

Age (yrs)	THR (BPM)	Age (yrs)	THR (BPM)	Age (yrs)	THR (BPM)	Age (yrs)	THR (BPM)
18	166	29	160	40	153	51	146
19	165	30	159	42	152	52	146
20	165	31	158	42	152	53	145
21	164	32	158	43	151	54	145
22	164	33	157	44	151	55	144
23	163	34	157	45	150	56	143
24	163	35	156	46	149	57	143
25	162	36	155	47	149	58	142
26	161	37	155	48	148	59	142
27	161	38	154	49	148	60	141
28	160	39	154	50	147	61	140

**THR Formula:  $[208 - (0.7 \times \text{age})] \times 0.85$**

**THE  
BIGGEST  
LOSER** by  
**TAYLOR.**

5568BL

# Body Fat Analyzer and Scale

**Leading the Way in Accuracy®**

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please read this instruction manual before  
using the product for the first time

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## HOW DOES THE TAYLOR® BODY FAT AND ANALYZER AND SCALE WORK?

The Taylor® Body Fat Analyzer and Scale uses BIA (Bio Impedance Analysis) technology which passes a tiny electrical impulse through the body to determine fat from lean tissue, the electrical impulse cannot be felt and is perfectly safe. Contact with the body is made via stainless steel pads on the platform of the scale. Contact with the body is made via stainless steel pads on the platform of the scale.

This method simultaneously calculates your personal weight, body fat, total body water, BMI, Basal Metabolic Rate and muscle mass giving you a more accurate reading of your overall health and fitness. This scale will also display weight, body fat and total body water for children and young adults aged 6-17 years. Muscle mass, BMI and BMR are not shown for this age range.

This scale stores the personal data of up to 8 users. As well as being an analyzer scale, this scale can be used as a conventional scale.

**NOTE:** This instrument is a personal monitor and should be used in a consistent manner for the most accurate reading. While readings might vary between this analyzer and other methods of measurement (hydrodensitometry or hand held calipers), your changes in body fat percentage shown by this instrument will be reflected accurately. While this analyzer will work accurately as a scale for anyone and give accurate body fat readings for a majority of people, it is not calibrated for use by pregnant women or children under the age of 18.

## BODY WATER - WHY MEASURE IT?

Water makes up approximately 50-70% of the body's weight. It is present proportionally more in lean tissue compared to fat tissue. Water is a medium for biochemical reactions that regulate body functions. For better accuracy, avoid fluctuation in hydration level prior to the measurement. The accuracy of the scale in estimating %TBW will also decrease with individuals suffering from diseases that tend to accumulate water in the body. The optimal %TBW of an individual varies according to age and gender.

Ideal body fat/body water content is not the same for all people. Age, sex, and heredity are variables in this measurement. Consult your physician to determine what levels are most ideal for you.

Please note that body fat contains some body water weight. Thus, body fat and body water percentages will not add up to 100%.

## BASAL METABOLIC RATE (BMR) - WHAT DOES IT MEAN?

Your Basal Metabolic Rate (BMR) is an estimation of the energy (measured in calories) expended by the body, at rest, to maintain normal body functions. This continual work makes up about 60-70% of the calories the body uses, and includes the beating of your heart, respiration, and the maintenance of body temperature. Your BMR is influenced by a number of factors, including age, weight, height, gender, dieting and exercise habits.

## WHY SHOULD I KNOW MY MUSCLE MASS?

Weight change may occur from a combination of losing or gaining fat or muscle. A 10-pound weight loss will be approximately 70% fat loss and 30% muscle loss. The disadvantage of a standard weight only scale is that it cannot distinguish between changes in fat or changes in muscle. Most fitness goals involve reducing fat and increasing muscle mass. Besides the benefits to the body of a lower body fat percentage, a greater muscle mass will result in a stronger, more efficient body.

Building up muscle in the body has been shown to support stronger, healthier bones. With the exception of body fat, all parts of the body (bones, organs, tissues, fluids) represent the fat-free body mass. The higher the percentage of fat-free body mass, the more muscle bulk and bone density the body has. Individuals should aim to strengthen and maintain healthy bones with adequate exercise and proper nutrition, especially in regards to calcium.

Thank you for purchasing a Taylor® Precision Product. Your Taylor® Body Fat

Analyzer and Scale is an example of superior design and craftsmanship. Please read this instruction manual carefully before use. Keep these instructions handy for future reference.

For more information on NBC's The Biggest Loser, or to join The Biggest Loser Club, please visit the official Biggest Loser website at

[www.nbc.com/The\\_Biggest\\_Loser.com](http://www.nbc.com/The_Biggest_Loser.com) or [www.biggestloserclub.com](http://www.biggestloserclub.com).

Get a free diet profile at [www.biggestloserclub.com](http://www.biggestloserclub.com)

**NORMAL HEALTHY RANGE OF BODY FAT & TOTAL BODY WATER PERCENTAGE**

MALE			FEMALE		
AGE	BODY FAT	BODY WATER	AGE	BODY FAT	BODY WATER
6	12-20%	60%+	6	14-23%	50%+
7	13-20%		7	15-25%	
8	13-21%		8	15-26%	
9	13-22%		9	16-27%	
10	13-23%		10	16-28%	
11	13-23%		11	16-29%	
12	12-22%		12	16-29%	
13	12-22%		13	16-29%	
14	11-21%		14	16-30%	
15	10-21%		15	16-30%	
16	10-20%	16	16-30%		
17	10-20%	17	15-30%		
18-29	8-19%	60%	18-29	20-30%	50%
30-39	11-21%	60%	30-39	22-32%	50%
40-49	13-23%	55%	40-49	24-34%	47%
50-59	15-25%	55%	50-59	26-36%	47%
60-69	17-27%	50%	60-69	28-38%	45%

**Fig 1**

For those using Athlete Mode: note that athletes may have a lower body fat range and a higher body water range than shown above, depending on their type of sport or activity.

