

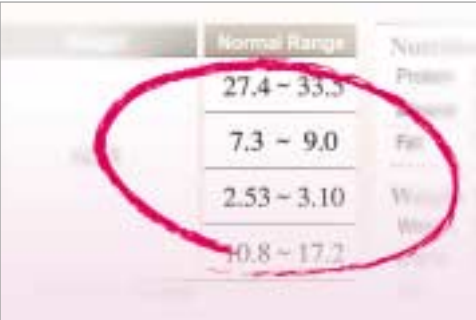
More convenient, more practical



Bar-type hand electrodes to guide proper posture
Proper posture spontaneously follows as grabbing bar-type handles.



Easy result sheet to see and use
The result sheet with essential contents for obesity diagnosis and exercise planner is highly applicable for health care.



Useful normal range for consultation
Individual normal range will make the consultation easier to advise and to follow.



Touch-screen for easier data input and higher legibility
Simply and clearly designed touch screen makes it much easier to use.

Optimal Design of InBody220 with consideration of your convenience

- Fast analysis less than 35 seconds
- Proper Posture led by Bar-type grip
- Easy input of personal profile with Touch Screen
- Result display on LCD screen
- Direct modification of setups on Initial screen with Quick Setup function

The result sheet, a condensation of InBody220's technology

- Possible to advertise your business; registration number, name of business, address and contact number
- Useful Muscle-Fat Analysis to check your client's body change from C shape to D shape on the graphs
- Check Boxes of various items, which simply alert customers to the necessity of health care
- Useful Normal Ranges for your consultation
- Possible to predict weight loss through exercise with Exercise Planner

InBody220



Specifications

Measurement Method	Direct Segmental Multi-frequency Bioelectrical Impedance Analysis Method, DSM-BIA Method	
Measurement Items	Impedance(Z)	10 Impedance Measurements by Using 2 Different Frequencies (20 _{KHz} , 100 _{KHz}) at Each 5 Segments (Right Arm, Left Arm, Trunk, Right Leg, Left Leg)
Electrode Method	Tetrapolar 8 - Point Tactile Electrode System	
Body Composition Calculation Method	No Empirical Estimation	
Outputs	Total Body Water, Protein, Mineral, Body Fat Mass, Skeletal Muscle Mass Fat Free Mass, Weight BMI, Percent Body Fat, Waist-Hip Ratio(WHR) Nutritional Evaluation(Protein, Mineral, Fat) Target Weight, Weight Control, Fat Control, Muscle Control, Fitness Score, Basal Metabolic Rate(BMR) Exercise Planner (Energy Expenditure for each Exercise) Recommended Calorie Intake per day Impedance of Each Segments & Frequencies	
Applied Rating Current	330 μ A	
Adapter	Power Input	AC100-240V, 50/60Hz, 1.2A
	Power Output	DC 12V, 3.5A
Display Type	320 \times 240 STN LCD	
Input Interface	Touch screen	
External Interface	RS-232C 2EA, USB Slave 1EA, USB Host 1EA, IEEE1284(25pin parallel)	
Compatible Printer	Laser / Inkjet Printer (with PCL 3 or above, the printers recommended by Biospace)	
Dimensions	19.9(W) \times 30.7(L) \times 40.8(H) : inch 505(W) \times 780(L) \times 1035(H) : mm	
Machine Weight	57.3 lbs.(26kg)	
Measurement Duration	35 seconds	
Operation Environment	10 ~ 40 $^{\circ}$ C(50 ~ 104 $^{\circ}$ F), 30 ~ 80% RH, 500 ~ 1060hPa	
Storage Environment	0 ~ 40 $^{\circ}$ C(32 ~ 104 $^{\circ}$ F), 30 ~ 80% RH, 500 ~ 1060hPa	
Weight Range	22 ~ 55 lbs.(10 ~ 250kg)	
Age Range	3 ~ 99years	
Height Range	2ft. 11.5in. ~ 7ft. 2.6in.(90 ~ 220cm)	

Ⓒ The aforementioned information is subject to change without prior notice.



