

Personalized Nutrition Plan Based on DNA

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Abstract: *This project explores the concept of personalized nutrition by using DNA analysis to create customized diet plans tailored to an individual's genetic profile. As people increasingly seek healthier lifestyles, generic diet recommendations often fall short because they do not account for the unique genetic factors that influence how we process different nutrients. By examining an individual's DNA, we can gain insights into how their body metabolizes carbohydrates, fats, and proteins, as well as identify potential food sensitivities, nutrient deficiencies, and predispositions to certain health conditions. This approach allows for the development of highly personalized nutrition plans designed to optimize health, support weight management, and reduce the risk of chronic diseases such as diabetes, heart disease, and obesity. Ultimately, this project aims to empower individuals to make more informed dietary choices based on their genetic makeup, leading to better long-term health outcomes.*

Keywords: Personalized nutrition, DNA analysis, Genetic profiling, Tailored diet plans, Diet genetics