Body water measurement results are influenced by the proportion of body fat and muscle. If the proportion of body fat is high, or the proportion of muscle is low then the body water results will tend to be low.

It is important to remember that measurements such as body weight, body fat and body water are tools for you to use as part of your healthy lifestyle. As short term fluctuations are normal, we suggest you chart your progress over time, rather than focus on a single days reading.

This product is for domestic use only. Pregnant women should only use the weight function.

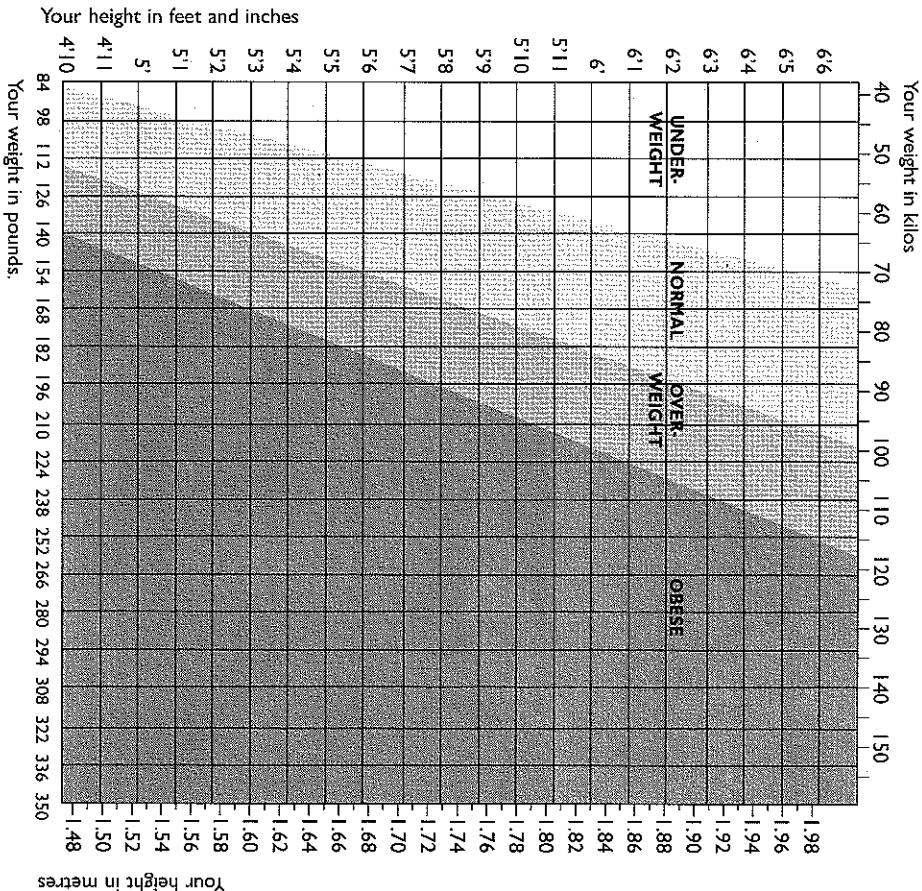
**Professional medical guidance should always be sought before embarking on diet and exercise programs.**

**CAUTION: Do not use this product if you have a pacemaker or other medical device fitted. If in doubt, consult your doctor.**

**WHAT DOES MY BMI VALUE MEAN?**

Your Taylor® Scale calculates your BMI value. Below is a useful chart to show the correlation between height, weight and the BMI categories Underweight, Normal, Overweight and Obese.

Get a free diet profile at [www.biggestloserclub.com](http://www.biggestloserclub.com)



Your BMI category can be identified using the table below.

BMI Category	BMI Value Meaning	Health Risk Based Solely On BMI
< 18.5	Underweight	Moderate
18.5-24.9	Normal	Low
25-29.9	Overweight	Moderate
30+	Obese	High

**IMPORTANT:** If the chart/table shows that you are outside of a 'normal' healthy weight range, consult your doctor before taking any action.

BMI classifications are for adults (age 20+ years) only.

**How exactly is my body fat and water being measured?**

The Taylor® Body Fat Analyzer uses a measurement method known as Bioelectrical Impedance Analysis (BIA). A minute current is sent through your body, via your feet and legs. This current flows easily through the lean muscular tissue, which has a high fluid content, but not easily through fat. Therefore, by measuring your body's impedance (i.e. its resistance to the current), the quantity of muscle can be determined. From this, the quantity of fat and water can then be estimated. Please note that body fat contains some body water weight. Thus, body fat and body water percentages will not add up to 100%.

**What is the value of the current passing through me when the measurement is taken? Is it safe?**

The current is less than 1mA, which is tiny and perfectly safe. You will not be able to feel it. Please note however, that this device should not be used by anyone with an internal electronic medical device, such as a pacemaker, as a precaution against disruption to that device.

