

**Wonderfully Made Series**  
**Study #16: Giants & Muscles**  
**Bible Sermon Study Notes by Cary Rodgers, pastor**

**Muscles**

- The muscles are the active part of the apparatus of locomotion.
- Their task is to move the body.
- The muscles comprise 40% of the body's weight.
- The body has 300 individual muscles in different shapes and sizes.
- Like an engine muscles turn energy in to motion.

**Basic function of muscles**

- Muscle tendons stabilize joints
- Fight Gravity
- Moves Skeleton
- Heat Production

**3 Types of Muscle Cells**

1. Skeletal (Striped) muscles (Voluntary & Attached to Skeleton)
2. Cardiac muscle (myocardium) (Involuntary Heart Muscle)
3. Smooth muscles (Involuntary & Walls of Hollow Organs)

**Muscles are Cells**

The basis of the muscles are muscle cells, capable of contracting longitudinally in response to nervous stimulation.

The muscle cells contain small contractile strands of protein (so-called myofibrils). They contract when stimulated, returning to their original state as soon as the stimulation ceases.

**Skeletal Muscle Basic Structure**

**Fascia** - Covering of the muscle

**Myofibrils** - Muscle Fibers = Contraction

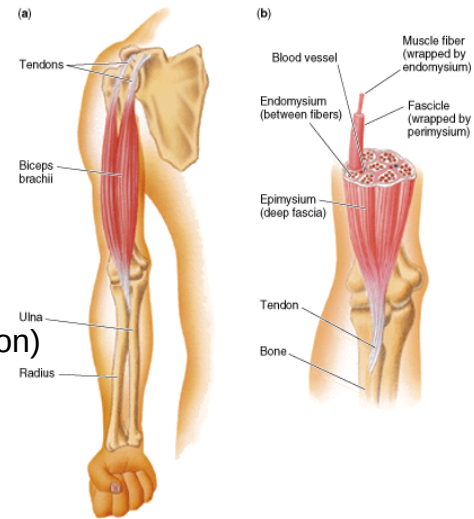
**Within Myofibrils**

- Actin – Thin filaments for Contractions
- Myosin – Thick filaments for Contractions

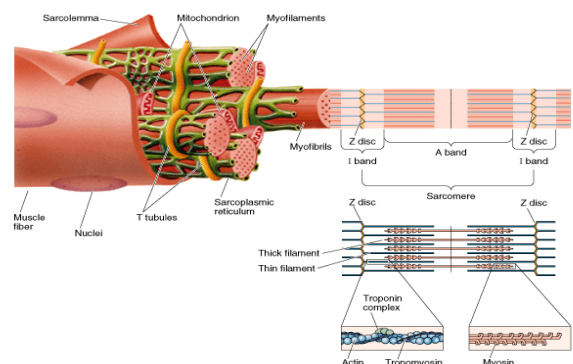
**Smooth Muscles**

Uses what is known as peristalsis: movement through a smooth muscle; coordinated squeezing movement; passage of food

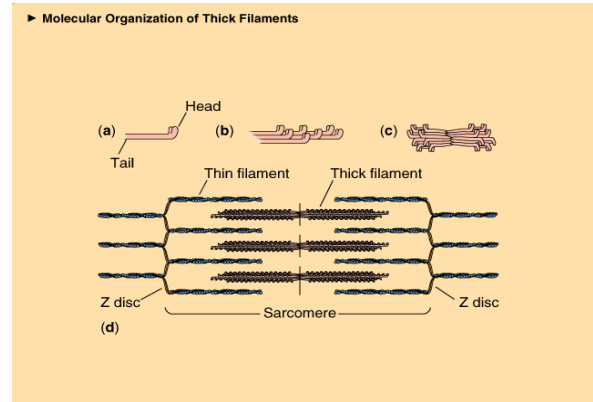
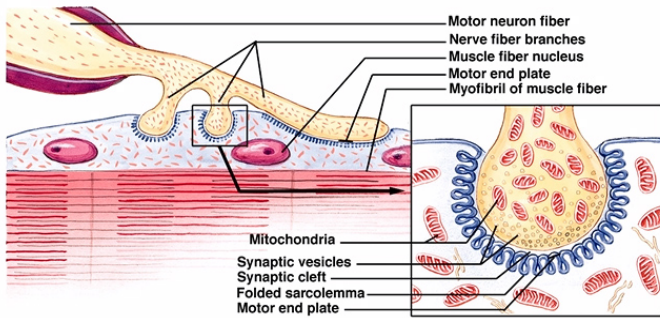
Organization of Skeletal Tissue



