

[www.clumberhealth.org](http://www.clumberhealth.org)



**We ask you to support the Embark DNA profile for Clumber Spaniels:**

**FOR OUR BREED:**

- **To establish a new method of international DNA banking** for Clumber spaniels. Each dog's DNA is profiled using over 200,000 genetic markers. This data is computerized and will be made available (without names of dogs or owners) to researchers working with the Clumber Spaniel Health Foundation (CSHF).
- **To help determine the prevalence of EIC** (Exercise Induced Collapse) in Clumbers worldwide
- **To provide an overall view** of the genetic health status of Clumber Spaniels and to potentially **help develop new DNA tests** for significant diseases in Clumbers.

**FOR OUR BREEDERS:**

- Embark provides a **comprehensive method of testing** for all current (and future!) DNA tests in our dogs. The 200,000+ genetic markers are stored as permanent data and can be used as future DNA tests are developed. ALL DNA tests are included in one price.
- **Reduced pricing for Clumber spaniels.** The CSHF is subsidizing \$40 for each Clumber tested (currently up to 100 dogs), and has partnered with Embark, which is also reducing its regular price. You get PDP1, EIC and all other canine DNA tests currently available, for **\$99**. This is a reduction of \$80 from their regular price.
- **Ease of collection:** Embark sends you a salivary collection kit, which is extremely user friendly. Prepaid mailing is also included in your cost – so no need to visit your vet for sample collection.

**ASSESS YOUR DOG'S GENETIC DIVERSITY:**

- Coefficient of Inbreeding (COI) is a measure of how genetically similar a dog's parents are to each other. From a genetic point of view, this translates to what percentage of the genome is identical on both its maternal and paternal strands (also known as homozygosity). This test uses actual genetic markers (vs mathematical probabilities) to evaluate each individual Clumber's COI.

**IMPORTANT:**

- **Please note that** while the test includes all currently-available canine DNA tests, most of the diseases tested for are not common or are not known to occur in Clumbers currently. It is likely that your Clumber will test "clear" for these disorders. While spontaneous mutations do occur, and of course, we are hoping to develop DNA tests for certain conditions for which they do not currently exist, presently PDP1 and EIC are the conditions of primary interest in Clumbers. The comprehensive nature of the results you will receive is due to the nature of the Embark methodology, which also enables us to use this new method efficiently for DNA banking. Further, due to the discounts & subsidies currently offered, it will generally be cost-effective to use this method to obtain results for both PDP1 and EIC.

**We invite you to join us in helping to improve the health of Clumber spaniels worldwide!**