Using Arsenic in Poultry Production Increases Americans' Cancer Risk



Introduction

When most Americans think of arsenic, they think of rat poison and cigarettes. Many do not realize that the Food and Drug Administration (FDA) has approved four arsenic-based, or arsenical, drugs for use in animal feed. Last year, FDA withdrew approvals for three of these drugs after a study by the Johns Hopkins Center for a Livable Future (CLF) found that feeding arsenicals to chickens led to the accumulation of the inorganic form of arsenic—a known carcinogen—in chicken breast meat.

Nevertheless, the agency has allowed the use of nitarsone, the fourth drug, to continue. Nitarsone is still approved for use in chickens and turkeys, both to make them grow faster and to prevent disease. Any exposure to a carcinogen can increase Americans' cancer risk, but although FDA has expressed concern that using nitarsone may expose consumers to inorganic arsenic, the agency has failed to take action.

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Key Points

• FDA has approved nitarsone for use in chickens and turkeys to make them grow faster and to prevent a disease known as blackhead; an industry trade association has confirmed that nitarsone is used widely in turkey production.

• While FDA does not release data it collects on nitarsone sales, CLF has used the best available data to estimate that roughly 249,000 pounds of nitarsone were sold for use in animal feed in 2012.

Public Health Concerns

• Chronic exposure to inorganic arsenic causes lung, bladder, and skin cancers and has been linked to cardiovascular disease, diabetes, cognitive deficits, and adverse pregnancy outcomes.

• Using arsenicals to produce poultry increases Americans' exposure to inorganic arsenic via food, and it releases arsenic into rural communities when poultry manure is used as fertilizer.

• A 2013 CLF study found that arsenical use triples the amount of inorganic arsenic in chicken breast meat compared to the breast meat of chickens raised without arsenicals.

Policy Options

FDA has allowed nitarsone to remain on the market despite strong evidence that using arsenicals increases Americans' cancer risk. In 2011, when an arsenical known as roxarsone was linked to increased inorganic arsenic in food, FDA allowed its manufacturer to voluntarily suspend sale of roxarsone products but took no action to withdraw arsenical approvals.

Finally, in 2013, the CLF's study and a lawsuit by advocacy organizations compelled FDA to withdraw the approvals for three of the four arsenicals. But the agency has failed to take action on nitarsone. FDA should end the use of arsenicals in animal feed by withdrawing its approval of nitarsone too.

Action

- Call on FDA to protect public health by withdrawing its approval of nitarsone.
- Support legislation that would permanently ban the use of arsenicals in animal feed by requiring FDA to withdraw its approval of nitarsone.



Who We Are

Based within the Bloomberg School of Public Health, The Johns Hopkins Center for a Livable Future (CLF) is an academic center that conducts and promotes research and communicates information about the complex inter-relationships among food production, diet, environment and human health.

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