



HEALTH
+
FITNESS
TESTING NZ

Name: Sample
DOB: NA
Test Date: NA



Advanced Test Package Report

If you have results marked in **ORANGE** or **RED** below, it is recommended that you take action immediately. It is also recommended that you are re-tested by Health and Fitness Testing or your GP within 3 months' time.

Key:

Green = Within optimal range / NZ Heart Foundation Recommended Ideal

Orange = You may need to address this before it turns into something worse

Red = You are likely to be at a higher risk of health problems

Please Read: The information below is based on a one-off test and should not be used to diagnose any medical conditions. These test results do not take into account your full medical situation. Your registered healthcare provider (e.g. your GP) should know your full medical situation and he/she has specific training and experience to interpret the information below. If you would like any of this information forwarded to your GP, please email our director peter@healthandfitnesstesting.nz and we will arrange this for you.

Summary Page

Measurement Type	Your Score	Optimal/recommended ranges*
Body Composition		
Body Shape Rating	59	90-100
Body Fat %	26.5%	14-17% (Male)
BMI	25.6	18.5-24.99 kg/m ²
Waist Circumference	99cm	<95 cm (Male)
Waist to Hip Ratio	0.99	<0.90 (Male)
Medical		
Blood Pressure	112/70 mmHg	≤ 140 / ≤ 90 mmHg
HbA1c (diabetes)	45 mmol/mol	≤ 40 mmol/mol
Total Cholesterol	6.79mmol/L	< 4 mmol/L
Triglycerides	1.41mmol/L	< 1.7 mmol/L
HDL	2.39mmol/L	> 1 mmol/L
LDL	3.4mmol/L	< 2 mmol/L
Total Chol/HDL	3.0mmol/L	< 4 mmol/L
Cardiovascular Heart Age		
Lipid version	48	<54
BMI version	50	<54
Fitness Age	58	<54

*Optimal/recommended ranges are for informational purposes only. These can vary depending on your current medical situation. Please discuss your results with your GP to determine the optimal/recommended level specific to you.

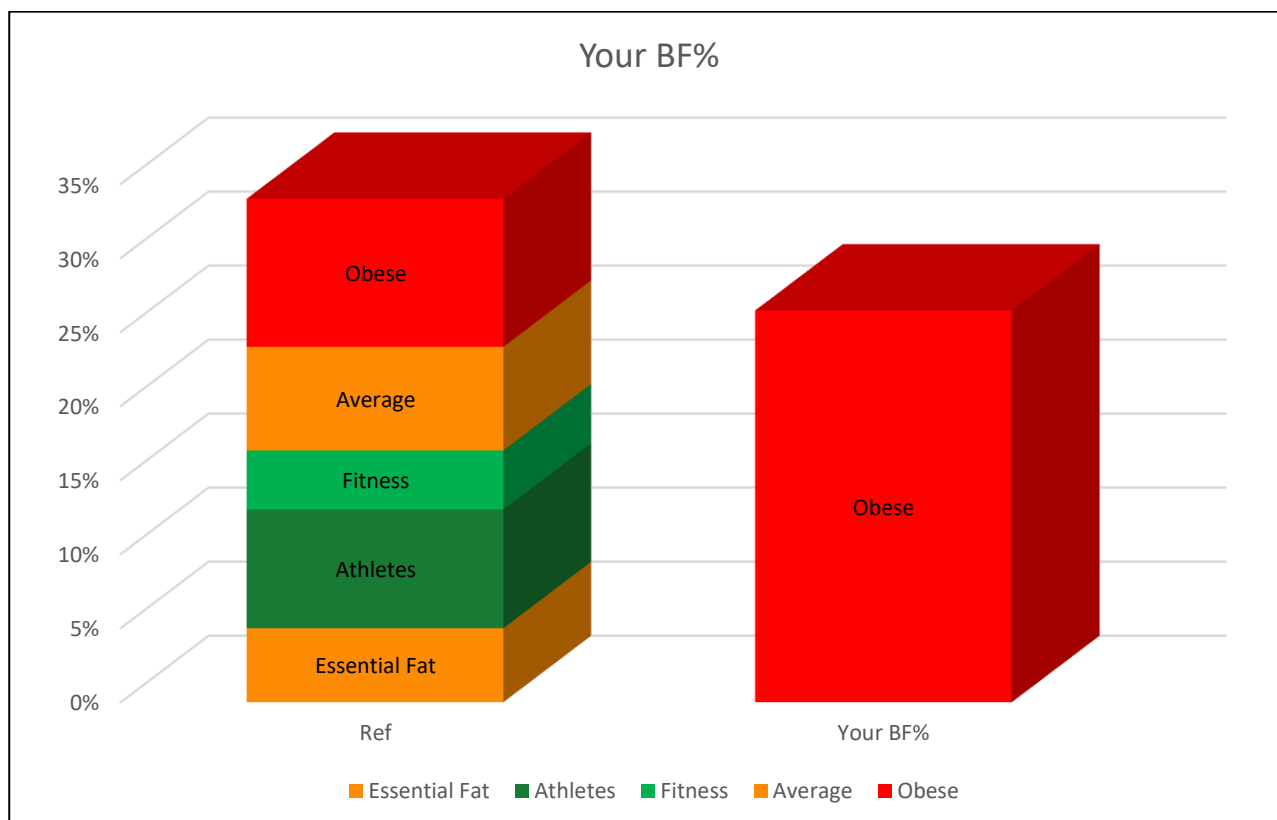
Body Composition

Fit3D Body Shape Rating (0-100, high number is better):

Your Current Fit3D Body Shape rating is **51**

Fit3D Body Fat %:

Your Current Fit3D Body Fat % is: **26.45%**



Body Fat % Guidelines

Description	Women	Men
Essential fat	10–13%	2–5%
Athletes	14–20%	6–13%
Fitness	21–24%	14–17%
Average	25–31%	18–24%
Obese	32%+	25%+