Certifications and patents obtained by Biospace



BIOSPACE

Biospace Co., Ltd.
TEL : + 82-2-501-3939
FAX : + 82-2-501-3978
Homepage : <http://www.biospace.co.kr>
E-mail : biospace@biospace.co.kr

Biospace, Inc.
TEL : +1-310-358-0360
FAX : +1-310-358-0370
Homepage : <http://www.biospaceamerica.com>
E-mail : USA@biospaceamerica.com

Biospace Japan, Inc.
TEL : + 81-3-5298-7667
FAX : + 81-3-5298-7668
Homepage : <http://www.biospace.co.jp>
E-mail : biospace@biospace.co.jp

DanilSMC Co., Ltd. [Asia]
TEL : + 82-2-3462-5400
FAX : + 82-2-3462-5105
E-mail : danilsmc@danilsmc.com

EC Representative
DongBang Acuprime Ltd. [EU]
PO Box 192, Exeter EX2 4WU, United Kingdom
TEL : +44 1392-671543
FAX : +44 1392-671541
E-mail : info@acuprime.com



InBody 220 is a good partner for your professional needs.

It provides important information for health and obesity diagnosis.

InBody, a good way to guide obesity treatment for your business.

- ❖ Provides accurate diagnosis of body composition.
- ❖ Enables to find a scientific solution for obesity problems by measuring SMM(Skeletal Muscle Mass), BFM(Body Fat Mass) and WHR(Waist-Hip Ratio).
- ❖ Helps to motivate people to follow up obesity treatment as comparing the pre & post InBody result.

Enjoy benefits of InBody220



Experience the technology on the result sheet

Core technology

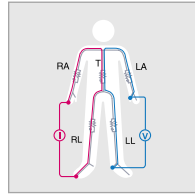
Accuracy : Direct Segmental Measurement

InBody220 directly measures bioimpedance of each body part as allowing the current and voltage into the body through 8 electrodes.

Approved accuracy with the correlation coefficient value - near 0.98 - comparing with DEXA.

Accurate impedance measurement at trunk segment, which is the key of bioimpedance measurement.

No empirical factors such as gender and age are used.

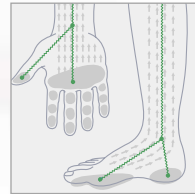


Reproducibility : Tetrapolar 8-Point Tactile Electrode System

Measurements are always taken on the same spots of wrists and ankles as the current and voltage are separately flowed into the body.

The fixed measuring point of the body guarantees high reproducibility.

It also prevents the errors caused by touching electrodes with different spots of hands or feet.



Sensibility : No Empirical Estimations

With the Direct Segmental Measurement and Tetrapolar 8-Point Tactile Electrode System,

No estimation is needed because of the accurate segmental measurement at trunk. Gender or age does not affect to the result as measurement is not estimated.

Since no empirical estimation is used, even the tiny changes of body composition can be detected.

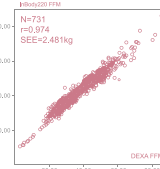
Result Sheet of InBody220

1. Body Composition Analysis tells the state of body composition.

Body composition analysis is one of the most fundamental information of InBody test. Comparing with normal range, you can estimate the current condition of the body.

InBody is the only body composition analyzer which offers the high correlation coefficient near 0.98 comparing with DEXA.

*Male : 343, Female : 388

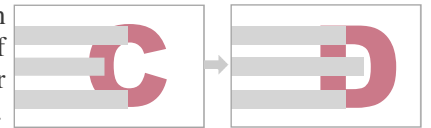


	N	Minimum	Maximum	Mean	Std. Deviation
Age	731	5.00	88.00	40.09	17.54
Height	731	106.50	193.00	162.42	10.43
Weight	731	17.30	118.30	60.60	13.59

2. Muscle-Fat Analysis shows you the actual changes of body.

Bars of Weight, SMM(Skeletal Muscle Mass) and BFM(Body Fat Mass) may appear in the shape of C or D. You can simply figure out the body condition based on this shape of bars.

Show them their graphs are on the way to D.



3. Obesity Diagnosis can even reveal the hidden obesity.

If BMI is normal but % body fat is high, we call it as 'hidden obesity'. Show the effects after workout or treatment to your clients who used to have high % body fat.

4. Exercise Planner provides the energy expenditure of each activity to individuals.

With more than 20 activities, the result sheet provides the unit energy expenditure of each activity based on individual's weight. Based on this, a weekly plan of exercise can be made. In addition, the amounts of consumable calories and weight loss are calculated.

5. Overall Evaluation clearly categorizes the results into health check points.

The health status can be seen at a glance by color; Blue and Red.

6. Weight Control suggests scientific weight control.

Based on individual body composition, InBody220 suggests not to adjust only weight but to control fat and muscle amounts. Your clients will experience reasonable weight control without yo-yo effect.

7. Impedance proves the accuracy of InBody test as showing the segmental values at various frequencies.

InBody220 uses core technologies which guarantee accuracy of impedance index. Biospace proudly shows impedance values of arms, trunk and legs at each frequency.



