Nutrigenomics: impacts on markets, diets, and health. Part 1: biotechnology and diagnostics

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Published online: 19 September 2007
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Keywords Nutritional genomics · Nutrigenetic · Diagnostics · Biotechnology · Pharmacogenomics · Nutrition

The billions of genome base pairs being discovered and extraordinary number of public health care cases and medical costs associated with nutrition and lifestyle diseases, such as diabetes and obesity (diabesity), are two areas that have collided to create the field of nutritional genomics. As a result of the collision of the science and technologies in the nutrition and genomics fields, a flood of new data and ‘nutrigenomic’ products that cross-traditional pharma, biotech, and food industry boundaries are emerging. The Cambridge Healthtech Associates (CHA) life sciences business report, ‘Nutrigenomics: impacts on markets, diets, and health,’ provides the scientific and business communities with an overview of what nutrigenomics currently is and what nutrigenomics might be in the future. For example, personalized nutrigenetic testing is a product that has received a buzz of popular press in 2005. So how does nutrigenetic testing fit into the big picture of genetic testing? How will consumers be able to receive a nutrigenetic test? Are there any parallels with pharmacogenetic testing? Going beyond nutrigenetic testing, what are other nutrigenomic diagnostics, and how, if at all, will ag-biotech products fit into the nutrigenomic landscape. Useful information in the report includes a discussion of

the definition of nutrigenomics; biotechnologies that are being developed to study nutritional genetics and develop products, including the use of clinical trials, in the pharma, diagnostics, dietary supplement, ingredient, and food related industries; and also the role of regulations and business models. At the same time the technologies and products emerge, some of which are unique and patentable, understanding how the food-related companies and consumers view the products and the field are also important forces to consider as the markets evolve.

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