American Council of Exercise, 2009

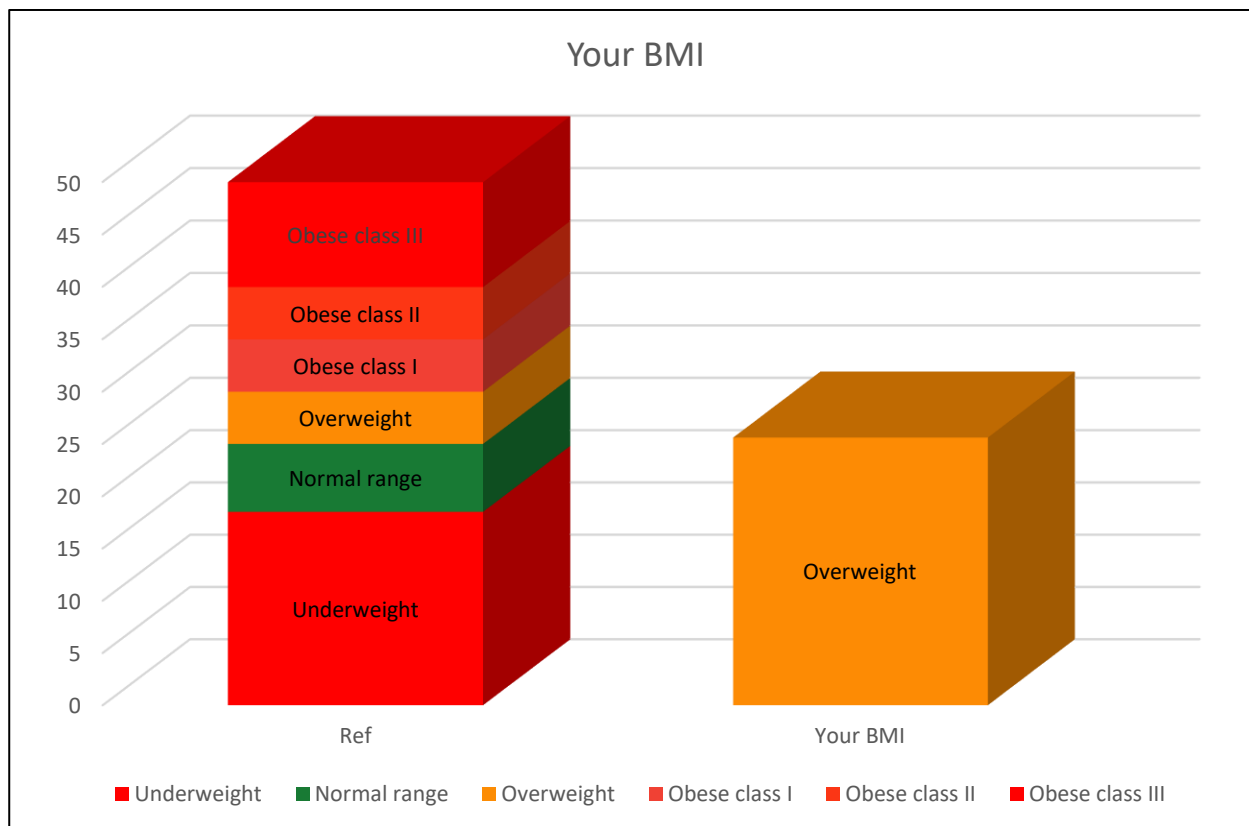
Fit3D have also made some gender and age-specific guidelines. You can view these [here](#)

Check out these resources if you would like more information on body fat %:

- American Council of Exercise Guidelines for Body Fat %: Click [here](#) to view
- The limitations of body fat %: Click [here](#) or [here](#) to view

Body Mass Index (BMI):

Your current Body Mass Index is: 25.6



BMI Guidelines

Classification	BMI(kg/m ²)	
	Principal cut-off points	Additional cut-off points
Underweight	<18.50	<18.50
Severe thinness	<16.00	<16.00
Moderate thinness	16.00 - 16.99	16.00 - 16.99
Mild thinness	17.00 - 18.49	17.00 - 18.49
Normal range	18.50 - 24.99	18.50 - 22.99
		23.00 - 24.99
Overweight	≥25.00	≥25.00
Pre-obese	25.00 - 29.99	25.00 - 27.49
		27.50 - 29.99
Obese	≥30.00	≥30.00
Obese class I	30.00 - 34.99	30.00 - 32.49
		32.50 - 34.99
Obese class II	35.00 - 39.99	35.00 - 37.49
		37.50 - 39.99
Obese class III	≥40.00	≥40.00

Source: Adapted from WHO, 1995, WHO, 2000 and WHO 2004.



Waist Circumference:

Your current Waist Circumference is: **98cm**

Waist Circumference and Health Risk

	Waist Circumference	
	Male	Female
Less Risk	<95 cm	<81 cm
Increased Risk	> 94 cm	> 80 cm
Substantially Increased Risk	>102 cm	>88 cm

World Health Organisation, 2008

Waist to Hip Ratio:

Your current Waist to Hip Ratio is: **0.99**

Waist to Hip Ratio (WHR) and Health Risk

	Waist to Hip Ratio	
	Male	Female
Less Risk	<0.90	<0.85
Substantially Increased Risk	≥0.90	≥0.85

World Health Organisation, 2008

Please Read: The measurements above, combined with your Fit3D girth measurements, muscle volumes, and Fit3D online image (view online via your personal data platform) will give you information on how your current body composition is tracking. Healthy eating habits and exercise are the generally the recommended way to improve your body composition. Please seek advice from a qualified fitness professional, dietician, or doctor if you need assistance with this. One study, of over 10,000 people who successfully improved their body composition concluded that regular body composition checks were one of the 4 key ingredients to successful weight loss regimes.

Medical

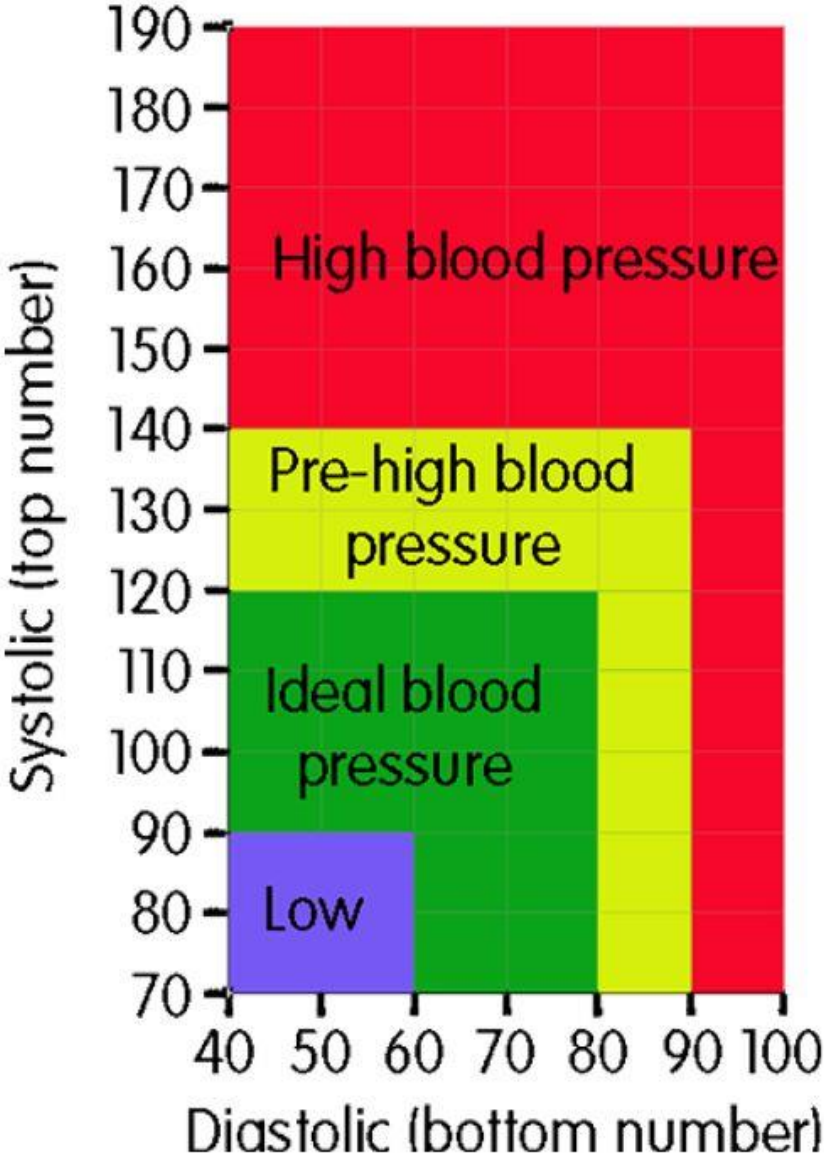
Blood Pressure Test Results:

Your current blood pressure results are:

	Your Results	Optimal Ranges (based on lab tests)*
Systolic Blood Pressure	112	≤ 140 mmHg
Diastolic Blood Pressure	70	≤ 90 mmHg

*An ideal blood pressure for most people is less than 130/80. In general, hypertension (high blood pressure) is defined as having blood pressure of 140/90 or higher. Blood pressure varies throughout the day in response to factors such as excitement, stress and exercise, however it quickly returns to a normal level. Blood pressure also increases with age, so what may be a normal blood pressure reading for someone in their 60's may be considered abnormally high for someone in their 20's. One blood pressure reading cannot be used to diagnose high blood pressure. If you don't have a history of high blood pressure and your current blood pressure reading was high, it is recommended that it is re-tested by Health and Fitness Testing NZ or your GP as soon as possible.

