

IMAGE



Science for kids: delayed cord clamping leads to more iron than on time cord clamping, which increases hepcidin

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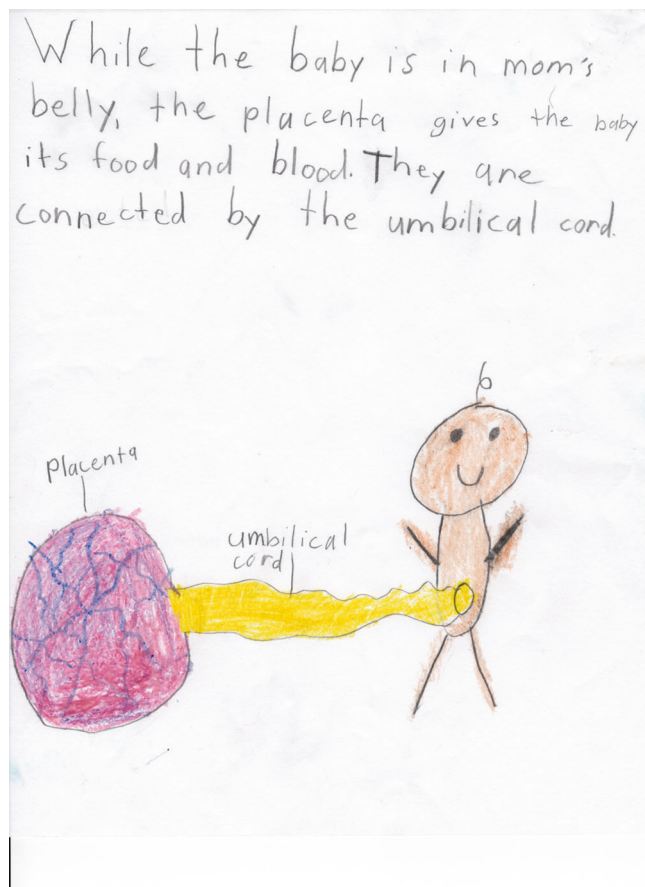


Fig. 1 Baby with umbilical cord and placenta. The baby is connected to the placenta by the umbilical cord.

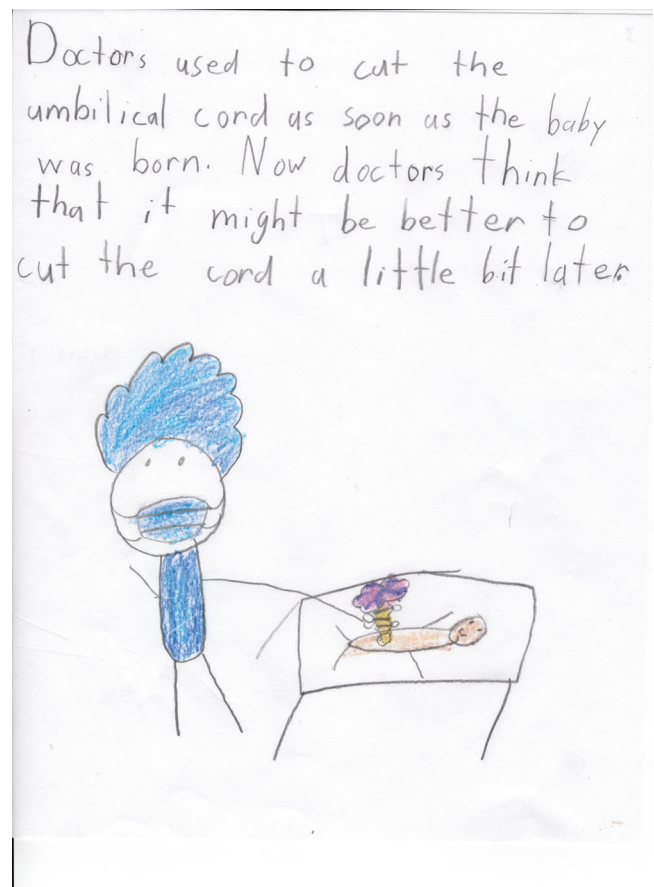


Fig. 2 Doctor cutting the umbilical cord. The doctor wearing scrubs, a hair net, and a mask cuts the cord after putting clamps on the cord. The doctor cuts between the clamps so the blood does not go everywhere.