**If I measure my body fat and water at different times during the day, it can vary quite considerably. Which value is correct?**

Your body fat percentage reading varies with body water content, and the latter changes throughout the course of the day. There is no right or wrong time of the day to take a reading, but aim to take measurements at a regular time when you consider your body to be normally hydrated. Avoid taking readings after having a bath or sauna, following intensive exercise, or within 1-2 hours of drinking in quantity or eating a meal.

**My friend has a Body Fat Analyzer made by another manufacturer. When I used it I found that I got a different body fat reading to that on my Taylor® Body Fat Analyzer and Scale.**

**Why is this?**

Different Body Fat Analyzers take measurements around different parts of the body and use different mathematic algorithms to calculate the percentage of body fat. The best advice is to not make comparisons from one device to another, but to use the same device each time to monitor any change.

**How do I interpret my body fat and water percentage readings?**

Please refer to the Body Fat and Water tables included with the product. They will guide you as to whether your body fat and water reading falls into a healthy category (relative to your age and sex).

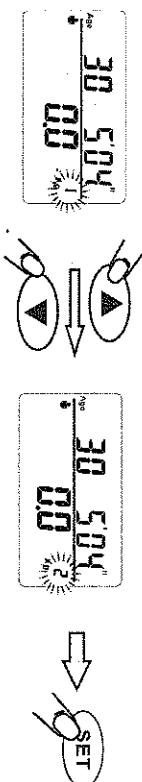
**Why are the body fat percentage ranges for men and women so different?**

Women naturally carry a higher percentage of fat than men, because the make-up of the body is different being geared towards pregnancy, breastfeeding etc.

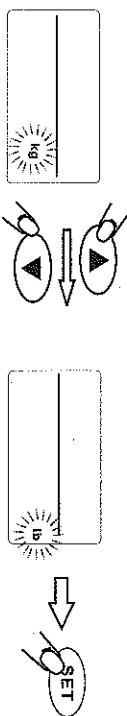
**Why should I avoid using the Taylor® Body Fat Analyzer while pregnant?**

During pregnancy a woman's body composition changes considerably in order to support the developing child. Under these circumstances, body fat percentage readings could be inaccurate and misleading. Pregnant women should therefore only use the weight function.

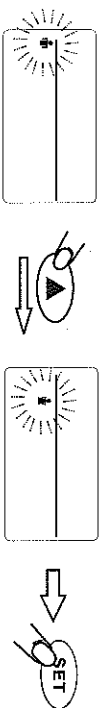
- 1) Press the **on/off** button to turn the scale on.
- 2) While '----' is flashing, press the **SET** button to activate the set-up procedure. The display shows the current gender, age & height. The user number will flash.
- 3) While the user number is flashing, select a user number by pressing the **▲** or **▼** buttons. Press the **SET** button to confirm your selection.



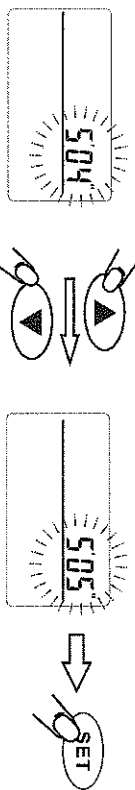
- 4) The weight mode display will flash.



- 5) The male or female symbol will flash.

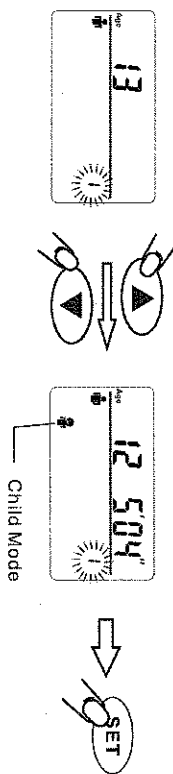


- 6) The height display will flash.



- 7) The age display will flash.

**Child Mode:**  
When the age is set from 6-12 years child mode is automatically selected. A small child icon will appear, as illustrated below.  
**Note:** In child mode only weight, body fat and body water are displayed.



- 8) The display will show your settings, wait for **0.0** to be displayed, then allow the scale to switch off. The memory is then set.
- 9) Repeat procedure for a second user, or to change user details.

**Note:** To update or overwrite the memorised data, follow the same procedure, making changes as required.

**Tip:** During the set-up procedure press **on/off** to quit and start again at any time.

### WEIGHT & BODY FAT READINGS

Position the Scale on a flat level surface.

- 1) Press the **on/off** button to turn the scale on.
- 2) While '---' is flashing, press the **SET** button.
- 3) Whilst the user number is flashing select your user number by pressing the **▲** or **▼** buttons. Your settings will be displayed.
- 4) Wait until the user number stops flashing. Zero will be displayed.

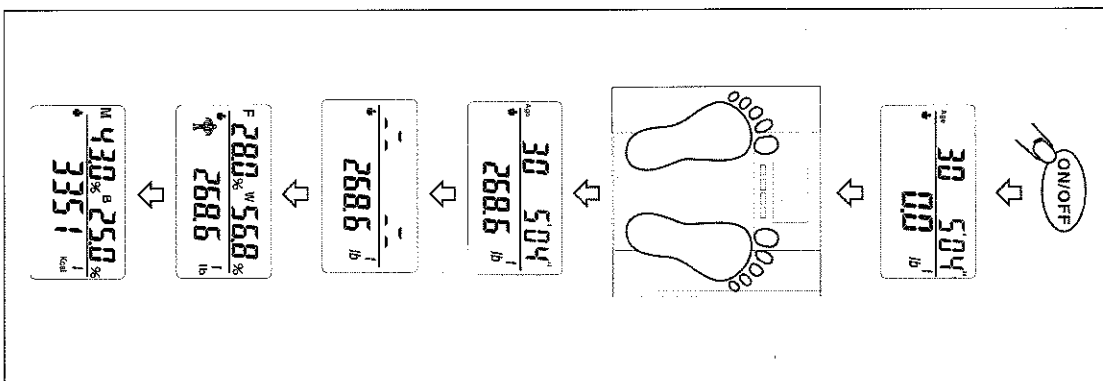
#### Athlete Mode:

To select Athlete Mode press the **▲** button.