Blood pressure chart for adults



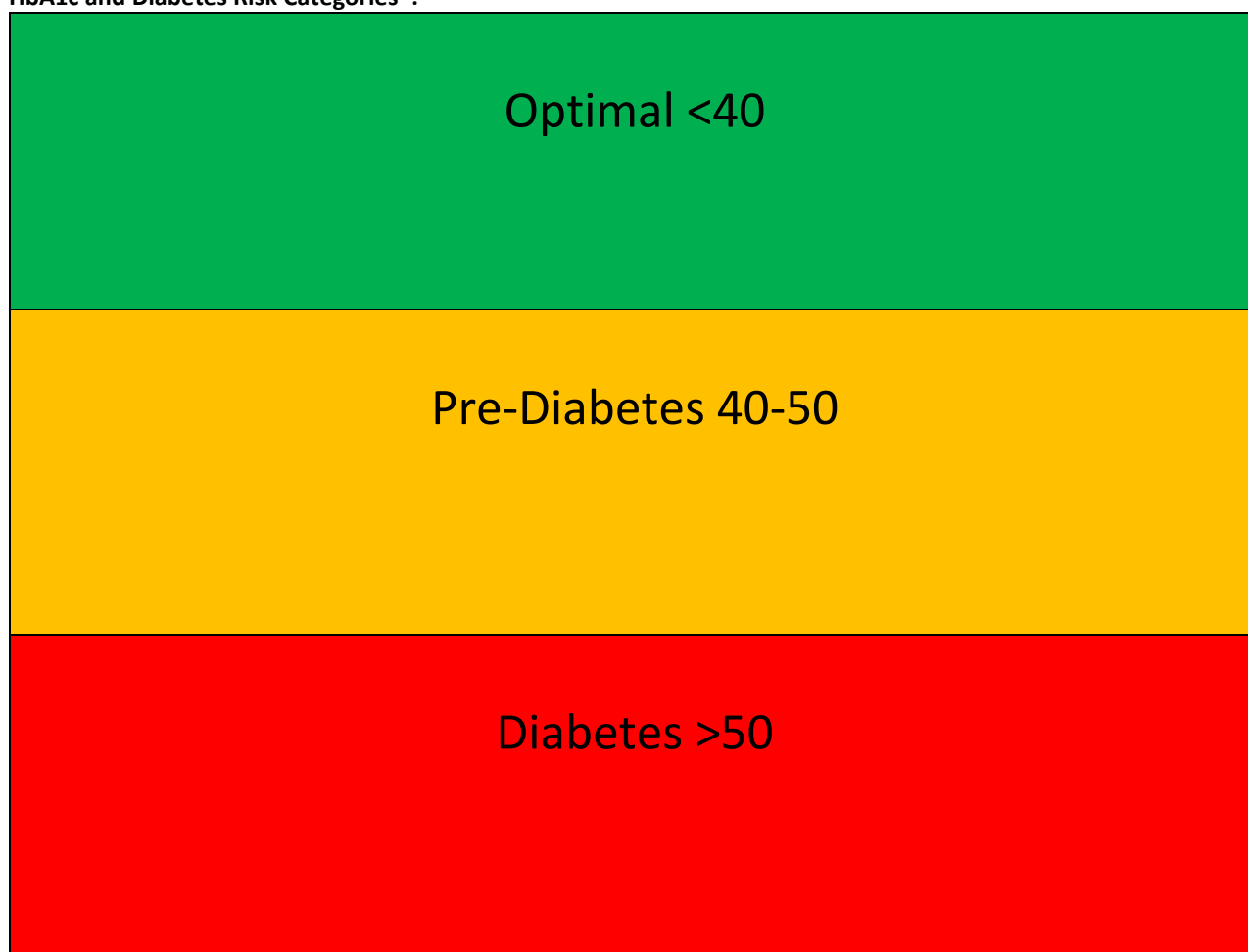
HbA1c Test Results (an indicator of diabetes risk)*:

	Your Results	Optimal Ranges (based on lab tests)
HbA1c	41	<41 mmol/mol = Optimal 41-50 mmol/mol "Pre-Diabetes Indicator"

*Point of Care Tests analysed by the 'cobas b 101 system', supplied by Roche Diagnostics NZ Limited

*HbA1c is one of the tests used as an indicator for the presence of type 2 diabetes. Although it can be a good indicator, a good/bad result in this test does not guarantee you do/don't have diabetes. If your HbA1c result was in the Pre-Diabetes or Diabetes category, you are recommendation to get a second opinion from your GP.

HbA1c and Diabetes Risk Categories*:

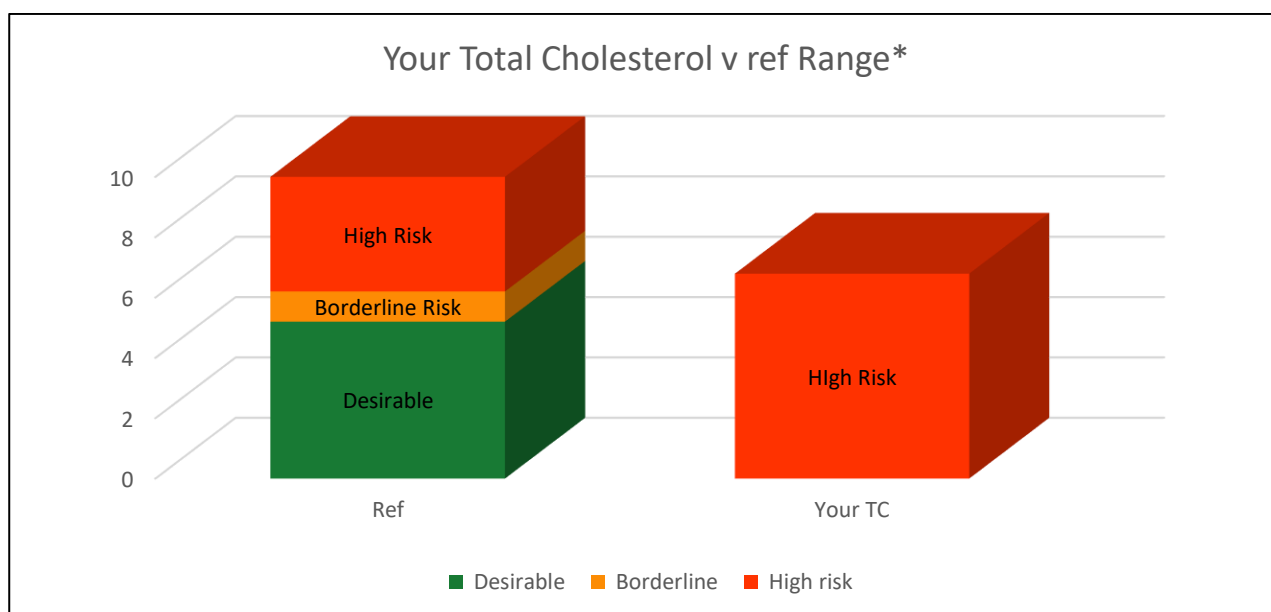


Cholesterol Test Results*:

