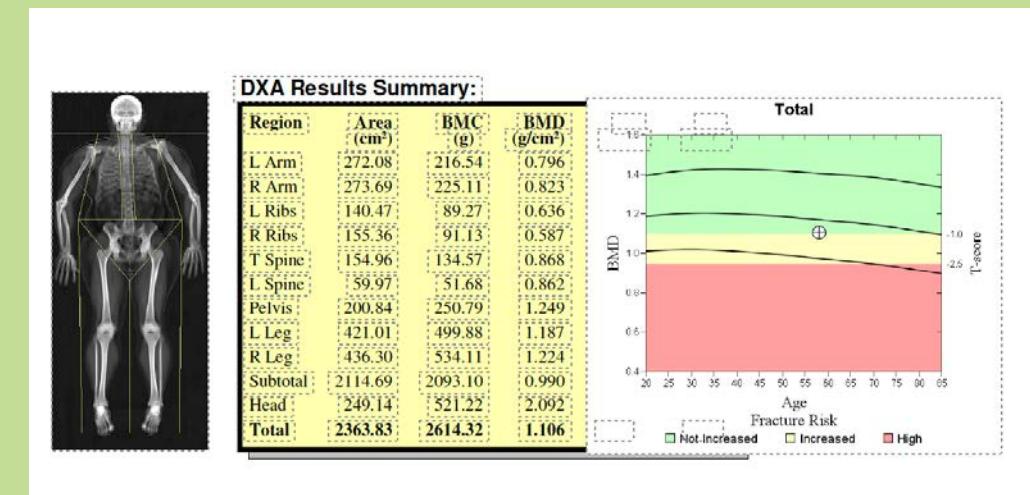
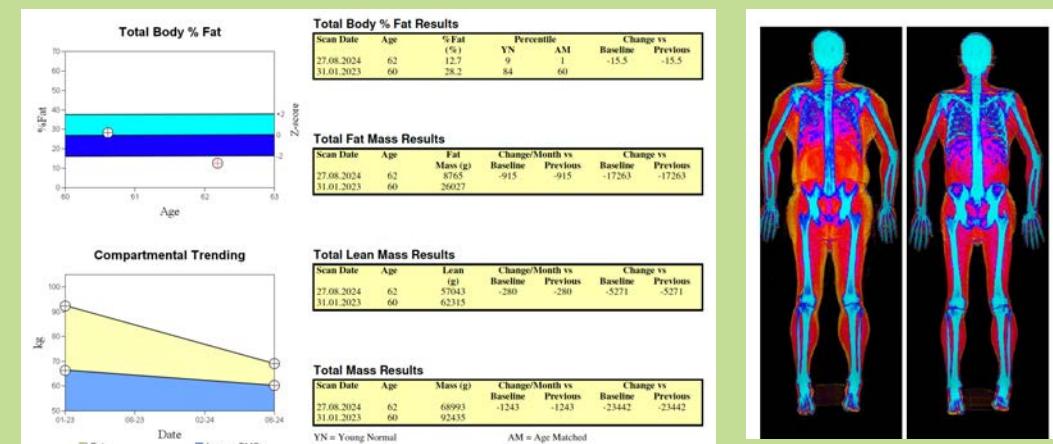
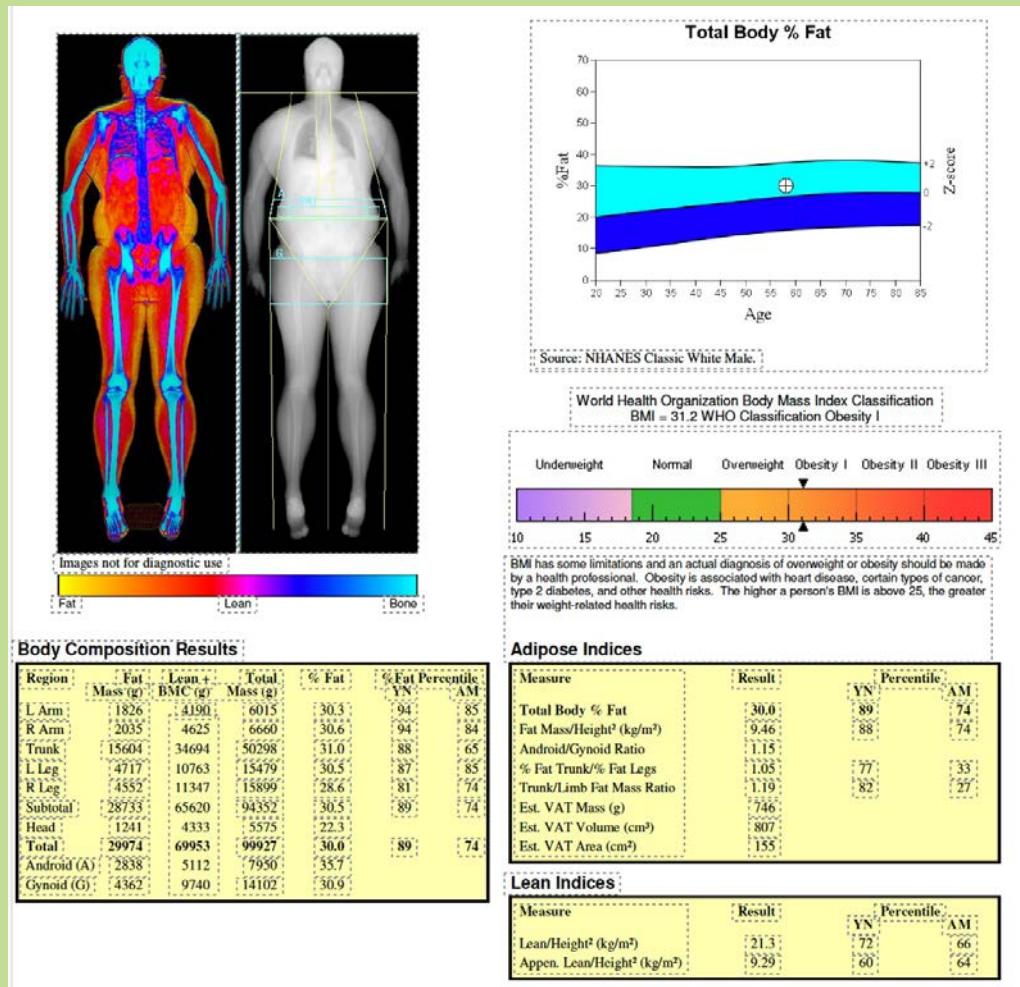


# DEXA Body Composition Report



## **DEXA Body Composition Report**

1. Color image of fat, lean and bone
2. Global and sub-region reports
3. Detailed Adipose Indices
  - Fat Mass/Height<sup>2</sup>
  - % Fat Trunk/% Fat Legs
  - Trunk/Limb Fat Ratio
  - Android/Gynoid Ratio
  - Visceral Adipose Tissue

## **DEXA Body Composition Report**

### **4. Detailed Lean Indices**

- Lean Mass/Height<sup>2</sup>
- Appendicular Mass/Height<sup>2</sup>

### **5. Whole body bone density**

### **6. Rate of Change Report**

- Compartmental trending
- Previous scan images visualize body composition changes

### **7. Nhanes Reference Data**

**DEXA** stands for Dual-Energy X-ray Absorptiometry and is considered the **gold standard** for measuring body fat, lean mass, and bone density.