**Note:** This feature is only available to those aged between 15-50 years.

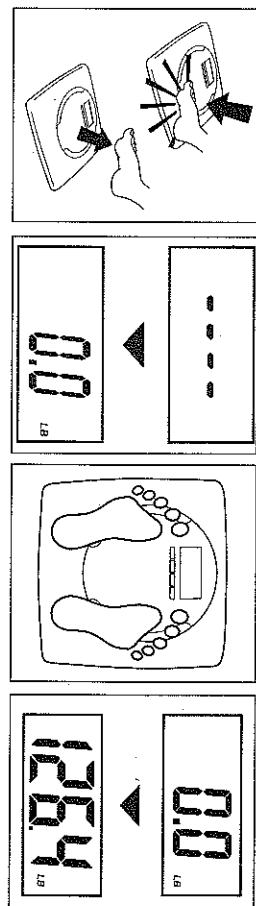
An athlete is defined as a person who is involved in intense physical activity of approximately 12 hours per week and who has a resting heart rate of approximately 60 beats per minute or less.

- 5) When zero is displayed, with bare feet, step onto the platform and stand still.
  - 6) After 2-3 seconds your weight will be displayed.
  - 7) Remain standing on the scale while your other readings are taken.
  - 8) Your body fat % (F), total body water % (W) and weight are displayed.
  - 9) Next your muscle mass % (M), BMI (B) and BMR (Kcal) are displayed.
- The results are repeated then the scale switches off.



### WEIGHT READING ONLY

Position the scale on a flat level surface.



- a) Tap the center of the platform firmly to activate the scale.
- b) Remove foot from platform and **WAIT** for display to show a zero reading.
- c) To change weight mode press the **SET** button.
- d) While zero is displayed, step onto the platform and stand still.
- e) After 2-3 seconds, your weight will be displayed.

### WARNING INDICATORS



'Lo' = replace battery.

'O-Lo' = Weight exceeds maximum capacity.

'Err' = out of range, incorrect operation or poor feet contact.

### TECHNICAL SPECIFICATION

80 cm - 220 cm 27" - 7'3"	Athlete mode = 15-50 years
6 - 100 years	d = 0.1 % body fat
Male/Female	d = 0.1 % body water
8 user memory	d = 0.1 % muscle mass
Child mode = 6-12 years	d = 1 kcal BMR

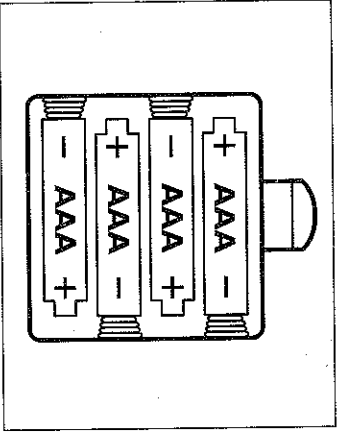
### CAUTIONS

BIA (Bioelectrical Impedance Analysis) method determines your body fat percentage by sending a harmless signal through the body. **Do not use this product if you have a pacemaker or other internal medical device.** When in doubt contact your physician.

This analyzer will give accurate body fat readings for a majority of people, but is not calibrated for use by pregnant women.

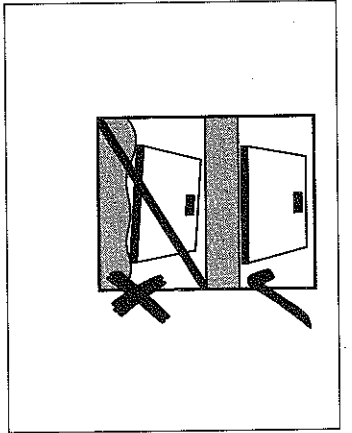
**NOTE:** If you are having a problem operating this Analyzer please call 866-843-3905 from 7:30 am to 4:30 pm, Mountain Standard Time, Monday through Friday.

## BATTERY



Requires 4 x AAA batteries.

## POSITION



Position scale on flat surface.

## ADVICE FOR USE AND CARE

- Always weigh yourself on the same scale placed on the same floor surface. Do not compare weight readings from one scale to another as some differences will exist due to manufacturing tolerances.
- Placing your scale on a hard, even floor will ensure the greatest accuracy and consistency.
- It is recommended that you measure at the same time of the day, preferably early evening before a meal for the most consistent results.
- Your scale rounds up or down to the nearest increment.
- If you weigh yourself twice and get two different readings, your weight lies between the two.
- Clean your scale with a damp cloth. Do not use chemical cleaning agents.
- Do not allow your scale to become saturated with water as this can damage the electronics.
- Treat your scale with care - it is a precision instrument. Do not drop it or jump on it.

## TROUBLESHOOTING GUIDE

- You must have bare feet when using body fat and total body water measurements.
- The condition of your skin on the bottom of your feet can affect the reading. To get the most accurate and consistent reading, wipe your feet with a damp cloth, leaving them slightly moist before stepping on the scale.

