

# Presentation on the topic : DIDACTIC OPPORTUNITIES OF MUSCLE AND MOTION

## PROGRAMS IN PREPARATION OF SPECIALISTS FROM PHYSICAL EDUCATION



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**Abstract:** Program Muscle and Motion - allows you to enter the body and understand the nuances of strength training. The program provides a detailed three-dimensional visualization of the anatomy of the human skeleton and muscles while performing strength training exercises, and many additional features. Program Muscle and Motion can also use teachers and teachers in the classroom biology or anatomy can see looks like this or that muscle, where it is that movements can be done and how to do them correctly.

**Introduction:** Information competence of teachers of physical culture, their ability to implement modern information technologies in the system of training is one of the urgent problems of education. Implementation in practice of the study of human movement of advanced biomechanics resulting in a change in research methodology, which resulted in increasingly have their computerization at all levels, the development and use of high-performance microcomputers.

# Literature review:

## **Methods:**

During the study used the following methods:

- synthesis of scientific literature,
- theoretical analysis,
- monitoring,
- processing of research results.

**Discussion:** The main body of work is considered a program which analyzes how it works, its features. The program also includes Muscle and Motion can find lots of interesting information from common mistakes to plan training. In the common errors and problems you can choose the body parts to make it easier to search. Another useful section - "Tests and evaluation." It tells how to assess their flexibility and joint mobility. And if there is a problem, you can learn how to fix them. For example, one video tells that stoop, thoracic kyphosis and difficulties with the proper performance of certain exercises may be associated with clogged muscles thigh (for teachers and teachers). Further, as to find out whether you have this problem, and how to stretch these muscles.

- **Results:** Muscle and Motion program is perfect for personal trainers, trainees, doctors, teachers and anyone interested in anatomy and muscle strength training. There is a unique program for fitness training. This product provides a detailed three-dimensional visualization of the anatomy of the human skeleton and muscles while performing strength training exercises, and many additional features. This set of exercises will be useful and interesting not only for those who have decided to study the anatomy of strength training, but also for those who do exercise regularly.
- Has introduced a program Muscle and Motion in the educational process of physical education students in the study of professional disciplines. With Muscle and Motion athlete can provide power development of his body, the complex of exercises for certain areas of the body that muscles work in the performance of a movement. This program provides a detailed three-dimensional visualization of the anatomy of the human skeleton and muscles while performing strength training exercises, and many additional features

- **Conclusion:** Achieving high athletic performance requires a constant search for improving monitoring and training process. Currently, the development of information tools required to develop and analyze the effectiveness of programs to find ways to quality training and competitive athletes in training activities. With Muscle and Motion athlete can provide power development of his body, the complex of exercises for certain areas of the body that muscles work in the performance of a movement.
- Muscle and Motion program may need for effective training or for a person who begins to exercise, exercise equipment analysis, fundamental errors and potential problems, knowledge of how to work the muscles and joints and how to move without breaking anything . You can compose their own training plan: 1) Choose which muscles need to pump; 2) Select a few exercises proposed; 3) See how to stretch those muscles after exercise; 4) Choose the method of training; 5) See how to make optimal training plan for a week.

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- 6. Muscle and Motion program source  
access: <http://www.muscleandmotion.net/m&m>

# Start watching program Muscle and Motion



All Body



Head & Neck



Torso



Upper Arm



Lower Arm



Upper Leg and Pelvis



Lower Leg and Foot

A-Z

Muscle index

A-Z

Strength index

A-Z

Stretches index

A-Z

Short movies index

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Theory

# You can see the muscles of the human body (biceps brachii)



# What exercises and how to perform

◀ Exercises All Body Machine & Cables Preacher Biceps Curls (machine)

**MUSCLE  
MOTION**  
STRENGTH TRAINING

EXAMPLES:

1 2 3 4

5

COMMON MISTAKES:

1 2 3

MUSCLES IN THIS EXAMPLE:

■ Target Muscles +

■ Synergists +

■ Stabilizers +

■ Lengthening

■ Analysis Table >



# Possible errors when performing exercises

← Exercises All Body Machine & Cables Preacher Biceps Curls (machine)

