

First Co., Ltd.
Japan Food Science Laboratory Co., Ltd. (JFS Labo Co., Ltd.)

According to the recent human clinical trial result, DNA oxidative damage reduction effect in cell by Pure Ash Coral is proved.

First Co., Ltd. (Main office: Shinagawa-ku, Tokyo, President & CEO: Koji YANO) and Japan Food Science Laboratory Co., Ltd. (JFS Labo Co., Ltd) (Main office: Bunkyo-ku, Tokyo, CEO: Yasushi KOJO) conducted a human clinical trial sampling 35 adults for 6 months (2015-2016). The trial aimed at evaluating antioxidative effect and safety of Pure Ash Coral (label name of the material: Hydrogen Coral Powder). Here we present the result of one of the trial items which examined "8-OHdG creatinine ratio".

Antioxidative effect (Hydroxyl Radical elimination effect) of the product has been proved already by electron spin resonance method (tested in test tubes), and this time its Hydroxyl Radical reduction effect in vivo is confirmed by the trial above.

Background Measuring antioxidative effect after intake of Pure Ash Coral (label name of the material: Hydrogen Coral Powder).

Method Subject: 28 adults male and female older than 20 years old

Intake method: 2g daily

Intake period: 6 months

Measuring method: Measuring 8-OHdG creatinine ratio in urine.

Analysis

In the case of 10 subjects, whose 8-OHdG creatinine ratios were not less than 20ng/mg CRE (strong DNA damage) before intake of Pure Ash Coral (Hydrogen Coral Powder), 6 months after the first intake the mean of 8-OHdG creatinine ratios of 10 subjects were reduced by significant difference. The reduction of 8-OHdG creatinine ratios suggests that Pure Ash Coral has oxidative stress elimination effect.

What is 8-OHdG (8-Hydroxy-2'-deoxyguanosine) ?

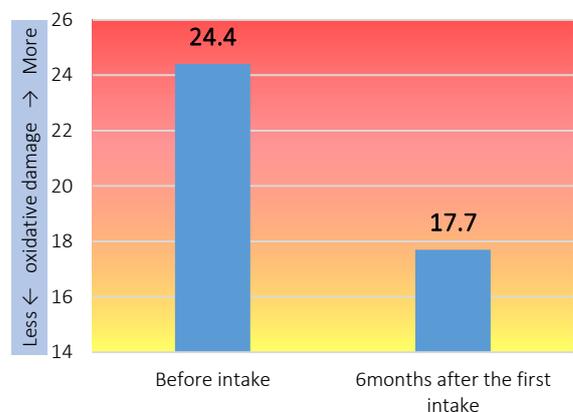
If DNA is damaged by active oxygen (Hydroxyl Radical), oxidation damaged material, called 8-OHdG, is generated. By measuring the amount of this material excreted in urine, they can find the degree of oxidative damage in the body.

The less the amount of 8-OHdG is, the less oxidative damage is, and the more the amount of 8-OHdG is, the more oxidative damage is proceeded in the body. If active oxygen is overproduced in the body, the bodies' antioxidative activity declines, and cells, organs and various molecules in the body fall into the state of oxidized and damaged.

Standard

Strong DNA damage	not less than 20ng/mg CRE
Moderate DNA damage	17~20 ng/mg CRE
Mild DNA damage	14~17 ng/mg CRE
Cautionary zone	11~14 ng/mg CRE
Favorable zone	not more than 11 ng/mg CRE

8-OHdG creatinine ratios (ng/mg CRE)



Test Result (The means of 10 subjects)

Test date	before intake	6 months after the first intake
Result (ng/mg CRE)	24.4	17.7

Medical institution conducting the clinical trial:

Clinic Shinken 4-18-10 Takanawa, Minato-ku, Tokyo, 108-0074

Ethical considerations

- (1) Complying with Helsinki Declaration
- (2) Having explained the content of the trial sufficiently to the trial participants and obtained their agreement in writing for the participation in the trial.

Contact information:

●First Co., Ltd.

5-7-14-1016 Kitashinagawa, Shinagawa-ku, Tokyo, 141-0001 Tel: 03-5475-8967 Fax: 03-5475-8968
Email: info@suiso1st.co.jp URL: <http://hair-ib.com/>

●Japan Food Science Laboratory Co., Ltd. (JFS Labo Co., Ltd.)

The University of Tokyo, Food Science Building
1-1-1 Yayoi, Bunkyo-ku, Tokyo, 113-8657 Email: info@jfs.tokyo