## Ten (10) Year Limited Warranty

This scale is warranted against defects in materials or workmanship for ten (10) years for the original purchaser from date of retail purchase. It does not cover damages or wear resulting from accident, misuse, abuse, commercial use, or unauthorized adjustment and/or repair.

Should this scale require service (or replacement at our option) while under warranty, please pack the item carefully and return it prepaid, along with store receipt showing date of purchase and a note explaining reason for return to:

Taylor Precision Products  
2220 Entrada Del Sol, Suite A  
Las Cruces, New Mexico 88001 USA

There are no expressed warranties except as listed above. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

For additional product information, or warranty information in Canada or elsewhere outside the USA, please contact us through [www.taylorusa.com](http://www.taylorusa.com).

If service is required, do not return to retailer. For service call 1 (866) 843-3905 from 7:30 am to 4:30 pm, Mountain Standard Time, Monday through Friday. To assist us in serving you, please have the model number and date of purchase available.

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Made to our exact specifications in China.

Not Legal for Trade

[www.taylorusa.com](http://www.taylorusa.com)

## **Release of Liability**

### **For Use of City of Fayetteville Fire / Emergency Management Wellness Equipment (For Off Duty participation only)**

I, \_\_\_\_\_ (name), in order to use the equipment while off duty in the City of Fayetteville Fire Stations, located on property owned by the City of Fayetteville, for purposes other than official departmental training, and in consideration of the services to be performed by the City of Fayetteville, its agents, officers, officials and employees, I do hereby assume all risks and hazards incidental to the use of such facilities. I do further hereby release, acquit, and forever discharge the City of Fayetteville, its employees, officers, officials, agents, servants, successors, heirs, executors and administrators and all other persons, corporations, firms, associations or partnerships, of and from, any and all claims arising from my use of this facility, including, but not limited to, any and all premises liability claims, causes of action, demands, rights, damages, costs (including, but not limited to, pre- and post-judgment interest), debts and sum of money, whatsoever, in law or equity, loss of services, personal injuries, mental anguish, emotional distress, pain and suffering and medical and other expenses and compensation whatsoever, which the undersigned may hereafter accrue on account of or in any way growing out of, all known and unknown, foreseen and unforeseen consequences resulting from, or to result, pursuant to the conduct of or participation in this activity or use of this facility.

I further covenant and agree that this Release shall bind myself, my heirs, next of kin, executors, administrators, agents, successors or assigns and shall insure to the benefit of the parties released herein, their heirs, next of kin, executors, administrators, successors or assigns.

I am fully aware of the risks inherent to using this facility and recognize that I should not use this facility and its contents unless I am medically able. I hereby acknowledge and certify that I have no medical condition(s) or disabilities that would prevent or prohibit my participation in this activity and I assume all risks associated with such participation.

In case of accident or illness resulting from my use of this facility, I authorize a representative, agent or employee of the City of Fayetteville to obtain immediate care deemed necessary by licensed medical personnel.

I have read and fully understand that these terms are contractual and not a mere recital. I hereby voluntarily sign this Release and take responsibility for the information contained herein, which is accurate to the best of my knowledge.

Signature of Participant: \_\_\_\_\_ Date: \_\_\_\_\_

Name \_\_\_\_\_

## PHYSICAL ACTIVITY READINESS QUESTIONNAIRE (PAR-Q)

Regular physical activity is fun and health, and increasingly more people are starting to become active every day. Being more active is very safe for most people. However, some should check with their doctor before they start becoming much more physically active.

If you are planning to become much more physically active than you are now start by answering the seven questions below. If you are between the ages of 15 and 69 the questionnaire will tell you if you should check with your doctor before you start. If you are over 69 years of age and you are not used to being very active, check with your doctor.

Common sense is your best guide when you answer these questions. Please read the questions carefully and answer each one honestly.

### Yes or No

1. Has your doctor ever said that you have a heart condition and that you should only do physical activity recommended by a doctor? YES or NO
2. Do you feel pain on your chest when you do physical activity? YES or NO
3. In the past month have you had chest pain when you were not doing physical activity? YES or NO
4. Do you lose your balance because of dizziness or do you ever lose consciousness? YES or NO
5. Do you have a bone or joint problem that could be made worse by a change in your physical activity? YES or NO
6. Is your doctor currently prescribing drugs (for example water pills) for your blood pressure or heart condition? YES or NO
7. Do you know of any other reason why you should not do physical activity?

### If you answered yes to one or more questions:

Talk with your doctor by phone or in person BEFORE you start becoming much more physically active or BEFORE you have a fitness appraisal. Tell your doctor about the questionnaire and to which questions you answered yes. You may be able to do any activity you want – as long as you start slowly and build up gradually. Or, you may need to restrict your activities to those that are safe for you. Talk with your doctor about the kinds of activities you wish to participate in and follow his/her advice.

### If you answered NO to all questions:

If you answered No honestly to all questions, you can be reasonably sure that you can:  
Start becoming much more physically active – begin slowly and build up gradually. This is the safest way to go. Take part in a fitness appraisal – this is an excellent way to determine your basic fitness so that you can plan the best way for you to live actively.

### DELAY BECOMING MUCH MORE ACTIVE:

If you are not feeling well because of a temporary illness such as a cold or fever, If you are or may be pregnant – talk to your doctor before becoming much more active.

Please note: If your health changes so that you then answer YES to any of the above questions, tell your fitness or health professional. Ask whether you should change your physical activity plan.