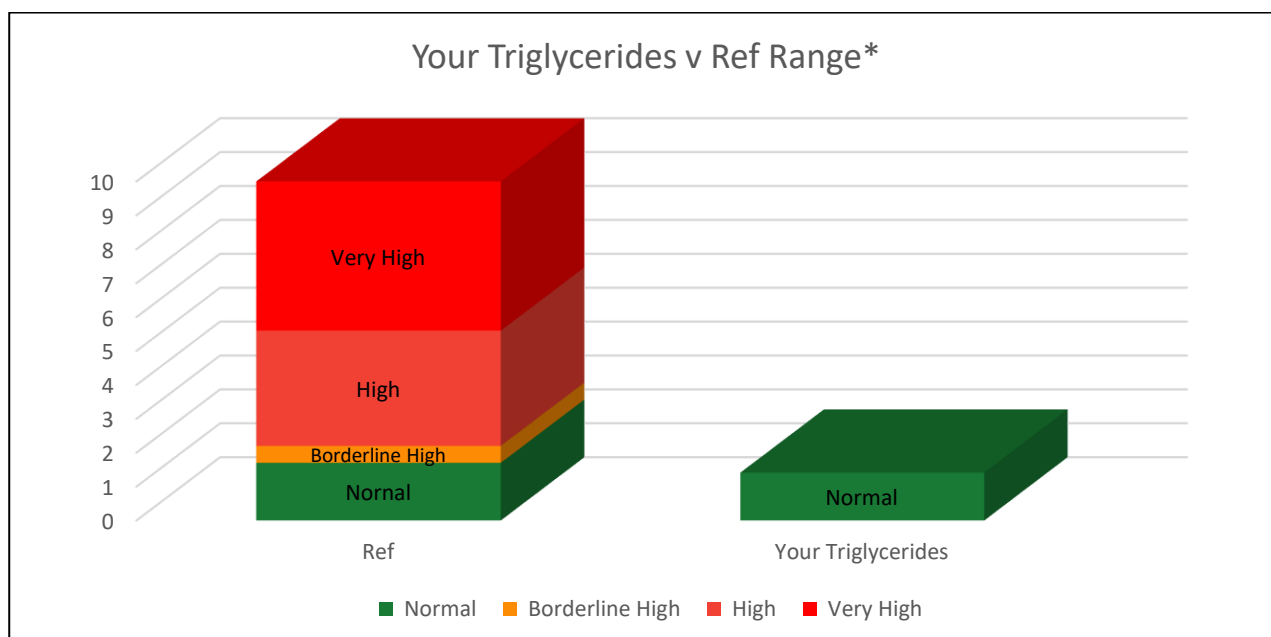
	Your Results	NZ Heart Foundation Recommended Ideal Levels
Total Cholesterol	6.79mmol/L	<4.0 mmol/L*
Triglycerides	1.41mmol/L	<1.7 mmol/L*
HDL	2.29mmol/L	>1.0 mmol/L
LDL	3.85mmol/L	<2.0 mmol/L
CHOL/HDL	3.0mmol/L	<4.0 mmol/L

*Point of Care Tests analysed by the 'cobas b 101 system', supplied by Roche Diagnostics NZ Limited

*Lower targets may be appropriate for people who have heart disease, diabetes or kidney disease. Check with your doctor what your target level should be. Cholesterol results should not be interpreted on their own – your doctor will take other heart risk factors into account as well. If your cholesterol level is high, you should consider having regular check-ups every three to six months, depending on the results and your doctor's advice.



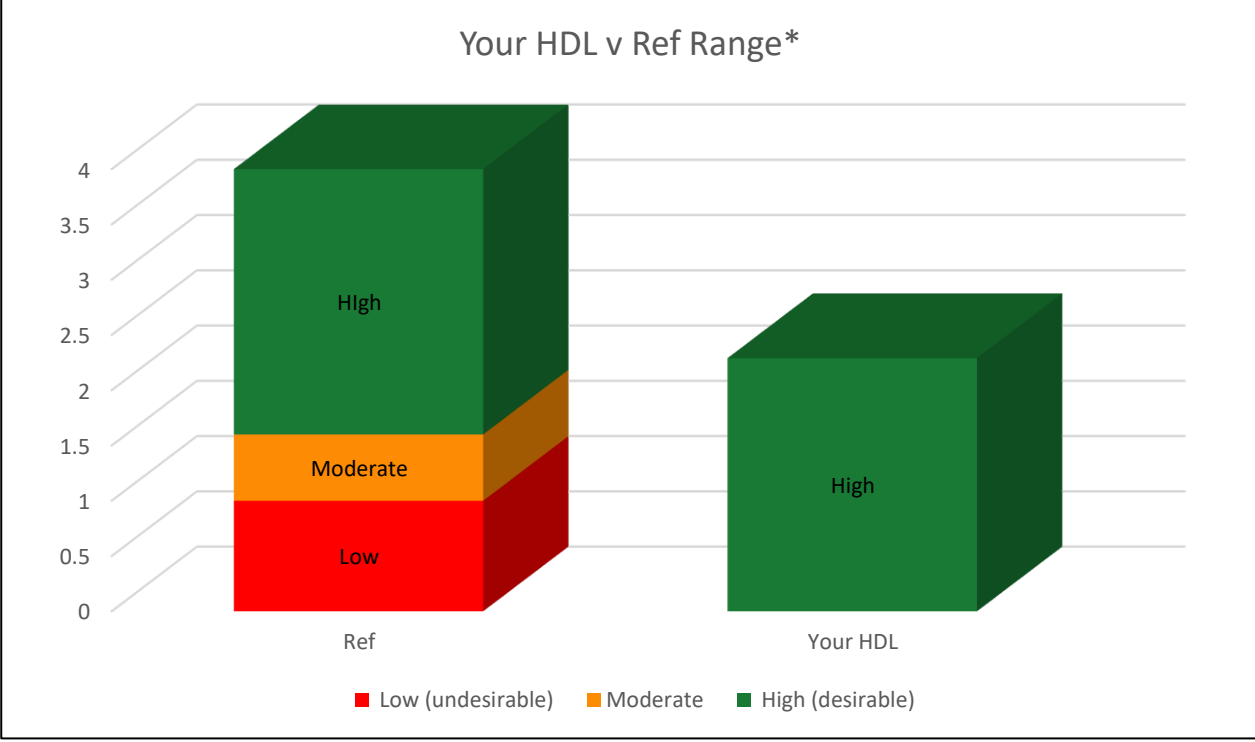
*Reference ranges are from The National Cholesterol Education Program (May 16, 2001), Journal of the American Medical Association