This test us accurately determines your overall body **fat mass** and **fat –free mass**, including specific **body segments** such as your arms, trunk, waist, hips and legs.

These scans provide valuable insights for athletes, the general population, and those at risk of osteoporosis. With a wide range of **data** and **detailed sections** in the report, understanding your results is key to taking meaningful steps toward achieving your health and fitness objectives.

## What is Body composition?

**Body composition** refers primarily to the distribution of fat and lean mass in the body, and its measurement plays an important role in both **sports** and **health**.

**Scales** measure total body mass, but they do not indicate whether the weight consists of fat mass, bone mineral content or lean tissue mass.

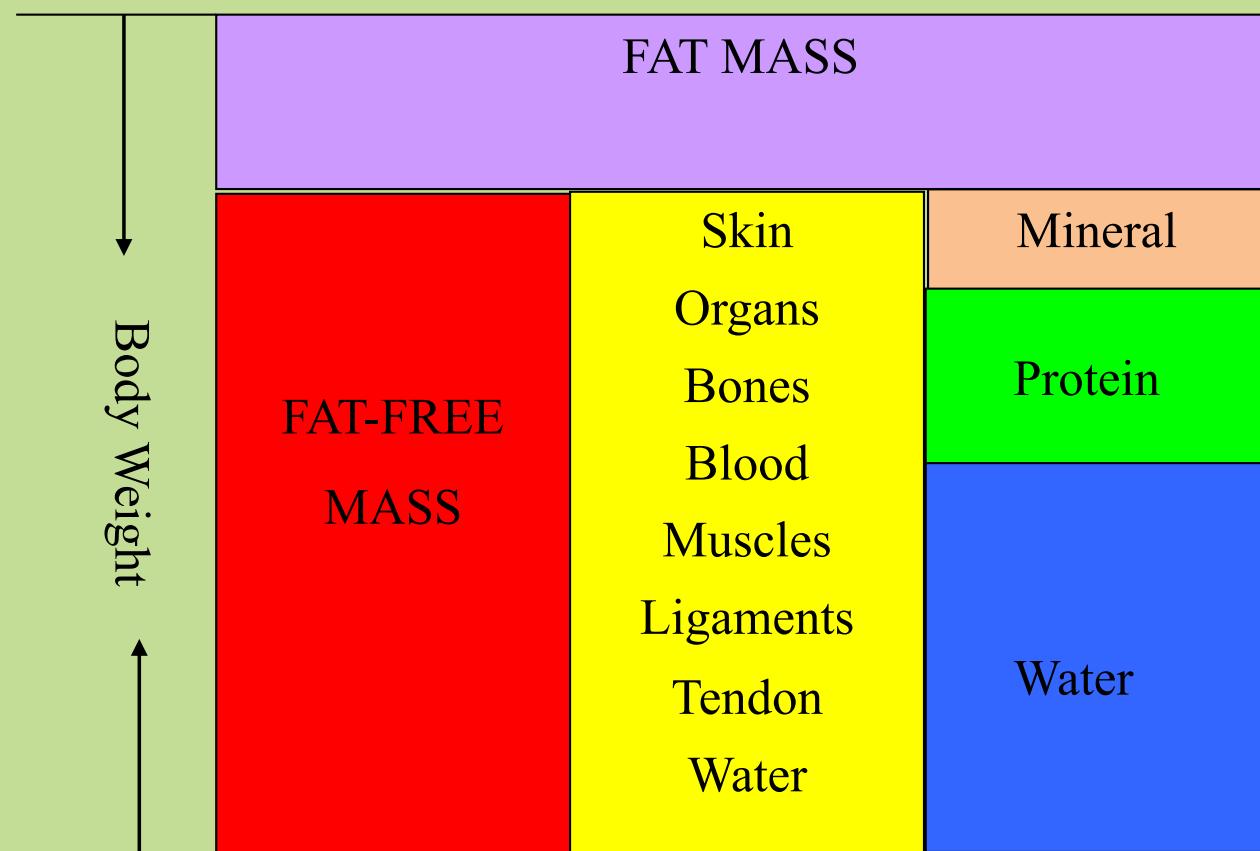
## What is Body composition?

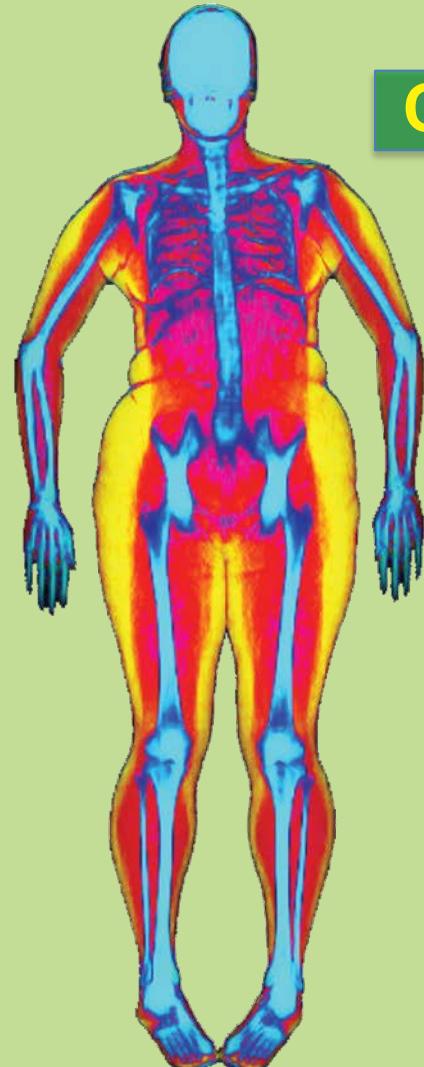
Your body weight

= fat mass

+

fat free mass





## Colour Image Map

The colour image map displays fat, lean (muscle) and bone using the graduated scale of colours to represent each area.

