy weight is a key factor in Maddie having a long and healthy life.

ADDITIONAL BREED TESTS

Our family tree analysis shows that Maddie closely resembles a single dog breed, based on the samples in the WISDOM PANEL[™] database. We have included some extra tests free of charge to investigate this in more detail.

Single Breed Comparison

This analysis shows the relationship

between Maddie and the Soft Coated Wheaten Terrier samples in our database with each individual dog represented as a dot. The closer the dots on the chart the closer the genetic relationship. Maddie's sample falls within the Soft Coated Wheaten Terrier cluster showing that Maddie's genetic profile closely resembles the other dogs from this breed in the Wisdom Panel database.

Single Breed Vs. All Breeds

Here we have compared Maddie's data to

Soft Coated Wheaten Terrier samples, and also a single representative sample from the other breeds in the WISDOM PANEL database. This is another way of showing that Maddie's data is more like the Soft Coated Wheaten Terrier than any other breed. Maddie's sample falls within the Soft Coated Wheaten Terrier cluster showing that Maddie's genetic profile closely resembles the other dogs from this breed in the WISDOM PANEL database.

Homozygosity

Homozygosity is a measure of how many of 📄

Maddie's genetic markers are identical because the same version was passed down from both the mother and father. Purebred dogs tend to have a higher homozygosity score than most mixed breed dogs, and each breed within the WISDOM PANEL database has a specific range of scores. Maddie's homozygosity score falls within the range for the Soft Coated Wheaten Terrier samples found in the WISDOM PANEL database.

W ≹ S D O M[™] PANEL



STATEMENT OF AUTHENTICATION

Owner's Name: Nolan Smith
Dog's Name: Maddie

Sample Id: **H029557**

Date: August 15, 2019

This certifies the authenticity of Maddie's canine genetic background as determined, following the careful analysis of more than 1800 genetic markers, by the WISDOM PANEL™ Canine DNA Test. The purebred breed signature matches included in the analysis are those that were detected in the last three generations of Maddie's ancestry using the Wisdom Health proprietary breed detection algorithm.



100% Soft Coated Wheaten Terrier