Lesson Eighteen
Exercise Prescription

Objectives

After participating in this lesson students will:
• Track progress on their healthy eating and physical activity goals.
• Develop an exercise plan to address all four components of physical fitness.
• Use their previously written goals to develop their plan.

Time

50 minutes            Prep Time: 20 minutes

Activities

18.1 Review and Plan for the Day       3 minutes
18.2 Tracking Your Progress      15 minutes
18.3 Exercise Prescription      25 minutes
18.4 Closure          7 minutes

Key Terms

• Prescription
• Frequency
• Intensity
• Time
• Type

Materials

☐ Tracking Your Progress (Activity Sheet 18.2)
☐ Rate of Perceived Exertion (Information Sheet 18.3)
☐ Chart of 4 components of physical fitness and examples
☐ Exercise Prescription (Activity Sheet 18.3)

Teacher Preparation

• Write Plan for the Day and Objectives on chart paper or board.
• Make copies of Tracking Your Progress (Activity Sheet 18.2), 1 for each student, and place in portfolios.
• Make copies of Rate of Perceived Exertion (Information Sheet 18.3), for students who missed Lesson 15.
• Make transparency (1) and copies of Exercise Prescription (Activity Sheet 18.3), 1 for each student, and place in portfolios.
• Create chart of 4 components of physical fitness and examples. (See Activity 18.3.)
18.1 Review and Plan for the Day 3 minutes

**Materials:** Plan for the Day and Objectives

Write the Plan for the Day and Objectives on the board before class, listing all of the activities students will be doing.

Plan for the Day:
- Tracking Your Progress
- Exercise Prescription
- Closure

Review the previous class. Let students know that they can take classes to become certified in CPR and First Aid.

Explain that in today’s lesson they will be designing their own workout program based on the goals they created earlier in this class and on what they have learned about physical fitness.

Review the Objectives with students.

18.2 Tracking Your Progress 15 minutes

**Materials:** Tracking My Progress (Activity Sheet 18.2)

Tell students that a week has passed since the last time they tracked progress on their goals. It is time again to see what they have achieved on their healthy eating and physical activity goals.

- Refer students to the Tracking My Progress activity sheet in their portfolios. Have them write in their goals for both healthy eating and physical activity.
- Then have them fill out the rest of the sheet keeping both of their goals in mind.
- Ask a couple of students to share how they did on their goals this past week. What were the challenges? What did they do to meet their goals? How did they feel about working toward their goals?

18.3 Exercise Prescription 25 minutes

**Materials:** Rate of Perceived Exertion (Information Sheet 18.3), chart of 4 components of physical fitness and examples, Exercise Prescription (Activity Sheet 18.3)

Explain that students are going to create an exercise prescription (a written direction for the administration of an exercise) and in order to do this they need to know the parts of the prescription.
- Write the letters F-I-T-T vertically on the dry erase/chalkboard or a piece of chart paper. Tell students that each of these letters stands for one of the parts to their exercise prescription.

- Start with **F** and write **Frequency** (*how often you do the exercise*). Tell students what frequency means. Explain that just as in writing their goals, they want to be specific when addressing frequency, for example, 3 times/week. Write the example on the board next to the definition. Explain that as teenagers they should try to exercise at a minimum of 3 times per week.

- Next to the letter **I**, write the word **Intensity**. Survey the students about what this word means (*how much of an effort put into the exercise*). Write this definition on the board. Explain that intensity is measured by your heart rate for cardiorespiratory fitness. They will know what their heart rate should be for 50-85% of their maximum heart rate if they were in class for the cardiorespiratory lesson. Give an example of a target heart rate zone, such as 120 to 175 beats per minute. To increase cardiorespiratory fitness, they should work at an intensity range of 50-85% of their maximum heart rate.

- If students missed the cardiorespiratory lesson give them a copy of the **Rate of Perceived Exertion** (RPE) information sheet to use as a guide for finding intensity level. Explain how it is used. When they are exercising they can put a number on how hard they are working, with 0 being not at all and 10 being maximal amount of exertion. They can write a number on their exercise prescription for the intensity level to work toward when exercising.

- **T** stands for **Time** (*the amount of time spent on a given activity in one session*). Write the definition on the board. Explain to students that it is recommended that they spend between 20 and 30 minutes on an activity in a single session to gain the benefits of that activity, for example, 30 minutes of running at 50% of maximum heart rate.

- The second **T** stands for **Type** (*what kind of physical activity are you participating in*). Write the definition on the board and give some examples of different types of physical activity.

Explain to the students that they will be taking these FITT principles and applying them to the 4 components of fitness. The end result will be an exercise prescription for them to use.

- Direct students’ attention to the chart with the 4 components of physical fitness and examples. Ask the students for examples of other activities they like to do under a particular component of physical fitness. Add those to the chart.

