

Note on abbreviations:

CVw = within-subject biologic variation

CVg = between-subject biologic variation

I = desirable specification for imprecision

B = desirable specification for inaccuracy

TE = desirable specification for allowable total error

	Analyte	Biological Variation		Desirable specification		
		CVw	CVg	I(%)	B(%)	TE(%)
S-	11-Desoxycortisol	21.3	31.5	10.7	9.5	27.1
S-	17-Hydroxyprogesterone	19.6	50.4	9.8	13.5	29.7
U-	4-hydroxy-3-methoximandelate (VMA)	22.2	47	11.1	13	31.3
S-	5' Nucleotidase	23.2	19.9	11.6	7.6	26.8
U-	5'-Hydroxyindolacetate, concentration	20.3	33.2	10.2	9.7	26.5
S-	<1-Acid Glycoprotein	11.3	24.9	5.7	6.8	16.2
S-	<1-Antichymotrypsin	13.5	18.3	6.8	5.7	16.8
S-	<1-Antitrypsin	5.9	16.3	3	4.3	9.2
S-	<1-Globulins	11.4	22.6	5.7	6.3	15.7
U-	<1-Microglobulin, concentration, first morning	33	58	16.5	16.7	43.9
P-	<2-Antiplasmin	6.2	---	3.1	---	---
S-	<2-Globulins	10.3	12.7	5.2	4.1	12.6
S-	<2-Macroglobulin	3.4	18.7	1.7	4.8	7.6
U-	<2-Microglobulin output, first morning	29	32	14.5	10.8	34.7
P-	<-aminobutyric acid	24.7	32.3	12.4	10.2	30.5
S-	<-Amylase	8.7	28.3	4.4	7.4	14.6
S-	<-Amylase (pancreatic)	11.7	29.9	5.9	8	17.7
U-	<-Amylase (pancreatic)	39	78.4	19.5	21.9	54.1
U-	<-Amylase concentration, random	94	46	47	26.2	103.7
P-	<-Carotene	24	65	12	17.3	37.1
S-	<-Carotene	48	65	24	20.2	59.8
S-	<-Fetoprotein(non hepatic carcinoma)	12.2	45.6	6.1	11.8	21.9
S-	<-Tocopherol	13.8	15	6.9	5.1	16.5
S-	Acid phosphatase	8.9	8	4.5	3	10.3
S-	Acid phosphatase tartrate-resistant (TR-ACP)	8	13.3	4	3.9	10.5
S-	Acid phosphatase prostatic activity (PAP)	33.8	---	16.9	---	---
P-	Activated partial thromboplastine time	2.7	8.6	1.4	2.3	4.5
S-	Acyl/free carnitine	10.4	27.2	5.2	7.3	15.9
P-	Adiponectin	18.8	51.2	9.4	13.6	29.1
S-	Adenosine deaminase (ADA)	11.7	25.5	5.9	7	16.7
P-	Alanine	14.7	55.8	7.4	14.4	26.6
S-	Alanine aminopeptidase	4.1	---	2.1	---	---
S-	Alanine aminotransferase	18	42	9	11.4	26.3

