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Dear Rabbi

I enjoyed our short meeting in London on 18th May and look forward another opportunity of talking with you in the future. Shortly after we met and to help with understanding, I wrote a short history of the development of the commercial broiler chicken (please see Word document attached "The Modern Broiler Industry").

The Arbor Acres White Rock is generally recognized as the founder breed of the modern poultry industry. This is not a breed whose physical components were known but combined several breeds and resulted from progeny testing different crosses to identify those with the most desirable characteristics. In the that years followed, the Arbor Acre 50 Female was developed from the White Rock by incorporating genetic material from additional breeds which means that already at this stage the mother is not actually known, and introducing the dominant white gene from a Leghorn. The Arbor Acres breed dominated the broiler market in the 1960's, 70's and 80's but started to lose market share when competitor breeds with better processing characteristics entered the market.

In the early 1990's customers in the USA began to place more emphasis on broilers with better processing characteristics and higher white meat yield, in particular. The Cobb-Vantress breed, for example, was known to contain genes from the Cornish (Mali) breed. Previously, there had been a lot of swapping of genetic lines amongst breeders but very little attention was paid to whether they may have contained Cornish (Mali) or Faverolles (Dorking) with five toes, or any other breed that you rule out according to rules of Kashruth. For this reason, it is impossible to answer your question of "who is the mother of the mother" in today's commercial breeds.

You also asked whether a new breed could enter the commercial chain. First, we need to consider the possibility that a new breeding company could enter the market. Ross (Aviagen), Cobb-Vantress (Tyson Foods) and Hubbard (Groupe Grimaud) are highly sophisticated companies who employ the very latest genetic tools and technologies to continuously

improve their production lines (each company maintains production lines which are crossed in different combinations to produce the products that they sell). The breeding and production systems employed by the breeders are very expensive to develop and maintain and this provides a significant barrier of entry to new entrants. In my opinion, it is highly unlikely that a new breeding company would be able to gain a foothold in the market.

The next question is whether any of the existing companies will be able to launch a new genetic line into the market. The breeders always try and respond to the needs of their customers and for this reason they maintain research lines with a variety of different characteristics. As is the case with the production lines, the precise genetic background of the research lines is unknown. Many of the research lines have been acquired as industry consolidation has taken place. To be frank, the breeding companies are interested only in the live performance and processing characteristics of their lines and not the phylogenetic origin.

From time to time, the breeders will make changes to their products by changing the mix of production lines or by introducing a research line into the production mix. There is continued push for lines with improved meat yield characteristics in the USA and South America. **This makes it even more difficult to determine whether the maternal lines offered by breeding companies originate from breeds that are permitted by Jewish Law.** Only if the ancestry could be tracked from the original cross would it be possible to verify the Kosher status and the only solution is to cultivate an independent line.

Respectfully yours,

Colin Baxter-Jones