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Genetics

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### Primary and Review Articles

There are two types of educational research-based pieces of writing or articles in this world and those are primary articles and review articles. A primary article is the original report of scientific findings with original data and research that was performed firsthand by the scientist. The main aspects that characterize a primary report are an introduction, materials, methods, results, any references, and discussion. Some of these sections are also included in a review article, but the materials, method, and results are the main aspects that will distinguish a primary article. Primary articles are also sent to other professionals in the same field to review before it is published.

On the other hand, a review article is a summary of the information that came from an original study or research. Since this is not an original piece from the research that was carried out, it will not include the method and other specified details. It usually organizes and brings together the points that are made in the primary article, to a position where it is easier to read and understand. A review article is a good place to start when looking into a research topic because it provides beneficial background information on a topic.

Before a primary article is published, it goes through a scientific peer review. This peer review is the second step of the article being reviewed for publication and the most important step. The first step of the article being reviewed is when it is first sent to the journal's editor for review. If they think it is qualified and significant enough, they then send it on to other scientific

experts in the same field that the article is written about, for review. Each of the experts analyze the article for the quality and significance it acquires. They go through a series of questions when reviewing the article to come to a conclusion if it should be approved for publication or rejected. The journal's editor then received all of the expert's judgements, and from there they make the ultimate decision if it will be published or not. This process of peer review can take months and even up to years to be completed.

After reviewing the two articles on Huntington's disease, the primary article is the one titled "Permanent inactivation of Huntington's disease mutation by personalized allele-specific CRISPR/Cas9". This article is the primary article because it contains the main characteristics of a primary article. It begins with an introduction and also lists the references at the end of the article. There is also a section on materials and methods, which is not within a review article, only an original report of scientific findings. The results of the research that was carried out is also discussed and includes graphs and pictures of the original findings. The article titled "Huntington's Disease: Mechanisms of Pathogenesis and Therapeutic Strategies" is the review article. Even though the article discusses many scientific factors of Huntington's disease, it does not include the materials and methods carried out in a scientific experiment firsthand. It does not provide results of an experiment that was done by the author of the article, it is mainly informative and summarizing different information about Huntington's disease.

In conclusion, a primary article is an original source of information from an original experiment carried out by the author, while a review article just summarizes information that is gathered from primary articles or other sources of information. It is easier to find review articles and there are many more review articles than there are primary articles because many primary

articles get denied for publication. Although review articles are generally a good place to start for research, a primary article will contain original information by a scientific expert themselves.