Aim: SWBAT understand how muscles become tired and why cramps occur.

Do Now: Why do muscles get tired?

Just adding some defintions

Flexor- Decreases the angle of the joint

Extensor- Increases the angle of the joint

Hypertrophy

- An increase in muscle mass and cross-sectional area . The increase in dimension is due to an increase in the size (not length) of individual muscle fibers.
- Leads to increase in capability of the muscle.
- Occurs in both skeletal and cardiac muscles.
- Increased the proteins in the myofibrils which make it able to work harder.

Function of Hypertrophy

- This makes you stronger. As you progressively overload the muscle, the muscle gets stronger.

How you say?

- Satellite cells function to facilitate growth, maintenance and repair of damaged skeletal (not cardiac) muscle tissue
- Located on the outer surface of the muscle fiber.
- They become activated when the muscle fiber receives any form of damage or injury, such as from resistance training.
- The satellite cells then multiply, and the daughter cells are drawn to the damaged muscle site. They then fuse to the existing muscle fiber, donating their nuclei to the fiber, which helps to regenerate the muscle fiber.

Facts to Know

- It is important to emphasize the point that this process is not creating more skeletal muscle fibers (in humans), but increasing the size and number of contractile proteins (actin and myosin) within the muscle fiber
- The amount of satellite cells present within in a muscle depends on the type of muscle. Type I or slow-twitch tend to have a five to six times greater satellite cell content than Type II (fast-twitch fibers), due to an increased blood and capillary supply

You say that seemed simple

We will go more in depth about this in the fitness unit.

Lactic acid on muscle

Read article and answer questions. Will discuss when done.