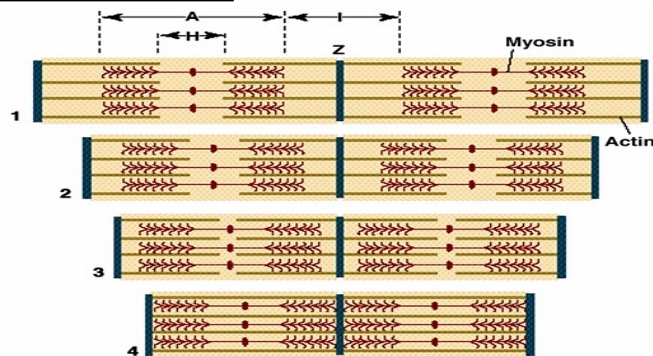
Organization of a Muscle Fiber



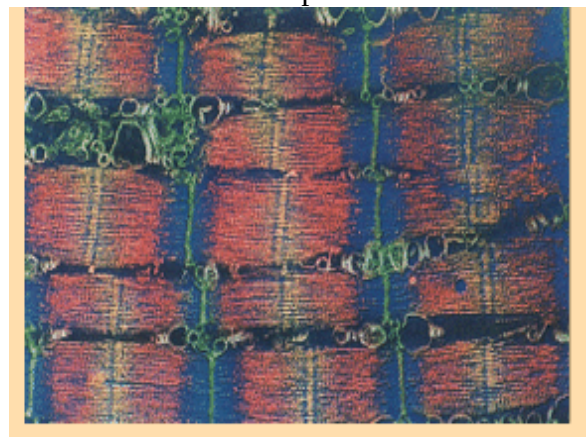
## Illustration of the Neuromuscular Junction



## CONTRACTION



Muscle under microscope



Muscles have a lot of mitochondria – powerplant of cells. ATP (Adenosine triphosphate) is the fuel that comes from mitochondria that is used as energy that causes the muscles to contract. ATP is known as ADP that is returned to the mitochondria to be recycled back into ATP.

## Prophecy Alert

There have many earthquakes throughout the earth for the past several months in 2019, it continues in 2020

### Earthquake kills at least 18 people in eastern Turkey, January 24, 2020, CBS News

“An earthquake with a preliminary magnitude of 6.7 rocked eastern Turkey on Friday, killing at least 18 people and causing some buildings to collapse. The quake injured more than 500 and left approximately 30 trapped in toppled buildings, Turkish officials said.”

**Coronavirus is a possible pandemic that started in China, its spreading. There are many death in China.**

### Coronavirus Live Updates: Toll Climbs as Infections Reach Europe and Australia, January 24, 2020, New York Times

“Chinese health authorities reported at least 15 new deaths in one day, raising the death toll to 41 — all in China. New cases were confirmed in the United States, France and Australia.”

**“Nationwide, more than 400 new cases of the virus were diagnosed, officials said early Saturday, bringing the total number of confirmed cases in China to nearly 1,300.”**

**China restricts travel for 35 million people to halt spread of deadly virus**, January 24, 2020, The Washington Post

BEIJING — China locked down more than 35 million people in an increasingly urgent effort to [halt the spread of the deadly coronavirus](#) Friday, as the United States confirmed a second infected person and the respiratory illness found its way to Europe, where the first three cases were announced in France.

**Christians see 'alarming' trend worldwide as China builds 'blueprint of persecution'**, January 15, 2020 Caleb Parke, Fox News

“ ‘The Chinese government has now placed severe restrictions and policies on the house churches asking neighbors to spy on one another, pressuring school teachers and college professors to betray and sign a statement to denounce their own faith as well to do the same to students,’ Pastor Jian Zhu said.

Christians in China have been under constant surveillance, not just on the streets, but also in their churches which have been torn down, holy books confiscated.”

**Boris Johnson signs withdrawal agreement for Brexit**, Edward Moreno, The Hill, January 24, 2020

“British Prime Minister Boris Johnson on Friday announced that he had signed a withdrawal agreement for the United Kingdom to leave the European Union, paving the way for Brexit.

Johnson tweeted an image of himself signing the agreement, setting up the U.K. to leave the EU by next week's Jan. 31 deadline.”

**We are on the border of the Heavenly Canaanland! Our faith MUST be strong to endure end time events to make it in. We have to fight “giants” along the way.**

**Why did Israel not go into Canaan the first time?**

**Deuteronomy 1:21-32**

21 Behold, the LORD thy God hath set the land before thee: go up and possess it, as the LORD God of thy fathers hath said unto thee; fear not, neither be discouraged.