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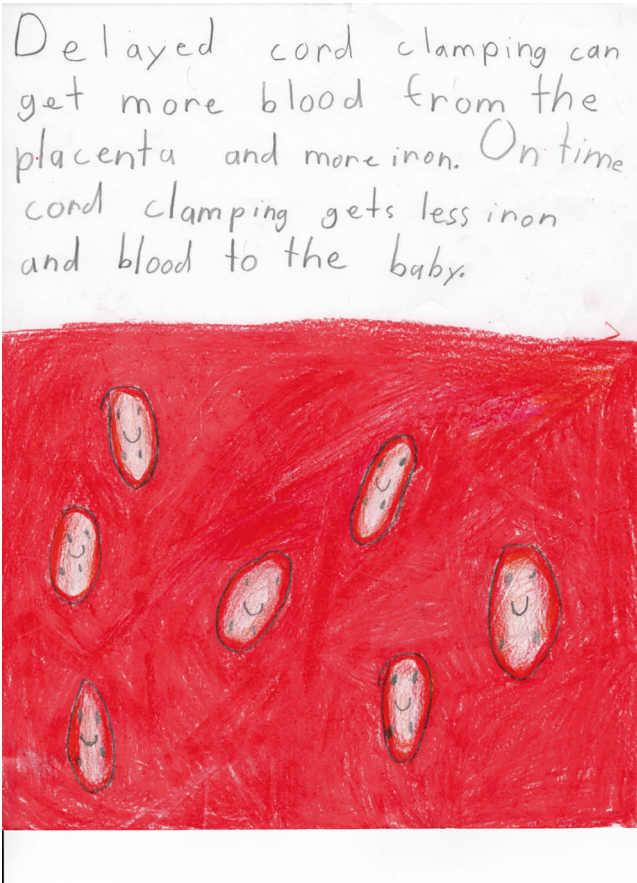


Fig. 3 Blood and red blood cells. Red blood cells are one part of blood. There are many things in blood that are not in the picture, like oxygen, salts, platelets, and white blood cells.

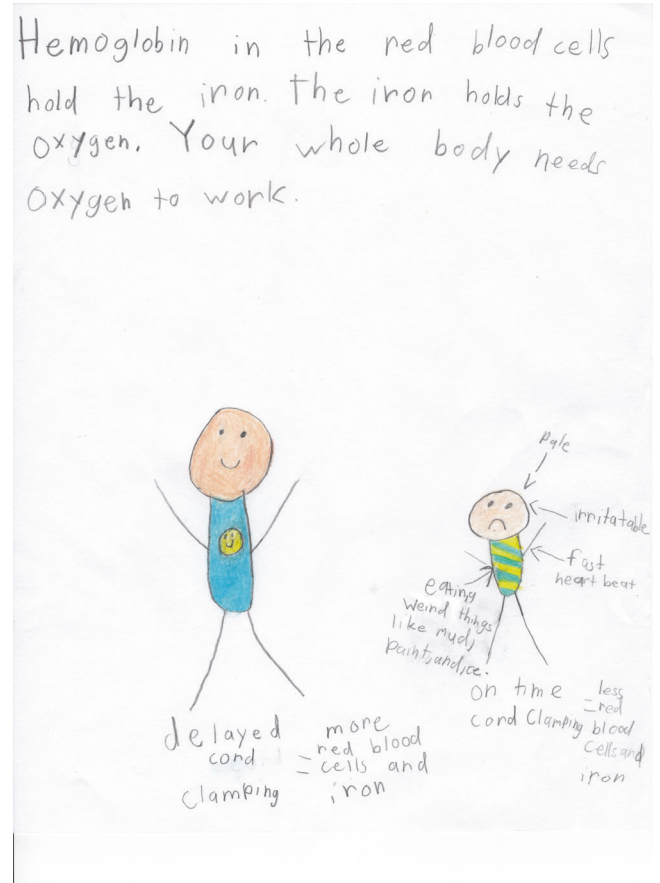


Fig. 4 Babies with delayed vs on time cord clamping. Babies with delayed cord clamping have more red blood cells, and they are more likely to be happy and grow better. Babies with on time cord clamping have fewer red blood cells and are more likely to eat weird things like mud, paint, and ice, be pale, be irritable, and have fast heartbeats.

