Golden Rice: Healthy for our body, not environment

* Purpose of Golden Rice(Saving Children) *five hundred thousand children*
* Background about Golden Rice(First, Second)

1. Beta-carotin
2. Vitamin A
3. Environmental problem (

Hello, my name is HYUNUK and I’m going to tell you about my opinion. Our question is “Is Golden Rice really less healthy than non-GMO food?”. And my answer is [breathe] Golden rice is healthy for our body but not environment. This is my contents of presentation. Before I tell you reasons about my opinion, I’ll treat the background of Golden Rice and purpose of this project. And last concluding all of the details and reassure my thought. (Body와 연결)

Golden Rice project started because of death rate of children who have lack of Vitamin-A. Many people in South Asia and Africa eat main food as rice. And probably their main source of nutrients is only rice. So, they could not take enough vitamin A. Especially, the children whose age is under the 5 have many diseases of nyctalopia, deficiency of vitamin-A. Nyctalopia means that when we are in a dark side suddenly we could not adjust the darkness in that situation. Severely this disease can cause losing their sight. In 1990, professor Fortycus started project to save children’s life.

Actually, Golden-Rice has developed for twice. As you see the middle one is their first result of development. And the third one was developed 10 years after the first one. It contains 23 times more than the normal rice, and It surprises the world. Then how it helps our body more health?

I want to talk about B-carotene. B-carotene is a major substance of Golden-Rice and it has 2 effectiveness to our body. The first one is traits as a precursor of Vitamin-A and the second one is antioxidant reaction.

How can the golden-rice make so many Vitamin-A?? Normal rice can not make this itself. But Golden-Rice can do it!!! How?? Golden-Rice contains psy-Gene. Is there someone who heard about this??[break] The psy-gene can help make Beta-Carotin which is precursor of Vitamin-A. Let’s take a look this content. The beta-carotene is made from the top one GGPP. Actually normal rice also have this GGPP too, but it don’t have psy-Gene!!!. That’s the reason why normal rice can’t make Vitamin-A. When the GGPP is converted to Beta-Carotin using psy-Gene, This is how golden rice make Vitamin-A itself. Therefore, Golden-Rice can be a good supplement of Vitamin-A and is great helpful for our health.

And then, B-carotene also have the benefit of antioxidant reaction. Can I ask you one-more thing? Have you heard about oxidative-stress? [break] not a educational stress.!! Easily It’s the stress of our cell, not our feeling of stress!! Oxidative-stress is known as reason of certain chronic diseases. So, antioxidant help reduce and prevent oxidative-stress in the body. For example, It improves cognitive function and increase the skin’s defense against UV radiation. Lastly, 2017 one study suggests that eating fruit rich in b-carotene had a protective effect against lung cancer. Likewise, B-carotene which is contained in Golden-Rice is widely helpful for our body.

However, Golden Rice is a GMO-food. Genetic Modified food always has a problem with environment. Actually, it’s not the natural. It’s artificially changed by humans. Therefore, It’s not verified precisely of disturbance ecosystem. Also it can cause contamination of other crop’s gene. In conclusion, golden-rice is not healthy in environment.

Golden-Rice does not have positive effects in all aspect like environment. But I think the golden-rice is revolution. It’s the method of saving many people and get more healthier our body. Thank you for listening.