22 And ye came near unto me every one of you, and said, We will send men before us, and they shall search us out the land, and bring us word again by what way we must go up, and into what cities we shall come.

23 And the saying pleased me well: and I took twelve men of you, one of a tribe:

24 And they turned and went up into the mountain, and came unto the valley of Eshcol, and searched it out.

25 And they took of the fruit of the land in their hands, and brought it down unto us, and brought us word again, and said, It is a good land which the LORD our God doth give us.

26 Notwithstanding ye would not go up, but rebelled against the commandment of the LORD your God:

27 And ye murmured in your tents, and said, Because the LORD hated us, he hath brought us forth out of the land of Egypt, to deliver us into the hand of the Amorites, to destroy us.

28 Whither shall we go up? our brethren have discouraged our heart, saying, The people is greater and taller than we; the cities are great and walled up to heaven; and moreover we have seen the sons of the Anakims there.

29 Then I said unto you, Dread not, neither be afraid of them.

30 The LORD your God which goeth before you, he shall fight for you, according to all that he did for you in Egypt before your eyes;

31 And in the wilderness, where thou hast seen how that the LORD thy God bare thee, as a man doth bear his son, in all the way that ye went, until ye came into this place.

32 Yet in this thing **ye did not believe the LORD your God,**

**The Israelites were on the border of their blessing, but when they saw the giants they did not believe that God would fight for them. Even though they saw many examples miracles of how God delivered from Egyptian bondage, feed them in the wilderness, gave them water to drink and protected them from danger their they lacked faith in Him.**

### **What is a giant?**

1. a living being of great size
2. a person of extraordinary powers
3. something unusually large or powerful (<http://www.merriam-webster.com>)

### **Numbers 13:31-33**

**31 But the men that went up with him said, We be not able to go up against the people; for they are stronger than we.**

**32 And they brought up an evil report of the land which they had searched unto the children of Israel, saying, The land, through which we have gone to search it, is a land that eateth up the inhabitants thereof; and all the people that we saw in it are men of a great stature.**

**33 And there we saw the giants, the sons of Anak, which come of the giants: and we were in our own sight as grasshoppers, and so we were in their sight.**

**“Giant” (Hebrew) = From H5307; properly, a feller, that is, a bully or tyrant.**

**Did one lose a battle against the giants? It wasn't there physical strength but their faith in God the defeated the giants.**

### **Why did Israel fear?**

#### **1 Samuel 17:4, 11**

4 And there went out a champion out of the camp of the Philistines, named Goliath, of Gath, whose **height was six cubits and a span.**

11 When Saul and all Israel heard those words of the Philistine, **they were dismayed, and greatly afraid.**

#### **Deuteronomy 3:11**

11 For only Og king of Bashan remained of the remnant of giants; behold, his bedstead was a bedstead of iron; is it not in Rabbath of the children of Ammon? **nine cubits was the length thereof,** and four cubits the breadth of it, after the cubit of a man.

**The giants were between eight to thirteen feet tall.**

## What do giants represent spiritually?

**Spiritually Giants are situations or events that too large for us in our human weakness to have victory over. By faith we are confident that God will defeat these giants.**

### Exodus 3:8-12

8 And I am come down to deliver them out of the hand of the Egyptians, and to bring them up out of that land unto a good land and a large, unto a land flowing with milk and honey; unto the place of the Canaanites, and the Hittites, and the Amorites, and the Perizzites, and the Hivites, and the Jebusites.

9 Now therefore, behold, the cry of the children of Israel is come unto me: and I have also seen the oppression wherewith the Egyptians oppress them.

10 Come now therefore, and I will send thee unto Pharaoh, that thou mayest bring forth my people the children of Israel out of Egypt.

11 And Moses said unto God, Who am I, that I should go unto Pharaoh, and that I should bring forth the children of Israel out of Egypt?

12 And he said, Certainly I will be with thee; and this shall be a token unto thee, that I have sent thee: When thou hast brought forth the people out of Egypt, ye shall serve God upon this mountain.

## Giants

### Remember that the LORD is with us.

#### Numbers 14:6 – 9

6 And Joshua the son of Nun, and Caleb the son of Jephunneh, which were of them that searched the land, rent their clothes:

7 And they spake unto all the company of the children of Israel, saying, The land, which we passed through to search it, is an exceeding good land.

8 If the LORD delight in us, then he will bring us into this land, and give it us; a land which floweth with milk and honey.