**Yellow** regions representing regions with higher %Fat

**Orange** and **Red** regions indicating progressively lower %Fat

**Bone** containing regions are indicated in **blue**

Fat      Lean      Bone

✓ Learn **the exact percentage of fat**, lean, and bone mass in **your arms, legs, and trunk**. Includes all areas defined by cut lines & % fat per segment

## Body Composition Results

Region	Fat Mass (g)	Lean + BMC (g)	Total Mass (g)	% Fat	% Fat Percentile YN	% Fat Percentile AM
L Arm	1604	2773	4376	36.6	37	25
R Arm	1597	3057	4653	34.3	29	19
Trunk	9557	29723	39279	24.3	17	9
L Leg	5722	9406	15129	37.8	29	23
R Leg	6226	9862	16088	38.7	32	25
Subtotal	24705	54821	79527	31.1	21	13
Head	1075	3691	4765	22.5		
<b>Total</b>	<b>25780</b>	<b>58512</b>	<b>84292</b>	<b>30.6</b>	<b>22</b>	<b>13</b>
Android (A)	1237	3907	5145	24.0		
Gynoid (G)	5541	9226	14767	37.5		

This is the total body fat percentage, 30.6%

YN = 22% Fat Percentile  
AM = 13% Fat Percentile

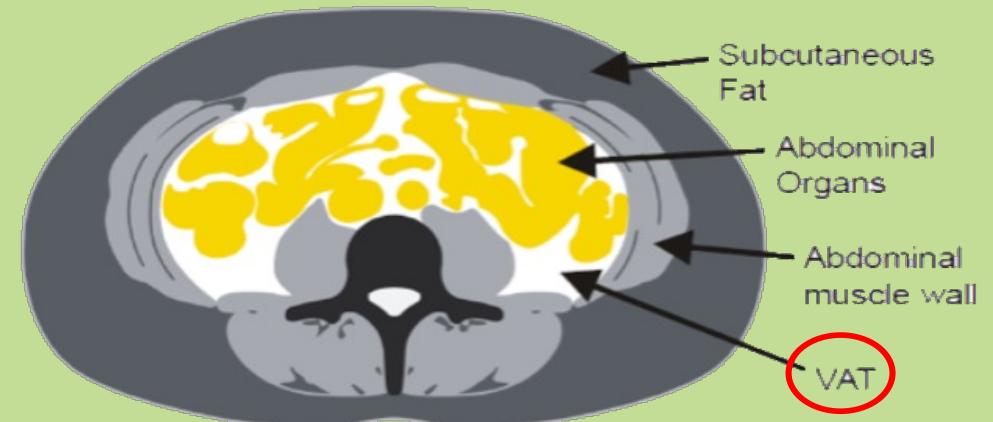
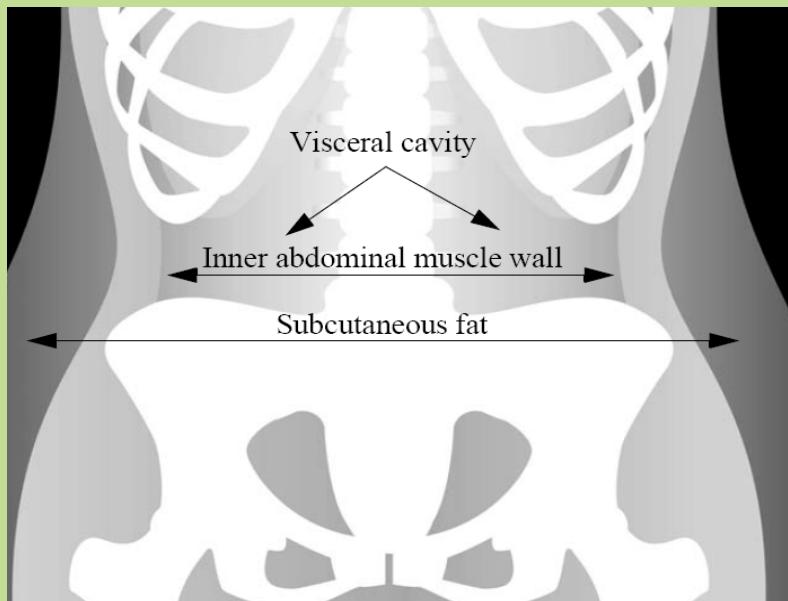
Android % Fat can show how close you are for a six-pack abdomen

This is the total body fat mass in grams or 25.8kg

Identify muscle imbalance & symmetry

This represents your fat free mass or everything in your body except fat (58.5kg). It includes lean mass and bone mineral content. This number is used to determine resting metabolic expenditure, a very useful indicator of the number of calories required to sustain life at rest.

## Visceral Adipose Tissue (VAT) Assessment



**Visceral Adipose Tissue (VAT)** is the fat that is deep inside the abdominal wall *only (not extremities)* and usually surrounds the organs.

It is placed about L4-L5 across the abdominal cavity and between the pelvis and the rib cage.

It is calibrated and correlated with VAT CT slices.

## Visceral Adipose Tissue (VAT) Assessment

### Adipose Indices

Measure	Result	Percentile	
		YN	AM
Total Body % Fat	30.6	22	13
Fat Mass/Height <sup>2</sup> (kg/m <sup>2</sup> )	8.47	45	33
Android/Gynoid Ratio	0.64		
% Fat Trunk/% Fat Legs	0.64	17	10
Trunk/Limb Fat Mass Ratio	0.63	19	10
Est. VAT Mass (g)	141		
Est. VAT Volume (cm <sup>3</sup> )	153		
Est. VAT Area (cm <sup>2</sup> )	29.3		

Visceral Fat score (cm<sup>2</sup>) and relative risk of heart disease and diabetes

The report shows the VAT information in 3 categories:

- Mass (grams)
- Volume (cm<sup>3</sup>)
- Area (cm<sup>2</sup>)

Area is the most important because this is the number that is correlated with disease risk

EXAMPLE:

Est VAT Area (cm<sup>2</sup>) = 29.3

Classification = Normal Range



**Fat Mass Index** is defined as the total fat mass adjusted for height squared.  
It is calculated by dividing fat mass in kilograms by the square of height in meters.  
$$FMI = \text{Fat mass} / \text{Height}^2 \text{ (kg/m}^2\text{)}$$

FMI has a distinct advantage over BMI for defining obesity status since it is independent of lean mass status.

