

**GET *RIID* OF THE *TDH***

**RE-BUILD PLAN**

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BUILD YOUR PHYSIQUE  
BUILD YOUR KNOWLEDGE  
BUILD YOUR CONFIDENCE

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***Health Standards***

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# BMI

Body Mass Index is a measure that takes into consideration your height and weight.

This is a standard measure that most doctors etc use to determine whether you are at a healthy weight.

However, BMI doesn't consider what type of weight you are holding, it doesn't consider muscle mass vs fat mass.

For example a shorter more muscular man will be quite heavy and could be obese according to their BMI, but this isn't the case

## BMI

### DESCRIPTION

### Range

Underweight

< 18.5

Normal

18.5 - 24.9

Overweight

25 - 29.9

Obese

30 - 39.9

Morbidly Obese

> 40

[→ BMI calculator](#)

As BMI is limited it would be better to calculate your body fat %.

# Body Fat %

Most people concentrate on weight only. It is better to look at body fat percentage as your weight is made up of a number of things such as fat, muscle, organs, water, bones etc.

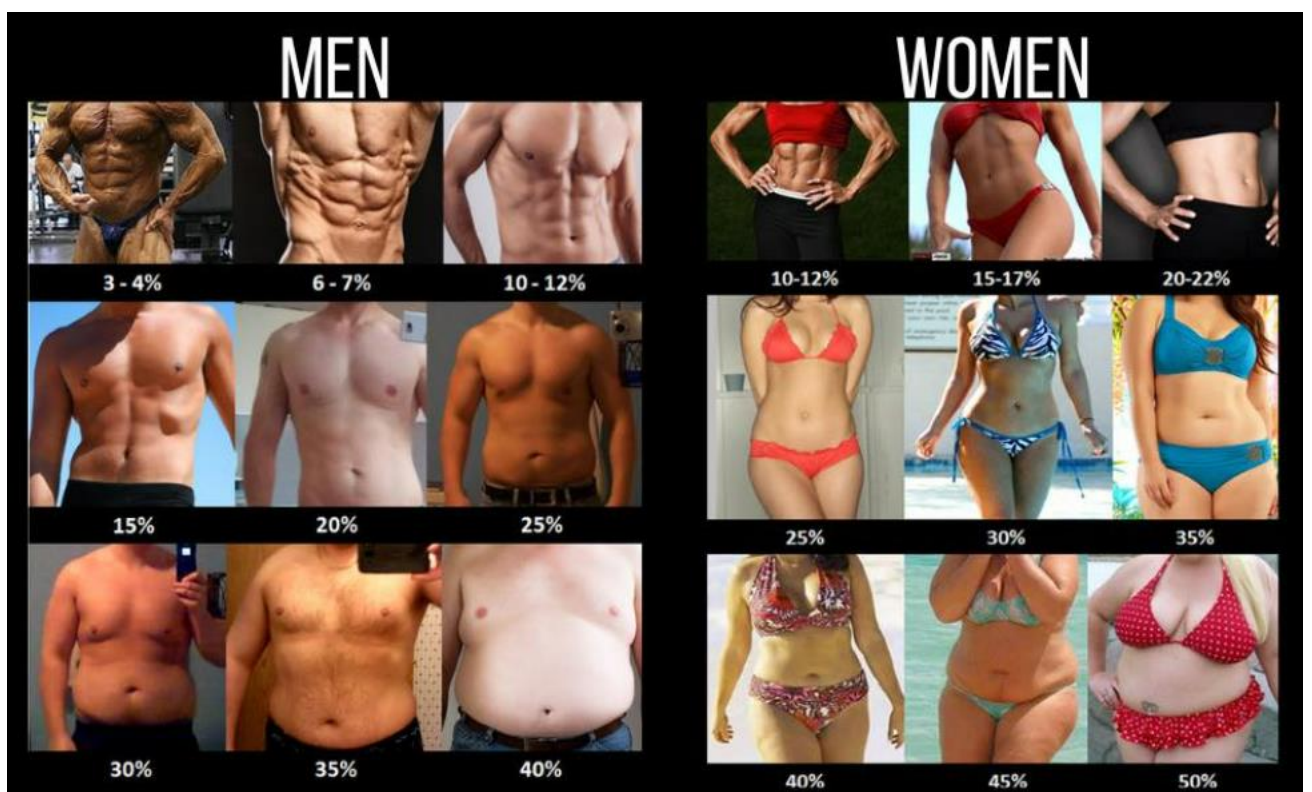
When trying to lose weight, we want to focus on losing fat. So taking your body fat % will help you establish how much fat mass vs lean mass you are holding.