MUSCLE  
MOTION  
STRENGTH TRAINING

EXAMPLES:

1

2

3

4

5

COMMON MISTAKES:

1

2

3

MUSCLES IN THIS EXAMPLE:

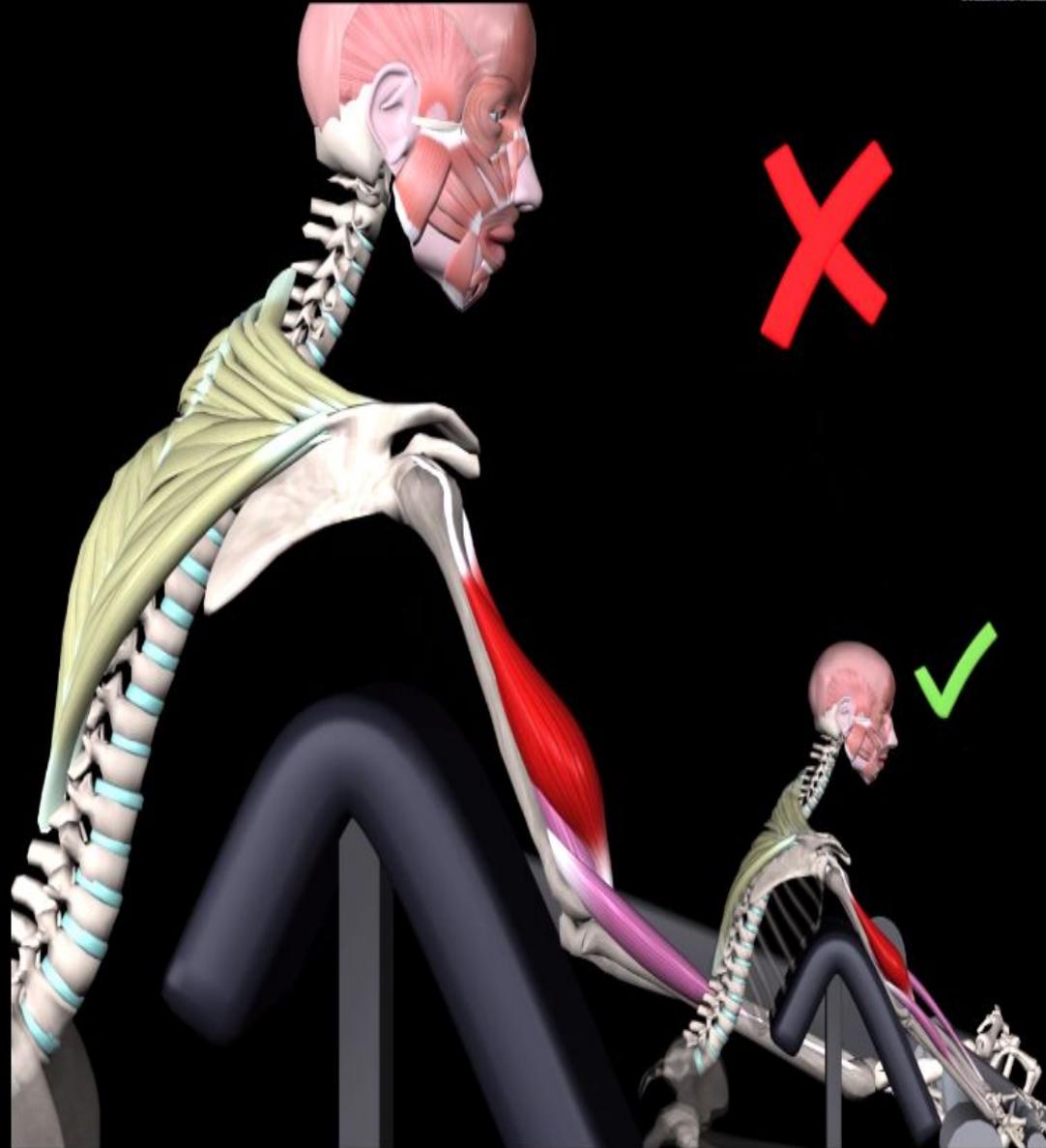
■ Target Muscles +

■ Synergists +

■ Stabilizers +

■ Lengthening

■ Analysis Table >

