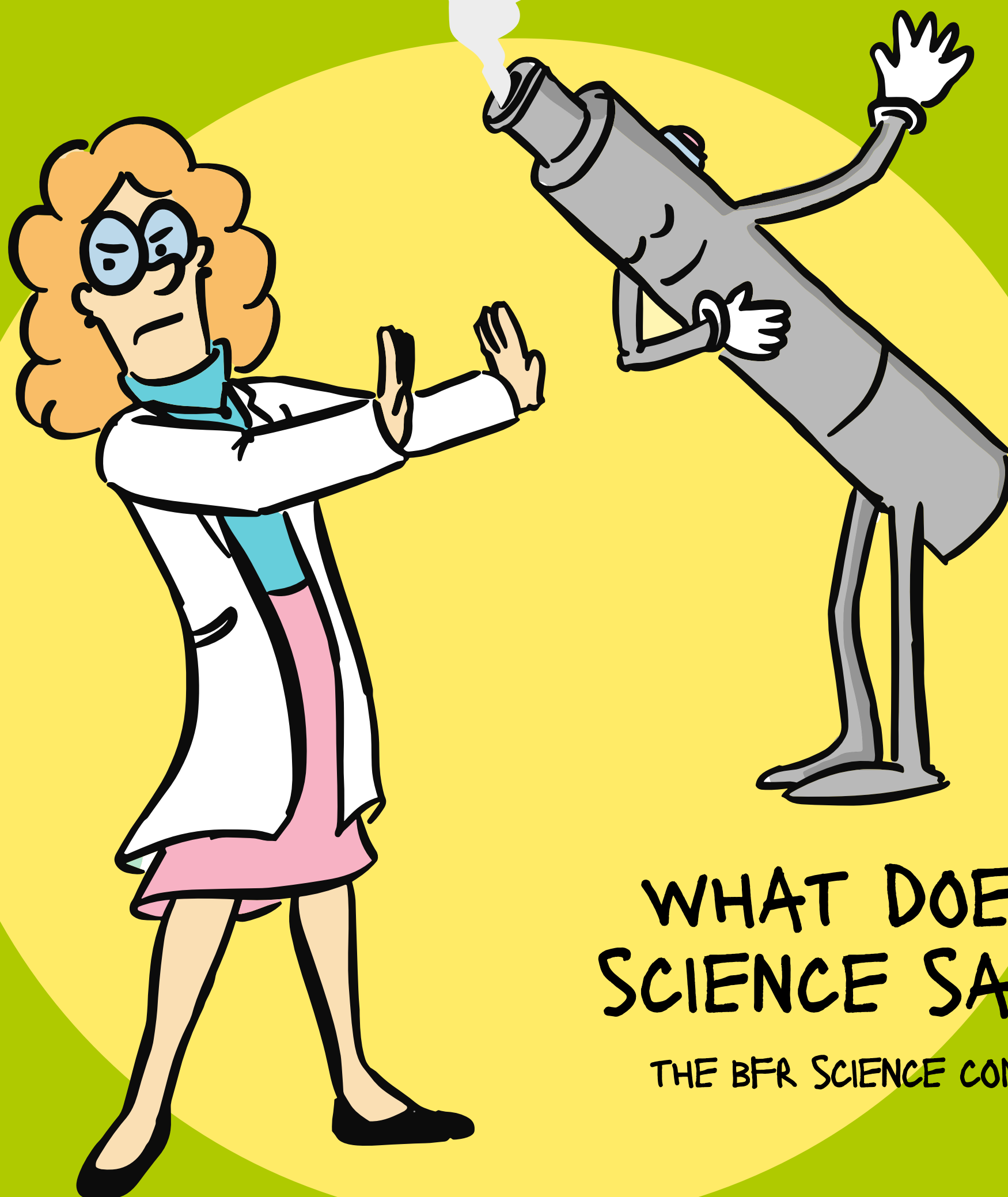


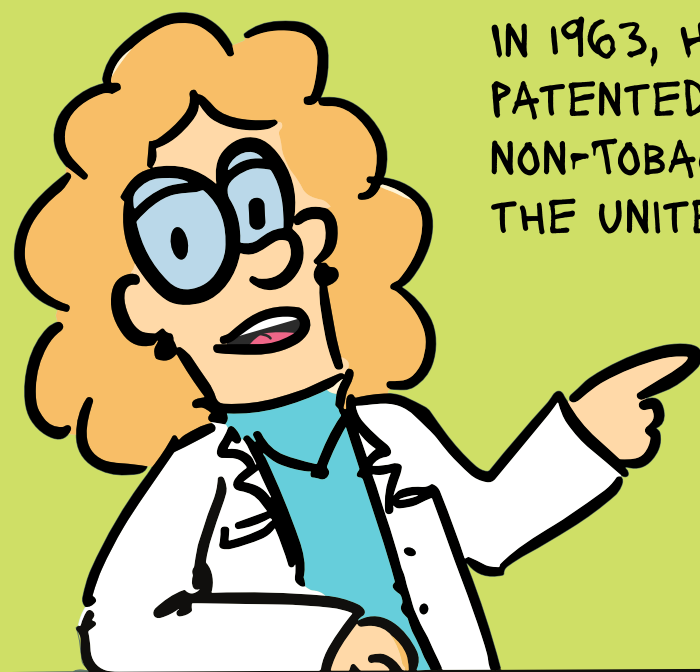