## BODY FAT % CHART (US NAVY)

DESCRIPTION	MEN	WOMEN
Essential	2-5%	10-13%
Athletes	6-13%	14-20%
Fitness	14-17%	21-24%
Average	18-24%	25-31%
Obese	25% +	32% +

There are a number of ways to take your body fat. Different methods will give you different results (accuracy is questionable). Whatever method you use keep it consistent.

[→ BODY FAT calculator](#) (US Navy method)



# Resting Heart Rate

Your RHR is how fast your heart beats when you're relaxed.

Physically active people tend to have a lower RHR than less active people.

The average heart rate generally increases with age

## Men (beats per min)

Age	18-25	26-35	36-45	46-55	56-65	65+
Athlete	49-55	49-54	50-56	50-57	51-56	50-55
Excellent	56-61	55-61	57-62	58-63	57-61	56-61
Great	62-65	62-65	63-66	64-67	62-67	62-65
Good	66-69	66-70	67-70	68-71	68-71	66-69
Average	70-73	71-74	71-75	72-76	72-75	70-73
Below Average	74-81	75-81	76-82	77-83	76-81	74-79
Poor	82+	82+	83+	84+	82+	80+

## Women (beats per min)

Age	18-25	26-35	36-45	46-55	56-65	65+
Athlete	54-60	54-59	54-59	54-60	54-59	54-59
Excellent	61-65	60-64	60-64	61-65	60-64	60-64
Great	66-69	65-68	65-69	66-69	65-68	65-68
Good	70-73	69-72	70-73	70-73	69-73	69-72
Average	74-78	73-76	74-78	74-77	74-77	73-76
Below Average	79-84	77-82	79-84	78-83	78-83	77-84
Poor	85+	83+	85+	84+	84+	85+

Rest quietly for 10 minutes. Gently place 2 fingers (not your thumb) on the inside of your wrist, below your thumb. Count the beats for 30 seconds. Double this number to get the number of beats per minute

# Blood Pressure

Blood pressure is the pressure of circulating blood against the walls of blood vessels. Most of this pressure results from the heart pumping blood through the circulatory system

## Blood Pressure

DESCRIPTION	Systolic	Diastolic
Low	< 90	< 60
Normal	90-120	60-80
Pre-hypertension	120-139	80-89
Hypertension stage 1	140-159	90-99
Hypertension stage 2	> 160	> 100

[→ Blood Pressure monitor](#)

# Cholesterol

High cholesterol is when you have too much of a fatty substance called cholesterol in your blood.

It's mainly caused by eating fatty food, not exercising enough, being overweight, smoking and drinking alcohol. It can also run in families.

You can lower your cholesterol by eating healthily and getting more exercise. Some people also need to take medicine.

Too much cholesterol can block your blood vessels. It makes you more likely to have heart problems or a stroke.

High cholesterol does not cause symptoms. You can only find out if you have it from a blood test.

Total cholesterol to HDL cholesterol ratio (TC:HDL) – the level of good cholesterol in your blood compared to your overall cholesterol

Good cholesterol (called HDL) – this may make you less likely to have heart problems or a stroke

Bad cholesterol (called LDL and non-HDL) – this may make you more likely to have heart problems or a stroke

<b>Result</b>	<b>Healthy level (mmol/L)</b>
<b>Total Cholesterol</b>	<b>5 or below</b>
<b>Total Cholesterol to HDL Cholesterol ratio</b>	<b>5 or below</b>
<b>HDL</b>	<b>1 or above for men 1.2 or above for women</b>
<b>LDL</b>	<b>4 or below</b>

[\*\*→ Home Cholesterol Test\*\*](#)

# Cholesterol

Total Cholesterol Level (mg/dl)	Category
< 200	Desirable
200-239	Borderline High
> 240	High
LDL Level (mg/dl)	Category
< 100	Optimal
100-129	Above Optimal
>130-159	Borderline High
160-189	High
> 190	Very High
HDL Level (mg/dl)	Category
< 40	Risk heart disease
40-59	The higher, the better
> 60	Protective against heart disease
Triglyceride Level	Category
< 150	Normal
150-199	Borderline High
200-499	High
> 500	Very High



# Blood Sugar

## What are blood sugar levels?

Your blood sugar levels, also known as blood glucose levels, are a measurement that show how much glucose you have in your blood. Glucose is a sugar that you get from food and drink. Your blood sugar levels go up and down throughout the day and for people living with diabetes these changes are larger and happen more often than in people who don't have diabetes.

