

## Multimedia Appendix 1. Biomarkers measurable in dried blood spots

11-deoxycortisol	Deoxycorticosterone	LSD Enzyme
17 $\alpha$ -hydroxypregnenolone	Dermatansulfate	Luteinizing Hormone
17 $\alpha$ -hydroxyprogesterone	DHEA-S	Lymphoproliferative diseases
17-dione	Dihydrotestosterone	Mucopolysaccharidosis type II
21-deoxycortisol	Epstein-Barr Virus Antibodies	Neurotrophins
25-hydroxyvitamin D3	Estradiol	Perfluorooctanesulfonate (PFOS)
3'-hydroxycotinine	Folate	Perfluorooctanoate (PFOA)
4-androstene-3	Follicle-Stimulating Hormone	Phenylalanine
$\alpha$ 1-antitrypsin genotypes	Frataxin	Phenylketonuria
Acid beta-D-glucosidase	Gamma-Hydroxybutyric Acid	Phosphatidylethanol
Acid sphingomyelinase	Gaucher Disease	Pompe disease
Acylcarnitines	Glucocerebrosidase	Pregnancy-Associated Plasma Protein A
Adenosine-deaminase defect	Glucose	Progesterone
Adrenal steroids	Gluthathione	Prolactin
$\alpha$ -galactosidase	Guanidinoacetate	Prostate-Specific Antigen (PSA)
$\alpha$ -iduronidase	H. influenzae b	Retinol
Alloisoleucine	Hemoglobin	S. pneumoniae
Alpha-N-acetyl-galactosaminidase	Hemoglobin A1c	Sandhoff Disease
Androstenedione	Heparinsulfate	Sex Hormone Binding Globulin
Anti-Mullerian Hormone	Hepatitis A Antibodies	Somatomedin-c
Apolipoprotein A-I	Hepatitis B Antibodies	Succinylacetone
Apolipoprotein B	Hepatitis B Antigen	Tay-sachs Disease
Babesiagibsoni Infection	Hepatitis C Antibodies	Testosterone
Beta-Carotene	HIV Antibodies	Thyroglobulin
Biotinidase	Homocysteine	Thyroid Antibody
Bisphenol A (BPA)	HTLV-I specific antibodies	Thyroid Stimulating Hormone (TSH)
C26:0-lysophosphatidylcholine	Human Chorionic Gonadotropin	Thyroxine (T4)
Carnitine and Acylcarnitines	Hormone (free B subunit)	Thyroxine Binding Globulin
Cd4+ lymphocytes	Hunter syndrome	TNF $\alpha$
Cd4+ t-cell	IFN $\gamma$	Tocopherols
Ceruloplasmin	IgE	Trans-3'-hydroxycotinine
Chitotriosidase	IGFBP-2	Transferrin Receptor
Citrulline	IGFBP-3	Triglycerides
Corticosterone	IGF-I	Triiodothyronine (T3)
Cortisol	IL-1b	Tyrosine
Cotinine	IL-6	Vitamin C
C-reactive protein	Inflammatory markers	Vitamin D2-25-OH
Creatine	Insulin	Vitamin D3-25-OH
Cytomegalovirus infection	Interferon- $\gamma$ inducible protein (IP)-10	
Dehydroepiandrosterone-sulfate	Interleukin-6	
	Lipoprotein (LP)	

Compiled from references 1-10.