\_\_\_\_\_  
Signature / Date

BMI	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Height	BodyWeight(pounds)																														
58' (4'10")	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167	172	177	181	186	191	196	201	205	210	215	220	224	229	234	239
59' (4'11")	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173	178	183	188	193	198	203	208	212	217	222	227	232	237	242	247
60' (5')	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179	184	189	194	199	204	209	215	220	225	230	235	240	245	250	255
61' (5'1")	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185	190	195	201	206	211	217	222	227	232	238	243	248	254	259	264
62' (5'2")	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191	196	202	207	213	218	224	229	235	240	246	251	256	262	267	273
63' (5'3")	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197	203	208	214	220	225	231	237	242	248	254	259	265	270	278	282
64' (5'4")	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204	209	215	221	227	232	238	244	250	256	262	267	273	279	285	291
65' (5'5")	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210	216	222	228	234	240	246	252	258	264	270	276	282	288	294	300
66' (5'6")	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216	223	229	235	241	247	253	260	266	272	278	284	291	297	303	309
67' (5'7")	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223	230	236	242	249	255	261	268	274	280	287	293	299	306	312	319
68' (5'8")	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230	236	243	249	256	262	269	276	282	289	295	302	308	315	322	328
69' (5'9")	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236	243	250	257	263	270	277	284	291	297	304	311	318	324	331	338
70' (5'10")	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243	250	257	264	271	278	285	292	299	306	313	320	327	334	341	348
71' (5'11")	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250	257	265	272	279	286	293	301	308	315	322	329	338	343	351	358
72' (6')	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258	265	272	279	287	294	302	309	316	324	331	338	346	353	361	368
73' (6'1")	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265	272	280	288	295	302	310	318	325	333	340	348	355	363	371	378
74' (6'2")	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272	280	287	295	303	311	319	326	334	342	350	358	365	373	381	389
75' (6'3")	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279	287	295	303	311	319	327	335	343	351	359	367	375	383	391	399
76' (6'4")	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287	295	304	312	320	328	336	344	353	361	369	377	385	394	402	410
BMI	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50

**FFD SOP #**  
**Appendix 1**

**Annual Fitness Test**

Annual evaluations will consist of five separate assessments.

1. Body Composition
2. Aerobic Capacity
3. Muscular Strength / Power
4. Muscular Endurance
5. Flexibility

Note:

Before conducting a fitness assessment, the PFT must ensure all proper forms are completed and client is with in 12 months of a successful medical physical.

**1. Body Composition:**

There are many techniques available to estimate body composition. WFI recommends a three-site skinfold measurement. When performed correctly, skinfold measurements yield reliable and accurate results.

Measurements will be taken using a skinfold caliper. A series of three sites on the body will be used, with a minimum of two measurements being taken at each site.

*Male Skinfold Sites:*

Triceps  
Subscapular  
Pectoral

*Female Skinfold Sites:*

Triceps  
Abdominal  
Suprailiac

Equipment used for body composition test:

Skinfold calipers, flexible tape measure, water soluble marker

***Note: This is a basic description of one component of the annual fitness test. A more detailed description will be available at the test site.***

## **2. Aerobic Capacity:**

FFD will use the WFI submaximal treadmill test. The assessment estimates a firefighter's maximal aerobic capacity, expressed as Vo<sub>2</sub> max. The assessment is submaximal and is based on the heart rate response during graded exercise.

One variable that assists in determining the Vo<sub>2</sub> max is the subjects BMI (Body Mass Index). It is important to note that BMI is not being used in these aerobic protocols to estimate body composition; but rather it is used to represent the mass of each subject, therefore obtaining a target heart rate.

The treadmill will start at three mph with a zero percent grade. At one minute intervals, either the speed or the grade will increase, not both. Once the subjects target heart rate (THR) is reached, the time will be noted. Once the heart rate remains at or above the THR for 15 seconds, the test will be concluded.

The participant will also perform a 3 minute cool down at three mph and zero percent grade.

Equipment needed for aerobic capacity test:

Commercial grade treadmill, calculator, heart rate monitor, stopwatch, height and weight scale

*Note: This is a basic description of one component of the annual fitness test. A more detailed description will be available at the test site.*

## **3. Muscular Strength / Power**

### **WFI Arm Strength:**

The arm strength assessment evaluates the maximum isometric strength of the flexor muscles of the arm.

It is a series of three trials in which the subject will 'ease into' the isometric arm contraction and release slowly.

The digital read out will display both the peak force and the average force achieved during the evaluation.

Equipment needed for arm strength test:

Jackson Strength Evaluation System or verified equivalent dynamometer, straight handlebar, towel

*Note: This is a basic description of one component of the annual fitness test. A more detailed description will be available at the test site.*

**WFI Leg Strength:**

The leg strength assessment evaluates the maximum isometric strength of the lower body by performing a static dead lift.

It is a series of three trials in which the subject will 'ease into' the isometric leg extension and release slowly.

The digital read out will display both the peak force and the average force achieved during the evaluation.

Equipment needed for leg strength test:

Jackson Strength Evaluation System or verified equivalent dynamometer, V-grip handlebar, towel, weight lifting belt (optional)

**WFI Vertical Jump:**

The leg power assessment estimates peak power in the lower body.

It is a series of three trials, with the subject jumping as high as possible on each one.

Using a formula, the highest jump recorded will be converted to estimate leg power.

