Wedderburn®

TANITA
Monitoring Your Health

What are you really made of?

Understanding your
Body Composition Analysis

A guide to understanding your Body Composition Analysis Report. The information below will allow you to compare your results to normal / average results and WHO guidelines.

WHOLE BODY ANALYSIS

Fat % / Fat Mass	Fat Mass is the predicted amount of fat in the subject's body. Fat % is the proportion of Fat Mass to the total body weight.
	Body Fat is essential for maintaining healthy skin, hair, body temperature and protecting internal organs. Yet too much fat can damage your health.
	Check your body fat results against the healthy body fat ranges shown at the bottom of your printout.
Fat Free Mass (FFM)	Fat Free Mass is comprised of non-fat components of the human body. Muscle, bone and water are all examples of fat-free mass.
Muscle Mass	The predicted weight of muscle in your body. As you exercise more, our muscle mass increases, which in turn burns more calories.
	Check your muscle mass rating against the normal or average value on your print out • Figures below the normal range = under average muscle • Figures similar to normal range = Average muscle • Figures higher than normal range = Higher than average muscle
Total Body Water % (TBW %)	Total Body Water Percentage (TBW%) is the total amount of fluid in the body expressed as a % of total weight.
	Being well hydrated will help concentration levels, sports performance and general well-being. Generally drinking 2 litres of fluid a day will ensure good hydration levels.
	The average TBW% ranges for a healthy person are: • Female 45% to 60% • Male 50% to 65% • Children 60% - 75%
	Individuals with a high body fat % may fall below the recommended body water percentage. As body fat is reduced over time the TBW% should gradually improve.
Body Mass Index (BMI)	Body Mass Index is a standardised ratio of weight to height and is used as a general indicator of health. Your BMI can be calculated by dividing your weight (in kilograms) by the square of your height (in metres). • <18.5 = Under weight • 18.5 - 24.9 = Normal weight • 25 - 29.9 = Overweight • 30> = Obese
	Note: BMI is influenced by build and muscle mass. For example misleading results may be given for: • people with high muscle mass (e.g. sportsmen and women) • people who suffer from muscular dystrophy or water balance dysfunction • changes in body composition over time
	BMI is a good general indicator for population studies but has serious limitations when used for individual analysis.
Bone Mass	The predicted weight of bone mineral in your body.
	It has been proven that increased muscle mass through sport activities promotes stronger healthier bones.
	Check for significant changes over time.
Physique Rating	Physique rating assesses muscle and body fat rating into 9 body types.
	As your activity level changes over time, the balance of body fat and muscle will alter which will change the user's overall physique.
Intracellular Water (ICW)	Intracellular Water or Cytosol, is the liquid found inside cells.
	Usually 40% of your body weight is intracellular water.

Extracellular Water (ECW)	Extracellular Water is the body fluid found outside of the cells.
	Approximately 15% of the body weight is extracellular water (this can be split into 10% intracellular liquid between the cells and 5% intravascular liquid in the blood).
Extracellular Water / Total Body Water (ECW/TBW %)	The percentage of extracellular water in relation to the total body water.
	Ideally the value should be approximately 40%.
Visceral Fat Rating	Visceral fat is the fat in the abdominal area surrounding and protecting the vital organs.
	Ensuring you have a healthy level of visceral fat reduces the risk of certain conditions such as heart disease, high blood pressure and type 2 diabetes. ▪ Rating from 1 to 12 indicates you have a healthy level of visceral fat. Monitor regularly to ensure your rating stays within this range. ▪ Rating from 13 to 59 indicates you have an excess level of visceral fat. Consider making changes in your lifestyle possibly through diet changes and/or increasing exercise.
Basal Metabolic Rate (BMR)	Basal Metabolic Rate is the daily minimum level of energy or calories needed at rest for your body to function effectively.
	Increasing muscle mass will directly speed up the metabolic rate. A person with a high BMR can burn more calories at rest than a person with a low BMR.
	Check how efficient your body is at burning calories in the indicator section of your print out ▪ Minus figures = low burn. Your body is slow at burning calories ▪ Zero figures = average burn. Your body is standard at burning calories ▪ Plus figures = high burn. Your body is fast at burning calories