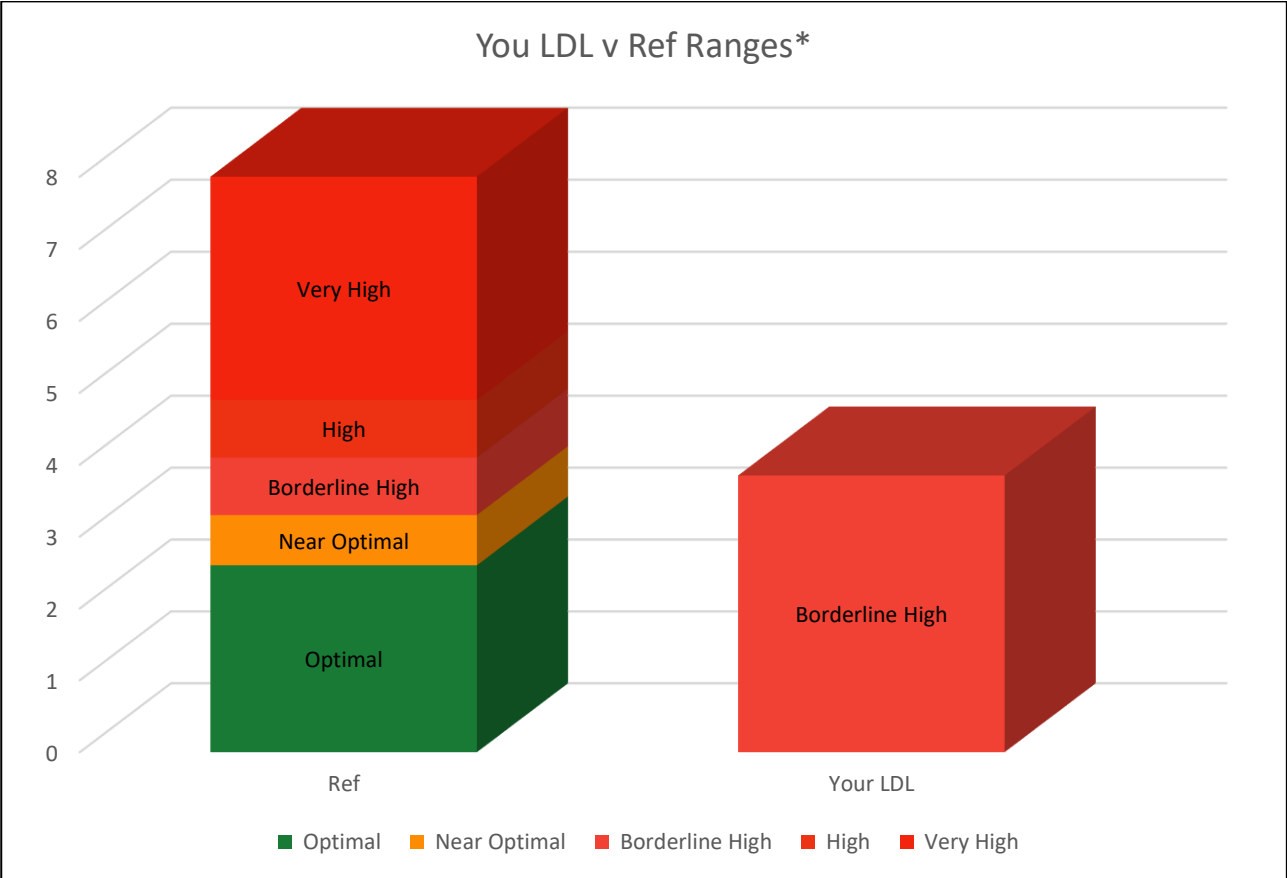
*Reference ranges are from The National Cholesterol Education Program (May 16, 2001), Journal of the American Medical Association



CHOLESTEROL



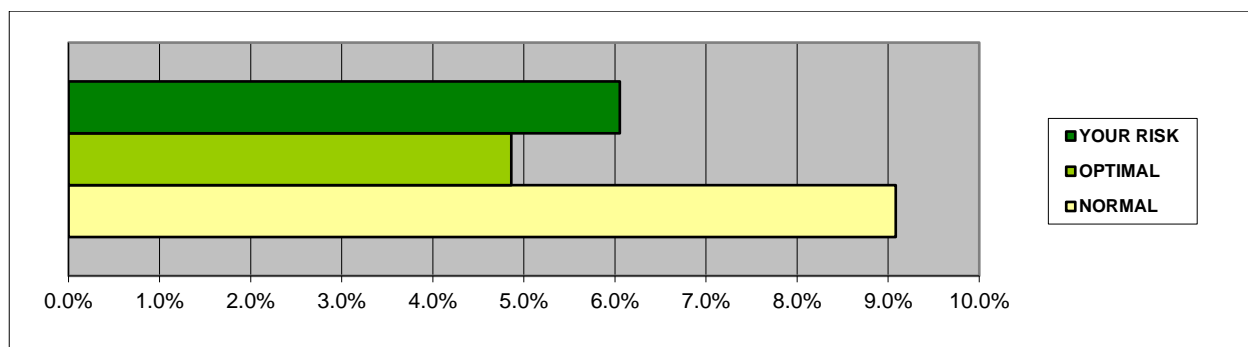
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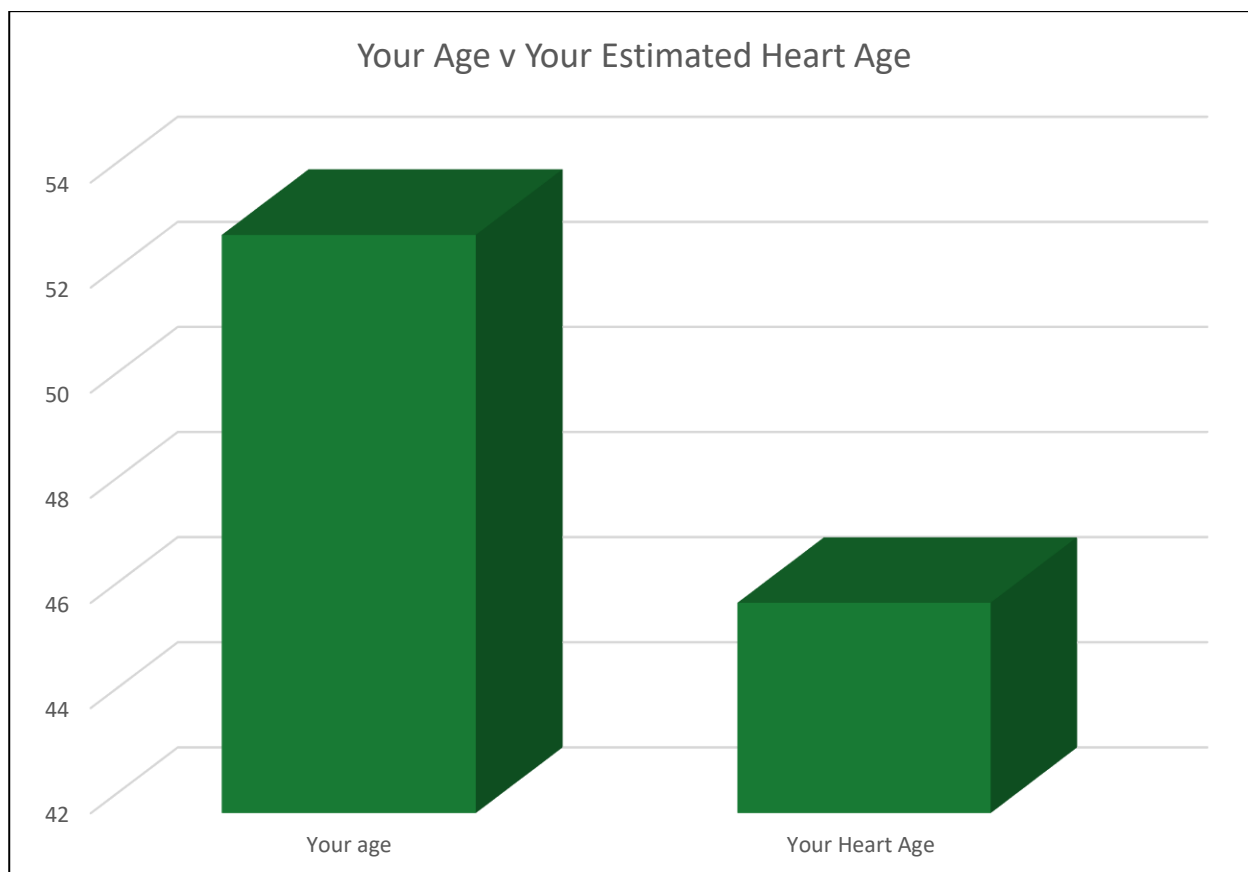
Cardiovascular Risk Score – Lipid version:

