

# Hopwood Hall Sports Arena Consultation Process



## Hopwood Hall Sports Arena

Hopwood Hall College | Rochdale Road | Middleton | M24 6XH

**0161 653 2070** [www.hopwood.ac.uk](http://www.hopwood.ac.uk)

# Consultation Process

Fitness testing is widely used in a variety of health and fitness clubs, seminars and rehabilitation settings.

Fitness assessments are used to establish a baseline of fitness for individuals and communities based on recognised fitness industry norms.

The Sports Arena consultation process is a comprehensive non-diagnostic procedure which can be used as a powerful motivational tool to educate you about activity and exercise; a personalised fitness programme can then be prescribed based on the results of the consultation and your goals. Successive testing can monitor and hopefully show improvements in fitness, and when judged against previous consultations, will show your progress since starting the exercise programme.



## Process in Detail

### Blood Pressure

Blood pressure (BP) is the measurement of pressure exerted on the walls of the arteries. There are two readings when taking some ones BP, Systolic and Diastolic. Systolic blood pressure is the highest.

When the beat or contraction of the heart forces blood around the body. Diastolic blood pressure is the lowest when the heart is relaxed between beats. Blood pressure is measured in mmtg (millimetres of mercury)

The American college of sports medicine (AGSM) guidelines state that optimal blood pressure is defined as 120/80 or less, and borderline high blood pressure hypertension is diagnosed is at or above 140/90



## Body Mass Index

An individual's body mass index is an estimation of an individual's weight in relation to their height. It is estimated by dividing their weight in kilograms by their height in metres squared.

The ideal range for BMI classification is 18.5 to 24.9. A reading of lower than 18.5 would be underweight and 25 to 29.9 overweight.

Anything 30.0 - 34.9 would be classified as obese.

As BMI increases from moderately overweight to obese, there is a greater risk of health complications such as high blood pressure, stroke, diabetes and coronary heart disease.

Although BMI is used by GP's and health professionals as a measurement of health risk, it does not distinguish between fat and lean muscle therefore many athletes, bodybuilders, recreational weight trainers can be classified as overweight or even obese on the BMI scale.



$$\text{BMI} = \frac{\text{WEIGHT IN POUNDS}}{(\text{HEIGHT IN INCHES}) \times (\text{HEIGHT IN INCHES})} \times 703$$

BMI	WEIGHT STATUS
BELOW 18.5	UNDERWEIGHT
18.5 - 24.9	NORMAL
25.0 - 29.9	OVERWEIGHT
30 AND ABOVE	OBESE

## Lung Function

Good lung function is important for good health and fitness.

The volume of air that your lungs can contain and the speed at which you can breathe out are very important for your capacity exercise.

The equipment that we use to measure someone's lung function is a spirometer, which takes two readings, FEV and FVC. FEV stands for forced expiratory volume and is the maximum amount of air you can breathe out in 1 second.

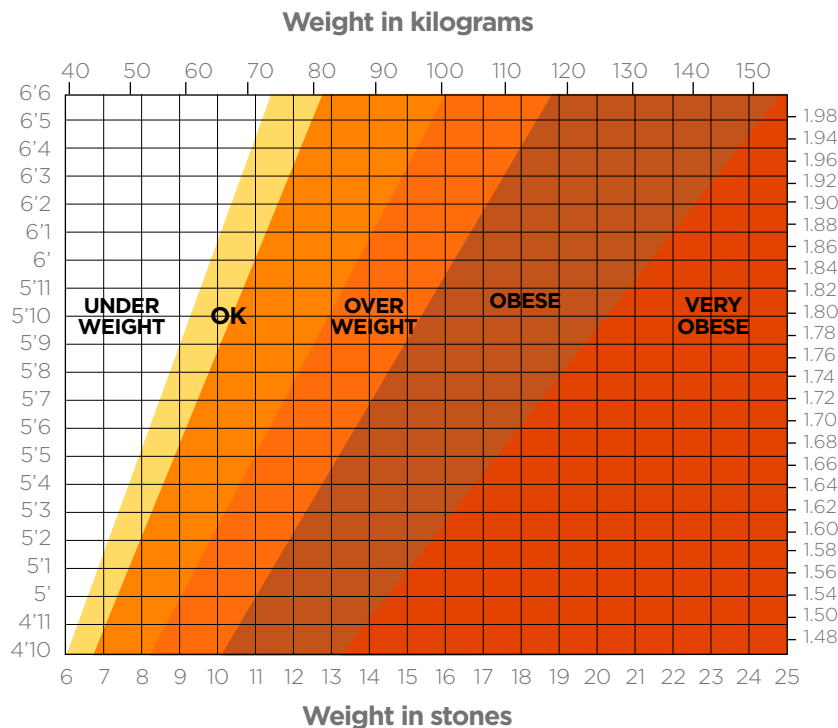
FVC stands for forced vital capacity and is a combination of the maximum amount of air you can breathe in, then out. Therefore the first measurement FEV's is a test of lung force and FVC is a test for lung volume.