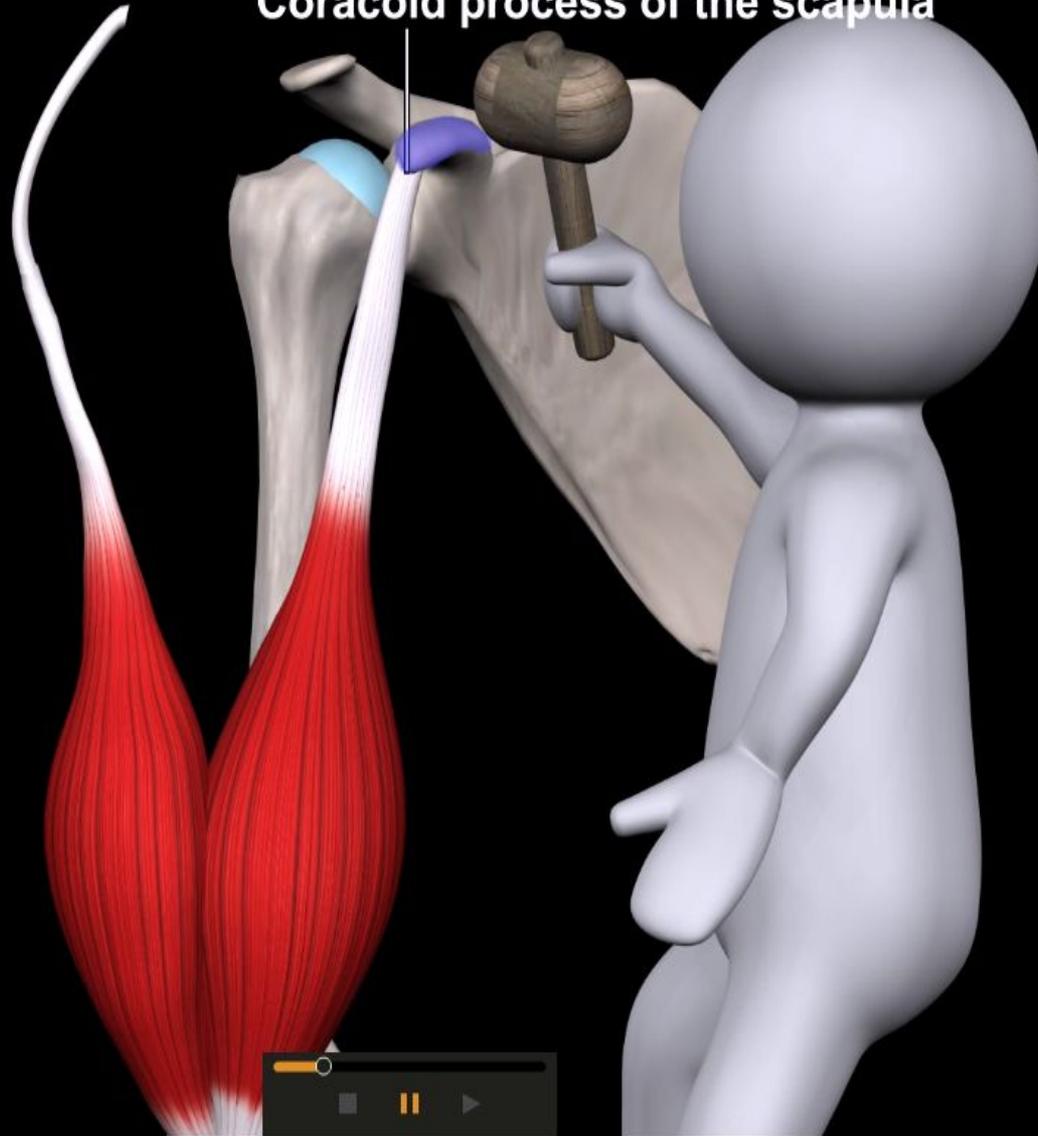


# You can see how muscle is built

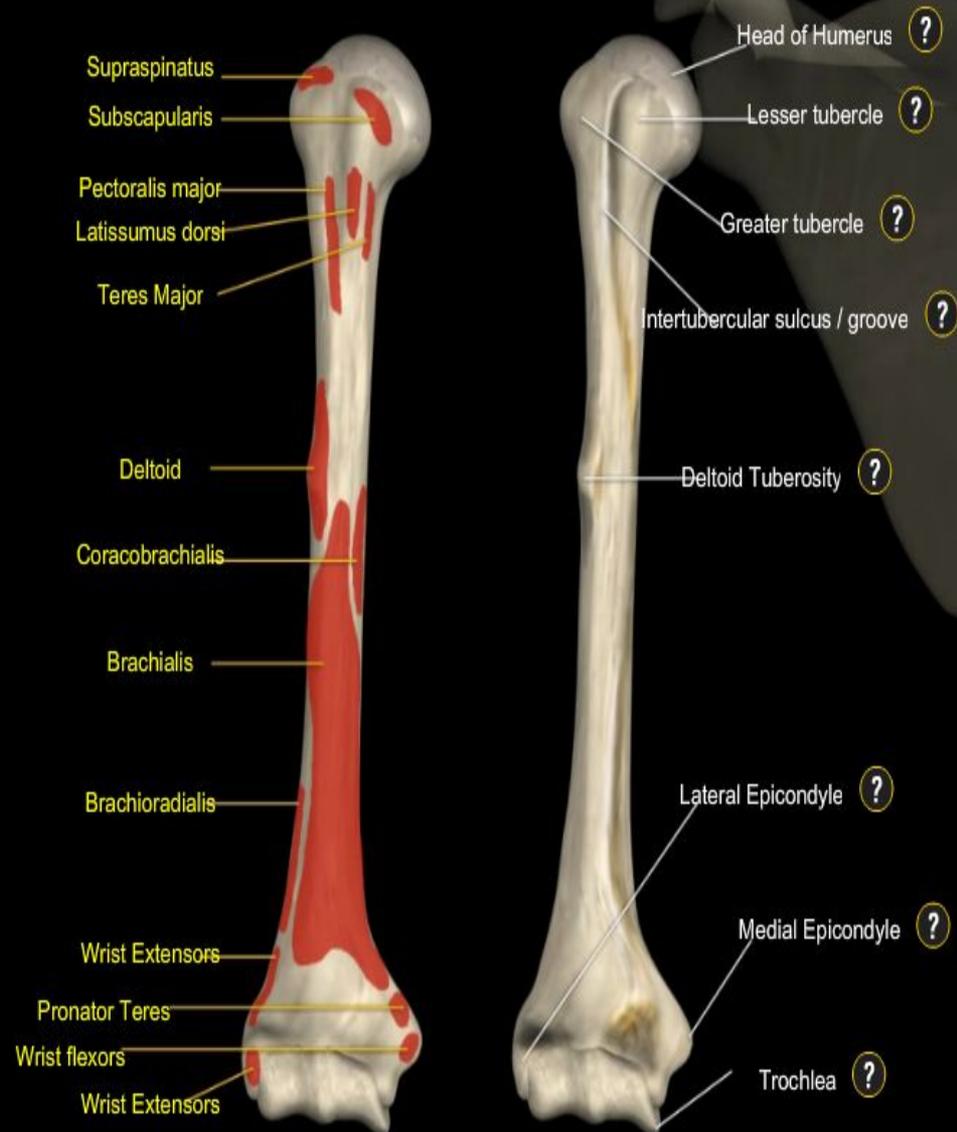
Muscular Anatomy Biceps Brachii



Origin (proximal attachment):  
Coracoid process of the scapula



# Available views constructing bones



# Viewing exercise which muscles are involved with

**MUSCLE & MOTION**  
/Art G. Neri  
**STRENGTH TRAINING**

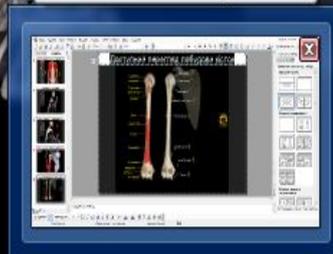
Target muscle

Synergists

Stabilizers



Microsoft PowerPoint - [3A4ÉT 12]



**Thank you for attention!!!**