

CLINICAL STUDY RESULTS SHOWING MICRO-CLUSTERED, HEXAGONAL WATER
HYDRATION **IMPROVEMENT IN TYPE 2 DIABETICS**

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In 2003 the Chinese Health Care Science and Technology Society organized an international cooperative research project on "Hydration and Health" to compare distilled water (DW) and micro-clustered water (MW). Recent bioelectrical impedance analysis (BIA) studies also showed that diabetics had a lower ratio of intracellular water (ICW) / extracellular water (ECW).

A total 336 type-2 diabetics (plasma glucose level =7.0 mmol/L) from five hospitals were recruited in a **randomized, double-blind trial**. All the subjects received 250 ml of MW or DW twice daily for 4 weeks. To avoid over-dose absorption, subjects were advised to not take medications within 30 minutes after consumption of the test waters. BIA (RJL, USA) and other clinical markers were performed weekly.

It was observed that MW consumption improved cell water distribution (ICW/ECW), basal metabolism rate (BMR), phase angle (PA) and cell capacitance (CP) during the 4 week testing period. The relative small size of the water cluster may be one of the mechanisms which leads to improved cell structure and function.

In comparison with the rate change from baseline, the P value (MW vs DW) of ICW/ECW, BMR, PA and CP were 0.04, 0.003, 0.005 and 0.003, respectively.

In this study, about 45% of subjects had higher plasma glucose level >8.3 mmol/L).

In comparison with the means of above four BIA measurements at the end of experiment, the P value (MW vs DW) were 0.025, 0.022, 0.007 and 0.009, respectively. Two repeating NMR analysis showed that the half-width of the oxygen (¹⁷) NMR spectrum were 64 and 67HZ, respectively, approximating normal saline, plasma and fresh natural spring water, while NMR values of DW and most purified waters exceeded 100 HZ.