

Model training fitness exercises for women-students at non-specialised in sports higher schools

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Model training fitness exercises for women-students at non-specialised in sports higher schools. *There is no universal fitness training program for women. A few model groups of training exercises are being viewed in this paper.*

Key words: *women-students, training, resistance exercises.*

INTRODUCTION

Most women-students regard the word "fitness" as exercise with weights in a gym. The truth is that what is meant is resistance and aerobics training plus a specific diet and lifestyle.

Having entered a gym each girl-student should know that she has to keep to a program based on the following 4 components:

- aerobics strain which removes fats;
- anaerobic strain – training with weights and equipment which causes hypertrophy of muscles;
- a specific diet;
- adequate alternation of training and recovery.

If the students have never done any sports, the start has to be a light one. "Light" means short aerobics efforts, small weights with just a few repetitions and training twice a week. There is a very subtle difference between "a pleasant training" and "too easy training" with which you are not able to achieve any goals. In this case one needs professional advice.

EXPOSITION

The program for resistance training is one of the most difficult things to assess. There are women-students who have been doing weightlifting for years but still they haven't got a good body build. However, if you train the right way, after a short time you will feel stronger and witness a proportional shaping of your own muscles. The most important aspect which women-students should be aware of regarding resistance training is that it is impossible to put on muscular mass and lose fats at one and the same time.

The most popular understanding of fitness says that one puts on mass during cold months and from March on you start losing fats. You also should have in mind the fact that no muscle grows bigger during resistance training – it is only filled with blood and looks bigger. The real muscle growth occurs after training and during the recovery period.

There are no such exercises only for women or for men only. The difference lies in the weights to be used. For greater comfort, exercises with levers can be replaced with analogical ones with fitness balls. At this point we should remind women who avoid strength exercises because of formation of "big" muscles that this is not true.

Their feeling worried is logically understandable because you do fitness following a program similar or even identical to that of bodybuilding and the exercises are practically the same. Therefore, it is expected that the results will be identical. But this is not so as big muscles of women cannot be achieved without the help of medicines.

VI. Boyanov [1] offers a program called BIA (from the Bulgarian words for pain, torture, agony), which is based on the classic Weider-system for beginners. It is performed three times a week and comprises 10 (in our case called model) exercises which involve all basic muscle groups and are performed in an antagonistic continuity:

1. Weightlifting or lifting fitness balls from lying on back.
2. Stretching a pulley vertically.
3. Lifting dumbbells.

4. Doing Scot's fold with a Z-bar.
5. Extension of triceps on a pulley.
6. Extension for quadriceps from sitting position.
7. Flexion of the muscles on the back of thighs from a prone position.
8. Extension for legs on a calf machine or with a bar from basic standing position.
9. Extension for the hips from a support position.
10. Folding into a Roman chair.

The so-offered methodology is comparatively simplified as the exercises are performed one after another and in two series only. The weights are chosen individually within 70% - 75% of the maximum strength ability. In the first series there are 6 repetitions and in the second one the exercises are 2 – 2,5 at the least until unable to continue. After that you should go on with the next antagonistic exercise without any break.

Three sessions a week is an excellent start for beginners. With more advanced people this training frequency does not have the necessary building effect. It only keeps the muscles fit because it is not possible to do more than 1-2 exercises for a group of muscles.

The research which has been done by some authors [3, 4, 5] shows the following significant peculiarities for both women and men:

- because of sex differences the muscles of women become hypertrophic much harder, so they don't need a specific kind of training and instruction;
- if a woman hasn't taken any testosterone, massive muscles are the to worry about; women build up their muscles twice slower than men. There will be no good result even if they use light fitness balls for a repeated number of times;
- women develop a muscular tone which is of great importance; in 3 months they lose 3 kg of fats if they train regularly twice or three times a week. When they do strength exercises their bone mineral density increases by 13 % after 6 months. This is women's best protection against osteoporosis;
- moderate resistance exercises make women stronger from 30% to 50%. They develop their strength at the same speed men do;
- according to Dr Barry A. Franklin from The Royal Oak Hospital in Michigan reducing one's weight leads to reducing LDL (the bad cholesterol) and increasing HDL (the good cholesterol). The risk of diabetes decreases by 23% [6].

In order to achieve muscle hypertrophy and keep the symmetry of a woman's body, you have to do optimal exercises at 70% -80% of your abilities. A training exercise for strength should be intensive and have preference to cardio-training. If women do excessively light exercises 20-30 times for a try, no desired progress can be made. They should do them 6-14 times using a weight which is heavy enough and not stop until unable to continue.