Your estimated risk of cardiovascular disease in the next 10 years is **6.1%**. An optimal percentage for your age would be **4.8%**



Your chronological age is **53**

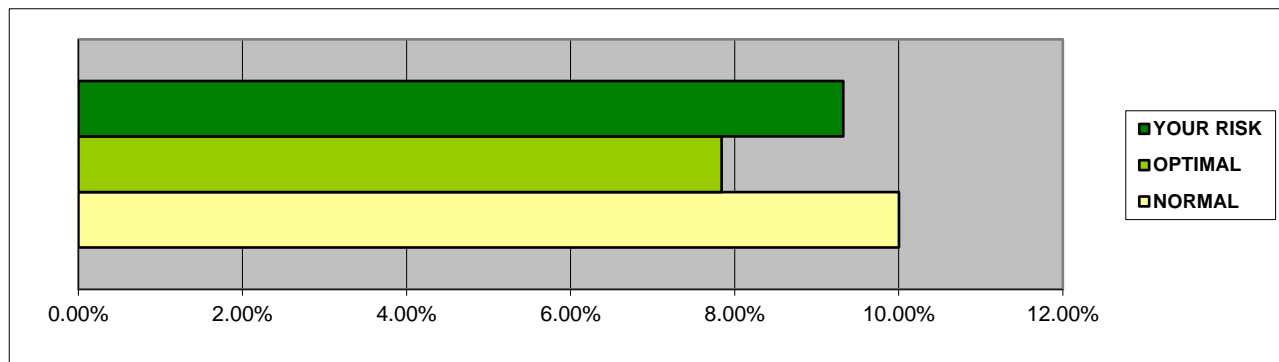
Your current heart/vascular age is **46**



This calculator estimates your risk of having cardiovascular disease within the next 10 years. Your score has been developed using the [10-year Framingham Risk Score Calculator](#) and is based on research from the Framingham Heart Study. This calculator is designed to inform. It does not take into consideration your full medical situation. It is only applicable to individuals aged 30 to 74 years old and without CVD at the baseline examination. If you already have cardiovascular disease, please discuss this with your GP or specialist. For the purposes of this calculator, cardiovascular disease includes CVD coronary death, myocardial infarction, coronary insufficiency, angina, ischemic stroke, hemorrhagic stroke, transient ischemic attack, peripheral artery disease, and heart failure.

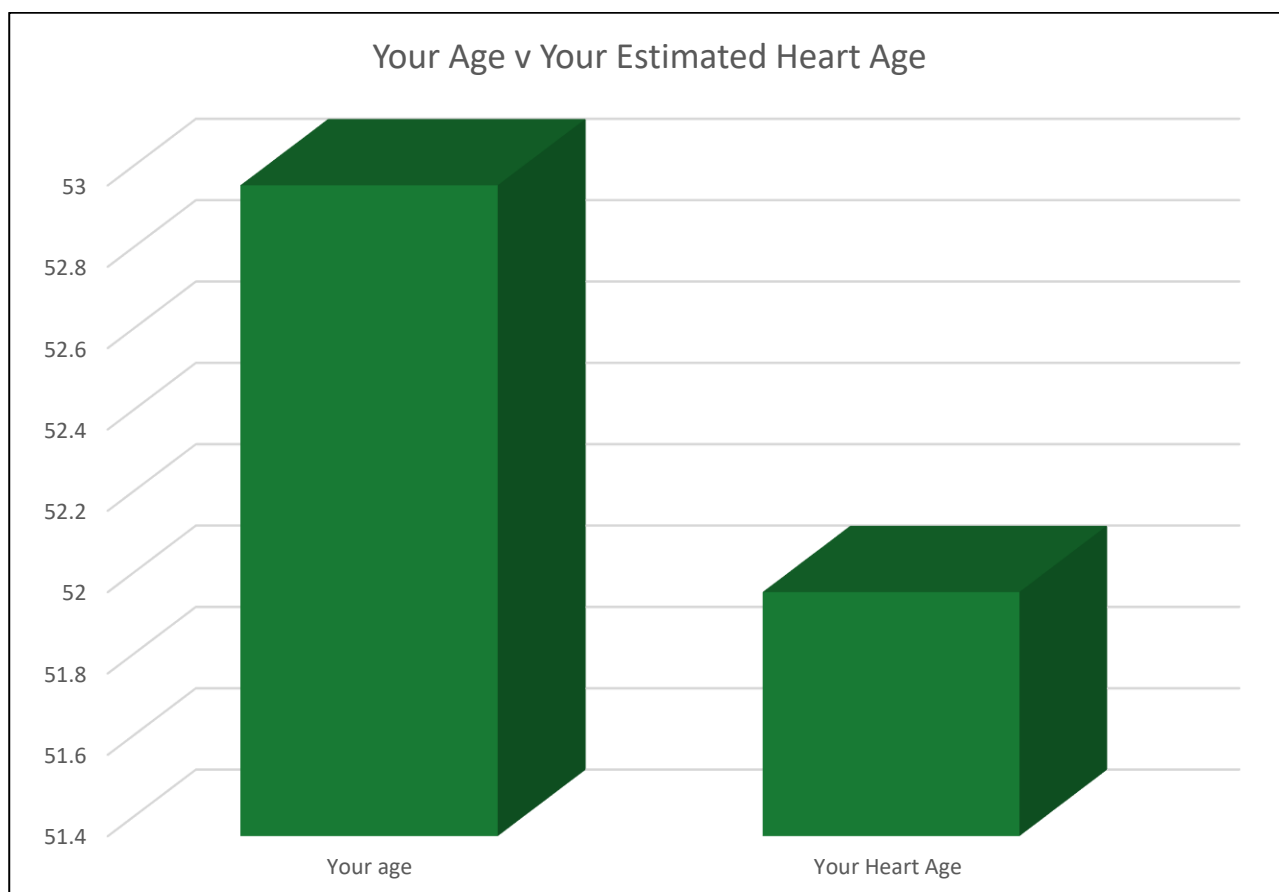
Cardiovascular Risk Score – BMI version:

