

Overview of **biomarkers** from the four BRHS physical examinations 1978 – 2018

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	1978-80 Baseline (Q1)	1998-2000 20 year survey (Q20)	2010-2012 30 year survey (Q30)	2018-2019 40 year survey (Q40)
Blood samples	X	X	X	X
Genetic Material (Blood)		X		
Frozen samples		X	X	X
BIOCHEMISTRY				
Alkaline Phosphatase (ALP)	X	X	X	X
Bilirubin (Total)	X	X	X	X
Cadmium	X			
CHDR			X	X
Lead	X			
Magnesium		X	X	X
Potassium	X	X	X	X
Protein (total)		X	X	X
Sodium	X	X	X	X
HAEMATOLOGY				
Basophils Absolute Value			X	
Blood Group	X			
Carboxyhaemoglobin		X		
Eosinophils Absolute Value			X	X
Haematocrit	X	X	X	X
Haemoglobin	X	X	X	X
Lymphocytes Absolute Value			X	
Mean Cell haemoglobin (MCH)	X	X	X	X
Mean Cell Haemoglobin	X	X	X	X
Mean Cell Volume (MCV)		X	X	X
Mean Platelet volume (MPV)	X	X	X	X
Monocytes Absolute Value			X	X
Neutrophils Absolute Value			X	X
Platelets		X	X	X
Red blood cell count (RBC)	X	X	X	X
Red Blood Cell Distribution Width			X	X
Rhesus	X			
White blood cell count (WBC)	X	X	X	X
RENAL-HEPATIC				
Alanine Aminotransferase (ALT)		X	X	X
Albumin	X	X	X	X
Aspartame Transaminase (AST)	X	X	X	X
Calcium	X	X	X	X
Calcium orthophosphates (CaPO4)	X			
Creatinine	X	X	X	X
Estimated Glomerular Filtration Rate		X	X	X
Gamma-Glutamyl transferase				
Gamma-glutamyl transpeptidase	X			
Globulin	X			
Nephelometric fibrinogen		X		
Parathyroid hormone (PTH)		X		
Phosphate		X	X	X
Urate	X	X	X	X
Urea	X	X	X	X

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BLOOD LIPIDS				
Cholesterol (Total)	x	x	x	x
High Density Lipoprotein cholesterol	x	x	x	x
Lipoprotein (LPa)			x	
Low Density Lipoprotein cholesterol		x	x	x
Triglyceride	x	x	x	x
GLUCOSE-INSULIN				
Cysteine		x		
Cysteinylglycine (CysGly)		x		
Glucose	x	x	x	x
Glycated Haemoglobin (HbA1c)		x	x	x
Insulin		x	x	x
Insulin-like growth factor 1 (IGF-1)			x	x
Proinsulin			x	
INFLAMMATION-HAEMOSTASIS				
Activated partial thromboplastin time		x		
Activated Protein C Resistance		x		
Carboxymethyl lysine (CML)			x	
C-Reactive protein (CRP)		x	x	x
Cystatin C			x	
Factor II				
Factors IX		x		
Factors VII		x		
Factors VIII		x		
Fibrin D-dimer		x	x	x
Fibrinogen		x		
Growth Differentiation Factor (GDF-15)				x
Interleukin-18 (IL-18),				
Interleukin-6 (IL-6),		x	x	x
Lysine (% of lysine that is glycated (CML			x	
Lysine concentration			x	
Mid-regional proadrenomedullin		x		
Plasma Viscosity		x		
Receptor for Advanced Glycation End			x	
Tissue plasminogen activator (t-PA)		x	x	
Tumor Necrosis Factor alpha (TNFa)				
von Willebrand factor		x	x	x

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VITAMINS, ADIPOKINES, OTHER				
Adiponectin		x	x	
CD40				
Copeptin		x	x	
Cotinine		x		
Ferritin				
Folate				
High-Sensitivity Troponin T (hsTnT)			x	
Homocysteine		x		
Leptin		x	x	
Metabolites -Blood		x		
N-terminal pro B-type natriuretic				
Troponin T (TnT)		x		x
Vitamin B12				
Vitamin C		x		
Vitamin D		x	x	x
Vitamin E		x		