Joann summarizes perspectives. Food security and animal health highlighted. Everyone is trying to find a balance between perspectives on either end of the antibiotic use issue (not necessarily at this meeting). There are differences of opinion—on evidence. Prevention—what does it mean? Education—how to assess whether this has been effective? Interesting alternatives heard. There are different challenges between large and small producers. Should solutions be tailored to producers—specific guidelines? She opens the floor for questions.

Stuart answers a question from Diane Kull on farm study. A clear ecologic effect. Animals were not distant—they are on same farm.

Scott Brown to Stuart Levy: dose per animal lower—100g/100 animals, 100 g/1 animal
Stuart: to some extent it was intuitive. Resistant bacteria outcompeted in one instance; at v. high doses you can have toxic effect; you don't need a therapeutic amt. to get an ecologic effect. Selective pressure
Single vs.100 animals. Issue has always been the use of antibiotics for growth promotion purposes.
Scott: Does antibiotic free mean ionophore free? He would like harmonization in definition of terms..

Martin Wierup: appreciates Paul's presentation. When you calculate the amount of antibiotic used in US—US use six times more antibiotics than Denmark. What do you think of this? Paul refers Martin to Mike Apley’s publication. Numbers are in the same range based on the Kansas State estimate—and are comparable to the upper range of Denmark's figures. Paul didn’t have the paper at hand that addressed antibiotic/kg of meat produced. (M. Apley et al. “Use Estimates of In-Feed Antimicrobials in Swine Production in the United States” Foodborne Pathogens and Disease, Vol. 9, No. 3, 2012)

Scott Brown to Stuart Levy: dose per animal lower—100g/100 animals, 100 g/1 animal
Stuart: to some extent it was intuitive. Resistant bacteria outcompeted in one instance; at v. high doses you can have toxic effect; you don't need a therapeutic amt. to get an ecologic effect. Selective pressure
Single vs.100 animals. Issue has always been the use of antibiotics for growth promotion purposes.
Scott: Does antibiotic free mean ionophore free? He would like harmonization in definition of terms..
Antibiotics is a very broad term.

Martin- coccidiostats have an antibacterial effect-and cited the work of (Herman Goossens) — the big threat is in the amount (of antibiotic) used. His understanding is that the more drugs you use, the higher the risk for cross-resistance (selective pressure). There is a general correlation to the amount used.

Mike Apley: the amount has an effect. There are hierarchies—look at different groups—different interaction. He was looking for data on duration and is uncomfortable—He has no illusion that after growth promotion—we shall be looking at prevention control. Thinks we need to collect data/evidence.

Kumar to Chet: backyard farmers can’t afford to take birds to the veterinarian. The bird might have something very serious, and there will need to be a veterinarian involved. Kumar asked about education.
Chet agreed that it was not the best plan. People do unscrupulous things—they take sick birds to a state fair! Chet thinks another problem is that animals do not complete a full dose of antibiotics.