InBody220
BODY COMPOSITION ANALYZER



InBody 220 Body Composition Analysis

I.D. **GN0074** AGE **26** HEIGHT **160cm** GENDER **F** DATE / TIME **2005.01.09/10:23:40(0009)**

B. Hospital
Doctor Lee

1 Body Composition Analysis

	Values	Fat Free Mass	Weight	Normal Range ⁵
T B W (ℓ) <small>Total Body Water</small>	28.0	38.3	60.3	27.4 ~ 33.5
Protein (kg)	7.4			7.3 ~ 9.0
Mineral (kg)	2.84			2.53 ~ 3.10
Body Fat Mass (kg)	22.0			10.8 ~ 17.2

▶ Mineral is estimated.

Nutritional Evaluation

Protein Normal Deficient
Mineral Normal Deficient
Fat Normal Deficient Excessive

Weight Management

Weight Normal Under Over
SMM Normal Strong Under
Fat Normal Under Over

Obesity Diagnosis

BMI Normal Under Over
 Extremely Over
PBF Normal Over Extremely Over
WHR Normal Over Extremely Over

2 Muscle - Fat Analysis

	Under	Normal	Over	UNIT: %	Normal Range
Weight (kg)	55 70 85 100 115 130 145 160 175 190 205	60.3			45.7 ~ 61.8
SMM (kg) <small>Skeletal Muscle Mass</small>	70 80 90 100 110 120 130 140 150 160 170	20.5			20.3 ~ 24.9
Body Fat Mass (kg)	40 60 80 100 160 220 280 340 400 460 520	22.0			10.8 ~ 17.2

3 Obesity Diagnosis

	Under	Normal	Over	Normal Range
BMI (kg/m ²) <small>Body Mass Index</small>	10 15 18.5 21.5 25 30 35 40 45 50 55	23.6		18.5 ~ 25.0
PBF (%) <small>Percent Body Fat</small>	8 13 18 23 28 33 38 43 48 53 58	36.6		18.0 ~ 28.0
WHR <small>Waist-Hip Ratio</small>	0.65 0.70 0.75 0.80 0.85 0.90 0.95 1.00 1.05 1.10 1.15	0.81		0.75 ~ 0.85

6 Weight Control

Target Weight	53.8 kg
Weight Control	- 6.5 kg
Fat Control	- 9.7 kg
Muscle Control	+ 3.1 kg
Fitness Score	67 Points
BMR	1196 kcal

7 Impedence

Z	RA	LA	TR	RL	LL
20 kHz	458.0	474.9	27.5	284.2	290.6
100 kHz	422.5	441.2	24.5	257.2	263.3

4 Exercise Planner

Plan your weekly exercises from the followings and estimate your weight loss from those activities.

Energy expenditure of each activity (base weight: 60.3 kg / Duration: 30 min. / unit: kcal)

Walking	Jogging	Bicycle	Swim	Mountain Climbing	Aerobic
121	211	181	211	197	211
Table tennis	Tennis	Football	Oriental Fencing	Gate ball	Badminton
136	181	211	302	115	136
Racket ball	Tae kwon-do	Squash	Basketball	Rope jumping	Golf
302	302	302	181	211	106
Push-ups <small>development of upper body</small>	Sit-ups <small>abdominal muscle training</small>	Weight training <small>backache prevention</small>	Dumbbell exercise <small>muscle strength</small>	Elastic band <small>muscle strength</small>	squats <small>maintenance of lower body muscle</small>

How to do

1. Choose practicable and preferable activities from the left.
2. Energy expenditure for each is calculated when it is done for 30 min.
3. Fill in those lined space below with your choices for 7 days.
4. Calculate the total energy expenditure for a week.
5. Estimate expected total weight loss for a month using the formula shown below.

Fill-out form

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Racketball 500 <small>(30 min)</small>	Jogging 350 <small>(30 min)</small>	Racketball 500 <small>(30 min)</small>	Jogging 350 <small>(30 min)</small>		Racketball 500 <small>(30 min)</small>	walking 300 <small>(30 min)</small>
weight training		weight training			weight training	

Calculation for expected total weight loss for a month (one month = 4 weeks)

Total energy expenditure (kcal/week) × 4 weeks ÷ 7700

(2500 × 4) ÷ 7700 = 1.3kg or (2500 × 4) ÷ 7700 × 2.2 = 2.86 lb.

Total energy expenditure for a week	Expected total weight loss for a month	Recommended calorie intake per day
2500 kcal	1.3kg	1600 kcal