## Adipose Indices

Measure	Result	Percentile	
		YN	AM
<b>Total Body % Fat</b>	<b>30.6</b>	<b>22</b>	<b>13</b>
Fat Mass/Height <sup>2</sup> (kg/m <sup>2</sup> )	8.47	45	33
Android/Gynoid Ratio	0.64		
% Fat Trunk/% Fat Legs	0.64	17	10
Trunk/Limb Fat Mass Ratio	0.63	19	10
Est. VAT Mass (g)	141		
Est. VAT Volume (cm <sup>3</sup> )	153		
Est. VAT Area (cm <sup>2</sup> )	29.3		

## **Body Mass index (BMI) vs. Fat Mass Index (FMI)**

Currently, BMI is the standard measure for clinical obesity

Problems with BMI (**Weight/Height<sup>2</sup>**):

- i) Measure of excess weight, not excess fat
- ii) Not gender specific

Advantages of FMI (**Fat Mass/height<sup>2</sup>**):

- i) Measure of excess fat not confounded by lean mass
- ii) Gender specific reference values
  - 5 – 9 kg/m<sup>2</sup> in women
  - 3 - 6 kg/m<sup>2</sup> in men

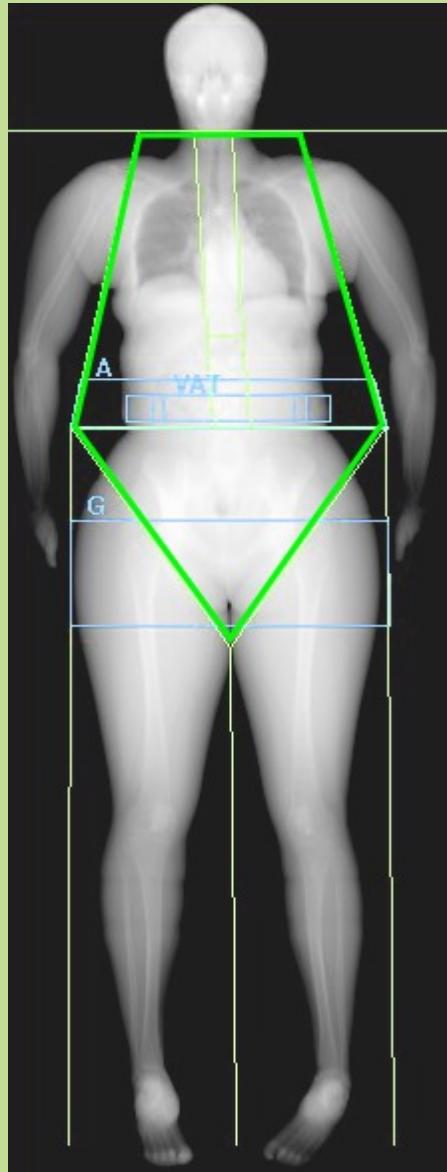
## Body Mass index (BMI) vs. Fat Mass Index (FMI)

Fat Mass Index ( $\text{kg}/\text{m}^2$ ) classification ranges<sup>1</sup>.

FMI Class	Severe Fat Deficit	Moderate Fat Deficit	Mild Fat Deficit	Normal	Excess Fat	Obese Class I	Obese Class II	Obese Class III
Male	< 2	2 to < 2.3	2.3 to < 3	3 – 6	> 6 to 9	> 9 to 12	> 12 to 15	> 15
Female	< 3.5	3.5 to < 4	4 to < 5	5 – 9	> 9 to 13	> 13 to 17	> 17 to 21	> 21

Classification ranges for FMI that match the prevalence of the WHO BMI classifications. Unlike BMI, FMI is a gender specific measure of fat not confounded by lean tissue.

<sup>1</sup>Kelly TL, Wilson KE, Heymsfield SB (2009) Dual energy X-Ray absorptiometry body composition reference values from NHANES. PLoS One 4: e7038.



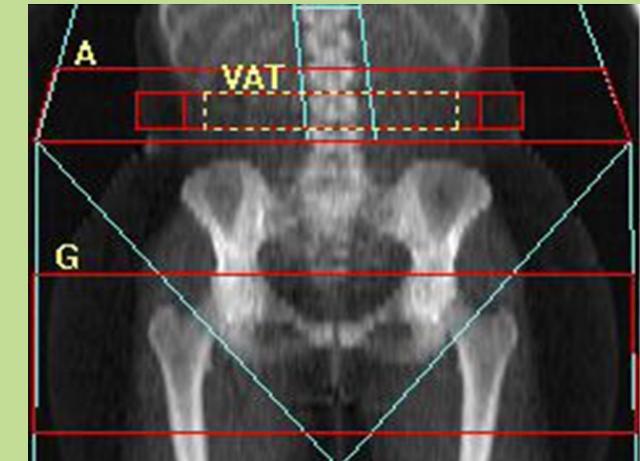
## Crystal Image Map

The crystal map displays shows the Android/Gynoid areas, Visceral Fat (VAT) slice and cut lines to distinguish the trunk from the extremities.

The trunk is outlined in green on this image and is referenced in parts of the Adipose and Lean Indices in the report

The Android (waist) and Gynoid (hips) areas are listed as “A” and “G”

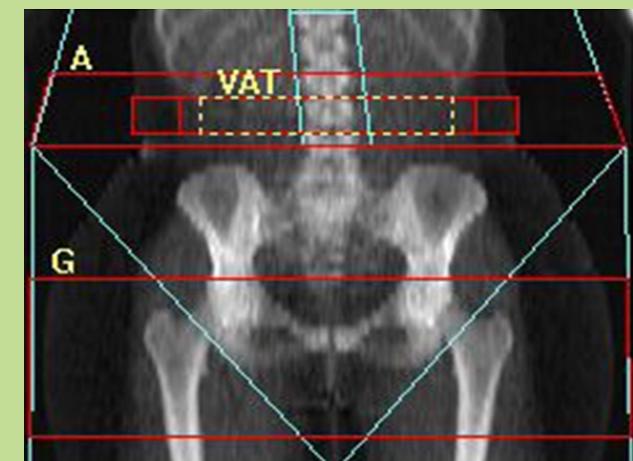
This determines if the patient is an “apple” or a “pear” which is important for assessing where the fat is primarily stored. Apple people have more cardiovascular issues, high blood pressure, diabetes, metabolic syndrome than pear people.