Your estimated risk of cardiovascular disease in the next 10 years is **9.3%**. An optimal percentage for your age would be **8%**



Your chronological age is **53**

Your current heart/vascular age is **52**

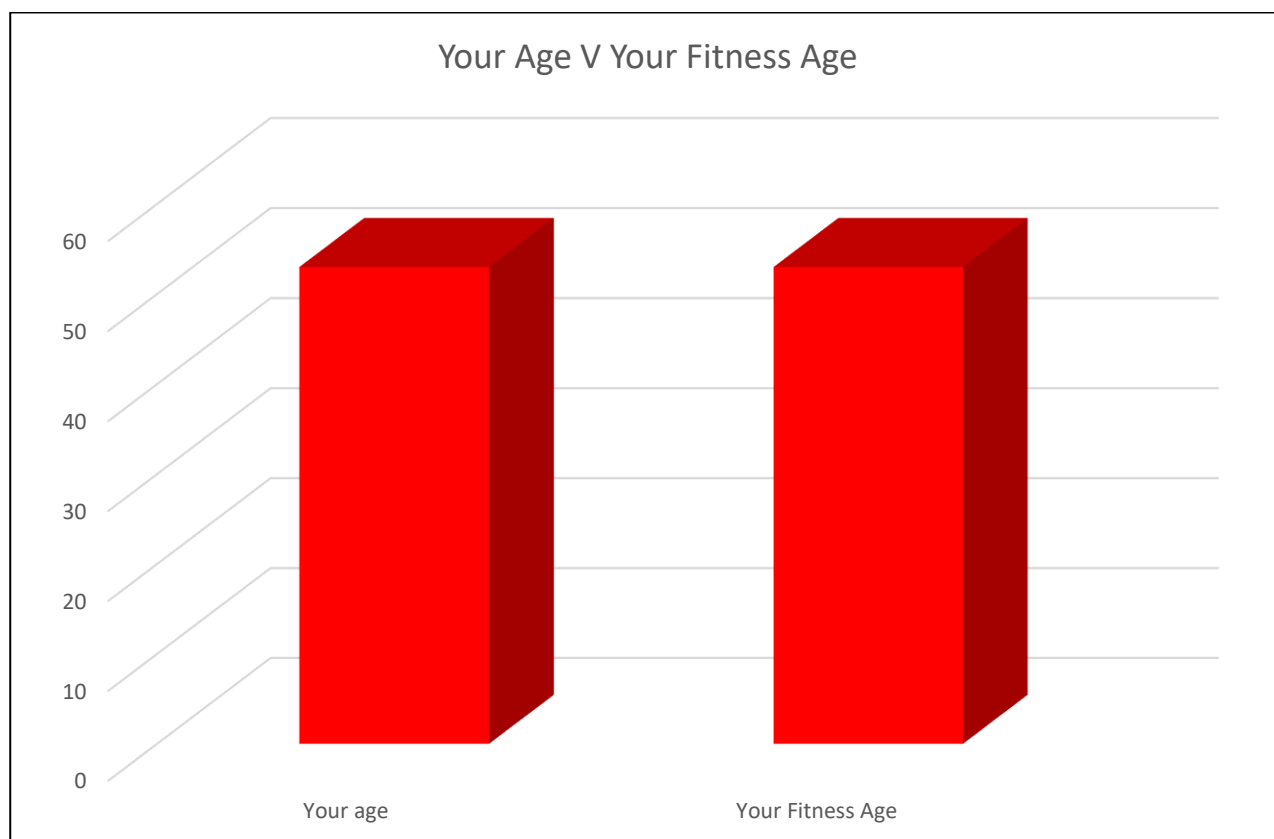


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Fitness Age:

Your Chronological Age is **53**

Your current Fitness Age is **53**



Your Expected Fitness Level is: **43 VO² Max**

Your Actual Fitness Level is: **43 VO² Max**

Your Fitness Age is based on the extensive research of The K. G. Jebsen Center of Exercise in Medicine at the Norwegian University of Science and Technology. The questionnaire you filled out at your initial assessment and some of your Advanced Test results are used to calculate this Fitness Age. Improving the following things will improve your score: waist measurement, weight, times/week you exercise, and the intensity you exercise.

Would you like to know how to improve your heart and fitness age? Email our [Sports Science Team](#) now to find out more.

Average fitness numbers

The mean maximal oxygen uptake in women and men participating in the HUNT3 Fitness Study were 35 and 44 mL/kg/min, respectively. The results suggest a ~7% decline in maximal oxygen uptake with every 10 year age increase in both genders.

Mean maximal oxygen uptake across the age-groups

Age	Women	Men
20-29 years	43	54
30-39 years	40	49
40-49 years	38	47
50-59 years	34	42
60-69 years	31	39
Over 70 years	27	34

Active elderly persons are as fit as inactive young persons

	Age	Inactive	Active
Men	20-29 years	47	60
	50-59 years	38	47
Women	20-29 years	37	49
	50-59 years	31	37

Higher fitness, lower disease risk

Fewer cardiovascular risk factors

Women and men below the gender-specific mean were four to eight times more likely to have a cluster of at least three cardiovascular risk factors – called the metabolic syndrome – compared to the most fit quartile of subjects. We also observed that maximal oxygen uptake may represent a continuum from health to disease, and that a general 5 mL/kg/min lower maximal oxygen uptake was associated with ~56% higher odds of having the metabolic syndrome.

Fewer heart attacks

Moreover, high cardiorespiratory fitness reveals the risk of heart attack in healthy persons. We found a strong link between higher fitness and reduced risk of a coronary event during the nine years following the HUNT3 Fitness Study. Only 147 participants had a heart attack or were diagnosed with angina pectoris during follow-up. The 25 % who measured the highest fitness levels had half the risk compared to those with the lowest fitness levels.

Less headache

We have also found less headache in young adults with high fitness. Nearly 4000 of the HUNT3 Fitness Study participants also answered headache questions in HUNT3, and in those aged between 20 and 50 years there was significantly increasing prevalence of any headache, migraine and tension-type headache with lower fitness. Actually, the 20 % with the lowest fitness numbers had more than twice the odds of any headache and almost four-fold likelihood of migraine compared to the fittest 20 %.

