Studies show: Kitchen and frying factory workers are exposed to cancer as a result of inhaling frying fumes

Most of you probably know that using oil that has gone through many frying cycles is harmful to your health, did you know that the dangers exist even inhaling the frying fumes? [Beyond-oil](https://www.beyondoil.co/), a new and groundbreaking Israeli development reduces the presence of carcinogenic components in oil to almost zero and protects the health of kitchen workers and customers.

[In 2019, an extensive research review](https://www.researchgate.net/publication/319921858_Impact_of_consumption_of_repeatedly_heated_cooking_oils_on_the_incidence_of_various_cancers-_A_critical_review) was published that deals with the effect of the consumption of repeatedly heated vegetable frying oils on the incidence of various types of cancer. The review brings together over 100 studies conducted in recent years around the world, all of which prove a direct link between inhaling the frying fumes of vegetable oil that has been fried a large number of times and between the consumption of food fried in such oil, and the incidence of various types of cancer and other serious diseases.

In the current age, where awareness of healthy nutrition is higher than ever, we all know that frying is not the healthiest way of cooking, but most of us do not know exactly why or to what extent, and it is assumed that only a few are aware that inhaling the oil vapors is just as harmful to our health as eating fried food.

**Kitchen workers in restaurants and factories are exposed to cancer**

Dozens of studies published in recent years have proven a health hazard for kitchen workers (those who work in restaurants, hotels, joy halls, and frying plant workers) in a causal connection between inhaling the smell of frying in fried oil that has been fried many times in restaurants and frying plants and a proven carcinogenic component called PAH, which causes many diseases including Lung cancer and other diseases.

The lack of awareness and knowledge of the food industry, owners of frying plants, restaurant workers and chefs regarding the health damage caused by fried oil, to them, their employees and their customers, means that they regularly prefer to prioritize financial costs over health.

According to these studies, eating such fried food, or even inhaling the frying fumes over time, has the potential to lead to the development of various types of cancer and other diseases.

**Not only the consumption of the oil is harmful, but also the inhalation of its fumes**

[In a comprehensive study conducted by Prof. Nissim Garti,](https://www.beyondoil.co/researches/health-report-on-frying-oil-risks-professor-nissim-garti-he) professor emeritus of the Hebrew University of Jerusalem, who served as chairman of the School of Chemistry at the Hebrew University and is an expert in, among other things, the physical and chemical properties of oils and fats, the professor points to a series of serious dangers derived from the by-products of the prolonged frying.

The study, which reviews a series of patents, articles and recommendations of legislative and health authorities around the world and is based, among other things, on the review of the 100 studies mentioned above, shows that vegetable oils that are repeatedly heated are genetically toxic, and may be carcinogenic and cause mutations. The process of heating the oils to high temperatures damages their quality and causes the formation of free fatty acids (FFA) and polar substances (TPM) leading to the development of polycyclic aromatic hydrocarbons (PAH) and acrylamide (AA).

PAH, Prof. Grethy shows in his review, is a component with toxic effects that pose a significant health hazard. Warnings regarding its consumption have been published by various authorities and bodies in the field of health, as it has been found that it may lead to the formation of genetic mutations, cancer, cardiovascular diseases, birth defects, damage to the immune system, effects on the reproductive system and more.

Acrylamide is also found to be an increased risk factor for cardiovascular and other diseases, studies show that it causes pancreatic cancer and it has been proven that it also causes breast cancer, testicular cancer, cancer of the central nervous system and other types of cancer.

**The effect of eating food fried in frying oils heated in the same oil for several days**

Repeated frying of the same oil for a large number of times increases the presence of these components, whose inhalation through the vapors of the fried oil also poses a significant health risk. In his review, Prof. Garthy cites an article from 2006 that links the high incidence of lung cancer among Chinese women to exposure to frying oil fumes. In addition, Prof. Garthy explains that the cooking fumes of the repeatedly heated oil and the consumption of the oil itself or food fried with it, have been found to encourage the presence of abnormal cells and multiple chromosomal damages, and that due to the extent of the cumulative damage, even a small number of exposures to such oil may pose a risk healthy.

**An Israeli global breakthrough that will make the world healthier**

The repeated use of vegetable oil for a large number of frying pans is common mainly in industrial kitchens (hotels, banquet halls, frying plants, etc.), in restaurants and fast food chains. Many of those responsible for these kitchens are not at all aware of the extent of the damage caused to both their customers and their employees, who inhale the oil fumes throughout the day.

Due to the awareness of the decline in oil quality, most kitchens change the oil once every three days, on average. But a groundbreaking and innovative Israeli development now allows them to save on the expenses of changing the oil at this frequency, while ensuring the health of diners and employees.

This is a sophisticated, unique and patented technology from Beyond Oil - an Israeli food tech company located in Kibbutz Yifat in the north and traded on the Canadian Stock Exchange under the symbol [BOIL.CN](https://thecse.com/en/listings/diversified-industries/beyond-oil-ltd?tvwidgetsymbol=CSE%3ABOIL). Beyond Oil's formula treats vegetable oils for frying, prevents the formation of toxic compounds over time and gives the oil a life cycle 300%-1000% times longer than its normal frying time.

As a direct continuation of the concern with the quality of the oil that goes through repeated frying, Prof. Garthy examined in his review a number of experiments that were done with the [Biond Oil](https://www.beyondoil.co/) formula in restaurants in Israel. At the end of 4 days of continuous frying, Prof. Garti tested the oil's components and discovered that the use of Biond Oil technology reduced the rate of acrylamide and the rate of all 9 PAH compounds to minuscule levels that are almost undetectable.

"Until the development of Beyond Oil's technology," Prof. Gerthy states in his review, "it was not possible to completely prevent or delay the formation of these components. They always appeared in the process of heating the oil and the only way to maintain healthy frying was to change the oil on a daily basis. Using the formula of Beyond Oil, the formation of carcinogenic compounds can be reduced to almost zero, even after many repeated frying processes, to maintain the quality of the oils at a very high standard, to reuse them for 15-50 days without replacing them (depending on the type of fried food and the type of oil)."

"According to my test," he summarizes his findings, "it seems that Beyond Oil's solution is the breakthrough we have been waiting for for many years. In my opinion, and based on the extensive experience I have in the frying world, there is no doubt that by switching to the use of Beyond Oil's formula, we can have an impact In a direct and positive way of reducing the mortality and morbidity rate, and making the world a healthier place for everyone." This is a true breakthrough for kitchen worker safety.