**9 Only rebel not ye against the LORD, neither fear ye the people of the land; for they are bread for us: their defence is departed from them, and the LORD is with us: fear them not.**

**Joshua and Caleb are examples of the faith that is we MUST have in order to defeat giants spiritually in the last days and enter into the Heavenly Canaanland. “The Lord is with us: fear them not.”**

#### Deuteronomy 1:21

**21 Behold, the LORD thy God hath set the land before thee: go up and possess it, as the LORD God of thy fathers hath said unto thee; fear not, neither be discouraged.**

**Moses reminded those on the border of Canaanland to remember the giants that were defeated in the past while they were in the wilderness. King Og who was about 13 feet tall with other giants were defeated in the wilderness.**

#### Deuteronomy 3:1-3

**1 Then we turned, and went up the way to Bashan: and Og the king of Bashan came out against us, he and all his people, to battle at Edrei.**

2 And the LORD said unto me, Fear him not: for I will deliver him, and all his people, and his land, into thy hand; and thou shalt do unto him as thou didst unto Sihon king of the Amorites, which dwelt at Heshbon.

3 So the LORD our God delivered into our hands Og also, the king of Bashan, and all his people: and we smote him until none was left to him remaining.

### **Deuteronomy 31:6-8**

**6 Be strong and of a good courage, fear not, nor be afraid of them: for the LORD thy God, he it is that doth go with thee; he will not fail thee, nor forsake thee.**

7 And Moses called unto Joshua, and said unto him in the sight of all Israel, **Be strong and of a good courage: for thou must go with this people unto the land which the LORD hath sworn unto their fathers to give them; and thou shalt cause them to inherit it.**

**8 And the LORD, he it is that doth go before thee; he will be with thee, he will not fail thee, neither forsake thee: fear not, neither be dismayed.**

### **How did God encourage Joshua as he was about to lead the Israelites to Canaan a land of giants?**

#### **Joshua 1:9**

**9 Have not I commanded thee? Be strong and of a good courage; be not afraid, neither be thou dismayed: for the LORD thy God is with thee whithersoever thou goest.**

This is God's promise to the faithful. That is will fight our giants and that He is with us always.

**David had examples in Moses, Joshua, and Caleb who defeated giants. David had faith in God that He will defeat Goliath as He did with other giants in the past.**

#### **1 Samuel 17:26, 32 – 37, 45 – 50**

26 And David spake to the men that stood by him, saying, What shall be done to the man that killeth this Philistine, and taketh away the reproach from Israel? for who is this uncircumcised Philistine, that he should defy the armies of the living God?

32 And David said to Saul, Let no man's heart fail because of him; thy servant will go and fight with this Philistine.

33 And Saul said to David, Thou art not able to go against this Philistine to fight with him: for thou art but a youth, and he a man of war from his youth.

34 And David said unto Saul, Thy servant kept his father's sheep, and there came a lion, and a bear, and took a lamb out of the flock:

35 And I went out after him, and smote him, and delivered it out of his mouth: and when he arose against me, I caught him by his beard, and smote him, and slew him.

36 Thy servant slew both the lion and the bear: and this uncircumcised Philistine shall be as one of them, seeing he hath defied the armies of the living God.

37 David said moreover, The LORD that delivered me out of the paw of the lion, and out of the paw of the bear, he will deliver me out of the hand of this Philistine. And Saul said unto David, Go, and the LORD be with thee.

45 Then said David to the Philistine, Thou comest to me with a sword, and with a spear, and with a shield: but **I come to thee in the name of the LORD of hosts, the God of the armies of Israel, whom thou hast defied.**

46 This day will the LORD deliver thee into mine hand; and I will smite thee, and take thine head from thee; and I will give the carcasses of the host of the Philistines this day unto the fowls of the air, and to the wild beasts of the earth; that all the earth may know that there is a God in Israel.

**47 And all this assembly shall know that the LORD saveth not with sword and spear: for the battle is the LORD'S, and he will give you into our hands.**

48 And it came to pass, when the Philistine arose, and came and drew nigh to meet David, that David hasted, and ran toward the army to meet the Philistine.

49 And David put his hand in his bag, and took thence a stone, and slang it, and smote the Philistine in his forehead, that the stone sunk into his forehead; and he fell upon his face to the earth.

50 So David prevailed over the Philistine with a sling and with a stone, and smote the Philistine, and slew him; but there was no sword in the hand of David.

**Philippians 4:13**

**13 I can do all things through Christ which strengtheneth me.**

**Matthew 17:20**

**20 And Jesus said unto them, Because of your unbelief: for verily I say unto you, If ye have faith as a grain of mustard seed, ye shall say unto this mountain, Remove hence to yonder place; and it shall remove; and nothing shall be impossible unto you.**

**Appeal**