E-CIGARETTES



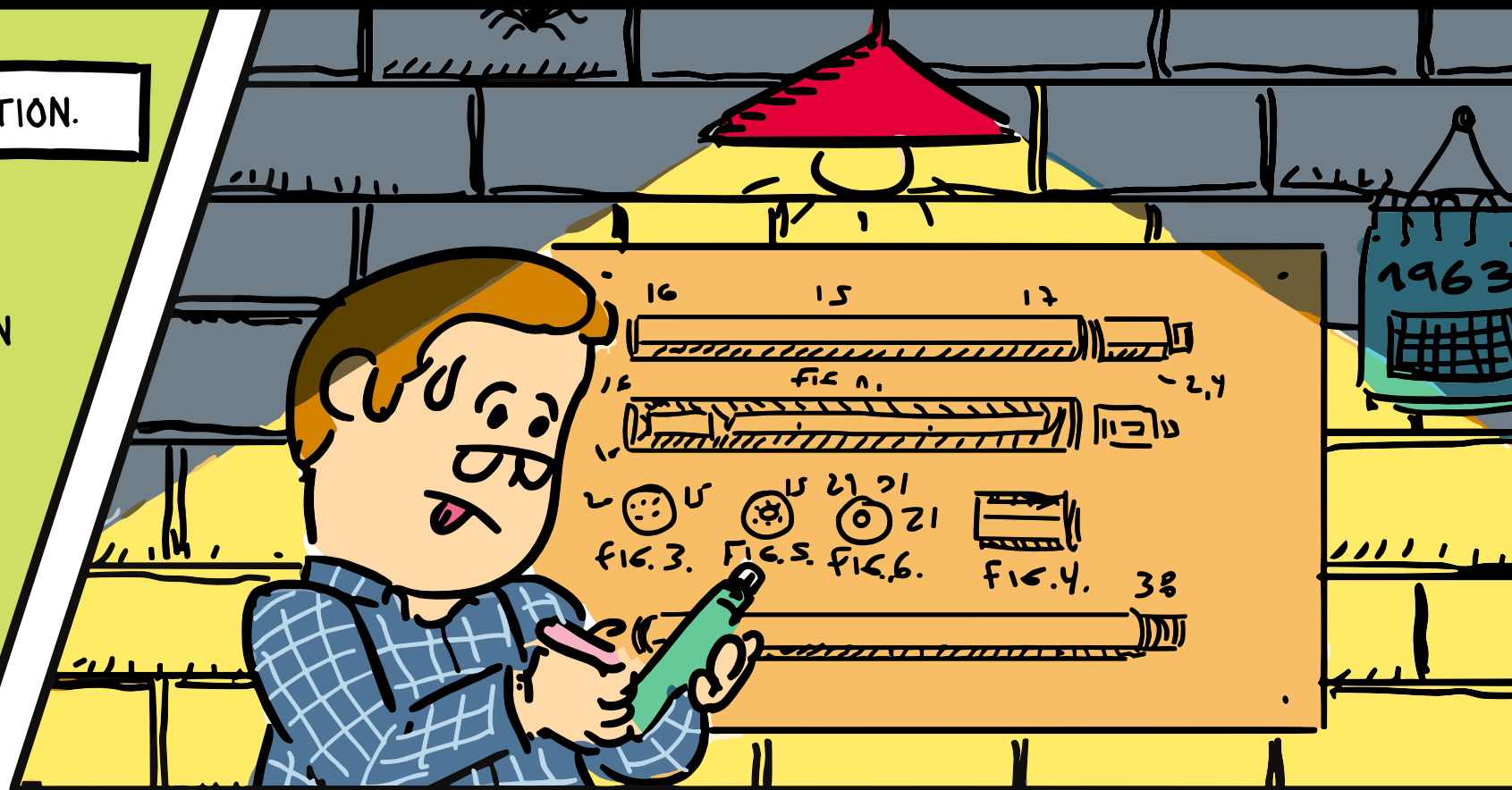
WHAT DOES
SCIENCE SAY?