Equipment needed for vertical jump test:

Pressure mat, calculator

*Note: This is a basic description of one component of the annual fitness test. A more detailed description will be available at the test site.*

**Grip Strength:**

This assessment evaluates the maximum isometric muscular strength of the flexor muscles of the hands. There is a strong correlation between hand grip strength and upper body strength.

This is a series of six trials, three per hand, alternating hands with each attempt. The participant will squeeze with maximum force for three seconds while exhaling.

The highest score for each trial in each hand will be recorded (to the highest kilogram).

Equipment needed for grip strength test:

Hydraulic hand dynamometer, towel

*Note: This is a basic description of one component of the annual fitness test. A more detailed description will be available at the test site.*

#### **4. Muscular Endurance**

##### **Prone Static Plank:**

This assessment evaluates the muscular endurance of the core stabilizer muscles of the trunk.

The subject will be tested in the prone position, with forearms and toes on the floor.

The test will max out at 4 minutes.

Equipment needed for static plank test:

Stopwatch, exercise mat

*Note: This is a basic description of one component of the annual fitness test. A more detailed description will be available at the test site.*

##### **Push Up:**

This assessment evaluates muscular endurance of the upper body. The series of push ups will be performed in a two minute time period, with a maximum of eighty push ups. The push ups will be performed in cadence with a metronome set at 40 bpm.

Equipment needed for push up test:

Five inch prop, metronome, stopwatch

*Note: This is a basic description of one component of the annual fitness test. A more detailed description will be available at the test site.*

#### **5. Flexibility**

This assessment evaluates generalized flexibility of the shoulders, trunk and hips. There is a direct correlation between flexibility and injury prevention. The flexion required during this evaluation must be smooth and slow.

It is a series of three trials, with a thirty second resting period between each.

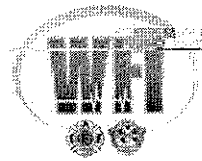
Once the assessment is complete, the greatest reach distance will be recorded from the three trials (rounded to the nearest ¼ inch).

Equipment needed for flexibility test:

Novel Acuflex or equivalent trunk flexibility test device

*Note: This is a basic description of one component of the annual fitness test. A more detailed description will be available at the test site.*

# WFI HEALTH HISTORY FORM



Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Date: \_\_\_\_\_ Date of Birth: \_\_\_\_\_ Age: \_\_\_\_\_ Gender: Male \_\_\_\_\_ Female \_\_\_\_\_

Regular physical activity is safe for most people. However, some individuals should check with their doctor before they start an exercise program. To help us determine if you should consult with your doctor before starting to exercise with a Peer Fitness Trainer, please read the following questions carefully and answer each one honestly. All information will be kept confidential. Please check YES or NO

**If you answer "Yes" to either of the following questions further medical evaluation may be needed.**

- |     |     |  |
|-----|-----|--|
| YES | NO  |  |
| ___ | ___ | Has it been more than 12 months since your last medical exam? If NO, last exam: ___ months ago |
| ___ | ___ | Has your health status changed since your last medical exam?                                   |

**If you answer "Yes" to two or more of the following questions further medical evaluation may be needed.**

- |     |     |  |
|-----|-----|--|
| YES | NO  |  |
| ___ | ___ | 1. Are you a male over 45 years of age?  |
| ___ | ___ | 2. Are you a female over 55 years of age?  |
| ___ | ___ | 3. Has your father or other male first-degree relative (brother or son) had a heart attack, stroke or cardiovascular disease before age 55? If YES, who? _____       |
| ___ | ___ | 4. Has your mother or other female first-degree relative (sister or daughter) had a heart attack, stroke or cardiovascular disease before age 65? If YES, who? _____ |
| ___ | ___ | 5. Do you currently smoke tobacco products or have you quit within the previous 6 months?  |
| ___ | ___ | 6. Is your total serum cholesterol > 200 mg/dl or LDL ≥ 130 mg/d or HDL ≤ 40?  |
| ___ | ___ | 7. Fasting blood sugar ≥ 110 mg/dl confirmed by measurements on at least two separate occasions?   |
| ___ | ___ | 8. Are you currently exercising LESS than 30 minutes most days of the week? If you answered NO, please list your activities: _____                                   |
| ___ | ___ | 9. Is your BMI ≥ 30, Waist girth >40 in. (male) or 35 in. (female), Waist/hip ratio ≥0.95 (male) ≥ 0.86 (female)?  |
| ___ | ___ | 10. Have you ever had a systolic blood pressure ≥140 mmHg or diastolic ≥90 mmHg on at least two separate occasions or on antihypertensive medication?                |
| ___ | ___ | 11. <b>Negative Risk Factor: High Serum HDL Cholesterol score &gt; 60 mg/dl</b>  |

**If you answer "Yes" to one or more of the following questions further medical evaluation may be needed.**

- |     |     |   |
|-----|-----|---|
| ___ | ___ | 1. Do you have a history of heart problems (unexplained rapid heart rate or "skipped" beats) or ever been told you have a heart murmur?                               |
| ___ | ___ | 2. Do you feel pain or discomfort in your chest at rest or with exercise?   |
| ___ | ___ | 3. Do you ever lose consciousness or have you ever lost your balance due to dizziness?  |
| ___ | ___ | 4. Do you ever experience unusual fatigue or shortness of breath with normal daily activities?  |
| ___ | ___ | 5. Do you have any type of pulmonary or breathing problems such as asthma, emphysema or Chronic Obstructive Pulmonary Disease (COPD)?                                 |
| ___ | ___ | 6. Have you ever had a stroke?  |
| ___ | ___ | 7. Do you have epilepsy or have you ever had a seizure?   |
| ___ | ___ | 8. Are you currently pregnant?  |
| ___ | ___ | 9. Are you currently being treated for a bone or joint problem that restricts you from engaging in physical activity?   |
| ___ | ___ | 10. Are you currently taking any dietary supplements or medications? If YES, please list the name of the medication/supplement and the reason for taking it:<br>_____ |