	Analyte	Biological Variation		Desirable specification		
		CVw	CVg	I(%)	B(%)	TE(%)
S-	Albumin	3.1	4.2	1.6	1.3	3.9
U-	Albumin, concentration, first morning	36	55	18	16.4	46.1
U-	Albumin, output, night urine	29.5	58	14.8	16.3	40.6
S-	Albumin, glycated	5.2	10.3	2.6	2.9	7.2
U-	Albumin/creatinine	30.5	32.5	15.3	11.1	36.3
S-	Aldosterone	29.4	40.1	14.7	12.4	36.7
U-	Aldosterone, concentration	32.6	39	16.3	12.7	39.6
S-	Alkaline phosphatase	6.4	24.8	3.2	6.4	11.7
S-	Alkaline phosphatase, bone	6.2	37.4	3.1	9.5	14.6
S-	Alkaline phosphatase, liver	10	27	5	7.2	15.4
S-	Alkaline phosphatase, placental	19.1	---	9.6	---	---
U-	Ammonia, output, 24h	24.7	27.3	12.4	9.2	29.6
S-	Amyloid A	25	61	12.5	16.5	37.1
S-	Androstendione	11.1	51.1	5.8	13.1	22.6
P-	Angiotensin converting enzyme	0.1	---	0.1	---	---
S-	Anion gap	9.5	10.1	4.8	3.5	11.3
P-	Antithrombin III	5.2	15.3	2.6	4	8.3
S-	Apolipoprotein A1	6.5	13.4	3.3	3.7	9.1
S-	Apolipoprotein B	6.9	22.8	3.5	6	11.6
P-	Arginine	19.3	34.1	9.7	9.8	25.7
S-	Aristeerase activity, non inhibited	3.8	37.2	1.9	9.3	12.5
P-	Ascorbate (Vitamin C)	20	21	10	7.3	23.8
S-	Ascorbate (Vitamin C)	26	31	13	10.1	31.6
P-	Asparagine	12.3	28	6.2	7.6	17.8
S-	Aspartate aminotransferase	11.9	17.9	6	5.4	15.2
P-	Aspartic acid	31.2	55.1	15.6	15.8	41.6
S-	Ⓜ-2-Microglobulin	5.9	15.5	3	4.1	9
P-	β-Carotene	18	48	9	12.8	27.7
S-	Ⓜ-Carotene	36	39.7	18	13.4	43.1
S-	Ⓜ-Cryptoxantin	36.7	---	18.4	---	---
S-	Ⓜ-Globulins	10.1	9.1	5.1	3.4	11.7
B-	Base excess	76.4	43.2	38.2	21.9	85
S-	Basophile, count	28	54.8	14	15.4	38.5
S-	Bilirubin total	23.8	39	11.9	11.4	31.1
S-	Bilirubin conjugated	36.8	43.2	18.4	14.2	44.5
Patie nt-	Body mass	1.1	26.6	0.6	6.7	7.6
P-	C Protein	5.6	55.2	2.9	13.9	18.7
S-	C reactive protein	42.2	76.3	21.1	21.8	56.6
S-	C3 Complement	5.2	15.6	2.6	4.1	8.4
S-	C4 Complement	8.9	33.4	4.5	8.6	16
S-	CA 125 antigen	24.7	54.6	12.4	15	35.4
S-	CA 15.3 antigen	6.1	62.9	3.1	15.8	20.8
S-	CA 19.9 antigen	16	102	8	25.8	39
S-	CA 549 antigen	9.1	33.4	4.6	8.7	16.2

	Analyte	Biological Variation		Desirable specification		
		CVw	CVg	I(%)	B(%)	TE(%)
S-	Calcium	1.9	2.8	1	0.8	2.4

