



AgroLogic

Henke-Sass Wolf

Hyline

Interheat

LUBING

Mirius

Novus

Perstorp

Silvateam

Wisium/Neovia

Introduction

Toxicity occurs when the actual bird is affected, whereas a chemical health hazard arises when chemicals in the bird's body present a risk to man when he eats their eggs or meat. The hazard from meat can be the result of the chemical having accumulated in the bird since hatching.

To determine whether a chemical consumed by poultry represents a health hazard to man relies on assessing the various effects likely to be produced in man following his consumption of the contaminated meat. These include carcinogenic effects, as well as genetic, teratogenic, photosensitisation, neurological, dermatological, immunological, reproductive or other toxic effects.

History

Paracelsus in the early 16th century stated that whether a substance is a poison depends solely on the dose (*sola dosis facit venenum*). It then took four centuries for toxicology to become a science and methodologies to be developed that could differentiate between non-toxic and toxic levels of a particular substance.

Although people are exposed to chemicals by various routes, food is by far the most common.

Risk

Risk is determined by the probability that a health effect of significant magnitude is observed after a defined period of exposure. We also need to be aware that many members of the public associate words like 'chemical' and 'food additive' as being synonymous with risk – which they are not.

There is a tendency to perceive chemicals and feed additives as more important risks, especially when they are compared to risks resulting from microbiological hazards or from exposure to natural toxicants such as mycotoxins.

Thus, we need to differentiate between perceived risks and real risks from pesticides, food additives and hazards to which exposure is unavoidable, such as persistent organic pollutants, heavy metals and naturally occurring contaminants.