When we work with women the trainings should follow the principle of gradualness with training load and moreover the principle of individual approach to the person in mind.

Methodologically trainings are relatively the same for both men and women, but the goals to be achieved are different. Women are willing to lose weight and make their bodies fit while men prefer to build more muscular mass. A training program for women may not be much more different than the one for men. Actually, they both do the same exercises but still there are some differences:

- fewer series for a separate group of muscles with more repetitions for a series;
- attention is paid to the problematic muscle zones with women (hips, thighs, upper limbs). Trainings aim at improving the muscular endurance for the sake of muscular volume. You should have in mind the strong and weak muscle groups of the women's organism when assign strength exercises.

Muscle cells of men and those of women react to adequate strength load in the same way, so young women who want to have a perfectly attractive body should train hard for a long period of time in order to achieve the result desired.

With gaining more training experience and motivation, performing the next repetition, the next series and the next training is what's of greatest importance. (2)

For both men and women the right way of physical loading leads to the best evident results.

Model groups of training exercises model groups of training exercises

Model variants of training exercises for the first cycle of the first stage of functional loading

Variant One – Monday

1. Warm up with elementary exercises of basic gymnastics.

2. Lifting a bar from lying on back: $\frac{50\%}{10}$, $\frac{60\%}{10}$, $\frac{70\%}{6}$, $\frac{80\%}{3}$, $\frac{90\%}{2}$, $\frac{60-65\%}{10}$ 3

3. Pulling a bar with a narrow grip from a start position: $\frac{50\%}{10}$, $\frac{60\%}{6}$, $\frac{70\%}{5}$, $\frac{80\%}{3}$, $\frac{90\%}{1}$, $\frac{55\%}{15}$ 3

4. Resistance lifting from a sitting position: $\frac{50\%}{10}$, $\frac{60\%}{7}$, $\frac{70\%}{5}$ 3

5. Lateral pull-up on a horizontal bar: 3 attempts at 55% of the maximum.

6. Exercise for abdomen and back muscles.

7. Exercise for stretching and relaxing.

Variant Two – Thursday

1. Warm up playing volleyball at low net.

2. Lifting a bar from lying on back: $\frac{50\%}{10}$, $\frac{60\%}{10}$, $\frac{70\%}{6}$, $\frac{80\%}{4}$ 4

3. Squat with a bar on shoulders: $\frac{50\%}{10}$, $\frac{60\%}{10}$, $\frac{70\%}{5}$ 4

4. Exercise for the folding and extensor elbow muscles.

5. Exercise for back and abdomen muscles.

6. Exercise for stretching and relaxing.

Model variants of training exercises for the second cycle of the first stage of functional loading

Variant One – Monday

1. Warm up with elementary exercises of basic gymnastics.

2. Lifting a bar from lying on back: $\frac{50\%}{10}$, $\frac{60\%}{7}$, $\frac{70\%}{5}$, $\frac{80\%}{4}$, $\frac{90\%}{2}$, $\frac{100\%}{1}$, $\frac{70\%}{2}$ until unable to continue 2

3. Pulling a bar with a narrow grip from a start position: $\frac{50\%}{10}$, $\frac{60\%}{8}$, $\frac{70\%}{6}$, $\frac{80\%}{3}$, $\frac{90\%}{1}$, $\frac{100\%}{1}$, $\frac{70\%}{6}$ 3

4. Resistance lifting a bar from a sitting position: 4 attempts at 70% of the maximum.

5. Lateral pull-up on a horizontal bar: 3 attempts at 50%.

6. Exercise for back and abdomen muscles.

7. Exercise for stretching and relaxing.

Variant Two – Wednesday

1. Warm up jumping on one or two legs.

2. Lifting a bar from lying on back: $\frac{50\%}{10}, \frac{60\%}{8}, \frac{70\%}{6}, \frac{80\%}{5}$ 4.
3. Squat with a bar on shoulders: $\frac{50\%}{10}, \frac{60\%}{8}, \frac{70\%}{6}, \frac{80\%}{4}, \frac{90\%}{2}, \frac{70\%}{5}$ 3.
4. Pulling a bar with a narrow grip from a start position: $\frac{50\%}{10}, \frac{60\%}{8}, \frac{70\%}{6}, \frac{80\%}{4}$ 4.
5. Lifting a bar with arms behind the head: $\frac{50\%}{10}, \frac{70\%}{6}$ 3.
6. Exercise for back and abdomen muscles.
7. Exercise for stretching and relaxing.

