

**The study of the the change in the weight,  
the size of waist, natural fat, Fat ratio and blood sugar  
after the NARL ultrasound treatment.**



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May, 2008**

**In order to find the change of the weight, size of waist, natural fat and fat ratio  
of human body before and after of ultrasound treatment, the following study has  
held according the protocol.**

## Protocol

10 minutes of NARL ultrasound treatment followed by 15 to 20 minutes of aerobic exercise  
Twice a week, 12 weeks. (Total 24 treatments)

Used device: NARL 517 MS, Pad: 21 cell x 2, 12 cells x 2

Size of the pad: 21 cells: 13 cm x 29 cm, 12 cells: 13 cm x 18 cm

## Result

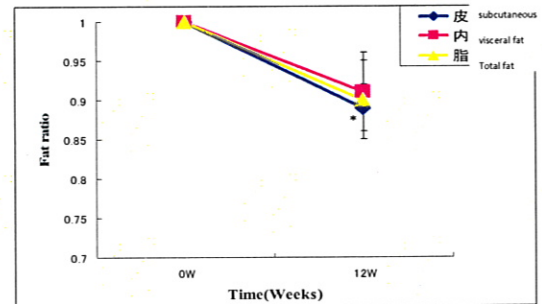
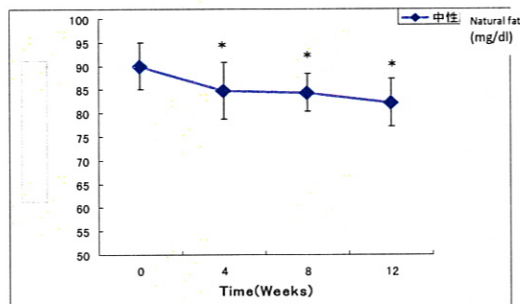
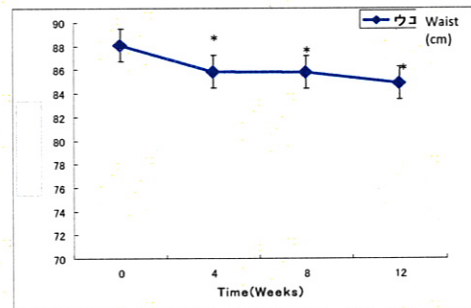
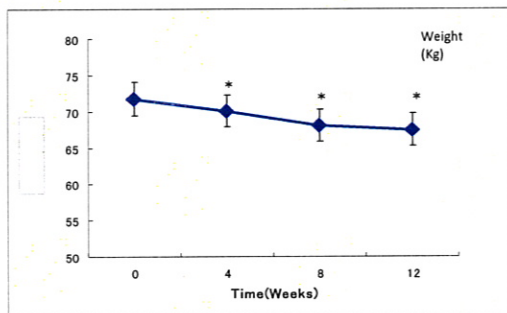
The change of all the data is stated in the table below and the graphed out in the following.

	Before treatment	After 24 treatments	Increase and decrease
Weight	71.7 ± 2.3kg	67.5 ± 2.2kg	▲4kg
Waist	88.1 ± 1.4cm	84.9 ± 1.4cm	▲3.2cm
Natural fat	90 ± 5mg/dL	82.2 ± 5mg/dL	▲7.8mg/dL
Fat Ratio	1	0.93	▲0.07
Blood sugar	88 ± 3mg/dL	79 ± 3mg/dL	▲9mg/dL

Method of estimation of Fat Ratio

Take a computed tomography scan of body before and after of treatment in section of umbilicus.

Total fat(subcutaneous fat + visceral fat) on scan regarded as 1. Compare it with the total fat of after 24 treatment.



## Conclusion

In summary, we confirm that the NARL ultrasound treatment followed the aerobic exercise is able to decrease the weight, sizes, natural fat and fat ratio of human body.