Title: Why Has My Wife Become a Vegan?

Narrator: To begin our discussion on the topic: from profligacy to concern for distant ecosystems and social equity, let me tell you why my wife has become a vegan.

Text: Being Vegan

Narrator: Well, my wife became a vegan a few years ago! Why am I telling this story? Because if the affluent, (and if you are listening to this, if you are a middle class American, you are, relatively speaking, on a global scale, one of the affluent) - if the affluent who are aware of the Human-Ecological issues on Earth begin to consume less, and live more mindfully, there is a chance that we can avoid ecological catastrophe and begin to promote equity and social justice in the world.

So what does becoming a vegan have to do with that?

Text: Remember How the World Works

Narrator: Remember our discussion of ecosystems, the aquarium, and the way the world works in Module 4? Here’s the general ecosystem diagram again.

Recall that due to the 2nd Law of Thermodynamics, also known as the 2nd Law of Energy, at each step in a food chain, 90% or more of the energy taken in by each organism is converted into “waste” heat, and lost to the food chain. It's the cost of being alive!

Text: Energy Flow in Food Chains

Narrator: Why is there less of each kind of organism as we go farther along the food chains?

Because there is less energy available due to about 90% of the energy being converted to waste heat energy at each step in the food chain!

Look at how the amount of energy and living mass, called biomass, decreases dramatically from step to step in the food chain. It takes approximately 10,000 lbs. of living grasses to support only 1 lb. of hawk because of this! That's why you don't see giant flocks of hawks flying over grasslands!

Of course, since the laws of physics hold for everything in the Universe, this is also true for human food chains.

Why do you suppose that rich societies eat a lot of meat whereas poor societies subsist mostly on a vegetarian diet?

Let’s consider the energy flows of those two societies.

Text: Energy Flow in Affluent Societies

Narrator: In an affluent society, some 10,000 lbs. of grain must be fed to 1 – 1000lb. cow, in order to feed 1 – 100 lb. person.

Why?

Because 90% of the energy in the grain fed to the cow is converted by the cow into waste heat energy as the cost of being alive. Remember, "There Ain't No Such Thing As a Free Lunch"! – The 2nd Law of Energy.
Let's compare the way people in affluent societies eat to the way people in poor societies eat. In poor societies, people tend to eat mostly grains and vegetables. Why?

**Text: Energy Flow in Poor Societies**

**Narrator:** Well, as you can see, if you eliminate a step in the food chain, there is 10x as much energy available, so 10x as many people can be fed if you skip the livestock, which convert most of the grain energy into waste heat! Feeding the grain to cattle is like throwing away 90% of the grain harvest!

This means that the shorter the food chain, the less energy it takes to produce that food, and so the more people can be fed.

**Text: Feeding People**

**Narrator:** Since Earth is finite, the amount of land that is arable is not increasing, and the population of humans on Earth is increasing exponentially, feeding the world’s population is a significant problem, which will only get worse - fast.

So, considering this, do you think that it is ethical to eat meat in a world where some 10,000 children die each day from malnutrition?

**Text: The Cost of Meat**

**Narrator:** That’s a tough question, and the answer also depends upon the distribution of food. In the affluent societies we suffer from an excess of food, and we waste a huge amount of food – some 40%, according to some estimates. But the moral dilemma is real.

If we also consider the water, fossil fuel and carbon dioxide pollution associated with meat production, it becomes even more energetically expensive and more environmentally damaging to raise livestock.

Sixteen times as much fossil fuel is used to produce 320 calories worth of meat compared to 320 calories of vegetables!

And, it takes about 1800 gallons of water to produce a pound of beef, with 15 lbs. of global warming gases produced!

**Text: This Is Why My Wife Is A Vegan**

**Narrator:** This is why my wife is a vegan – not because she doesn’t like meat, but because she feels morally obliged to no longer contribute to the environmental degradation and human suffering caused by her consumption of meat. She is part of a paradigm shift away from “Unlimited Growth” and towards “Sufficiency.” She did it because she understands the global picture, wants to decrease the size of her ecological footprint, and promote equity and basic human dignity on Earth. She is concerned about distant ecosystems and about the social equity of the people in those distant lands who grow her food. And she’s not alone! Many people are reducing their meat consumption, or becoming vegetarians or vegans, for the same reason – plus its healthier. It turns out that what is good for the planet is also good for personal health!

**Text: A Vegetarian Diet Is Healthy For Both People And The Planet**

**Narrator:** By the way, a vegetarian or vegan diet is very healthy, as long as you eat a broad variety of vegetables, fruits, nuts and whole grains. It is actually much more healthy than the typical diet, which is high in fats and salt, leading to obesity, high blood pressure, diabetes, heart disease, strokes, joint problems from obesity, and even premature death!
My wife says that she doesn’t miss the meat eating, with the exception of baked chicken. She enjoys eating all the different vegetables, fruits and grains available, and she enjoys exploring the wonderful vegan recipes that are delicious, nutritious, and interesting, with all kinds of textures, tastes, and aromas. She enjoys eating just as much as she did when she was a meat eater.

**Text: Changing Our Profligate Consumption Patterns**

**Narrator:** I’m not a vegan – yet. I have been an ovo-lacto-pesca vegetarian for many years – decades. That is, I eat eggs, dairy, and fish as well as vegetables, grains, and fruits. But, I only eat either wild meats or free-range or even better, pastured eggs, and meat. (Pastured means that the animals truly are able to freely live outside, most of their lives). Morally, I cannot support the inhumane treatment of animals in the mass poultry and pork industries, where animals are horribly abused for the sake of the industrial meat industry – another symptom of the remote production of food. I only eat meat a few times a week. So, I call myself a “feral-tarian” – only eating meat from feral, that is wild or free-roaming animals who were humanely treated. We have raised our family this way.

We try to buy organic, as much as possible, and buy local produce when we can. We’d like to join a C.S.A. (that is a Community Supported Agriculture group), and start growing some of our own food as well. We feel good about our eating habits. It just seems like the right thing to do!

So, it *is* possible, for each of us in the affluent world to try to consume less and consume more consciously without feeling deprived, and in ways that will help our society to switch to the paradigm of “Sufficiency.” The “Earth is Full,” and we must change our ways of being, if civilization is to avoid catastrophe on this finite planet, which is experiencing climate change, and with a population of over 7 billion people exponentially growing towards 9 billion within a couple of decades. The “Paradigm of Unlimited Growth” is impossible on this finite planet with finite resources -- *we must change* – and we can!

**Text:** End of presentation.