THE ELECTRONIC CIGARETTE

I tried many tastes but it didn't suit me. I had headaches, obviously, this wasn't the most suitable solution for me. I therefore stopped vaping.

I use various tastes, this enables me to vary the pleasures, I never get tired of it.

In 40 years of smoking, I tried everything without success. With the help of an electronic cigarette, tobacco has now become irrelevant to me. It's now 2 years I stopped smoking... neither do I vape !

Useful information in order to build your own opinion on the use of electronic cigarette and its capacity to reduce health risks.

WHAT IS IT?

An electronic cigarette contains four main elements :

It operates without combustion. Nowadays, there's a large range of brands and models. The latter keep on evolving, some of them even allow to regulate power and vapor flux.

The liquid contains :

› Glycol Propylene and/or vegetable glycerin;

› Aromas;

› And, in most cases, nicotine, the dosis of which can vary.

Upon pushing on a button, the battery heats the resistance which is located in the atomizer. The heated liquid is then vaporized and inhaled by the user.

CLASSICAL VERSUS ELECTRONIC?

		
FUNCTIONING	With combustion : inhalation of smoke.	Without combustion : inhalation of vapor.
CONTAINED OR PRODUCED SUBSTANCES	› Tars, carbon monoxide (CO), arsenic, acetone, flavouring agents, benzene, nitrogen oxide, hydrocyanic acid, ammonia, mercury, lead, chromium and 4000 other substances, including more than 50 carcinogen substances. › The temperature of the incandescent end of a cigarette can reach an average of 800°C (1472F°) to 900°C (1652°F)	› In the absence of combustion, no carbon monoxide and no tars. › Presence of a few carcinogen substances in minute doses. › At high temperature (above 250°C (482°f)), glycerine can release an irritating substance (acrolein) in far lesser quantity than with a classical cigarette.
HEALTH RISKS	› Irritation of respiratory tracts, mouth and throat. › Exposure of the consumer and his/her entourage to numerous toxic substances present in the smoke. › Development of cancers, respiratory and/or cardiovascular diseases. › Reduction of life expectancy. › Risk of burns following a fire caused by an improperly extinguished cigarette.	› Irritation of respiratory tracts, mouth and throat. › Reduced exposure of the consumer and his environment following the production of a limited number of toxic substances. › Long-term vaping risks are still unknown. Various researches are still ongoing. › Device risks overheating if the tank is insufficiently filled up, with possibility of release and inhalation of toxic substances. › Risk of burns and wounds in case of battery explosion (very scarce).
IMPACT ON ENVIRONMENT	Production of atmospheric pollutants and waste in the form of non bio-degradable cigarette butts, risk of fire.	Production of atmospheric pollutants in minute quantity and of chemical waste (cartridges, flasks...), use of electricity and battery consumption, devices to be recycled.
PRICE	Monthly cost varies between 80 and 100 Euros for a consumption of 10 classical cigarettes a day.	Cost is a rough estimate. It depends on type of device, liquid, mode of consumption, etc. An electronic cigarette would cost about 4 times less than a conventional cigarette.

ZOOM ON NICOTINE

Nicotine is not the main toxic component of a classic or electronic cigarette.

Generally, vapers and smokers seek the calming and/or stimulating effects of nicotine which :

- **Can reach the brain in a few seconds** via the pulmonary artery system when smoking conventional cigarettes. Most electronic cigarettes tend to reproduce a similar effect;
- **Has a very addictive effect creating a physical addiction**. Its prolonged privation or a sudden stop can lead to signs of addiction : irritability, anxiety, depression, difficulty of concentrating, headaches,...

Nicotinic substitution treatments (patches, gums, lozenges,...) used in helping smoking cessation :

- **Slowly release nicotine** in the organism through the skin (patches) or more rapidly through the inner wall of the mouth (gums, tablets and sprays). In these forms, nicotine scarcely creates an addiction.
- Allow about 20% of smokers, to **free themselves from physical addiction**. Guidance by a tobaccologist further increases the chances of success.

A TOOL FOR REDUCING RISKS?

Yes

There are fewer risks than with classic cigarettes as

› **There is no combustion** of organic substances, therefore **neither CO nor tar production**. **Carcinogenic substances** are present, albeit in **minute** doses.

› **Toxic substances are far much less numerous and in fewer concentration** than in tobacco smoke. Consequently, there's a reduced risk of cancer, of chronic lung diseases such as Chronic Obstructive Pulmonary Disease (COPD) and cardiovascular diseases.

