



LAB#: U000000-0000-0
 PATIENT: Sample Patient
 ID: PATIENT-SAMPLE-00001
 SEX: Female
 AGE: 56

CLIENT#: 12345
 DOCTOR:
 Doctor's Data, Inc.
 3755 Illinois Ave.
 St. Charles, IL 60174 U.S.A.

DNA Oxidative Damage; Urine

	Within	Outside	Reference Range	
8-hydroxy-2'-deoxyguanosine* (8-OHdG)			< 12 ng/mg creat	This test assesses ongoing oxidative DNA damage/stress in the body. Results greater than the reference value are indicative of elevated oxidative damage/stress.
Creatinine			35- 225 mg/dL	

Oxidation of DNA occurs readily at the guanosine residues and measurement of 8-hydroxy-2'-deoxyguanosine (8-OHdG) in urine provides a quantitative assessment of oxidative damage to DNA. Urinary 8-OHdG is a sensitive biomarker and elevated levels have been associated with many diseases, including bladder and prostate cancer, cystic fibrosis, atopic dermatitis, rheumatoid arthritis, and a wide range of neurological conditions including Parkinson's disease, Alzheimer's disease and Huntington's disease. Elevated levels of urine 8-OHdG also have been associated with hyperglycemia and have been positively correlated with HbA1c and the severity of nephropathy and retinopathy in diabetics. Moderately elevated levels of oxidized DNA have been associated with inadequate intake of carotinoids, antioxidant-rich foods and supplemental antioxidants.

Environmental factors such as toxic elements and chemicals, ionizing radiation and, life style (smoking, drugs and some pharmaceuticals) are associated with higher than normal production of the hydroxyl radical that is implicated in oxidation of DNA. An important component of endogenous antioxidant protection is intracellular glutathione. Intracellular glutathione status can be assessed by the Doctor's Data Glutathione assay.

Comments:

Date Collected: 06/09/2015 Collection Period: **Random** <dl: less than detection limit
 Date Received: 06/11/2015 Volume: **Method: EIA**
 Date Completed: 06/12/2015

* For research use only. Not for use in diagnostic procedures.

V9.09