## Android/Gynoid Ratio

### Adipose Indices

Measure	Result	YN	Percentile	AM
Total Body % Fat	30.6	22		13
Fat Mass/Height <sup>2</sup> (kg/m <sup>2</sup> )	8.47	45		33
Android/Gynoid Ratio	0.64			
% Fat Trunk/% Fat Legs	0.64	17		10
Trunk/Limb Fat Mass Ratio	0.63	19		10
Est. VAT Mass (g)	141			
Est. VAT Volume (cm <sup>3</sup> )	153			
Est. VAT Area (cm <sup>2</sup> )	29.3			

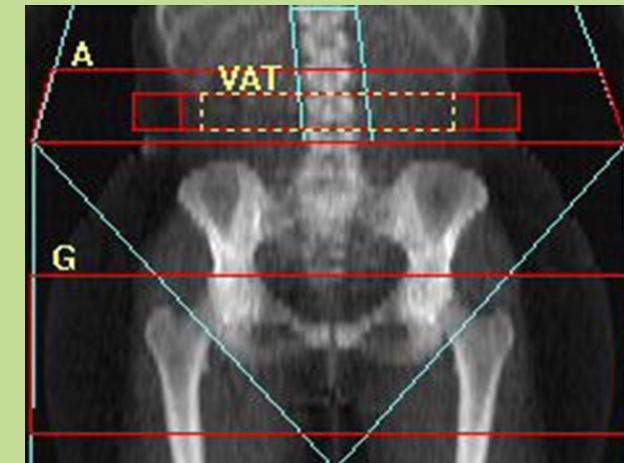


The Android/Gynoid (A/G) ratio refers to the distribution of fat in the body, comparing the android region (abdominal area) to the gynoid region (hip and thigh area). This ratio is analogous to the more commonly used anthropometric measurement of the waist-to-hip ratio.

## Android/Gynoid Ratio

### Adipose Indices

Measure	Result	YN	Percentile	AM
Total Body % Fat	30.6	22		13
Fat Mass/Height <sup>2</sup> (kg/m <sup>2</sup> )	8.47	45		33
Android/Gynoid Ratio	0.64			
% Fat Trunk/% Fat Legs	0.64	17		10
Trunk/Limb Fat Mass Ratio	0.63	19		10
Est. VAT Mass (g)	141			
Est. VAT Volume (cm <sup>3</sup> )	153			
Est. VAT Area (cm <sup>2</sup> )	29.3			



- The A/G ratio is calculated as the percentage of fat in the android region divided by the percentage of fat in the gynoid region. The A/G ratio may predict cardiovascular disease (CVD) and other health problems (e.g., metabolic syndrome).
- Higher Ratio (>1):** Indicates a greater concentration of fat in the abdominal region compared to the hips and thighs.
- Lower Ratio (<1):** Suggests a healthier fat distribution, with more fat in the gynoid region than in the android region.

The overall consensus is that "the lower the better," but this must also be considered in the context of the patient's overall fat mass, genetic profile, and health status.

## Interpretation of Results

Example 1:

Total % Fat = 30.6

Percent body fat reflects the proportion of body weight that is **fat mass**

YN = 22% Fat Percentile

This means that this individual has a higher body fat % than 22% of people in the 20-29-year-old age group of the same gender, or that 22% of individuals in the 20-29-year-old age group of the same gender have a lower body fat % than this individual.

AM = 13% Fat Percentile

This means that this individual has a higher body fat % than 13% of people in the same age and gender group, or that 13% of individuals in the same age and gender group in the database have a lower body fat % than this individual.

## Interpretation of Results

Example 2:

**Fat Mass Index = 8.47 kg/m<sup>2</sup>**

Fat Mass Index (FMI) is a measure used to assess the amount of fat mass relative to an individual's height and is calculated by dividing a person's fat mass (in kilograms) by their height squared (in meters).

**YN = 45th Percentile**

This means that this individual has a higher Fat Mass Index than 45% of people in the 20-29-year-old age group of the same gender, or that 45% of individuals in the 20-29-year-old age group of the same gender have a lower Fat Mass Index than this individual.

**AM = 33th Percentile**

This means that this individual has a higher Fat Mass Index than 33% of people in the same age and gender group, or that 33% of individuals in the same age and gender group in the database have a lower Fat Mass Index than this individual.

## Interpretation of Results

Example 3:

**Lean Mass Index = 18.2 kg/m<sup>2</sup>**

Lean Mass Index (LMI) is a measure used to assess the amount of lean mass relative to an individual's height and is calculated by dividing a person's lean mass (in kilograms) by their height squared (in meters).

**YN = 89th Percentile**

This means that this individual has a higher Lean Mass Index than 89% of people in the 20-29-year-old age group of the same gender, or that 89% of individuals in the 20-29-year-old age group of the same gender have a lower Lean Mass Index than this individual.

**AM = 84th Percentile**

This means that this individual has a higher Lean Mass Index than 84% of people in the same age and gender group, or that 84% of individuals in the same age and gender group in the database have a lower Lean Mass Index than this individual.

## Interpretation of Results

Example 4:

**Appendicular Lean Mass Index = 7.72 kg/m<sup>2</sup>**

Appendicular Lean Mass Index (ALMI) is a measure used to assess the amount of lean mass in the arms and legs relative to an individual's height and is calculated by dividing a person's lean mass in the arms and legs (in kilograms) by the square of their height (in meters).

**YN = 85<sup>th</sup> Percentile**

This means that this individual has a higher ALMI than 85% of people in the 20-29-year-old age group of the same gender, or that 85% of individuals in the 20-29-year-old age group of the same gender have a lower ALMI than this individual.

**AM = 82<sup>nd</sup> Percentile**

This means that this individual has a higher ALMI than 82% of people in the same age and gender group, or that 82% of individuals in the same age and gender group in the database have a lower ALMI than this individual.

## Lean Indices

Measure	Result	Percentile	
		YN	AM
Lean/Height <sup>2</sup> (kg/m <sup>2</sup> )	18.2	89	84
Appen. Lean/Height <sup>2</sup> (kg/m <sup>2</sup> )	7.72	85	82

### Lean Indices(Muscle)

These indices measure amount of muscle mass in the body.

#### Lean/Height<sup>2</sup>

- Result: Higher number is desired as this signifies *more* muscle mass.