THE BfR SCIENCE COMIC

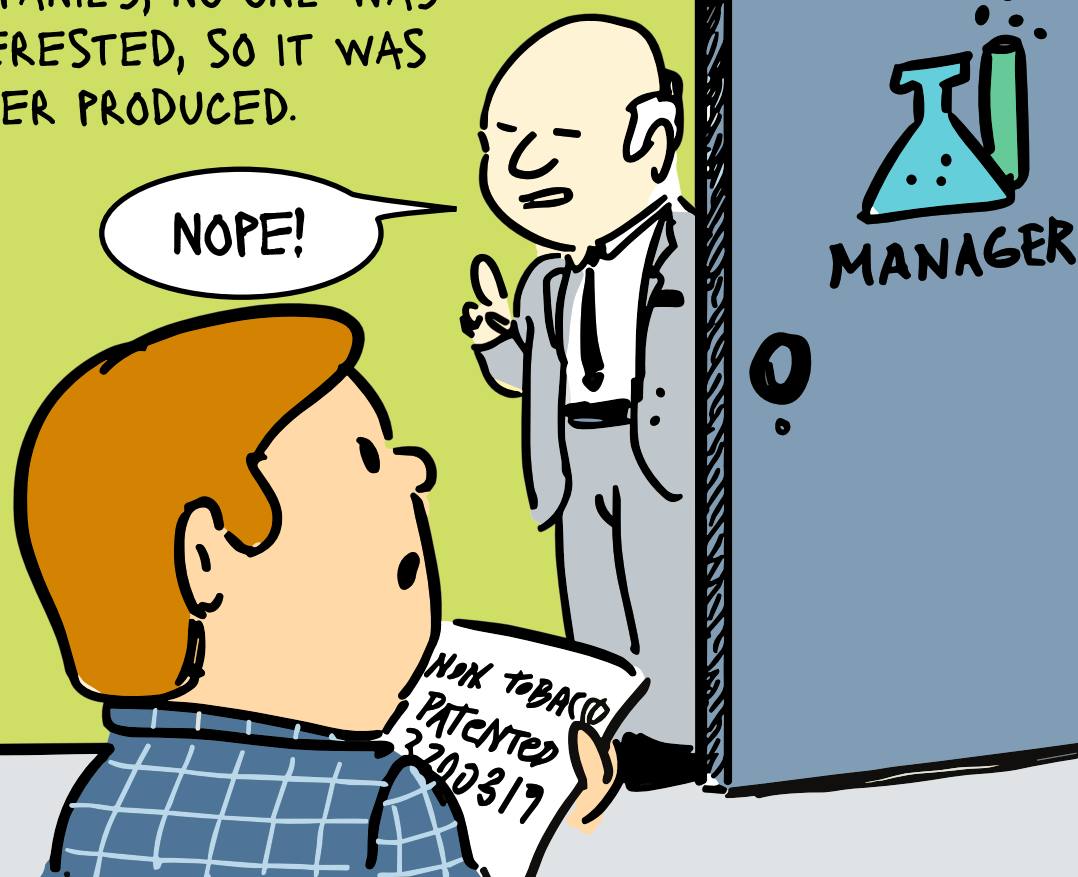
E-CIGARETTES ARE NOT AN ENTIRELY NEW INVENTION.



IN 1963, HERBERT GILBERT
PATENTED THE "SMOKELESS
NON-TOBACCO CIGARETTE" IN
THE UNITED STATES.



HOWEVER, WHEN HE OFFERED HIS
INVENTION TO PHARMACEUTICAL
COMPANIES, NO ONE WAS
INTERESTED, SO IT WAS
NEVER PRODUCED.