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**PEER FITNESS TRAINER USE ONLY:**

Resting HR: \_\_\_\_\_ Resting BP: \_\_\_\_\_ / \_\_\_\_\_ Cleared to exercise Yes: \_\_\_\_\_ No: \_\_\_\_\_

PFT Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Date Physician Release \_\_\_\_\_

Received: \_\_\_\_\_



Women: (See fig 5.6 – 5.11)

**Measurement 1:**

Tricep: \_\_\_\_\_ mm      Abdominal: \_\_\_\_\_ mm      Suprailliac sites: \_\_\_\_\_ mm

**Measurement 2:**

Tricep: \_\_\_\_\_ mm      Abdominal: \_\_\_\_\_ mm      Suprailliac sites \_\_\_\_\_ mm

**Measurement 3: (if required)**

Tricep: \_\_\_\_\_ mm      Abdominal: \_\_\_\_\_ mm      Suprailliac sites \_\_\_\_\_ mm

Avg. Tricep: \_\_\_\_\_ mm      Avg. Abdominal: \_\_\_\_\_ mm      Avg. Suprailliac sites: \_\_\_\_\_ mm

Sum Skinfold: _____ mm
---------------------------

Female Body fat: _____ %
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See Table 5.2

**WFI AEROBIC CAPACITY EVALUATION:**

**Submaximal Treadmill Protocol**

Test Time: \_\_\_\_:\_\_\_\_ min:sec      Test Time (decimal): \_\_\_\_\_ (see table 5.6)

Treadmill      *Treadmill*  
VO<sub>2</sub> max. \_\_\_\_\_ ml/kg/min       $VO_{2max} = 56.981 + (1.242 \times TT) - (0.805 \times BMI)$

Evaluation terminated prior to exceeding target heart rate, give reason(s):  
\_\_\_\_\_

**Submaximal Stepmill Protocol**

Test Time: \_\_\_\_:\_\_\_\_ min:sec      Test Time (decimal): \_\_\_\_\_ (see table 5.6)

Stepmill      *Stepmill*  
VO<sub>2</sub> max. \_\_\_\_\_ ml/kg/min       $VO_{2max} = 57.774 + (1.757 \times TT) - (0.904 \times BMI)$

Evaluation terminated prior to exceeding target heart rate, give reason(s):  
\_\_\_\_\_

## **WFI MUSCULAR STRENGTH EVALUATION:**

### Grip Assessment

Trial 1, Right Hand: \_\_\_\_\_ kg      Trial 1, Left Hand: \_\_\_\_\_ kg

Trial 2, Right Hand: \_\_\_\_\_ kg      Trial 2, Left Hand: \_\_\_\_\_ kg

Trial 3, Right Hand: \_\_\_\_\_ kg      Trial 3, Left Hand: \_\_\_\_\_ kg

Highest Score Right Hand: \_\_\_\_\_ kg      Highest Score Left Hand: \_\_\_\_\_ kg

Evaluation terminated, give reason(s) \_\_\_\_\_

### Leg Assessment

Trial 1: **Do not record** (Practice only)      Trail 2: \_\_\_\_\_ kg      Trail 3: \_\_\_\_\_ kg

Highest Leg Strength Score: \_\_\_\_\_ kg

Evaluation terminated, give reason(s) \_\_\_\_\_

### Optional Assessment:

#### Jump Assessment (Power Evaluation)

Jump 1: \_\_\_\_\_ in.      Jump 2: \_\_\_\_\_ in.      Jump 3: \_\_\_\_\_ in.

Highest Jump Score \_\_\_\_\_ in. x 2.54 = \_\_\_\_\_ cm

*Power Formula:  $[(60.7 \times \text{jump height (cm)}) + (45.3 \times \text{body weight (kg)})] - 2055$*

Leg Power = \_\_\_\_\_ watts

Evaluation terminated, give reason(s) \_\_\_\_\_

### Arm Assessment

Trial 1: \_\_\_\_\_ kg      Trail 2: \_\_\_\_\_ kg      Trail 3: \_\_\_\_\_ kg

Highest Arm Strength Score: \_\_\_\_\_ kg

Evaluation terminated, give reason(s) \_\_\_\_\_

**WFI Muscular Endurance Evaluation:**

**Prone Static Plank Assessment *max 4 min***

Test Time: \_\_\_\_:\_\_\_\_ min:sec

Evaluation terminated, give reason(s) \_\_\_\_\_

**Push-up Assessment @80bpm**

Number of successfully completed push-ups: \_\_\_\_\_

Evaluation terminated, give reason(s) \_\_\_\_\_

**Optional Assessment:**

**Alternate Grip Push-up Assessment @80bpm**

Number of successfully completed push-ups: \_\_\_\_\_

Evaluation terminated, give reason(s) \_\_\_\_\_

**WFI Flexibility Evaluation**

**Sit and Reach Assessment**

Trial 1: \_\_\_\_\_ in

Trail 2 \_\_\_\_\_ in

Trail 3: \_\_\_\_\_ in

Highest Score: \_\_\_\_\_ in

Evaluation terminated, give reason(s) \_\_\_\_\_