# Body Fat Percentage measurement/ Body Composition

Body composition refers to the proportion of total body mass which is fat mass and lean body mass.

People who have high levels of body fat are at risk of complications such as hypertension, type 2 diabetes and strokes.

We offer a choice of body fat measurement methods, the hand held electrical device or the skinfold callipers. The skinfold callipers are more accurate and only requires one measurement to be taken at the shoulder blade.



## Cardiovascular Condition VO2

The aerobic fitness test is a submaximal test of VO<sub>2</sub>, the minimum amount of oxygen out the body can take in and deliver it to the working muscles. It is measured in ml of oxygen per kilogram of bodyweight per minute.

We offer three methods of measuring your aerobic fitness. The chester step test, the chester treadmill test and the bike test.

The chester step test and the bike test are suited to those new to exercise, although these tests can also be adjusted for those who are regular to exercise.

The treadmill test is more suited for regular exercisers with participants eventually walking or running at 15% incline. The VO<sub>2</sub> measurement is then recorded as a measurement of fitness (excellent, good, poor).



## Flexibility: The Sit and Reach Test

Flexibility is defined as the range of movement (ROM) available at a joint or group of joints.

As with any other component of physical fitness if neglected flexibility will decrease and not only exercise but every day tasks such as housework, gardening, everyday living will become harder.

The sit and reach test gives a good indication of overall flexibility involving the calves, hamstrings, pelvis, lower back, shoulders and arms.



## Muscular Endurance

The 1 minute sit up/crunch curl test measures abdominal strength and endurance.

Endurance is a measurement of the muscles ability to work out for an extended period of time, the instructor can gauge any weaknesses that need to be addressed and prescribe a programme to improve this area.

## Grip Strength / Explosive Strength

To measure a person's strength comprehensively would require a whole battery of tests which would be outside the remit of this consultation, and not suitable for most people.

The 1 rep maximum test using a grip dynamometer gives a useful indication of overall bodily strength.

Health and fitness testing can be used as a powerful motivational tool, as looking at each stage as a whole gives a clearer picture of your state of fitness. In discussion with one of our fitness instructors, we can prescribe a programme of exercise to suit your aims and goals and the results of the consultation.



## Pulse Oximeter

Pulse oximetry is a non-invasive method allowing the monitoring of the saturation of a patient's haemoglobin.

A sensor is placed on a thin part of the patient's body, usually a fingertip or earlobe, or in the case of an infant, across a foot. Light of two different wavelengths is passed through the patient to a photodetector. The changing absorbance at each of the wavelengths is measured, allowing determination of the absorbance's due to the pulsing arterial blood alone.





You have taken the first step towards a healthier lifestyle. We will be offering guidance and support throughout your membership as well as nutritional advice.

As we combine diet with exercise, you will not only lose weight, but feel healthier, have more energy and reduce the risk of diabetes, cancer, arthritis, obesity, osteoporosis and high blood pressure.



## So let's get started...

Keeping control of your weight and staying healthy doesn't mean eating salads 24 hours a day and spending hours in the gym. Instead, make small manageable lifestyle changes and your goals will be achieved. We will provide information on the healthiest foods to eat, and which foods to cut down on.

Losing weight is as simple as expending more energy (calories) than you consume. Ideally you should be aiming to lose 1 to 2lbs per week, any more and you risk losing lean tissue i.e. muscle, which can reduce your metabolism and thus increase your weight.

When trying to lose weight, people often believe the less you eat the better, - this is not the case, you can actually eat too little food. Plan to eat at least 4-6 times per day. This does not mean increasing the amount eaten, rather eating moderate sized meals or snacks more frequently. Each time we eat our metabolic rate increases for a short while afterwards, thus the act of eating actually burns calories.

Never skip meals especially breakfast, as this helps to kick start your metabolism after a night's sleep and balances your bodies sugar levels, which prevents craving sugary snacks later in the day.

## Sensible Eating

Sensible eating means eating more of some foods and less of others. If your goal is to reduce body fat levels, then certain fats need to be reduced from your diet. However, there are good (polyunsaturated and monounsaturated) and bad (saturated) fats.

