Advanced NGx – other competing nutrigenetic tests. A comparison panel.

	Advanced NGx	Competitor 1	Competitor 2
Technical features			
Genetic variants	404	86	36
Number of genes	99	73	36
Technology	Sequencing (100x depth)	Array-based	Unclear (array-based?)
Report features			
Provides nutrition targets	Yes	No	Yes
Algorithms used	Haplotype analysis Gene-gene interactions Single genetic variations	No No Single genetic variations	No No Single genetic variations
Specific to European population	Yes	No	No
Gender specificity	Yes	Yes	Yes
Age category	Adults	Adults	Adults
Nutrient targets (recommended intakes defined by genotypes in healthy adults)			
Alcohol consumption	2 genes	Qualitative only – 1 gene	1 gene
Betaine	3 genes	No assessment	No assessment
Calcium	1 gene	No assessment	No assessment
Carbohydrates	No assessment	Qualitative only – 7 genes	5 genes
Choline	5 genes	No assessment	No assessment
Coffee consumption	1 gene	Qualitative only – 1 gene	2 genes
Folates	1 gene	Qualitative only – 1 gene	1 gene
Iron	1 gene	No assessment	No assessment
Lactose intolerance	2 genes	1 gene	1 gene
Magnesium	8 genes	No assessment	No assessment
Omega-3 fatty acids	3 genes	Qualitative only – 1 gene (PUFA); 2 genes (MUFA)	2 genes
Omega-6 fatty acids	4 genes		No assessment
Riboflavin	2 genes	No assessment	No assessment
Saturated fats	No assessment	No assessment	7 genes
Selenium	2 genes	No assessment	No assessment
Sodium	No assessment	No assessment	2 genes
Vitamin A	2 genes	Qualitative only – 1 gene	No assessment
Vitamin B3 (Niacin)	1 gene	No assessment	No assessment
Vitamin B12	2 genes	Qualitative only – 1 gene	1 gene
Vitamin B6 (pyridoxine)	No assessment	Qualitative only – 1 gene	No assessment
Vitamin C	1 gene	No assessment	No assessment
Vitamin D	2 genes	Qualitative only – 1 gene	1 gene
Vitamin E	1 gene	Qualitative only – 1 gene	No assessment
Vitamin K	1 gene	No assessment	No assessment
Zinc	3 genes	No assessment	No assessment
Other nutrient targets with no genotype-specific available data	Yes	No	Yes
Pregnancy and nutrition (dietary recommendations & birth-associated risks – qualitative only)			
Betaine	3 genes	No assessment	No assessment
Birth weight	3 genes	No assessment	No assessment
Choline & Phospholipids	9 genes	No assessment	No assessment
Folates	5 genes	No assessment	No assessment
Congenital alactasia allele carrier	1 gene	No assessment	No assessment
Omega-3 fatty acids	3 genes	No assessment	No assessment
Vitamin B1 (Thiamine)	1 gene	No assessment	No assessment

Risks of nutrition-related metabolic imbalances (qualitative only)

Hepatosteatosis	14 genes	No assessment	No assessment
Asthenospermia	1 gene	No assessment	No assessment
Overweight/obesity	5 genes	9 genes	2 genes
Gastric cancer & alcohol	3 genes	No assessment	No assessment
Cardiovascular diseases	4 genes	No assessment	No assessment
Type 2 diabetes & insulin resistance	6 genes	16 genes	5 genes
Nutrition-related dyslipidemia	1 gene	30 genes (general lipid profile)	5 genes (general lipid profile)
Postprandial hyperlipidemia	1 gene		
Hypomagnesemia	6 genes	No assessment	No assessment
Rhabdomyolysis (sarcopenia)	2 genes	No assessment	No assessment
Sodium sensitivity	1 gene	No assessment	2 genes

Physical performance (qualitative only)

Muscular strength and power	3 genes	2 genes	No assessment
Risk for rhabdomyolysis – nutrition related	2 genes	Injury risk – 1 gene	Injury risk – 7 genes
Cardiorespiratory fitness and endurance	4 genes	3 genes	Aerobic potential – 4 genes
Body weight and adiposity	5 genes	1 gene	No assessment
Insulin and glucose metabolism	6 genes	1 gene	No assessment
Lipid and lipoprotein metabolism	2 genes	2 genes	No assessment
Hemodynamic traits	8 genes	1 gene	Recovery – 7 genes

Genetic screening for variants associated with other diseases & response to drug treatments

Pancreatitis risk at thiopurine treatment	HLA haplotype & TPMT	No assessment	No assessment
Atopic dermatitis (Vitamin D-dependent)	2 genes	No assessment	No assessment
Achondroplasia	1 gene	No assessment	No assessment
Alpha-1 antitrypsin deficiency	1 gene	No assessment	No assessment
Cystic fibrosis	1 gene	No assessment	No assessment
Factor V Leiden Thrombophilia	1 gene	No assessment	No assessment
Biotinidase deficiency	1 gene	No assessment	No assessment
BRCA1/BRCA2 screening	2 genes (>150 loci)	No assessment	No assessment
Familial Mediterranean Fever	1 gene	No assessment	No assessment
Gaucher disease	1 gene	No assessment	No assessment
Hereditary hemochromatosis	1 gene	No assessment	No assessment
Coumarin dosage	2 genes	No assessment	No assessment
Contraceptive management in women	2 genes	No assessment	No assessment
Homocystinuria (pyridoxine-responsive)	1 gene	No assessment	No assessment
Goiter Risk	2 genes	No assessment	No assessment
Response to Methotrexate treatment	1 gene	No assessment	No assessment