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ELECTRICITY & HUMAN BODY

Almost all of the

processes that keep

you alive can be linked

to an electric field that

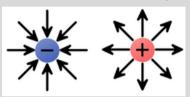
a part of your body is

producing.

ELECTRICAL FIELDS AND CHEMICAL REACTIONS

Even in the absence of external electric fields, the chemical reactions that take place as part of regular internal operations generate very small electrical currents within the human body (World Health Organization, 2016).

> https://www.who.int/news-room/questions-andanswers/item/radiation-electromagnetic-fields



HOW MUCH VOLTAGE IS IN THE HUMAN BODY?

When the walking motion is repeated, a regular voltage is produced in the human body. The maximum voltage in a human body is 48 V (Ichikawa, 2016).

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5l366ll/

WAYS ANIMALS USE ELECTRICITY

Animals that are electroreceptive may detect the faint electrical fields that their prey produces. An electroreceptive animal can detect the distortion that an electric field causes when it strikes a live thing (Sunkara, 2021).

WHY DON'T ELECTRIC FISH **ELECTROCUTE THEMSELVES?**

By stretching their bodies into a form that stops the electric current from flowing through their hearts. They harden into a line segment that resembles a straight edge as they charge up. The electric current only passes parallel to their tail and behind their heart (Rosen, 2018).

> https://www.forbes.com/sit es/auora/2018/04/03/howdo-eels-generateelectricity-in-waterwithout-electrocutingthemselves/? sh=7025l83064a0



CAN A HUMAN BODY CONDUCT **ELECTRICITY?**

Different ions in our body cells, such as sodium. potassium, chloride, and others, have the ability to conduct electricity, thus our body is a good conductor of electricity (Ichikawa, 2016).

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5l366ll/

DOES THE HUMAN BODY GIVE OFF **ELECTROMAGNETIC ENERGY?**

The human body and all other items emit electromagnetic radiation. The temperature of the objects affects the wavelength of the radiation that is emitted (World Health Organization, 2016)

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