S-	Calcium, complexed	5.3	4.5	2.7	1.7	6.1
U-	Calcium, concentration, 24h	27.5	36.6	13.8	11.4	34.1
S-	Calcium, ionized	1.7	1.9	0.9	0.6	2
U-	Calcium, output, 24h	26.2	27	13.1	9.4	31
S-	Calcium, protein bound	4.1	6.1	2.1	1.8	5.2
S-	Calcium, ultrafiltrable	2.2	2.7	1.1	0.9	2.7
S-	Carbohydrate deficient transferrin	7.1	38.7	3.6	9.8	15.7
(B)G as	Carbon dioxide	4.8	5.3	2.4	1.8	5.7
S-	Carcinoembryonic antigen (CEA)	12.7	55.6	6.4	14.3	24.7
S-	Carnitine, free	7.6	15.2	3.8	4.2	10.5
S-	Carnitine, total	7.7	13.8	3.9	4	10.3
S-	Ceruloplasmin (ferroxidase)	5.8	11.1	2.9	3.1	7.9
S-	Chloride	1.2	1.5	0.6	0.5	1.5
S-	Cholesterol	5.4	15.2	2.7	4	8.5
S-	Cholinesterase, concentration	7.1	---	3.6	---	---
S-	Cholinesterase, activity	6.1	18.2	3.1	4.8	9.8
P-	Chromogranin A	12.8	26.3	6.4	7.3	17.9
P-	Citrulline	21.4	43.9	10.7	12.2	29.9
S-	Collagen type I C propeptide (PICP)	7.8	26.7	3.9	7	13.4
S-	Collagen type I N propeptide (PINP)	7.4	57.3	3.7	14.4	20.5
S-	Collagen type III N propeptide (PIIINP)	13.6	87.2	6.8	22.1	33.3
U-	Color, first morning	30.9	47.4	15.5	14.1	39.6
P-	Copper	8	19	4	5.2	11.8
S-	Copper	4.9	13.6	2.5	3.6	7.7
S-	Cortisol	20.9	45.6	10.5	12.5	29.8
S-	C Peptide	16.6	23.2	8.3	7.1	20.8
S-	C-Propeptide type I procollagen	8.2	17.6	4.1	4.9	11.6
S-	C-Reactive protein	42.2	76.3	21.1	21.8	56.6
S-	Creatine kinase (CK)	22.8	40	11.4	11.5	30.3
S-	Creatine kinase MB, %	6.9	48.2	3.5	10.8	16.5
S-	Creatine kinase MB, activity	19.7	24.3	9.9	7.8	24.1
S-	Creatine kinase MB, mass	18.4	61.2	9.2	16	31.2
S-	Creatinine	6	14.7	3	4	8.9
Patie nt-	Creatinine clearance	13.6	13.5	6.8	4.8	16
Patie nt-	Creatinine clearance, MDRD	6.7	---	3.4	---	---
U-	Creatinine, concentration, 24h	24	24.5	12	8.6	28.4
U-	Creatinine, concentration, first morning	23.2	25.7	11.6	8.7	27.8
U-	Creatinine, concentration, random	36.3	32.4	18.2	12.2	42.1
U-	Creatinine, output, 24h	11	23	5.5	6.4	15.4
S-	C-Terminal telopeptide type I collagen	9.6	30.6	4.8	8	15.9
U-	C-Terminal telopeptide type I collagen/creatinine, second void	24.4	48	12.2	13.5	33.6
S-	Cyfra 21.1	22.2	31.1	11.1	9.6	27.9
P-	Cystatin C	5.5	---	2.8	---	---
S-	Cystatin C	4.6	13	2.3	3.4	7.2
P-	Cysteine	5.9	12.3	3	3.4	8.3
P-	Cystine	38.3	48.5	19.2	15.4	47
U-	δ-aminolevulinic acid	16	27	8	7.8	21

