In the rat experiments with the Amadea potato the amount of freeze-dried potato added in the diet was very low, and in only two concentrations; 2.5 and 5 % of the diet. No change in caecum weight was observed. This is probably due to the very low content of potato. Moreover, the OECD guidelines recommend testing in three test concentrations in addition to control. The test doses should be up to toxic effect or to the limit dose. The experiments should have been performed using cooked or baked potato in higher doses up to limit test concentration.

Another concern is the uses of only one inbred strain of rats in safety studies of food and feed ingredients. It is more proper to test the food and feed ingredient in either a battery of inbred strains or in outbred animals. Performing these studies using a small battery of inbred rats would give more reliable results (Festing 2010). In addition feeding studies should be performed in production animals were raw potato is a natural ingredient.

We would recommend that the faeces is analysed for its content of indigested starch. This should be included in all studies if raw GMO potatoes are tested.

References