#### EXAMPLE

Lean Mass Index = 18.2 kg/m<sup>2</sup>

YN = Young normal (T score)

YN = 89 Percentile

This means that this individual has a higher Lean Mass Index than 89% of people in the 20-29-year-old age group of the same gender, or that 89% of individuals in the 20-29-year-old age group of the same gender have a lower Lean Mass Index than this individual.

AM = Aged match (Z score)

AM = 84 Percentile

(This means that this individual has a higher Lean Mass Index than 84% of people in the same age and gender group, or that 84% of individuals in the same age and gender group in the database have a lower Lean Mass Index than this individual.)

## Body Composition Regions

### Adipose Indices

Measure	Result	Percentile	
		YN	AM
Total Body % Fat	30.6	22	13
Fat Mass/Height <sup>2</sup> (kg/m <sup>2</sup> )	8.47	45	33
Android/Gynoid Ratio	0.64		
% Fat Trunk/% Fat Legs	0.64	17	10
Trunk/Limb Fat Mass Ratio	0.63	19	10
Est. VAT Mass (g)	141		
Est. VAT Volume (cm <sup>3</sup> )	153		
Est. VAT Area (cm <sup>2</sup> )	29.3		

### Adipose Indices(Fat)

#### % Fat Trunk/% Fat Legs and Trunk/Limb Fat Mass Ratio

- Primarily used for determining impact of lipodystrophy.
- As a result of treatment for AIDS/HIV, redistribution of subcutaneous fat occurs from the extremities to the trunk, usually in abdominal and upper neck/shoulder area.
- This ultimately turns into visceral fat.
- These ratios are not frequently used unless site is scanning AIDS/HIV patients
- Again if both parts of the equation are equal, 1.00 will be Result.
- If less than 1.00, second part of the equation is where the fat occurs (legs or limb)
- Percentile YN and AM higher number not desired for lipodystrophy

## Body Composition Regions

### Adipose Indices

Measure	Result	Percentile	
		YN	AM
<b>Total Body % Fat</b>	<b>30.6</b>	<b>22</b>	<b>13</b>
Fat Mass/Height <sup>2</sup> (kg/m <sup>2</sup> )	8.47	45	33
Android/Gynoid Ratio	0.64		
% Fat Trunk/% Fat Legs	0.64	17	10
Trunk/Limb Fat Mass Ratio	0.63	19	10
Est. VAT Mass (g)	141		
Est. VAT Volume (cm <sup>3</sup> )	153		
Est. VAT Area (cm <sup>2</sup> )	29.3		

### % Fat Trunk/% Fat Legs and Trunk/Limb Fat Mass Ratio

While these measurements aren't vitally important to everyday health monitoring, they demonstrate the distribution of fat in a client's body and can be used clinically to track lipodystrophy.

## Lean Indices

Measure	Result	Percentile	
		YN	AM
Lean/Height <sup>2</sup> (kg/m <sup>2</sup> )	18.2	89	84
Appen. Lean/Height <sup>2</sup> (kg/m <sup>2</sup> )	7.72	85	82

### Lean/Height<sup>2</sup>

- Result: Higher number is desired as this signifies *more* muscle mass.

### EXAMPLE

Lean Mass Index = 18.2 kg/m<sup>2</sup>

YN = Young normal (T score)

YN = 89 Percentile

This means that this individual has a higher Lean Mass Index than 89% of people in the 20-29-year-old age group of the same gender, or that 89% of individuals in the 20-29-year-old age group of the same gender have a lower Lean Mass Index than this individual.

AM = Aged match (Z score)

AM = 84 Percentile

(This means that this individual has a higher Lean Mass Index than 84% of people in the same age and gender group, or that 84% of individuals in the same age and gender group in the database have a lower Lean Mass Index than this individual.)

## Lean Indices

Measure	Result	Percentile	
		YN	AM
Lean/Height <sup>2</sup> (kg/m <sup>2</sup> )	18.2	89	84
Appen. Lean/Height <sup>2</sup> (kg/m <sup>2</sup> )	7.72	85	82

Appendicular Lean Mass Index = 7.72 kg/m<sup>2</sup>

YN = Young normal (T score)

YN = 85 Percentile

(This means that this individual has a higher ALMI than 85% of people in the 20-29-year-old age group of the same gender, or that 85% of individuals in the 20-29-year-old age group of the same gender have a lower ALMI than this individual.)

AM = Aged match (Z score)

AM = 82 Percentile

(This means that this individual has a higher ALMI than 82% of people in the same age and gender group, or that 82% of individuals in the same age and gender group in the database have a lower ALMI than this individual.)

- Appendicular Lean/Height<sup>2</sup>
- Higher number is desired
- Low number signifies lack of adequate muscle mass which may interfere with daily living issues such as lifting themselves from a chair or unsteadiness.
- Sports athletes will have a high number as they are using their extremities most often in their sport (football, swimming, etc)

## Resting Metabolic Rate

To calculate **Resting Metabolic Rate (RMR)** using the **Cunningham Equation** and a DEXA Body Composition scan, follow these steps:

### Step 1: Convert Fat-Free Mass (FFM) from grams to kilograms

- Locate the **Total Lean + BMC (Bone Mineral Content)** value from your DEXA scan, measured in grams.
- Convert this value to kilograms by dividing it by 1000.

### Example

**Total Lean + BMC = 58512 g**

### Conversion to kilograms

- $58512 \div 1000 = 58.5 \text{ kg}$

Region	Fat Mass (g)	Lean + BMC (g)	Total Mass (g)	% Fat
L Arm	1604	2773	4376	36.6
R Arm	1597	3057	4653	34.3
Trunk	9557	29723	39279	24.3
L Leg	5722	9406	15129	37.8
R Leg	6226	9862	16088	38.7
Subtotal	24705	54821	79527	31.1
Head	1075	3691	4765	22.5
<b>Total</b>	<b>25780</b>	<b>58512</b>	<b>84292</b>	<b>30.6</b>

# Resting Metabolic Rate

## Body Composition Results

Region	Fat Mass (g)	Lean + BMC (g)	Total Mass (g)	% Fat	%Fat Percentile YN	%Fat Percentile AM
L Arm	1604	2773	4376	36.6	37	25
R Arm	1597	3057	4653	34.3	29	19
Trunk	9557	29723	39279	24.3	17	9
L Leg	5722	9406	15129	37.8	29	23
R Leg	6226	9862	16088	38.7	32	25
Subtotal	24705	54821	79527	31.1	21	13
Head	1075	3691	4765	22.5		
<b>Total</b>	<b>25780</b>	<b>58512</b>	<b>84292</b>	<b>30.6</b>	<b>22</b>	<b>13</b>
Android (A)	1237	3907	5145	24.0		
Gynoid (G)	5541	9226	14767	37.5		