	Analyte	Biological Variation		Desirable specification		
		CVw	CVg	I(%)	B(%)	TE(%)
S-	Dehydroepiandrosterone sulfate	5.6	25.9	2.8	6.6	11.2
U-	Deoxypyridinoline/creatinine, 24h	16	30.7	8	8.7	21.9
U-	Deoxypyridinoline/creatinine, first morning	13.8	34.6	6.9	9.3	20.7
U-	Deoxypyridinoline/minute, first morning	15.4	30.3	7.7	8.5	21.2
P-	Dipeptidyl-peptidase IV (ACE)	8.2	14.5	4.1	4.2	10.9
S-	Dipeptidyl-peptidase IV (ACE)	12.5	27.7	6.3	7.6	17.9
P-	Elastase	13.6	16.4	6.8	5.3	16.5
S-	Endotelial growth factor	10.7	47.6	5.4	12.2	21
B-	Eosinophils, count	21	76.4	10.5	19.8	37.1
(B)Plat-	Epinephrine	25.3	---	12.7	---	---
P-	Epinephrine	48.3	---	24.2	---	---
B-	Erythrocytes, count	3.2	6.1	1.6	1.7	4.4
B-	Erythrocyte distribution wide	3.5	5.7	1.8	1.7	4.6
U-	Estradiol	30.4	---	15.2	---	---
S-	Estradiol	22.8	24.4	11.4	8.3	27.2
U-	Estradiol, free	38.6	---	19.3	---	---
P-	Factor V coagulation	3.6	---	1.8	---	---
P-	Factor VII coagulation	6.8	19.4	3.4	5.1	10.7
P-	Factor VIII coagulation	4.8	19.1	2.4	4.9	8.9
P-	Factor X coagulation	5.9	---	3	---	---
S-	Ferritin	14.2	15	7.1	5.2	16.9
P-	Fibrinogen	10.7	15.8	5.4	4.8	13.6
(B)Erythry-	Folate	12	66	6	16.8	26.7
S-	Folate	24	73	12	19.2	39
S-	Follicle stimulating hormone (FSH)	7.9	41.6	3.9	10.6	17.1
S-	Fructosamine	3.4	5.9	1.7	1.7	4.5
S-	Galactosyl hydroxylysine	11.8	25.8	5.9	7.1	16.8
S-	©-Globulins	14.6	12.3	7.3	4.8	16.8
S-	©-glutamyltransferase	13.8	41	6.9	10.8	22.2
S-	Globulins, total	5.5	12.9	2.8	3.5	8
P-	Glucose	4.5	5.8	2.3	1.8	5.5
S-	Glucose	6.1	6.1	2.9	2.2	6.9
(B)Erythry-	Glucose-6-phosphate-1-dehydrogenase (G6PDH)	32.8	31.8	16.4	11.4	38.5
B-spot	Glucose-6-phosphate-1-dehydrogenase (G6PDH)	7.3	10.3	3.7	3.2	9.2
P-	Glutamic acid	46.4	79.9	23.2	23.1	61.4
P-	Glutamine	12.1	22	6.1	6.3	16.3
S-	Glutathion peroxidase	7.2	21.7	3.6	5.7	11.7
P-	Glycine	11.8	40.3	5.9	10.5	20.2
P-	Haptoglobin	20	27.9	10	8.6	25.1
S-	Haptoglobin	20.4	36.4	10.2	10.4	27.3
S-	HDL cholesterol	7.1	19.7	3.6	5.2	11.1
S-	HDL 1 cholesterol	5.5	27.2	2.8	6.9	11.5
S-	HDL 2 cholesterol	15.7	40.7	7.9	10.9	23.9
S-	HDL 3 cholesterol	7	14.3	3.5	4	9.8
B-	Hematocrit	2.8	6.4	1.4	1.7	4.1

B-	Hemoglobin	2.8	6.6	1.4	1.8	4.1
B-	Hemoglobin A1 C	1.9	5.7	0.9	1.5	3
P-	Histidine	9.7	27.2	4.9	7.2	15.2
P-	Homocysteine	9	40.3	4.5	10.3	17.7
S-	Hydroxybutyrate dehydrogenase	6.6	---	3.3	---	---
P-	Hydroxyproline	34.5	56.7	17.3	16.6	45.1
U-	Hydroxyproline/creatinine, first morning	34.3	42.7	17.2	13.7	42
U-	Hydroxyproline/creatinine, second void	19	33.8	9.5	9.7	25.4
U-	Hydroxyproline/minute, first morning	36.1	38.8	18.1	13.2	43
U-	Hydroxyproline/minute, second void	40.5	32.9	20.3	13	46.5