› **Use of electronic cigarette can enable a reduction or a halt of tobacco consumption**, which is much more harmful. It is possible to adapt the dosage of nicotine according to needs or to consume a nicotine-free liquid.

However

› When overheated, the **liquid** becomes **toxic** and there's a possible toxicity in the device if submitted to an **excessive heating.**

› If the liquid **contains nicotine**, **a physical addiction** can creep in.

› **Long-term effects** of **vaping** are **unknown**.

› Use of an electronic cigarette is **not recommended for pregnant women, in the absence of sufficient knowledge** of potentially harmful effects on the newly-born child.

› Vaping can lead non-smokers, particularly at a young age, to **initiate to the act of smoking** and to get them **acquainted with nicotine**.

SOME ADVICE

In the perspective of reducing or quitting smoking

› **Avoid a combined use of tobacco and electronic cigarette**. This gives the illusion of tobacco management, of risks reduction and delays or jeopardizes the desire to quit.

› **Progressively decrease** vaping and nicotine doses.

Generally

› **Favour latest-generation devices** rather than «disposable» electronic cigarettes because they allow temperature limitation, nicotine diffusion that more adequately meets the needs of smoking cessation, and their batteries are more reliable.

› Knowing that the resistance of an atomizer is measured in ohms (Ω) and that the voltage delivered by the battery of an electronic cigarette is measured in volts (V): **do not exceed a voltage of 5V for a resistance of 2.5 Ω, or 4.5V for a resistance of 1.8 Ω.**

› After having filled the device with liquid, **wait for 5 minutes minimum before vaping** to allow the device's resistance to impregnate with liquid and thus avoid overheating.

› Ensure that the **tank is sufficiently filled up** to limit overheating risks of liquid and resistance.

› Store the refills **out of reach of children**, nicotine being very toxic for them.

› **Avoid vaping in closed premises**, even if the effects of passive vaping are minimal.

› **Non-smokers should avoid using an electronic cigarette**, especially pregnant women, children or teenagers.

› **Consult a tobaccologist** when starting to use the electronic cigarette, in order to :

- benefit from advice adapted to the level of addiction;
- avoid underdosing which generates craving to smoke;
- help the vaper to get rid of everything that could become a new addiction;
- avoid relaps to tobacco use in case of vaping failure;
- obtain a drug treatment or a nicotine replacement therapy;

Use of an electronic cigarette is not advised beyond a perspective of risk reduction or quitting smoking.

WHAT DOES THE LAW SAY?

Electronic cigarettes are considered as a product similar to tobacco. **That is why it is forbidden** :

- to use them in closed public premises;
- to advertise or promote them, with the only exception of displays or posters in newspaper shops and specialized sales points;
- to sell them to teenagers under 16 years of age;
- to sell them online (via internet).

Moreover :

- selling of electronic cigarettes that are disposable or refillable (with nicotine) is authorized;
- the dosage of nicotine cannot exceed 20mg/ml (flasks of 10ml max) and the liquid cannot contain vitamins or stimulants, colorants or substances favourizing nicotine inhalation or absorption.
- electronic cigarettes and refill flasks must be equipped with a childproof security device and must be protected against breaks and leaks.

Electronic cigarettes are submitted to numerous controversies at a legislative level. To remain updated, please surf on Federal Public Service's Health website : **www.health.belgium.be**

Buy only material certified by the European Union (CE).

DID YOU KNOW?

For the tobacco industry, which defines itself as a nicotine industry, diversification of its products represents a way to maintain its business in the face of the development of the electronic cigarette and to build customer loyalty, when 3 out of 4 smokers want to quit. Thus, the tobacco industry :

- has acquired the main first-generation electronic cigarette companies that are on the market;
- develops various processes that heat tobacco without burning it and that deliver nicotine without smoke (tobacco vaporizer) or that release nicotine without containing tobacco (nicotine inhaler).

Against these new tobacco-consuming technologies, the conventional cigarette risks to become an obsolete product.

WHOM TO ASK YOUR QUESTIONS TO?

- Your **physician** or any other health professional.
- To a **tobaccologist**, i.e. a health professional specialized in tobacco coaching and management - www.tabacologues.be
- To the **Smokers Help Centre** - **Centre d'Aide aux Fumeurs – CAF®** (équipe multidisciplinaire)- www.aideauxfumeurs.be
- To **TABACSTOP** (toll free number 0800 111 00) where a tobaccologist will answer all your questions or may set up a free regular following programme - www.tabacstop.be

Tobaccology consultations are partially refunded.

FOR FURTHER INFO, PLEASE SURF ON OUR WEBSITE WWW.FARES.BE

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