IN 2003



e-CIGARETTE
NOW AVAILABLE

40 YEARS LATER, CHINESE
PHARMACIST HON LI DEVELOPED
THE FIRST E-CIGARETTE, WHICH
ACTUALLY WENT ON THE MARKET.

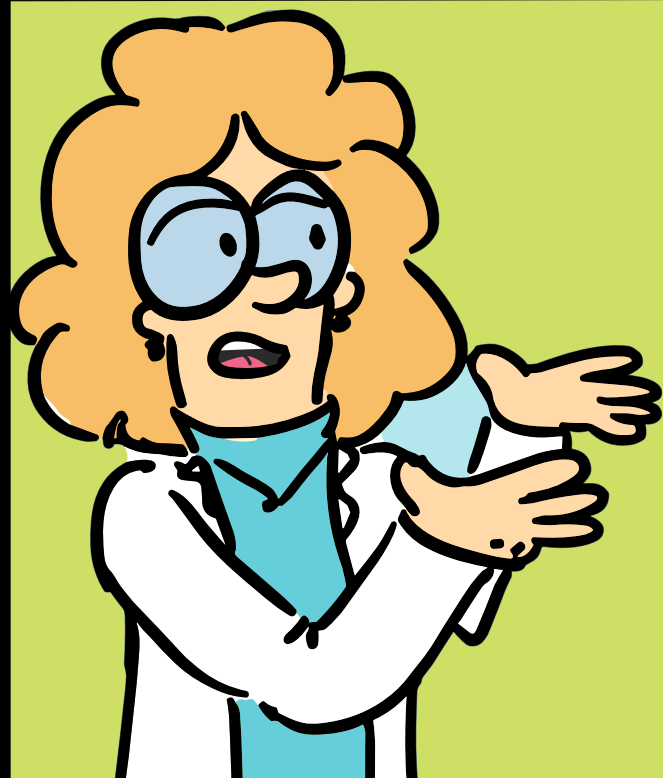
IT WAS PROMOTED AS AN ALTERNATIVE FOR
SMOKERS WHO WANTED TO ENJOY THE NICOTINE
RUSH WITHOUT INHALING THE HARMFUL
SUBSTANCES CONTAINED IN CIGARETTE SMOKE.

WHAT DOES SCIENCE SAY?

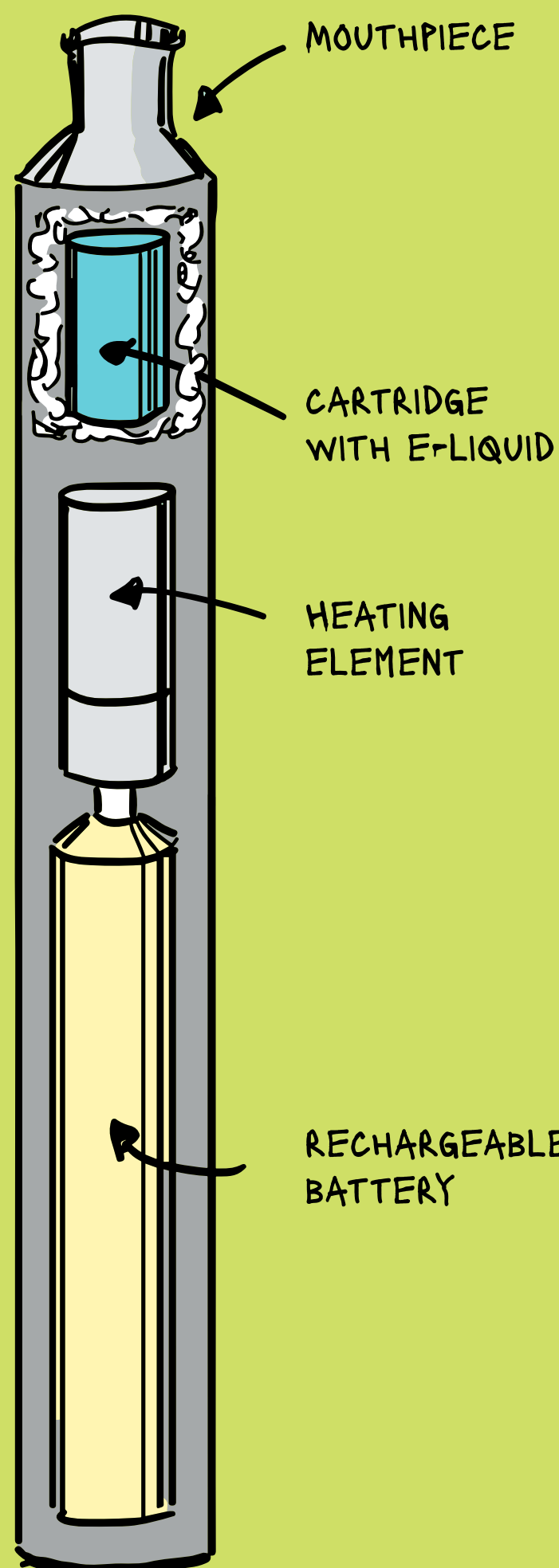
OVER THE YEARS, HOWEVER, THERE HAS
BEEN CLEAR EVIDENCE THAT E-CIGARETTES
MAY BE ASSOCIATED WITH HEALTH RISKS.