## Saturated Fats

This types of fat are visible on meat, cheese, cream, milk, eggs, butter, lard, tropical oils such as palm and coconut and also manufactured pies, cakes, cookies, crisps and chocolate. Saturated fat will raise the level of bad cholesterol (LDL) in the blood, which is linked to heart disease, obesity and cancer. Your daily dietary intake should be made up of only 10% fat, so:

- Take the fat off meat
- Make an effort to eat more fish, chicken and turkey
- Cut back on chocolates, crisps, biscuits and processed food
- Drink semi or skimmed milk

## Monounsaturated Fats

These are the good fats. They help lower your bad cholesterol (LDL) and raise your good (HDL) cholesterol, which protects you from heart disease. Types on monounsaturated fats are found in:

- Hazelnuts & Walnuts
- Almonds & Peanuts



## Polyunsaturated Fats

Also a good fat, although not as beneficial as monounsaturated. They can be split into OMEGA 6, which are found in vegetable oils e.g. corn, safflower, sunflower and also nuts and seeds and OMEGA 3 which are found in fish e.g. herring, mackerel, sardines, trout, fresh tuna and salmon.

Research has shown that we should eat proportionally more of OMEGA 3 and less of OMEGA 6.

## Protein

Protein is essential for growth and formation of new tissue. It can be found in a variety of foods such as:

- Meat & poultry
- Seafood
- Eggs
- Milk
- Cheese

However, many of the above also contain a high fat content, so you need to:

- Eat lean cut meat
- Remove the fat off meat
- Eat less red meat and more chicken and turkey
- Eat more fish
- Drink semi or skimmed milk
- Eat low fat cheese and creams

When cooking meat use methods which do not involve the addition of fat or oil e.g. grill, bake, poach, boil, or barbecue instead of frying. Cereals, seeds, nuts grains and pulses are also good sources of protein.

## Carbohydrates

Carbohydrates are our primary source of energy especially when exercising. Good sources should come from unrefined natural products, such as:

- Wholegrain bread, pasta and rice
- Pulses
- Fresh Fruit
- Vegetables

Unrefined natural products are not processed in anyway, contain all their original nutrients and plenty of fibre.

On the other hand refined products e.g. white bread, pasta and rice, have little nutritional value and a high fat content. You should therefore plan your meals around wholegrain rice and pasta, baked or sweet potatoes, unsweetened cereals (e.g. Weetabix), pulses, fresh fruit and vegetables and snack on fruits and nuts.



## Drinks

It is recommended that we drink 6-8 glasses of water per day. By doing this you will cleanse your body of toxins, your skin and hair will be healthier and there are no calories to worry about.

Alcohol on the other hand is full of empty calories. We recommend that you reduce your intake of both alcohol and fizzy drinks and increase your intake of plain water.

Did you know that thirst can be confused with hunger, so next time you feel hungry drink a glass of water and see if the hunger passes.







## Level One

- 6 to 8 weeks:

- Cardio 3x per week = 20-30 min
- Strength 2x per week = 20 mins
- Flexibility 3x per week = 10 mins

## Level Two

- 6 to 8 weeks:

- Cardio 4x per week = 30-40 mins
- Strength 3x per week = 20 mins
- Flexibility 4x per week = 10 mins

## Level Three

- 6 to 8 weeks:

- Cardio 5x per week = 30-60 mins
- Strength 4x per week = 30 mins
- Flexibility 5x per week = 15 mins

- 1:** Build up gradually, which will give your body time to cope with the demands of new exercise.
- 2:** The only way to lose excess fat is by taking it slowly. It is impossible for fat to disappear overnight, so plan to change your eating habits which caused the fat to accumulate in the first place.

- 3:** Do not STARVE yourself. Without food, you simply run your body on low power and burn up fewer calories.
- 4:** Make time for exercise. Exercise is essential for PERMANENT weight loss, as it burns up calories and increases metabolism.

## Gym Plan

Use the gym plan as an aid to set fitness goals. Make sure to note down every activity, workout type, time and level each time you exercise. Keeping the log can be an excellent motivator, as you look back over the progress you have made. The plan will also highlight areas that may need more attention or areas you maybe overworking. When exercising make sure to warm up GRADUALLY and cool down before and after every session to reduce the risk of injury.

















