Tell me about Oil Processing.
The process comprises using hexane to extract oil from oilseeds, heating with phosphoric acid above 260 deg C, adding caustic soda, bleaching, and de-odorization.

Did you say HEXANE?
Yes! All major brands employ a hydrocarbon called hexane to extract oil from oilseeds. Studies found that hexane persists in small amounts in the final product created. Chronic long-term exposure to it can cause you to get peripheral nervous system failure.

Why phosphoric acid?
Mixed with water, it helps to rid the oil of lecithin (which is actually needed by your body to digest the oil) to give it a clear, homogenous look. Sadly, many minerals and chlorophyll are destroyed in the process.

What does caustic soda do?
It gets rid of the damaged fats, waxes and phospholipids that promote oxidation. As a side effect, it also destroys any fat-soluble vitamins like Vitamins A and E. The oil has to be fortified with these anti-oxidants later on.

Can bleaching be harmful?
Bleaching aims to make the oil appear flawless even, even as it strips off its natural color and taste. The process removes protective pigments, destabilizes the fatty acids and introduces some very unpleasant odors that must be removed later.

Is that why de-odorization is done?
Yes! Steam at very high temperatures and pressure is passed through the oil to strip it of all remaining odors and taste. No leftover anti-oxidants can survive the onslaught.

Are any chemical additives added?
Your end product is a pale, bland liquid containing damaged fatty acids. These damaged fatty acids are very prone to oxidation — but oxidation must be prevented as it causes the oil to go rancid and reduces its shelf life. So, to allow the oils to be placed in clear plastic bottles on supermarket shelves, where they can easily be oxidized by light, stabilizers and synthetic anti-oxidants must be added to the mix. These synthetic anti-oxidants actually promote cancer.

What about double refined oils?
Single refining strips the oil of nearly all cofactors needed for healthy metabolism. Double refining repeats the process one more time. Double refined oils last about 3 times longer on the shelves, extending shelf life from about a year to about 3 years. It’s easy to see why double refined oils are healthy for a company’s bottom line. Just not healthy for You.

Is sunflower oil good for me?
Most sunflower oil brands in India are very high in linoleic acid. Linoleic acid belongs to the Omega-6 category of fats within a group called polyunsaturated fatty acids (PUFA). PUFA’s are quick to form trans-fats when subjected to heating stress. Studies done on people having a high intake of linoleic acid suggest that it causes disruption with thyroid hormones and promotes obesity, mood disorders, ulcerative colitis, arthritis, heart attacks, stroke and cancer.

I thought using refined oils is protecting me against heart disease!
Not at all. Most commercially available refined oils like sunflower oil and soybean oil contain mostly Omega-6 PUFA’s. While these do lower the levels of your bad cholesterol (LDL), they also lower the levels of your good cholesterol (HDL). This is a major risk factor for developing heart disease and high blood sugar, and has even been linked to memory loss!

Isn’t soybean oil supposed to be healthy?
Besides being dangerously loaded with Omega-6 PUFA’s, soybean oil is often hydrogenated and used in snacks to enhance shelf life. It is used in bread, mayonnaise, margarine, sandwich spreads, coffee creamers and so on.