	Analyte	Biological Variation		Desirable specification		
		CVw	CVg	I(%)	B(%)	TE(%)
S-	Immunoglobulin A	5.4	35.9	2.7	9.1	13.5
S-	Immunoglobulin G	4.5	16.5	2.3	4.3	8
S-	Immunoglobulin M	5.9	47.3	3	11.9	16.8
S-	Immunoglobulins κ chains	4.8	15.3	2.4	4	8
S-	Immunoglobulins λ chains	4.8	18	2.4	4.7	8.6
S-	Insulin	21.1	58.3	10.6	15.5	32.9
S-	Insulin-like growth factor (IGF-1)	14.6	45.4	7.3	11.9	24
S-	Insulin-like growth factor binding protein 3 (IGFBP-3)	10.1	63.9	5.1	16.2	24.5
S-	Intercellular adhesion molecule-1 (ICAM-1)	1.9	21	1	5.3	6.8
(B)Leuc-	Interferon receptor	14	20	7	6.1	17.7
S-	Interleukin 1-β	30	36	15	11.7	36.5
S-	Interleukin-8	24	31	12	9.8	29.6
S-	Iron	26.5	23.2	13.3	8.8	30.7
P-	Isoleucine	15.5	45.5	7.8	12	24.8
B-	Lactate	27.2	16.7	13.6	8	30.4
S-	Lactate dehydrogenase (LDH)	8.6	14.7	4.3	4.3	11.4
S-	Lactate dehydrogenase 1 isoform (LDH1)	2.3	8.3	1.2	2.2	4.1
S-	Lactate dehydrogenase 2 isoform (LDH2)	3.3	2.4	1.7	1	3.7
S-	Lactate dehydrogenase 3 isoform (LDH3)	2.8	3.8	1.4	1.2	3.5
S-	Lactate dehydrogenase 4 isoform (LDH4)	5.9	5.3	3	2	6.9
S-	Lactate dehydrogenase 5 isoform (LDH5)	8	9.6	4	3.1	9.7
P-	Lactoferrin	11.8	23.7	5.9	6.6	16.4
S-	LDL Cholesterol	8.3	25.7	4.2	6.8	13.6
S-	LDL Cholesterol (direct)	6.5	---	3.3	---	---
P-	LDL Cholesterol (oxidized)	21	50	10.5	13.6	30.9
S-	LDL receptor mRNA	21.5	13.6	10.8	6.4	24.1
P-	Leucine	14.8	44	7.4	11.6	23.8
B-	Leukocytes count	10.9	19.6	5.5	5.6	14.6
S-	Lipase	23.1	33.1	11.6	10.1	29.1
S-	Lipoprotein (a)	20.8	18.1	10.4	6.9	24.1
P-	Lutein	13	21	6.5	6.2	16.9
S-	Lutein	23.7	---	11.9	---	---

S-	Luteinizing hormone (LH)	14.5	27.8	7.3	7.8	19.8
P-	Lycopene	22	33	11	9.9	28.1
S-	Lycopene	40.1	33	20.1	13	---
B-	Lymphocytes, count	10.4	27.8	5.2	7.4	16
B-	Lymphocytes CD4	25	---	12.5	---	---
P-	Lysine	11.5	38.2	5.8	10	19.5

	Analyte	Biological Variation		Desirable specification		
		CVw	CVg	I(%)	B(%)	TE(%)
(B)Er ythr-	Magnesium	5.6	11.3	2.8	3.2	7.8
(B)Le uc-	Magnesium	18.3	16.4	9.2	6.1	21.2
(B)M on -	Magnesium	18.1	20.3	9.1	6.8	21.7
S-	Magnesium	3.6	6.4	1.8	1.8	4.8
U-	Magnesium, concentration, 24h	45.4	37.4	22.7	14.7	52.2
U-	Magnesium, ionized	1.9	5.1	1	1.4	2.9
U-	Magnesium, output, 24h	38.3	37.6	19.2	13.4	45
(B)Er ythr-	Mean corpuscular hemoglobin (HCM)	1.6	5.2	0.8	1.4	2.7
(B)Er ythr-	Mean corpuscular hemoglobin concentration (MCHC)	1.7	2.8	0.9	0.8	2.2
(B)Er ythr-	Mean corpuscular volume (MCV)	1.3	4.8	0.7	1.2	2.3
(B)Pl at-	Mean platelet volume (MPV)	4.3	8.1	2.2	2.3	5.8
P-	Metionine	14.7	43.4	7.4	11.5	23.6
B-	Monocytes, count	17.8	49.8	8.9	13.2	27.9
S-	Mucinous carcinoma-associated antigen (MCA)	10.1	39.3	5.1	10.1	18.5
S-	Myeloperoxidase	36	30	18	11.7	41.4
S-	Myoglobin	13.9	29.6	7	8.2	19.6
U-	N-Acetyl Glucosaminidase, concentration, first morning	52.9	22	26.5	14.3	58
U-	N-Acetyl Glucosaminidase/Creatinine	51.1	21.8	25.6	13.9	56
B-	Neutrophiles, count	16.1	32.8	8.1	9.1	22.4
U-	Nitrogen, output	13.9	24.2	7	7	18.4
S-	Non-inhibited arilestearase activity	3.8	37.2	1.9	9.3	12.5
B(Pla t)-	Norepinephrine	9.5	---	4.8	---	---
P-	Norepinephrine	19.5	---	9.8	---	---
U-	N-Telopeptide type I collagen/Creatinine, first morning	17	52	8.5	13.7	27.7
U-	N-Telopeptide type I collagen/Creatinine, second void	15.5	37.6	7.8	10.2	23
S-	N-terminal (NT)-proBNP	10	16	5	4.7	13
P-	Ornithine	18.4	54.9	9.2	14.5	29.7
P-	Osmolality	1.3	1.5	0.7	0.5	1.6
Saliv a-	Osmolality	9.5	35.8	4.8	9.3	17.1
S-	Osmolality	1.3	1.2	0.7	0.4	1.5
U-	Osmolality, first morning	28.3	57.9	14.2	16.1	39.5
S-	Osteocalcin	6.3	23.1	3.2	6	11.2