HOW HARMFUL
ARE E-CIGARETTES
REALLY?

TO ANSWER THAT QUESTION, WE HAVE TO DIG A LITTLE DEEPER TO UNDERSTAND
+++ HOW E-CIGARETTES WORK +++



AN E-CIGARETTE CONSISTS OF A VAPORISER WITH A BATTERY-POWERED HEATING ELEMENT AND A CARTRIDGE THAT CONTAINS LIQUID.



UNLIKE CONVENTIONAL CIGARETTES, NO TOBACCO IS BURNED.

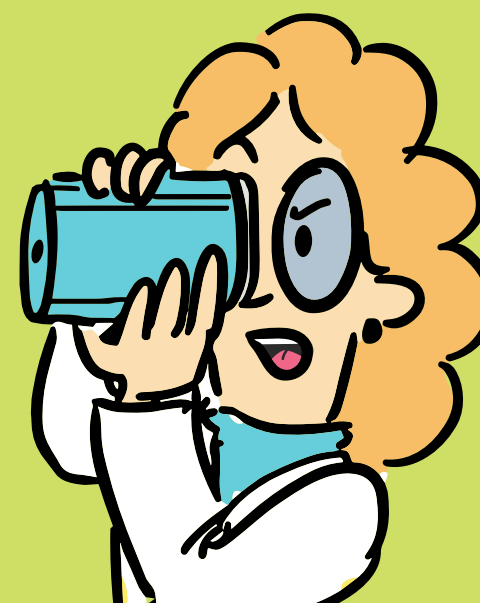
INSTEAD, A FLAVOURED LIQUID CONTAINING NICOTINE IS HEATED AND VAPORISED;

E-LIQUID

THIS VERY LIQUID IS THE PROBLEM!!!



THE LIQUID CONSISTS OF PROPYLENE GLYCOL AND GLYCERINE, BOTH VAPORISING AGENTS ...

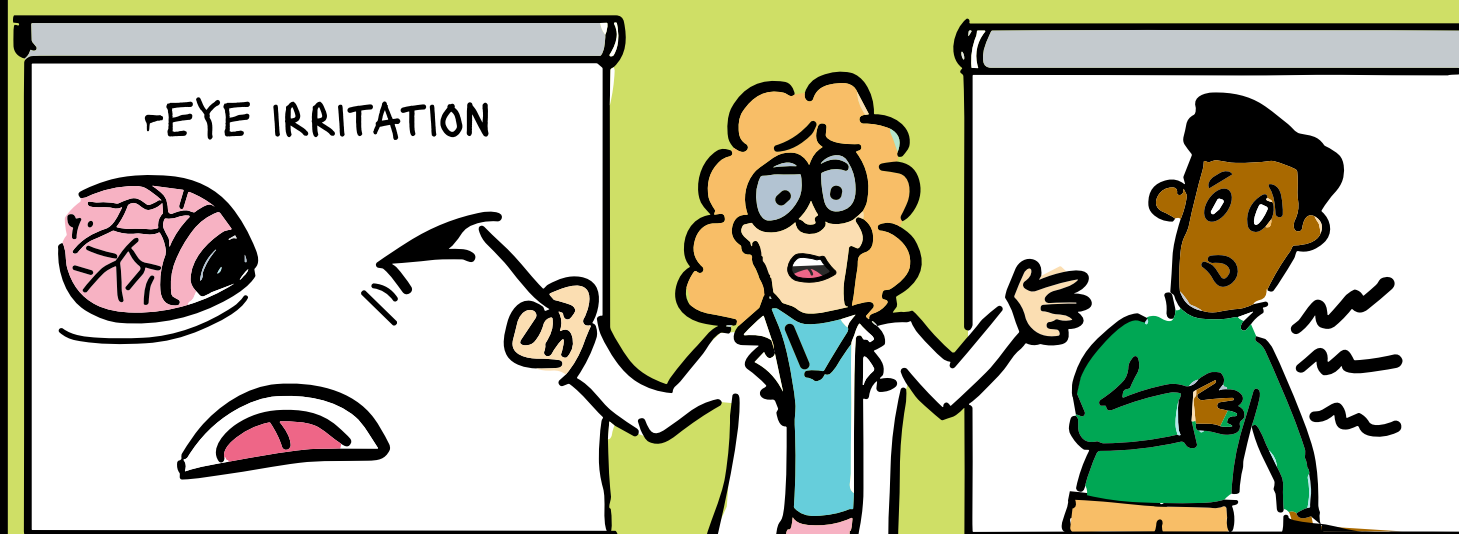


... THAT, WHEN HEATED, PRODUCE THE VAPOUR THAT IS ALSO USED IN FOG MACHINES.

