# SOON SOON OILMILLS TECHNICAL BULLETIN

Issue No. TB 13-01/2009 (Malaysian Edition)

Frequently Asked Questions About Dioxins



## SOON SOON OILMILLS SDN BHD (37441-T)

(A member of Soon Soon Group)
2448 Lorong Perusahaan 2, Prai Industrial Estate, 13600 Prai, Penang, Malaysia.
P.O. Box 300, 12720 Butterworth, Penang, Malaysia.
Tel: 604-3828288 Fax: 604-3988 277

Email: oilmill@soonsoongroup.com Website: www.soonsoonoil.com.my

# **Frequently Asked Questions About Dioxins**

#### Q: What are dioxins?

A: "Dioxins" refers to a group of chemical compound that share certain chemical structures and biological characteristics.

Dioxins are formed as a result of combustion processes such as commercial or municipal waste incineration and from burning fuels (like wood, coal or oil). They are also formed when household trash is burned and as a result of natural processes such as forest fires. Chlorine bleaching of pulp and paper, certain types of chemical manufacturing and processes, and other industrial processes all can create small quantities of dioxins. Cigarette smoke also contains small amounts of dioxins.

#### Q: Why are people concerned about dioxins?

A: Dioxins from natural and man-made sources have been widely distributed throughout environment. Almost every living creature has been exposed to dioxins. Studies have shown that exposure to dioxins at high enough doses may cause a number of adverse health effects. The health effects associated with dioxins depend on a variety of factors including:- the level of exposure, when someone was exposed, and for how long and how often. Because dioxins are so widespread, we all have some level of dioxins in our bodies.

The most common health effect in people exposed to large amounts of dioxin is chloracne, a severe skin disease with acne-like lesions that occur mainly on the face and upper body. Other effects of exposure to large amounts of dioxin include skin rashes, skin discoloration, excessive body hair and possibly mild liver damage.

One of the main concerns over health effect from dioxins is the risk of cancer in adults. Workers exposed to high levels of dioxins at their workplace over many years have an increased risk of cancer.

#### Q: How might I be exposed to dioxins?

A: Most of the population has low-level exposure to dioxins. Although dioxins are environmental contaminants, most dioxin exposure occurs through diets, with over 95% coming through dietary intake of animal fats. Farm animals like pig, cattle, poultry may pick up dioxins from consumption of feeds compounded from feedstuffs contaminated with dioxins.

Small amounts of exposure can also occur from breathing air containing trace amounts of dioxins on particles and in vapor form, and from absorption through skin contacting air, soil, or water containing minute levels of dioxins.

#### Q: What are the major sources of dioxins?

A: Historically, commercial or municipal waste incineration, manufacture and use of certain herbicides and chlorine bleaching of pulp and paper resulted in the major releases of dioxins to air and water.

### Q: How can I reduce my personal dioxin levels?

A: We all have some levels of dioxins in our bodies. Unfortunately, there are no safe and effective treatments to rid dioxins now in humans. Dioxins metabolize slowly over years. The best way to reduce your personal dioxins level and your potential risks from dioxins is to reduce exposure and intake of dioxins.

Although dioxins are an environmental contaminant, exposure most often occurs through the food by consumption of animal fats.

#### Q: Should I reduce my fat intake?

A: We need a certain amount of fat for a healthy, balanced diet. Fats supply energy and essential fatty acids, and they help the body absorb fat-soluble vitamins (A, D, E and K). You need some fat in the food you eat as fats are an important part of balanced nutrition.

However, some people consume more foods high in saturated fats (meat and dairy). For these people, there are well-known and significant health benefits from reducing saturated fat intake that go beyond the potential risks of dioxin.

# Q: Can I cook the dioxins out? Or wash them off?

A: Good food safety practices like washing food will reduce risk from bacterial infection but it cannot reduce dioxin levels. Methods that keep fat at a minimum in the food you eat (such as trimming fat and broiling) may help to reduce dioxin exposure.