S-	Osteocalcin (+1 trab)	7.2	27	3.6	7	12.9
U-	Oxalate, concentration, 24h	44	18	22	11.9	48.2
U-	Oxalate, output, 24h	42.5	19.9	21.3	11.7	46.8

	Analyte	Biological Variation		Desirable specification		
		CVw	CVg	I(%)	B(%)	TE(%)
B-	pCO2	4.8	5.3	2.4	1.8	5.7
B-	pH [H+]	3.5	2	1.8	1	3.9
B-	pH (pH units)	0.2	---	0.1	---	---
S-	Paraoxonase 1	13.4	84	6.7	21.3	32.3
S-	Paraoxonase 1 substrate inhibition (PON 4SI)	3.9	80.1	1.9	20	23.2
S-	Paraoxonase, activity (salt stimulated)	8	86.4	4	21.7	28.3
S-	Parathyroid hormone (PTH)	25.9	23.8	13	8.8	30.2
S-	Phenylacetate	6.6	25.2	3.3	6.5	12
P-	Phenylalanine	9.5	40.6	4.8	10.4	18.3
S-	Phosphate	8.5	9.4	4.3	3.2	10.2
U-	Phosphate, concentration, 24h	26.4	26.5	13.2	9.4	31.1
U-	Phosphate, output, 24h	18	22.6	9	7.2	22.1
Patie nt-	Phosphate tubular reabsorption	2.7	3.3	1.4	1.1	3.3
S-	Phospholipids	6.5	11.1	3.3	3.2	8.6
B-	Piruvate	15.2	13	7.6	5	17.5
P-	Plasminogen	7.7	---	3.9	---	---
B-	Platelets, count	9.1	21.9	4.6	5.9	13.4
B-	Platelet distribution wide	2.8	---	1.4	---	---
B-	Plateletcrit	11.9	---	6	---	---
U-	Porphobilinogen	17	31	8.5	8.8	22.9
U-	Porphyrins (total)	40	---	20	---	---
(B)Le uc-	Potassium	13.6	13.4	6.8	4.8	16
S-	Potassium	4.8	5.6	2.4	1.8	5.8
U-	Potassium, concentration, 24h	27.1	23.2	13.6	8.9	31.3
U-	Potassium, output	24.4	22.2	12.2	8.2	28.4
S-	Prealbumin	10.9	19.1	5.5	5.5	14.5
S-	Prolactin	23	35	11.5	10.5	29.4
P-	Proline	17	104.4	8.5	26.4	40.5
P-	Prolyl endopeptidase	16.8	13.9	8.4	5.5	19.3
S-	Properdin factor B	9.5	11.2	4.7	3.7	11.5
S-	Prostatic specific antigen (PSA)	18.1	72.4	9.1	18.7	33.6
S-	Protein	2.7	4	1.4	1.2	3.4
U-	Protein, concentration, 24h	39.6	17.8	19.8	10.9	43.5
S-	Protein, glycated	0.9	11.6	0.5	2.9	3.7
U-	Protein, output, 24h	35.5	23.7	17.8	10.7	40
P-	Prothrombin time	4	6.8	2	2	5.3
U-	Pyridinoline/creatinine	8.7	17.6	4.4	4.9	12.1
U-	Pyridinoline/minute, first morning	19.4	23.6	9.7	7.6	23.6
B-	Pyruvate	15.2	13	7.6	5	17.5
B-	Red cell distribution wide (RDW)	3.5	5.7	1.8	1.7	4.6
S-	Reticulocyte highly fluorescent, count	10	62	5	15.7	24
S-	Reticulocyte low fluorescent, count	1.6	4.9	0.8	1.3	2.6

