

DNA Analysis of the Bene Israel Jews

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“You shall not intermarry with them: do not give your daughters to their sons or take their daughters for your sons” (Deuteronomy 7:3). The Torah specifically warns us against intermarriage and assimilation to ensure the purity of the Jewish people. In order to accomplish this, it is essential for every Jew to marry a person who is halachically Jewish.

The Talmud emphasizes that one’s Jewish identity is dependent on the Jewish identity of his mother. If one’s mother is Jewish, that person is thereby Jewish as well, as it says “Rav Yehuda continued his recounting: When I said this halakha, that there is a concern about the betrothal of gentiles nowadays, before Shmuel, he said to me: One need not worry about this, as your son from a Jewish woman is called your son, i.e., he inherits his lineage from you, and your son from a gentile woman is not called your son, but rather her son. Consequently, all children born to Jews from gentile women are not considered Jews, as their lineage is determined by their gentile mothers” (Yevamos 17a).

Determining one’s Jewish identity is crucial, especially since multiple Jewish Diasporas over thousands of years have scattered Jews all across the world. Groups of people that have been isolated for hundreds of years around the world are now attempting to prove their Jewish identity. “Bene Israel” and other small groups from India claim to be descendants of Jews who migrated there during the time of King Solomon [1]. While these groups in India claim Jewish descent, they lack a concrete history of their arrival in India, thereby allowing for speculation of their Jewish ancestry. Although Rambam mentions the existence of Jews living in India in a letter dated approximately 1200 CE, it is unclear if the modern-day community descends from these Jews [2].

A possible way to ascertain the heritage of these groups in India is to analyze their DNA. DNA is a person’s history book, as it was inherited from parents, who inherited it from their parents, and so on. Cellular

DNA is located primarily in nuclear chromosomes, which are inherited from both parents, and from mitochondrial DNA (mtDNA), which is a circular, double-stranded DNA inherited primarily from the mother through the egg. Through the analysis of mtDNA from this specific Diaspora group, their matrilineal descent was examined to determine their lineage. These studies compared the DNA of these groups in India to the DNA of Jews from surrounding regions with similar non-Ashkenazi descent. Prior research showed that most Jewish Diaspora groups have genetic information connecting them to Middle East origin, however, the groups from India lacked this similarity, thereby casting doubt as to their Jewish lineage [3].

mtDNA was examined to determine whether the groups from India originated from women who were part of the ancient Jewish community. One study showed that mtDNA obtained from the groups in India did not resemble the Jewish mtDNA genome. Rather, their mtDNA was more similar to the native Indians of their region than to mtDNA of Jews of non-Ashkenazi descent [3]. This strongly suggested that the groups in India were not of Jewish descent. Although analysis of mtDNA from the community in India implied that their descent was mainly from the local Indian gene pool, there was some indication of admixture with Jews. The Indian community’s dominant mtDNA was Hg M5a2, a DNA signature from the Kerala (a local region in India) gene pool. However, there was a small fraction of their mtDNA, primarily from the “Bene Israel” group, that belonged to the sub-Hgs H13a2a1 and H14 genotype, which are DNA sequences found in many Iraqi and Iranian Jews. Not only did some of the mtDNA collected from the groups in India share these DNA sequences with Iraqi and Iranian Jews, but some of the mtDNA samples also contained signatures seen in Italian Jews and other Jews of non-Ashkenazi descent, not present in the local Indian gene pool, which genetically relates the group of people in India to ancient Jewry. [4] This creates a conflict with previous results that concluded with the

Bene Israel not having “Jewish DNA”, thereby creating a halachic disagreement of whether or not using the mtDNA is enough the Jewishness of the Bene Israel.

Jews have been scattered across the world after the destruction of the first and second Temples, in locales which developed into thriving Jewish communities and to places which were unable to maintain an active orthodox Jewish lifestyle. As time progressed, these latter groups of people may have mixed with the indigenous population, thereby diluting their claim of belonging to the Jewish people today. However, regarding the communities from India, their identification with the Jewish people is significant and their situation is similar to that of many Ethiopian Jews. Upon meeting the necessary halachic requirements, these communities would be accepted and welcomed into the Jewish nation.

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