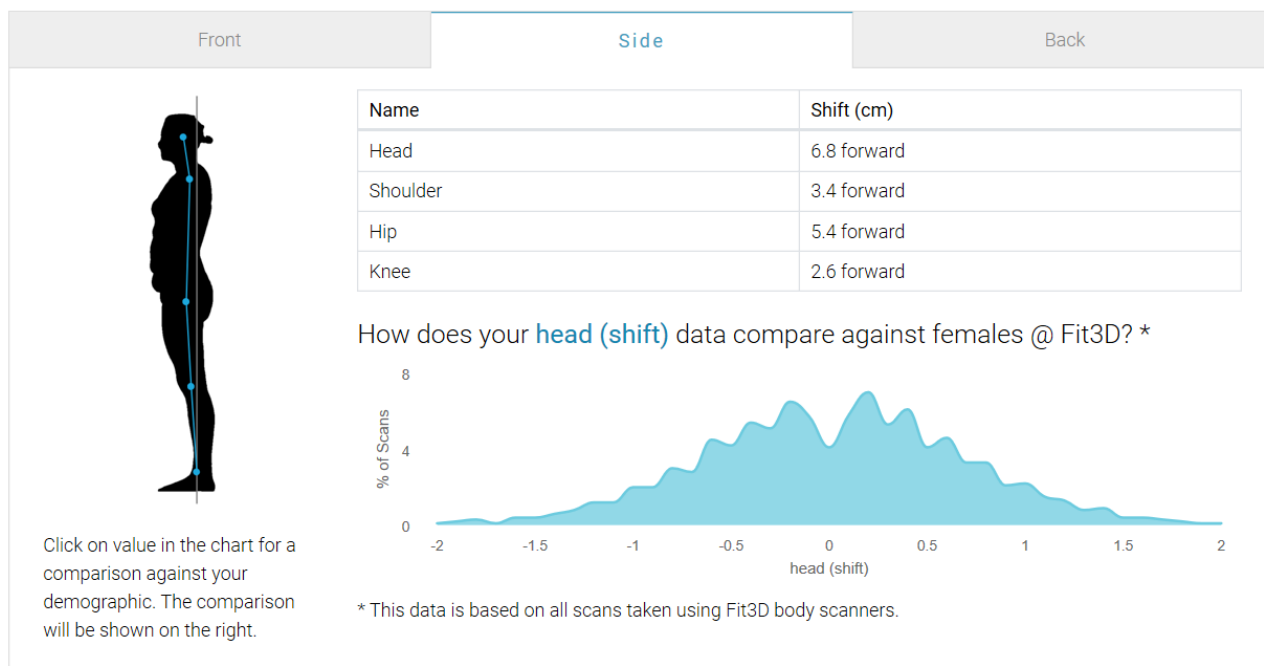
Website link for more info: <https://www.ntnu.edu/ceerg/fitness-numbers#cardiovascular>

Posture Report

Presuming you stood still during your Fit3d Scan, your Fit3d Posture Report will be sent to you via email within 48 hours of your Fit3d Body Scan. Experience has found that only the Side-On View is valuable on a one-off Fit3d Posture Report. The front and back views only become available

Sample Posture Report (Side-On View):

Posture



Additional Information

To help you learn more about your test results, we have included some website links below. You may also find some useful information in the Resources section of our website <http://healthandfitness testing.nz/resources/category/fit3d-body-scan-resources>

HbA1c and Diabetes:

- NZ Health Navigator: What is diabetes?
<https://www.healthnavigator.org.nz/videos/d/diabetes-videos/diabetes-explained/>
NZ Health Navigator: What causes diabetes?
<https://www.healthnavigator.org.nz/videos/d/diabetes-videos/diabetes-explained/>
- NZ Heart Foundation information and video on managing Diabetes:
<https://www.heartfoundation.org.nz/wellbeing/managing-risk/managing-diabetes/>
- Diabetes NZ information video about diabetes:
<https://www.youtube.com/watch?v=Z-NxzMYRqaM&feature=youtu.be>
- Diabetes NZ information on HbA1c, Lab Tests and Diabetes:
http://www.diabetes.org.nz/living_well_with_diabetes/living_with_type_1_diabetes/lab_tests

Cholesterol:

- NZ Heart Foundation information and video on managing High Cholesterol:
<https://www.heartfoundation.org.nz/wellbeing/managing-risk/managing-high-cholesterol/>
- More detailed tips to decrease “Bad” LDL and increase “Good” HDL Cholesterol
<https://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-a-healthy-lifestyle-to-improve-cholesterol-triglycerides.pdf>
- Best Practice Advocacy Centre New Zealand (bpac^{nz}) information brochure on Cholesterol:
http://www.bpac.org.nz/Supplement/2012/December/docs/bpac_2012_lipids_patient_info_A4.pdf
- An article that includes some tips to lower cholesterol:
<https://www.healthline.com/nutrition/high-cholesterol-foods#lowering-cholesterol>
- The “Bad” LDL Cholesterol:
<https://medlineplus.gov/ldlthebadcholesterol.html>
- How to boost your “Good” HDL Cholesterol
<https://www.mayoclinic.org/diseases-conditions/high-blood-cholesterol/in-depth/hdl-cholesterol/art-20046388>
- A quick video that explains the science behind how “Good” HDL can help improve your health
<https://www.youtube.com/watch?v=hsHRnKWmmhQ>

High Blood Pressure:

- NZ Heart Foundation information and video on managing High Blood Pressure:
<https://www.heartfoundation.org.nz/wellbeing/managing-risk/managing-high-blood-pressure>
- Southern Cross information on high blood pressure:
<https://www.southerncross.co.nz/group/medical-library/high-blood-pressure-hypertension>
- Blood Pressure UK information on how to improve blood pressure:
<https://www.southerncross.co.nz/group/medical-library/high-blood-pressure-hypertension>



Healthy Eating and Exercise:

- HealthEd, Healthy Eating and Active Living Tips NZ:
https://www.healthed.govt.nz/system/files/resource-files/HE1518_Healthy%20eating%20active%20living.pdf
- Diabetes NZ information video about the fat and sugar content of common NZ foods:
<https://www.youtube.com/watch?v=keWUzYnYy2w&feature=youtu.be>
- Quantity and Quality of Exercise recommended for developing and maintaining fitness
https://journals.lww.com/acsm-msse/Fulltext/2011/07000/Quantity_and_Quality_of_Exercise_for_Developing.26.aspx

Please Read:

Health and Fitness Testing NZ Limited (HFTNZ), its owner(s), its director(s) and its employee(s) do NOT diagnose medical conditions and cannot be relied on as such. All information contained in this report is provided for educational purposes only. This information should not be used to diagnose or treat any health problem or disease and this information alone is not an indication of good or poor health. THIS INFORMATION IS NOT INTENDED TO REPLACE CLINICAL JUDGMENT OR GUIDE INDIVIDUAL PATIENT CARE IN ANY MANNER. HFTNZ strongly recommends that customers should speak to their GPs and/or other health care providers if they have any questions or concerns regarding their health or the results of the tests provided by HFTNZ.

The optimal ranges, guidelines, and recommended ranges in this report are developed by companies external to HFTNZ. The Fit3D ProScanner, HbA1c (diabetes indicator), cardiovascular risk score calculator, and cholesterol analyser machine are developed by companies external to HFTNZ. HFTNZ takes no responsibility for any inaccurate results or omissions that occur as a result of equipment failure or any other reason. For Fit3D's terms and conditions, please refer to their website at <https://www.fit3d.com/terms/>. While HFTNZ will do its best to ensure that the optimal ranges and recommended ideals set out above are up to date, accurate and in accordance with best practices, these ranges and ideals may be out of date, inaccurate and/or not in accordance with best practices from time to time.

If you have results in this report marked in ORANGE or RED, it is recommended that you take action immediately (such as going to see your GP immediately).

If you or GP have any additional questions, please email our company director peter@healthandfitnesstesting.nz