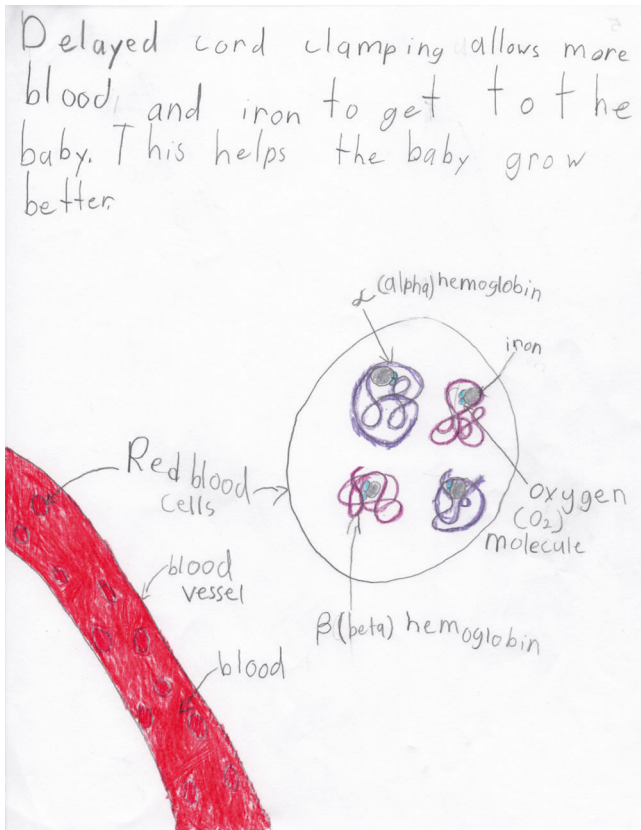


Fig. 5 What is inside of red blood cells. Red blood cells have four hemoglobin chains; two are alpha hemoglobin (dark purple) and two are beta hemoglobin (light purple). Each hemoglobin molecule (all four parts together) holds four iron molecules (gray circles). Each iron molecule can hold one oxygen molecule (two oxygen atoms, blue circles next to iron).

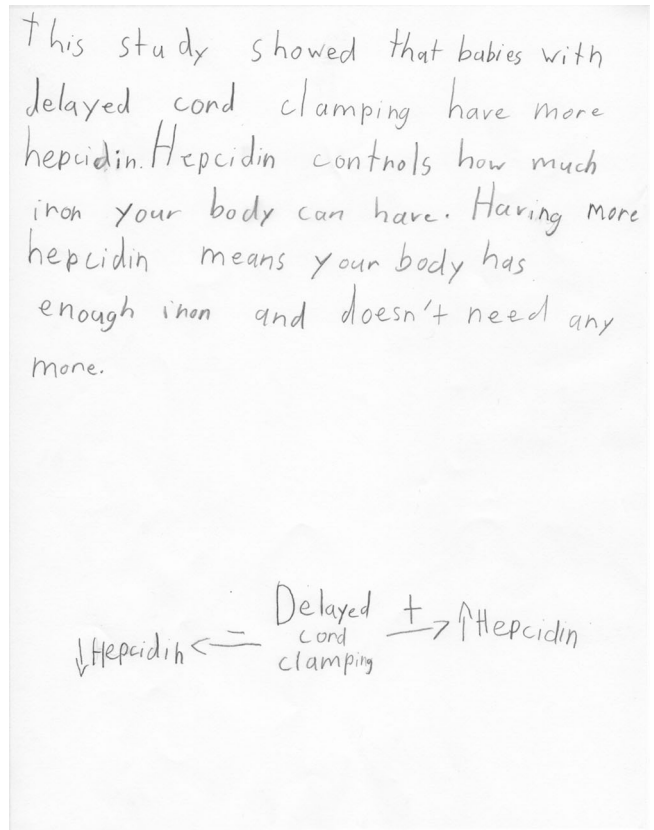


Fig. 6 How delayed cord clamping affects hepcidin. Having delayed cord clamping makes hepcidin go up, which means your body does not need any more iron. Not having delayed cord clamping makes hepcidin go down, which tells your body you do not have enough iron.