# Weight Conversion Chart

POUNDS	STONES/ POUNDS	KILOS	POUNDS	STONES/ POUNDS	KILOS	POUNDS	STONES/ POUNDS	KILOS	POUNDS	STONES/ POUNDS	KILOS
98	7	44.5	144	10.4	65.3	190	13.8	86.2	236	16.12	107.0
99	7.1	44.9	145	10.5	65.8	191	13.9	86.6	237	16.13	107.5
100	7.2	45.4	146	10.6	66.2	192	13.10	87.1	238	17	108
101	7.3	45.8	147	10.7	66.7	193	13.11	87.5	239	17.1	108.4
102	7.4	46.3	148	10.8	67.1	194	13.12	88	240	17.2	108.9
103	7.5	46.7	149	10.9	67.6	195	13.13	88.4	241	17.3	109.3
104	7.6	47.2	150	10.10	68	196	14	88.9	242	17.4	109.8
105	7.7	47.6	151	10.11	68.5	197	14.1	89.4	243	17.5	110.2
106	7.8	48.1	152	10.12	68.9	198	14.2	89.8	244	17.6	110.7
107	7.9	48.5	153	10.13	69.4	199	14.3	90.3	245	17.7	111.1
108	7.10	49	154	11	69.9	200	14.4	90.7	246	17.8	111.6
109	7.11	49.4	155	11.1	70.3	201	14.5	91.2	247	17.9	112.0
110	7.12	49.9	156	11.2	70.8	202	14.6	91.6	248	17.10	112.5
111	7.13	50.3	157	11.3	71.2	203	14.7	92.1	249	17.11	112.9
112	8	50.8	158	11.4	71.7	204	14.8	92.5	250	17.12	113.4
113	8.1	51.3	159	11.5	72.1	205	14.9	93	251	17.13	113.9
114	8.2	51.7	160	11.6	72.6	206	14.10	93.4	252	18.0	114.3
115	8.3	52.2	161	11.7	73	207	14.11	93.9	253	18.1	114.8
116	8.4	52.6	162	11.8	73.5	208	14.12	94.3	254	18.2	115.2
117	8.5	53.1	163	11.9	73.9	209	14.13	94.7	255	18.3	115.7
118	8.6	53.5	164	11.10	74.4	210	15.0	95.3	256	18.4	116.1
119	8.7	54.0	165	11.11	74.8	211	15.1	95.7	257	18.5	116.6
120	8.8	54.4	166	11.12	75.3	212	15.2	96.2	258	18.6	117.0
121	8.9	54.9	167	11.13	75.7	213	15.3	96.6	259	18.7	117.5
122	8.10	55.3	168	12	76.2	214	15.4	97.1	260	18.8	118.4
123	8.11	55.8	169	12.1	76.7	215	15.5	97.5	261	18.9	118.8
124	8.12	56.2	170	12.2	77.1	216	15.6	98	262	18.10	119.3
125	8.13	56.7	171	12.3	77.6	217	15.7	98.4	263	18.11	119.7
126	9	57.2	172	12.4	78	218	15.8	98.9	264	18.12	120.2
127	9.1	57.6	173	12.5	78.5	219	15.9	99.3	265	18.13	120.7
128	9.2	58.1	174	12.6	78.9	220	15.10	99.8	266	19.0	121.1
129	9.3	58.5	175	12.7	79.4	221	15.11	100.2	267	19.1	121.6
130	9.4	59	176	12.8	79.8	222	15.12	100.7	268	19.2	122.0
131	9.5	59.4	177	12.9	80.3	223	15.13	101.2	269	19.3	122.5
132	9.6	59.9	178	12.10	80.7	224	16	101.6	270	19.4	122.9
133	9.7	60.3	179	12.11	81.2	225	16.1	102.1	271	19.5	123.4
134	9.8	60.8	180	12.12	81.6	226	16.2	102.5	272	19.6	123.8
135	9.9	61.2	181	12.13	82.1	227	16.3	103.0	273	19.7	124.3
136	9.10	61.7	182	13	82.6	228	16.4	103.4	274	19.8	124.7
137	9.11	62.1	183	13.1	83	229	16.5	103.9	275	19.9	125.2
138	9.12	62.6	184	13.2	83.5	230	16.6	104.3	276	19.10	125.6
139	9.13	63	185	13.3	83.9	231	16.7	104.8	277	19.11	126.1
140	10	63.5	186	13.4	84.4	232	16.8	105.2	278	19.12	126.6
141	10.1	64	187	13.5	84.8	233	16.9	105.7	279	19.13	127
142	10.2	64.4	188	13.6	85.3	234	16.10	106.1	280	20.0	127.5
143	10.3	64.9	189	13.7	85.7	235	16.11	106.6			

# Tanita Body Composition Form

Client name: ..... Instructors name: .....

 % Body Fat	Body fat percentage?	
 %Total Body Water	Total body water percentage?	
 Visceral Fat	Visceral fat rating?	
 BMR / Metabolism Age	Basal metabolic rate (BMR)?	
 BMR/ METABOLIC AGE	Metabolic age?	
 Muscle Mass	Muscle mass?	
 PHYSIQUE RATING	Physique rating?	
 Bone Mass	Bone mass?	