Fat Free Mass  
58512 grams  
= 58.5 KG

## Step 2 – Apply the Cunningham equation

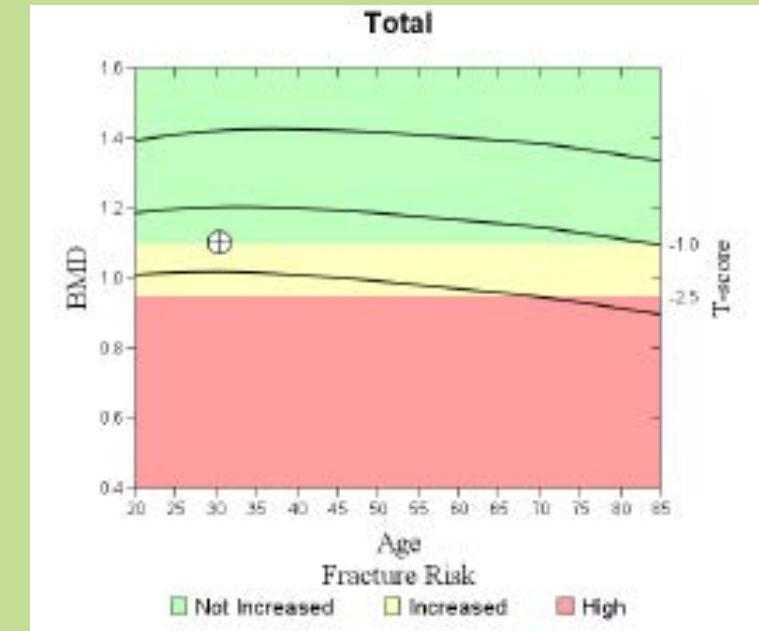
- $RMR=500+(22\times FFM)$
- Multiply the FFM (in kg) by 22.
- Add 500 to the result.
- $RMR=500+(22\times 58.5)$
- $RMR=500+1287$
- $RMR=1787\text{calories/day}$

The calculated **RMR** represents the number of calories your body requires at rest to maintain essential functions, such as breathing, circulation, and temperature regulation.

## Whole Body bone density



Region	Area (cm <sup>2</sup> )	BMC (g)	BMD (g/cm <sup>2</sup> )	T - score	Z - score
L Arm	217.54	161.85	0.744		
R Arm	222.28	174.75	0.786		
L Ribs	117.26	78.68	0.671		
R Ribs	118.05	79.26	0.671		
T Spine	124.37	102.57	0.825		
L Spine	52.12	48.31	0.927		
Pelvis	198.59	219.70	1.106		
L Leg	335.20	373.30	1.114		
R Leg	344.28	389.18	1.130		
Subtotal	1729.70	1627.60	0.941		
Head	238.47	542.45	2.275		
<b>Total</b>	<b>1968.17</b>	<b>2170.05</b>	<b>1.103</b>	<b>-1.0</b>	<b>-1.0</b>



This is the total Bone Mineral Content (BMC) in grams

This is the total Bone Mineral Density (BMD) in grams per cm squared

- Important to note:** A whole-body bone density provides you with the total bone mass and bone mineral density (BMD) but cannot provide a diagnosis of osteoporosis.

## Whole Body bone density

Region	Area (cm <sup>2</sup> )	BMC (g)	BMD (g/cm <sup>2</sup> )	T - score	Z - score
L Arm	217.54	161.85	0.744		
R Arm	222.28	174.75	0.786		
L Ribs	117.26	78.68	0.671		
R Ribs	118.05	79.26	0.671		
T Spine	124.37	102.57	0.825		
L Spine	52.12	48.31	0.927		
Pelvis	198.59	219.70	1.106		
L Leg	335.20	373.30	1.114		
R Leg	344.28	389.18	1.130		
Subtotal	1729.70	1627.60	0.941		
Head	238.47	542.45	2.275		
Total	<b>1968.17</b>	<b>2170.05</b>	<b>1.103</b>	<b>-1.0</b>	<b>-1.0</b>

- The **T-score** compares your bone density to that of a young, healthy population aged 20-29
- The **Z-score** compares your bone density to an age-matched population
- A **T-score** of -1.0 means the bone density is **1 standard deviation** below the median of a young, healthy population aged 20-29.
- A **Z-score** of -1.0 means the bone density is **1 standard deviation** below the median of an age-matched population.

The T-score is -1

The Z-score is -1

## Whole Body bone density

A whole-body bone density scan provides total bone mass and Bone Mineral Density (BMD) but cannot diagnose osteoporosis.

If the T-score or Z-score suggests lower-than-average bone density, further evaluation may be needed. It is recommended to discuss the results with your doctor. They may suggest blood tests to assess factors affecting bone health and, if warranted, perform bone densitometry specifically for the lumbar spine and hip.