Variant Three – Friday

1. Warm up playing basketball.
2. Lifting a bar from lying on back: $\frac{50\%}{10}, \frac{60\%}{8}, \frac{70\%}{6}, \frac{80\%}{4}, \frac{90\%}{2}, \frac{100\%}{1}$,
 $\frac{75\%}{}$ 3
until unable to continue.
3. Pulling a bar with a narrow grip from a start position: $\frac{50\%}{10}, \frac{60\%}{8}, \frac{70\%}{6}, \frac{80\%}{4}$,
 $\frac{90\%}{2}, \frac{100\%}{1}, \frac{70\%}{}$ 3
until unable to continue.
4. Lateral pull-up on a horizontal bar: 3 attempts till giving up.
5. Exercise for folding hand muscles with a bar: 2 attempts with 10 repetitions.
6. Exercise for back and abdomen muscles.
7. Exercise for stretching and relaxing.

Model variants of training exercises for the second stage of functional loading

Variant One – Monday

1. Warm up with elementary exercises of basic gymnastics.
2. Lifting a bar from lying on back: $\frac{50\%}{10}, \frac{60\%}{7}, \frac{70\%}{5}, \frac{80\%}{4}, \frac{90\%}{2}, \frac{100\%}{1}$,
 $\frac{70\%}{}$ 2
until unable to continue.
3. Pulling a bar with a narrow grip from a start position: $\frac{50\%}{10}, \frac{60\%}{8}, \frac{70\%}{6}, \frac{80\%}{3}$,
 $\frac{90\%}{1}, \frac{100\%}{1}, \frac{70\%}{6}$ 3.
4. Squat with a bar on shoulders: $\frac{50\%}{10}, \frac{60\%}{6}, \frac{80\%}{3}, \frac{90\%}{2}, \frac{100\%}{1}, \frac{70\%}{6}$ 4.
5. Lateral pull-up on a horizontal bar: 3 attempts till giving up
6. Resistance exercise for the hand folding muscles with a bar: 2 – 3 attempts with 10 repetitions each.
7. Exercise for back and abdomen muscles.
8. Exercise for stretching and relaxing.

Variant Two – Wednesday

1. Warm up playing volleyball at low net.
2. Lifting a bar from lying on back: $\frac{50\%}{10}, \frac{60\%}{8}, \frac{70\%}{6}, \frac{80\%}{5}$ 4.

3. Pulling a bar with a narrow grip from a start position: $\frac{50\%}{10}$, $\frac{60\%}{8}$, $\frac{70\%}{6}$, $\frac{80\%}{4}$ 4.
4. Lifting a bar with arms behind the head: $\frac{50\%}{10}$, $\frac{70\%}{6}$ 3.
5. Incline barbell pull: $\frac{50\%}{10}$ 3.
6. Front push-ups – 2 series until unable to continue.
7. Exercise for back and abdomen muscles.
8. Exercise for stretching and relaxing.

Variant Three – Friday

1. Warm up playing basketball.
2. Lifting a bar from lying on back: $\frac{50\%}{10}$, $\frac{60\%}{8}$, $\frac{70\%}{6}$, $\frac{80\%}{4}$, $\frac{90\%}{2}$, $\frac{100\%}{1}$,
 $\frac{75\%}{\text{until unable to continue}}$ 2.
3. Pulling a bar with a narrow grip from a start position: $\frac{50\%}{10}$, $\frac{60\%}{8}$, $\frac{70\%}{6}$, $\frac{80\%}{4}$,
 $\frac{90\%}{2}$, $\frac{100\%}{1}$, $\frac{70\%}{\text{until unable to continue}}$ 3.
4. Squat with a bar on shoulders: $\frac{50\%}{10}$, $\frac{60\%}{8}$, $\frac{70\%}{5}$, $\frac{80\%}{4}$ 4.
5. Resistance lifting a bar: $\frac{50\%}{10}$, $\frac{70\%}{6}$ 3.
6. Exercise for the hand folding muscles with a bar: 2 attempts with 10 repetitions each.
7. Exercise for back and abdomen muscles.
8. Exercise for stretching and relaxing.

CONCLUSION

Finally a few more things about strength training with women-students:

- always warm up for 10 minutes before training;
- one hour is the maximum length of training for women- beginners;
- if you train 3 times a week, the most widely grouping of muscles is: chest/triceps, back/biceps, shoulder/legs.
- breaks between separate series should not be longer than 2 – 3 minutes.

Dear women-students, make fitness and a balanced diet part of your lifestyle and I am sure that you will achieve you goal after some months.

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The report has been reviewed.