

PREVIEW_ Peter Ballerstedt - Presentation (San Diego 2017) 2

Peter Ballerstedt: Not all protein is created equal. When you see a protein value on some feedstuff just please remember it's almost certainly a crude protein value. And crude protein is nothing more than the total nitrogen content in a feedstuff on a dry matter basis multiplied by 6.25.

Because we're going to assume that all the nitrogen that's in that feedstuff is protein... in protein and all protein is 16% nitrogen. Those are both very shaky assumptions with plants, but that's what we do.

So yeah you got a little bit more in the beans than you do in an equivalent amount of cooked beef muscle, but when you start looking at digestibility you see that there starts to be significant differences.

And just because you can digest it and absorb it doesn't mean your body can use it. So then there's something called biological value and when you apply that across the line what you see is a threefold difference in usable protein from equivalent amounts of feedstuffs. Beef versus beans.

And people will say that, well, we should just eat it directly and we could feed more people, right? "Animals worldwide produce about a kg or a pound of human food protein for every 1.4 kg or pound of human-edible protein consumed."

So yes it does take more to make a pound of animal protein, but the biological value of protein in foods from animals is about 1.4 times that of food from plants.

So at the end of the day it's a wash except, "...diverting grains from animal production to direct human consumption would, in the long-term, result in little increase in total food protein and would decrease average dietary quality and diversity." Oh, and by the way it would degrade the environment.