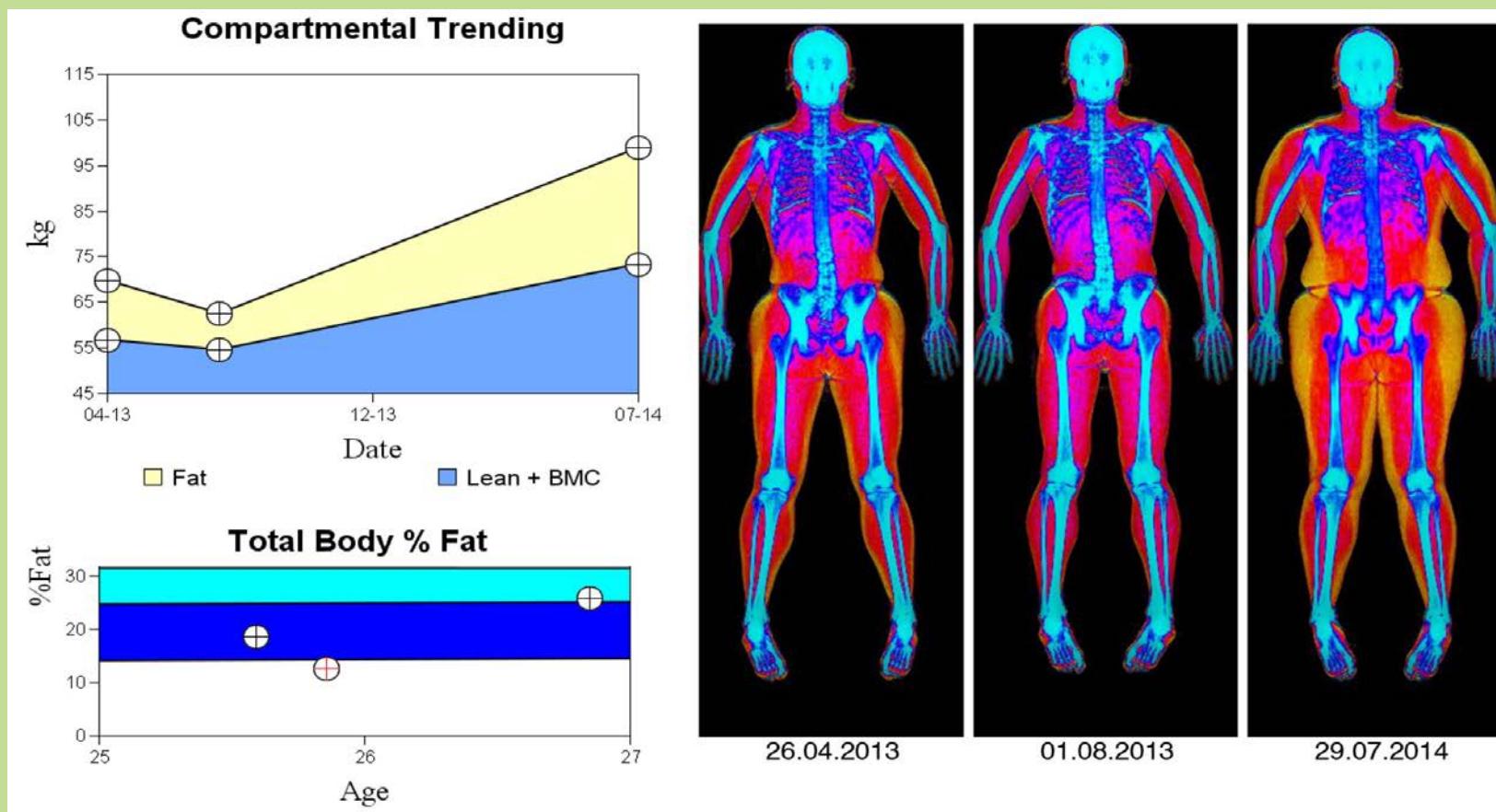
To view a sample Bone Densitometry report, click the link below:

[https://www.bodydexafit.com.au/wp-content/uploads/2017/02/bone\\_density.pdf](https://www.bodydexafit.com.au/wp-content/uploads/2017/02/bone_density.pdf)

## Tracking your changes in Body Composition

- ✓ Having body composition monitored periodically with DEXA will provide valuable feedback on how successful your diet and training have been towards achieving your goals.
- ✓ Additional scans can be performed to monitor rehabilitation from injury.

## Tracking your changes in Body Composition



**DEXA makes use of X-ray energy, but this is at extremely low and safe levels.**

The amount of radiation exposure is very low (**1-4 MicroSievert**), compared to radiation exposure of approximately **10 MicroSievert** on an airline flight from Melbourne to Sydney or **20 MicroSievert** during chest xray (front view only)

# EFFECTIVE RADIATION DOSE COMPARISON

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Diagnostic procedure	Typical effective dose (mSv)	Equivalent No. of DEXA Body Scans	Approximate equivalent period of natural background radiation (¹)
<b>*DEXA Body composition</b>	<b>&lt;0.004</b>	<b>1</b>	<b>&lt;16 hours</b>
<i>X-ray examinations:</i>			
Limbs and joints (except hip)			
	<b>&lt;0.01</b>	<b>2.5</b>	<b>&lt;1.5 days</b>
Chest (single PA film)	<b>0.02</b>	<b>5</b>	<b>3 days</b>
Skull	<b>0.07</b>	<b>17.5</b>	<b>11 days</b>
Thoracic spine	<b>0.7</b>	<b>175</b>	<b>4 months</b>
Lumbar spine	<b>1.3</b>	<b>325</b>	<b>7 months</b>
Hip	<b>0.3</b>	<b>75</b>	<b>7 weeks</b>
Pelvis	<b>0.7</b>	<b>175</b>	<b>4 months</b>
Abdomen	<b>1.0</b>	<b>250</b>	<b>6 months</b>
IVU	<b>2.5</b>	<b>625</b>	<b>14 months</b>
Barium swallow	<b>1.5</b>	<b>375</b>	<b>8 months</b>
Barium meal	<b>3</b>	<b>750</b>	<b>16 months</b>
Barium follow through	<b>3</b>	<b>750</b>	<b>16 months</b>
Barium enema	<b>7</b>	<b>1,750</b>	<b>3.2 years</b>
CT head	<b>2.3</b>	<b>575</b>	<b>1 year</b>
CT chest	<b>8</b>	<b>2,000</b>	<b>3.6 years</b>
CT abdomen or pelvis	<b>10</b>	<b>2,500</b>	<b>4.5 years</b>

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<i>Radionuclide studies:</i>			
Lung ventilation (Xe-133)			
	<b>0.3</b>	<b>75</b>	<b>7 weeks</b>
Lung perfusion (Tc-99m)	<b>1</b>	<b>250</b>	<b>6 months</b>
Kidney (Tc-99m)		<b>1</b>	<b>250</b>
Thyroid (Tc-99m)		<b>1</b>	<b>250</b>
Bone (Tc-99m)	<b>4</b>	<b>1,000</b>	<b>1.8 years</b>
Dynamic cardiac (Tc-99m)	<b>6</b>	<b>1,500</b>	<b>2.7 years</b>
PET head (F-18 FDG)	<b>5</b>	<b>1,250</b>	<b>2.3 years</b>

(¹) UK average background radiation = 2.2 mSv per year: regional averages range from 1.5 to 7.5 mSv per year.

With advice from Wall, B. National Radiological Protection Board.

\*This table has been adapted to include DEXA Body composition scan using Hologic Discovery A as used at Body DEXA fit. The radiation dose is very low, 1 to 4 MicroSieverts or 0.001 to 0.004 MilliSieverts (1 milliSievert = 1000 MicroSievert)

## **Disclaimer**

The information provided is for informational purposes.

You should not use this to diagnose a medical condition or disease and diagnosis of any medical condition or disease should be made by a health professional. Whilst all reasonable care has been taken in the preparation of this report no liability is assumed for any errors or omissions.