High blood sugar (hyperglycaemia) is where the level of sugar in your blood is too high. It mainly affects people with diabetes and can be serious if not treated.

# Blood Sugar

Mg/dl	Fasting		2 hrs post meal
	Min	Max	
Normal	70	99	< 140
Pre-diabetes	100	125	140-199
Type 2 diabetes	> 126		> 200
Mmol/l	Fasting		2 hrs post meal
	Min	Max	
Normal	4	6	< 7.8
Pre-diabetes	6.1	6.9	7.8-11
Type 2 diabetes	> 7		> 11.1

[→ Blood sugar Test](#)

# Hormone levels - Women

Hormones affect everything from metabolism to mood and libido. Understanding them can help you to function at your best.

Female hormones are essential for a healthy female reproductive system. Other functions of female hormones include fertility, mood, and energy.

Oestradiol is the main female sex hormone, which is a type of oestrogen produced in the ovaries.

Other essential female hormones include follicle-stimulating hormone (FSH), luteinising hormone (LH) and progesterone.

Testosterone is a crucial hormone for women because your body uses it to make estrogen.

In women, hormone levels change naturally throughout the monthly menstrual cycle.

Levels of oestrogen and progesterone can decrease with age, and women can experience a rise in FSH and LH levels during menopause because your body uses it to make estrogen.

A hormonal imbalance can lead to unwanted symptoms such as acne, weight gain, mood changes, tiredness, and changes to your menstrual cycle. If your hormone levels are imbalanced for a long time, you could be at higher risk of health problems such as osteoporosis.

[→ Female Hormone Test](#)

# Testosterone levels - Men

Testosterone is an essential trigger for the process of protein synthesis; which enables muscle repair and growth.

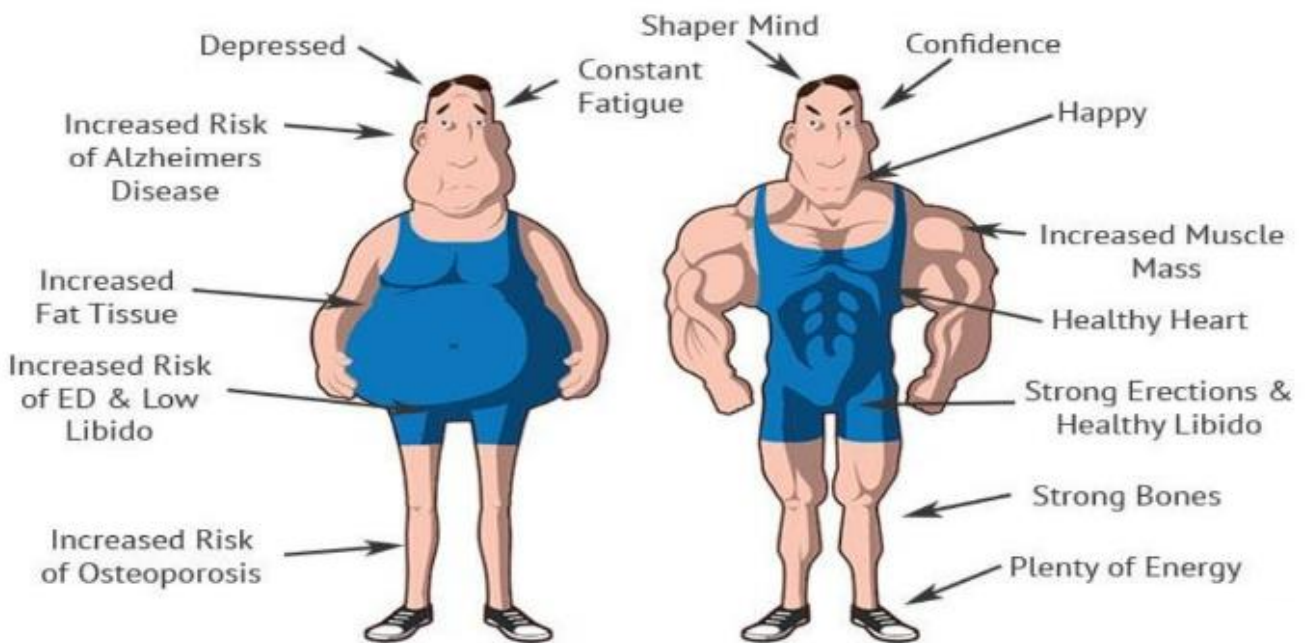
This hormone regulates your libido, improves cognitive function and helps to ward off cardiovascular disease.