SEGMENTAL ANALYSIS

Muscle Mass Rating	The shaded blue area indicates the average person. The black line represents your muscle mass distribution. The muscle mass rating for the trunk, each leg and arm is shown. ▪ Minus figures = low muscle tone ▪ Zero = average muscle tone ▪ Plus figures - high muscle tone Ideally you should aim for Zero or Plus figures to be healthy.
Fat Rating	The shaded green area indicates the average person. The black line represents your fat mass distribution. The fat mass rating for the trunk, each leg and arm is show. ▪ Minus figures = low fat ▪ Zero = average fat ▪ Plus figures - high fat Ideally you should aim for Zero or a little under to remain healthy.
Muscle Mass Balance	Shows the balance between the left and right side of the body.
Reactance & Resistance	The Reactance Resistance Table at the bottom of the page indicates measurements for the impedance flow at each of the 4 multi-frequency levels. ▪ H-L = Hand to Leg ▪ RL = Right Leg ▪ LL = Left Leg ▪ RH = Right Hand ▪ LH = Left Hand ▪ L-L = Leg to Leg Bioelectrical impedance analysis predicts the subject's body composition by passing a tiny electrical signal through the body at different frequencies to determine its impedance. The impedance of body tissue comprises of two key components, its resistance and its reactance. The conductive characteristics of body fluids provide the resistance element, whereas the cell membranes that act as a capacitor contribute to the reactance element. The impedance is lower in Fat Free Mass tissue such as hydrated muscle and much higher in the non-conductive fatty tissue.

How Does Tanita BIA Work?

Tanita Bioelectrical Impedance Analysis (BIA) operates by passing small electrical signals through the body between hand held and footplate electrodes. The conducting ability of a body's tissues is then used to calculate the amount of fat mass, lean mass, bone mass and basal metabolic rate.

Benefits of this method include;
- accurate and detailed body composition analysis given in under 20 seconds
- high repeatability
- results can be trended on a PC with the optional Heath Monitoring Software (TIGMONSW)
- easy to use, durable and cost effective
- client comfort

TANITA – A Global Leader

Tanita is the world leader in precision weighing and body composition equipment. Established over 60 years ago, the Company has steadily grown through continuous product innovation and a strong commitment to high manufacturing quality standards.

The Company has developed a wide portfolio of medical and fitness products that are successfully used in professional practice, research and consultations worldwide.

Ensuring all body composition measurements are the most accurate has been supported by 20 years of investment into independent validation and medical research. Tanita Bioelectrical Impedance Analysis is regularly tested against DEXA (Dual Energy X-Ray Absorptimetry). Tanita have an extensive library of independent validation and research studies proving that our products are among the most accurate available.

TIMC780MA Segmental Body Composition Analyser at a Glance

The TIMC780MA features detailed information and segmental analysis of body fat and fluid. This scale has the quality mark of being WAND registered in New Zealand, ideal for professionals in fitness, medical and healthcare industries.

- multi frequency technology provides heightened accuracy with proven reliability and repeatability
- non-invasive 8 electrode Bioelectrical Impedance Analysis
- total body analysis including body fat, muscle mass, total body water, extra cellular and intra cellular water, bone mass, visceral fat rating, metabolic age and more
- detailed information and analysis of intra cellular and extra cellular water essential for fluid status assessment
- segmental analysis for each leg, arm and trunk, fat distribution and reactance/resistance assessment allowing in-depth trend consultation
- clinical accuracy with quick 20 second analysis
- 2 user modes, standard and athlete, 5 - 99 years of age, 90 - 250 cm height
- USB & RS232C data output for in-depth assessment
- SD Card slot for data recording
- USB mini-B printer port for PictBridge printer
- New Zealand Register of Medical Devices (WAND) #101129-WAND-6A43MB
- optional health management software to chart clients progress

Capacity:
270 kg x 100 g

For more information, contact your local Wedderburn team today

www.wedderburn.co.nz
① 0800 800–379

Wedderburn ®
Since 1896.