**Note:** Create the chart before class using the following information as an example:

1. Cardiorespiratory Fitness: Tennis, basketball, soccer, running, swimming
2. Muscular Endurance: Walking with a backpack, running, raking leaves
3. Muscular Strength: Sit-ups, push-ups, sprinting, lifting weights
4. Flexibility: yoga, stretching
• Show students the **Exercise Prescription** activity sheet in their portfolios. (It may be helpful to make an overhead transparency of this sheet to work along with students.) Explain that their prescription is specific to them. Give an example of a prescription a doctor might give (take 2 tablets 3 times per day for 6 weeks). This prescription would be different for different people. Tell them they can use the list of physical fitness examples to help them complete their exercise prescription.

• Make the point that this is a beginning exercise plan, unless they have already been participating in an activity. For example, if they run for 30 minutes 3 times per week, they are already on an exercise plan and they can look at increasing the time, frequency or intensity. If they are just starting the exercise plan/prescription, they will want to wait 4 to 6 weeks before they increase the workload. *Too much too fast leads to burn out!*

• After they have been on the prescription for 4 to 6 weeks, they will increase each of the FITT principles in increments, not all at the same time. For example, they may first increase the intensity from 50% to 65% of their maximum heart rate for 1 week, then depending on how their body feels they can increase the time or frequency the following week. The point is to gradually build up to their goal for physical fitness. Once they reach the goal, they can then create a new goal.

• Make sure students consult their physical activity goal so that they can relate the plan to their stated goal as they create their exercise prescription. If they are unhappy with their goal, invite them to change it to something more appealing or pertinent.

• Have students take out the **Exercise Prescription** activity sheet. Tell them to write their name where it says, “Exercise prescription for….” Direct their attention to the two boxes on the top of the worksheet labeled “Cardiorespiratory Fitness” and “Muscular Strength and Endurance.”

• Explain that they are going to be filling in these two boxes for their own use. Using the overhead transparency of the **Exercise Prescription** activity sheet, give an example of what they might write in the Cardiorespiratory box. Check in with students who are using the RPE scale to make sure they understand what to write down for intensity.

• Once students have completed the Cardiorespiratory box, go on to the Muscular Strength and Endurance box. Write an example for students to follow. Then walk around helping students where needed.

• Read the section on Flexibility and have students write in some stretches that would address the muscles they would be using in their exercise session.

• Direct students’ attention to the last paragraph and explain to them that an exercise session includes three parts: a warm-up, the training period (which is doing the activities listed in the boxes above) and cool-down activities.
• Have students use the space available to write a complete exercise session. Give an example on the overhead transparency if needed.

• Walk around the room and check in with students to make sure they are filling out the activity sheet properly and to answer any questions they may have.

18.4 Closure 7 minutes

Materials: Exercise Prescription (Activity Sheet 18.3)

Have students do some self reflection. Ask them to look through their exercise prescription and determine if this is an accurate prescription for them to improve their physical condition. Then have them pass the prescription to someone else and have this person look at it for accuracy.

Have students share their prescriptions with the class and talk about how they can support each other to stay on track in the future.
### Tracking My Progress

**My healthy eating goal:**

**My physical activity goal:**

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**Date:**

**What I did to meet my goals:**

- ____________________________________________
- ____________________________________________
- ____________________________________________
- ____________________________________________
- ____________________________________________
- ____________________________________________

**What I learned this week:**

*Benefits* I enjoyed this week: ____________________________________________

*Challenges* I had: ______________________________________________________

Possible ways to *deal with challenges* if they come up again: ________________

What am I going to do toward my goals *next week*: __________________________

Who could *help* me with my goals if I need support: ________________________

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Adapted with permission from *Health Smart* High School.
Rate of Perceived Exertion

0 – Nothing at all
1 – Very light
2 – Light
3 – Somewhat moderate
4 – Moderate
5 – Somewhat hard
6 – Hard
7 – Somewhat intense
8 – Intense
9 – Almost maximal
10 – Maximal
Exercise Prescription for _______________________

Cardiorespiratory Fitness

Frequency ___________________________

Intensity

Heart Rate _______
RPE ___________

Time ___________________________

Type ___________________________

Muscular Strength and Endurance

Frequency ___________________________

Intensity (resistance) _________________

Time is determined by:

Sets_________________
Repetitions__________

Type ______________________________

Flexibility

Depending on the type of activity you are performing, the muscles to be used should be stretched both before and after the activity. Pick some stretches you know to perform during your exercise session. ___________________________________________

*A stretch should be held for at least 20 seconds.*

Every exercise session should include a warm up, training period and a cool-down. Use the line to write in a sample exercise session with a warm-up, training period and cool-down.

- **Warm-up** can include stretching and/or a light cardiorespiratory activity. (For example; a slow jog or a brisk walk)

- **Training period** is the main piece of the workout, whether it’s cardiorespiratory or muscular strength/endurance.

- **Cool-down** should include some stretching of muscles used during training period or a light cardiorespiratory activity.