

# **The current and future contributions of genetic counselors in the field of direct-to-consumer genetic testing for lifestyle advice: an exploratory study**

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In the age of personalized healthcare, the range of genetic tests available for the general consumer continues to expand, and consequently new professional roles for genetic counselors also develop. One example is genetic tests that specifically provide lifestyle, or wellness, information and advice. Such testing is usually marketed directly to the consumer and the results, which are accompanied by dietary and/or fitness plans, are based on single nucleotide polymorphisms in genes related to nutrigenomics, obesity, and exercise response. For the purposes of this study, we termed this “lifestyle direct-to-consumer genetic testing.” We surveyed genetic counselors to ascertain their opinions on the roles which genetic counselors should, or should not, have in the lifestyle direct-to-consumer genetic testing market. We additionally interviewed genetic counselors who have experience with lifestyle direct-to-consumer genetic testing to understand their current roles. Although survey respondents had mixed views on whether genetic counselors should have a role related to lifestyle direct-to-consumer genetic testing, overall involvement was found to be essential. Genetic counselor roles in lifestyle direct-to-consumer genetic testing included providing genetics education within a direct-to-consumer company, to other healthcare professionals, and creating relevant educational materials, but did not always include directly counseling a consumer. Our study highlighted the importance of overlap in healthcare professional expertise in order to provide consumers with accurate, helpful information when seeking lifestyle direct-to-consumer genetic testing.