

## About 21st Century Rehab

21<sup>st</sup> Century Rehab is dedicated to you, and in providing the utmost of patient-centered care. Whether you need intensive rehabilitation after a sport injury or surgery, or occupational health services for your employees, or quick recovery from back or neck pain, you'll find the services you need at 21<sup>st</sup> Century Rehab. We look forward to becoming a resource for your good health...now and after your therapy is over.

Our staff of physical, occupational, and speech therapists and certified athletic trainers provides treatment for the following injuries:

- Arm, Wrist or Hand Problems
- Carpal Tunnel Syndrome
- Pain and/or Dysfunction Related to Arthritis
- Balance Impairments or Vertigo
- Post-Surgical Rehabilitation
- Athletic Injuries
- Occupational Health (Consultation, Risk Reduction Services and Treatment of Work-Related Injuries)
- Back, Neck and Shoulder Pain
- Hip, Knee, Ankle or Foot Pain
- TMJ Disorders, Headaches, or Facial Pain

## LOCATIONS

[www.21stcenturyrehab.com](http://www.21stcenturyrehab.com)

Corporate Office  
P.O. Box 461  
Nevada, IA 50201  
Ph: 515-382-3366  
Fax: 515-382-1576  
Toll Free: 1-877-21REHAB

612 8th Street SW  
Altoona, IA 50009  
Ph: 515-967-4124  
Fax: 515-967-9094

270 SW 1st Street  
Suite H  
Grimes, IA 50111  
Ph: 515-986-9667  
Fax: 515-986-9642

Indianola Physical Therapy  
1507 N. 1st Street  
Indianola, IA 50125  
Ph: 515-961-7435  
Fax: 515-961-7436

Dallas County Hospital  
610 Tenth Street  
Perry, IA 50220  
Ph: 515-465-7672  
Fax: 515-465-7655

Hamilton Hospital  
800 Ohio Street  
Webster City, IA 50595  
Ph: 515-832-7735  
Fax: 515-832-9420

Story County Medical Center  
630 Sixth Street  
Nevada, IA 50201  
Ph: 515-382-2543  
Fax: 515-382-7171  
Toll Free: 1-888-522-9820



**21<sup>st</sup>CENTURY  
REHAB**  
Work well. Play well. Live well.

## FITNESS

*A Way of Life*



*We would all like to be physically fit, but how many of us know what “fit” really means? Does playing softball twice a week make us fit? Or swimming at the neighborhood pool? Or walking to and from work? What amount of activity is enough to keep us fit? Do we all need to follow the same fitness program or are we all different?*

*Physical therapists answer these kinds of questions all the time. Realizing that each individual is unique, physical therapists have developed specific methods to determine how fit you are, and what types of activities optimize your level of fitness.*

## Six Elements of Fitness

1. Aerobic Capacity
2. Body Structure
3. Body Composition
4. Body Balance
5. Muscular Flexibility
6. Muscular Strength

### AEROBIC CAPACITY

Aerobic capacity is an index of your cardiovascular system’s ability to transport oxygen to working muscles, where the oxygen is used as fuel to produce energy for movement.

You can improve your aerobic capacity by achieving what is called an *aerobic response*. Although the level necessary to achieve an aerobic response varies with each individual, it is usually reached by exercising at 60 to 80 percent of your maximum heart rate. This ideal rate for exercise (60 to 80 percent of maximum) is called your *target heart rate*. Exercising at your target heart rate should be maintained for 20 to 30 minutes and occur at least three times a week for you to attain aerobic fitness.

There are many different types of activities that can generate an aerobic response. Walking can be an excellent activity that is a particularly good aerobic exercise. Some other aerobic activities include jumping rope, swimming, running, cross-country skiing, hiking, aerobic dancing, and bicycling.

To estimate your target heart rate, you must first determine your maximum heart rate. This is done by subtracting your age from 220. If a check-up by your physician indicates no problems, your target heart rate is 60 to 80 percent of your

maximum rate. For example: If you are 20 years old, your maximum heart rate is 200. Your target heart rate is 60 to 80 percent of 200, or 120 to 160 beats per minute.

### BODY STRUCTURE

A physical therapist evaluates your body structure by looking for structural malalignments in upper and lower extremities (arms and legs), the head, neck, and trunk. The therapist will check your overall posture by looking at your head, neck, shoulders, spine, pelvis, knees, and feet, from front, side and back views.

Even a small imbalance in the way you stand – too much weight on one foot, your shoulders “slouched” forward – may lead to pain and injury when you start exercising. If any problems are identified in the evaluation, the physical therapist may give you some exercises to strengthen weak muscles or improve the flexibility of tight muscles, teach you to become more aware of your posture while standing and walking, or recommend specific footwear.

### BODY COMPOSITION

Body composition is the ratio of body fat to lean body mass (bones and muscles). You cannot determine your body composition simply by weighing yourself on a standard scale. In fact, body composition measurements tend to be a much better indicator of your current fitness level than your body weight. Some people who weigh a lot are not fat; they just may be muscular and muscles weigh more than fat. Conversely, a person who maintains a seemingly “ideal” weight may actually be carrying too much fat.

Your physical therapist can determine your body composition by taking fat measurements at various places on your body. Although ideal body fat levels vary with each individual, it is generally accepted that the ideal range of body fat is approximately 10 to 15 percent of total body mass for males and 15 to 22 percent for females. An excessive fat-to-lean body composition puts unnecessary weight on your skeletal structure during exercise without helping you perform your task. Muscles at least work *for* you; fat just weights you down.

### BODY BALANCE

A physical therapist will check your balance by having you stand, with your eyes closed, on one leg for a brief period of time, then on the other. Although this seems a simple test, it may indicate if you have a neurological (nervous system) problem, or a significant musculoskeletal imbalance.

Even a minor balance problem may place you at risk for possible injury. If a problem is identified, your therapist may give you some exercise tips that will help to improve your balance.

### MUSCULAR FLEXIBILITY

Your muscles should be flexible to allow for the full range of motion required by life’s many activities, such as stretching, lifting, reaching, and bending. Muscles should be able to lengthen without too much effort, allowing your body and limbs to move efficiently in many different ways.

A physical therapist can determine your flexibility by measuring how far you can move your arms, legs, and torso. The therapist will notice if you have any specific areas of “tightness” and will suggest some gentle exercises to increase flexibility.

### MUSCULAR STRENGTH

In addition to being flexible, your muscles should be able to exert force and control movement. For example, flexible muscles will help you bend over to pick up a box, but it’s your muscular strength that enables you to lift it.

The physical therapist will determine the strength of your major muscle groups by having you perform weight-resistance exercises and tests.

If your muscles need strengthening, you may embark on a strength-training program designed by your therapist. Usually these exercises do not require heavy lifting or strenuous exercise. You may only need to work with hand weights to strengthen one arm, or do strengthening exercises to bring muscles on one side of your body in balance with the other.

