

NutriGENE™

“Know thyself”

Genetics is getting personal...

We are all different and this is mainly due to our genes. There are the differences that we all see like eyes and hair colour, but then there are the differences inside – how we metabolise nutrients for example, the way we deal with toxins – we all interact with the environment in our own unique way. Genetically we are almost identical, but in each gene there are points of variation, the most common type being a single base change at a particular position – this variation is called a Single Nucleotide Polymorphism, or SNP (pronounced SNIP). It is the collection of these small differences that affect who we are and define our individuality – but genes are not all, they don't work alone and they don't determine everything about us. Genes interact with our environment – and modifying the environment modifies our “phenotype” – the way we are (e.g. a fair skinned person will only suffer from sunburn if she/he stays in the sun too long). Because we have some control over our environment we can have some control on our destiny, we are not slaves to our genes, and the biggest “environment” is our diet, the food that we eat.

A healthy diet contributes to a long and healthy life, but exactly what is a healthy diet? Is it the same for everyone? No. One size does not fit all and one diet, or one “Recommended Daily Dose” does not suit all.

Over the last 10 years enormous progress has been made in the area of gene-environment interactions and a new field of knowledge has emerged: Nutrigenetics. This knowledge is ready to apply right now for the benefit of your clients. We have used it to design a panel of genes that determine how individuals handle certain key diet components. The panel will shape the diet you give to your clients, tailoring it to his / her genotype, determining the daily goals of nutrients and the daily limits of components such as saturated fats. Each piece of genetically derived advice delivered in the personal NutriGENE report is the fruit of repeated scientific studies by different labs around the world and published in peer reviewed international journals. There is an enormous body of scientific literature that details how individual genetic variation can affect your dietary needs

Genes modify your nutritional requirements and NutriGENE determines the personal goals and limits that are needed by each of your clients. A simple genetic test reveals the variations in 20 relevant genes; the results are converted to a personal report and nutrient goal chart. The report explains to you and your client what each of the genetic variations means to him/her and the nutrient table makes it easy to design a personal diet with

optimum amounts of important components – this will be “your clients diet” and no-one else’s. It’s not a radical diet, but is made up of small modifications in various areas – small modifications that over the long term can have a very significant effect on health and well being. Did you know that just 20 calories per day in excess, that’s a teaspoon of sugar, can cause a weight gain of 12 kg over 20 years – easy to put on, very hard to get off. But think then what a little bit too much saturated fat might be doing over the 20 years as well...then your client will start to understand the potential benefits of a personalised nutrigenetic diet.

Knowing that the diet is personal, knowing how the genes work and how they modify what we need - *knowing thyself* - is a powerful motivator.