S-	Reticulocyte medium fluorescent, count	13	33	6.5	8.9	19.6
S-	Reticulocyte, count	11	29	5.5	7.8	16.8
P-	Retinol	6.2	21	3.1	5.5	10.6
S-	Retinol	13.6	19	6.8	5.8	17.1
S-	Rheumatoid factor	8.5	24.5	4.3	6.5	13.5

	Analyte	Biological Variation		Desirable specification		
		CVw	CVg	I(%)	B(%)	TE(%)
S-	SCC antigen	39.4	35.7	19.7	13.3	45.8
P-	S Protein	5.8	63.4	2.9	15.9	20.7
P-	Selenium	12	14	6	4.6	14.5
B-	Selenium	12	12	6	4.2	14.1
P-	Serine	12.8	42.8	6.4	11.2	21.7
S-	Sex hormone binding globulin (SHBG)	12.1	42.7	6.1	11.1	21.1
(B)Er ythr-	Sodium	1.8	12.4	0.9	3.1	4.6
(B)Le uc-	Sodium	51	36.4	25.5	15.7	57.7
S-	Sodium	0.7	1	0.4	0.3	0.9
B-	Sodium Bicarbonate	4	4.8	2	1.6	4.9
S-	Sodium Bicarbonate	4.8	4.7	2.4	1.7	5.6
Swe at-	Sodium Chloride	15	25	7.5	7.3	19.7
U-	Sodium, concentration, 24 h.	24	26.8	12	9	28.8
U-	Sodium output, 24 h.	28.7	16.7	14.4	8.3	32
P-	Soluble CD163	9	35.9	4.5	9.3	16.7
Sem en-	Spermatozoa, concentration	26.8	56.4	13.4	15.6	37.7
Sem en-	Spermatozoa, morphology	19.6	44	9.8	12	28.2
Sem en-	Spermatozoa, progressive motility	15.2	32.8	7.6	9	21.6
Sem en-	Spermatozoa, fast progressive motility	18.8	51.8	9.4	13.8	29.3
Sem en-	Spermatozoa, total motility	18.4	29.8	9.2	8.8	23.9
Sem en-	Spermatozoa, vitality	10.3	25.8	5.2	6.9	15.4
S-	Superoxide dismutase	17.1	10.5	8.6	5	19.1
(B)Er ythr-	Superoxide dismutase	12.3	4.9	6.2	3.3	13.5
P-	Taurine	30.6	44	15.3	13.4	38.6
S-	Testosterone	9.3	19.7	4.7	5.4	13.1
Saliv a-	Testosterone	17.3	28.8	8.7	8.4	22.7
U-	Testosterone	25	---	12.5	---	---
S-	Testosterone, free	9.3	---	4.7	---	---
U-	Testosterone, free	51.7	---	25.9	---	---
S-	Thyroglobulin	14	39	7	10.4	21.9
S-	Thyroglobulin antibody	8.5	82	4.3	20.6	27.6
S-	Thyroid peroxidase antibody	11.3	147	5.7	36.9	46.2
S-	Thyroid stimulating hormone (TSH)	19.3	24.6	9.7	7.8	23.7
S-	Thyrotropin receptor antibody	4.8	---	2.4	---	---
S-	Thyroxine (T4)	4.9	10.9	2.5	3	7
S-	Thyroxine, free (FT4)	5.7	12.1	2.9	3.3	8