At the same time it keeps your muscles and bones strong and aids your ability to remember things.

Everyone has different levels of testosterone but they should fall within an acceptable level

The normal ranges of testosterone for us men are from 280 to 1,100 ng/dL according to the University of Rochester Medical Center.

## Benefits of Optimal Testosterone



# Testosterone levels - Men

Testosterone is the main sex hormone in men, while free testosterone is the free or unbound type of the total testosterone that's found in the body.

Free T makes up approximately 2% of all testosterone in the bloodstream.

About 98% of all testosterone is the bound version of our primary male hormone.

Total testosterone represents all 3 testosterone types in the body – SHBG-bound testosterone, albumin-bound testosterone and free testosterone.

## Total Testosterone

1. Bioavailable testosterone – Albumin-bound testosterone and Free testosterone

2. Bound testosterone – Sex hormone-binding globulin-bound Testosterone

Free and albumin-bound testosterone forms are considered bioavailable.

In contrast, the SHBG-bound (sex hormone-binding globulin) testosterone isn't available to our cells.

[→ Testosterone Test](#)

# Testosterone levels - Men

AGE	Total Testosterone (ng/dl)	Free Testosterone (ng/dl)	SHBG (nmol/L)
25-34	617	123	4
35-44	668	103	4.5
45-54	606	90	5
55-64	562	83	5.1
65-74	524	69	5.5
75-84	471	60	5.7
85-100	376	54	7.4

This chart is based on data from the endocrinology chapter (named "Androgen Decline In The Aging Male" ) of a urology book

AGE	Total Testosterone (ng/dl)	Lower end 5 <sup>th</sup> percentile (ng/dl)	Higher end 95 <sup>th</sup> percentile (ng/dl)
< 25	697	408	956
25-29	637	388	1005
30-34	597	348	975
35-39	567	329	945
40-44	547	319	936
45-49	527	329	846
50-54	518	289	936
55-59	547	319	866
Avg. Adult male	270-1070		

# Blood Test – general health check

Blood tests have a wide range of uses and are one of the most common types of medical test. A blood test can be used to:

- assess your general state of health
- check if you have an infection
- see how well certain organs, like the liver and kidneys, are working
- screen for certain genetic conditions

## → [Blood Test](#)

### Heart health

When these biomarkers are too high or too low, they increase the risk of future cardiovascular diseases, such as heart disease and stroke.

Biomarkers for heart check:

Cholesterol

LDL

HDL

Triglycerides

### Thyroid health

These biomarkers are essential for optimal heart and muscle function, digestion and brain development, and regulating the body's metabolic rate.

Biomarkers for thyroid check:

Free T4

TSH

### Testosterone

Check if your testosterone level is what it should be. This hormone is responsible for regulating sex drive and controlling the distribution of muscle mass.

Biomarkers for testosterone check:

Total testosterone

### Diabetes risk

HbA1c is a biomarker that determines your average blood glucose (sugar) level, which reveals your risk of developing diabetes.

Biomarkers for diabetes risk check:

HbA1c

### Kidney health

These biomarkers indicate if your kidneys are removing waste and extra fluid from the body as well as they should.

Biomarkers for kidney check:

Creatinine

Urea

eGFR

Sodium

### Liver health

These biomarkers indicate if your liver is removing toxins from your blood as well as it should.

Biomarkers for liver check:

Bilirubin

Albumin

GGT

ALP

ALT

### Vitamin D

Your vitamin D level indicates your risk of vitamin D deficiency. This nutrient supports your immune system and it's necessary for absorbing calcium, which contributes to bone strength.

Biomarkers for vitamin D check:

Vitamin D

### Anaemia-related deficiencies

Screen for nutritional deficiencies that can be linked to anaemia.

Biomarkers for deficiencies check:

Vitamin B12

Folate

Ferritin

# Health Chart – Record results

<b>Week</b>	<b>1</b>	<b>12</b>	<b>24</b>
<b>Date</b>			
<b>BMI</b>			
<b>Body Fat %</b>			
<b>Resting Heart Rate</b>			
<b>Blood Pressure</b>			
<b>Cholesterol</b>			
<b>Blood Sugar</b>			