S-	Thyroxine/TBG	0.1	0.1	0	0	0.1
S-	Thyroxine binding globulin (TBG)	0.09	0.06	0	0	0.1
P-	Tirosine	10.5	61	5.3	15.5	24.1
S-	Tissue polypeptide antigen (TPA)	31.1	63.7	15.6	17.7	43.4
S-	Tissue polypeptide specific antigen (TPS)	36.1	108	18.1	28.5	58.3
S-	Total carnitine	7.7	13.8	3.9	4	10.3
U-	Total catecholamines, concentration, 24h	24	32	12	10	29.8
S-	Transferrin	3	4.3	1.5	1.3	3.8
P-	Treonine	17.9	33.1	9	9.4	24.2
S-	Triglyceride	20.9	37.2	10.5	10.7	27.9
S-	Triiodothyronine (T3)	8.7	17.2	4.4	4.8	12
S-	Triiodothyronine/TBG	0.1	0.1	0.1	0	0.1
S-	Triiodothyronine, free (FT3)	7.9	17.6	4	4.8	11.3
S-	Triiodothyronine, uptake	0.05	---	0.03	---	---
S-	Troponin I	9.7	57	4.9	14.5	22.5
S-	Troponin T	30.5	90	15.3	23.7	48.9
P-	Tryptophan	22.7	152.6	11.4	38.6	57.3
S-	Tumor Necrosis Factor- α (TNF- α)	43	29	21.5	13	48.4
S-	Urate	9	17.6	4.5	4.9	12.4
U-	Urate, concentration, 24h	24.7	22.1	12.4	8.3	28.7
U-	Urate, output, 24h	18.5	14.4	9.3	5.9	21.1
S-	Urea	12.3	18.3	6.2	5.5	15.7
U-	Urea, concentration, 24h	22.7	25.9	11.4	8.6	27.3
U-	Urea, output, 24h	17.4	25.4	8.7	7.7	22.1
P-	Valine	10.6	40.1	5.3	10.4	19.1
U-	Vanilmandelic Acid concentration, 24h	22.2	47	11.1	13	31.3
S-	Vascular cell adhesion molecule-1 (VCAM-1)	5.2	16	2.6	4.2	8.5
P-	Vascular endothelial growth factor	14.1	18.1	7.1	5.7	17.4
B-	Vascular endothelial growth factor	14.3	28.8	7.2	8	19.8
S-	Vascular endothelial growth factor	10.7	47.6	5.4	12.2	21
P-	Vitamin B1	4.8	12	2.4	3.2	7.2
B-	Vitamin B2 (Riboflavin)	5.8	10	2.9	2.9	7.7
(B)Er yth-	Vitamin B2 (Riboflavin)	6.4	11	3.2	3.2	8.5
(B)Er yth-	Vitamin B2 status (gluthation reductase activation)	5.2	40	2.6	10.1	14.4
(B)Er yth-	Vitamin B12	15	69	7.5	17.7	30
(B)Er yth-	Vitamin B6	14	24	7	6.9	18.5
B-	Vitamin B6	20	34	10	9.9	26.4
(B)Er yth-	Vitamin B6 status (AST activation)	1.4	44	0.7	11	12.2
(B)Er yth-	Vitamin E (Tocopherol)	7.6	21	3.8	5.6	11.9
(B)Er yth-	Vitamin K (Phylloquinone)	38	44	19	14.5	45.9
S-	VLDL Cholesterol	27.6	---	13.8	---	---
P-	Von Willebrand factor	2.5	27.3	1.3	6.9	8.9
P-	Von Willebrand factor antigen	5	18	2.5	4.7	8.8

S-	Water	3.1	0.1	1.6	0.8	3.3
S-	Zeaxanthine	34.7	---	17.4	---	---
S-	Zinc	9.3	9.4	4.7	3.3	11
P-	Zinc	11	14	5.5	4.5	13.5

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