FRAGRANCES, FLAVOURING SUBSTANCES AND NICOTINE ARE ADDED.

RISKS POSED BY VAPING

RESPIRATORY AND CARDIOVASCULAR PROBLEMS



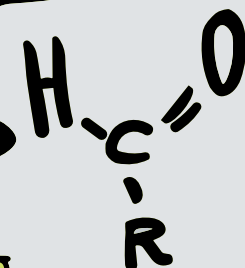
- INCREASED HEART RATE
- INCREASED BLOOD PRESSURE
- CHEST PAIN

VAPORISATION PRODUCES SUBSTANCES SUCH AS ACROLEIN, ACETALDEHYDE

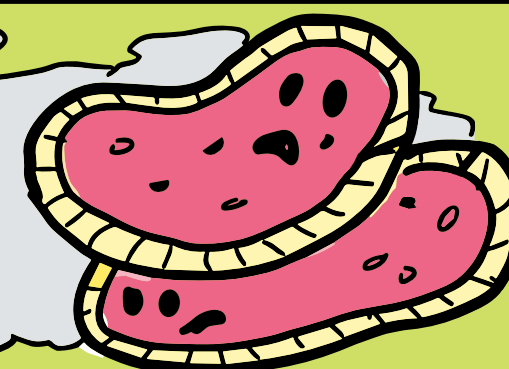


AND CARCINOGENIC FORMALDEHYDE.

ALDEHYDES



CELLS



ACCORDING TO A SURVEY BY THE BFR:

84%

OF THE POPULATION ASSOCIATE
E-CIGARETTES WITH HEALTH RISKS
49% VIEW LUNG DAMAGE AS
THE MAIN RISK.

SOURCE:
1,006 RESPONDENTS,
BFR CONSUMER MONITOR 2019,
SPECIAL E-CIGARETTES



E-CIGARETTES

LUNG DAMAGE



RISK PERCEPTION

"HOW WOULD YOU RATE THE HEALTH
RISKS OF E-CIGARETTES?"

64%*

RATE THE HEALTH RISK OF
E-CIGARETTES AS
VERY HIGH OR HIGH

37%

27%

24%

6%

3% 3%

ALL RESPONDENTS

VERY HIGH RISK

VERY LOW RISK

*848 RESPONDENTS WHO ASSOCIATE
RISKS WITH E-CIGARETTES WITH POSSIBLE
HEALTH RISKS

33%**

OF RESPONDENTS
THINK THE MOST POSITIVE
THING ABOUT E-CIGARETTES IS
THE SMELL!

**131 RESPONDENTS WHO ASSOCIATE POSITIVE
ASPECTS WITH E-CIGARETTES



MMM!
SMELLS LIKE
TEEN SPIRIT!

SOURCE:
BFR CONSUMER MONITOR 2019,
SPECIAL E-CIGARETTES

LONG-TERM EFFECTS OF E-CIGARETTES; UNKNOWN

SMOKING TOBACCO CAN CAUSE CANCER, HEART DISEASE, STROKE AND LUNG DISEASE.

ALTHOUGH E-CIGARETTES MAY BE LESS HARMFUL THAN CONVENTIONAL CIGARETTES, THEY ARE NOT HARMLESS.

MANY OF THE SUBSTANCES USED IN E-CIGARETTES HAVE NOT BEEN SUFFICIENTLY INVESTIGATED.

THE VAPORISING AGENTS MAY BE HARMLESS IF USED FOR A SHORT TIME. NOBODY KNOWS HOW THEY MIGHT AFFECT HEALTH IF INHALED OVER A LONG PERIOD OF TIME.

NICOTINE IN E-CIGARETTES IS ALSO HARMFUL TO HEALTH AND IS ADDICTIVE.

THEREFORE, QUITTING SMOKING ALTOGETHER IS ALWAYS THE BEST SOLUTION.

This text version is a translation of the original German text which is the only legally binding version.

Legal notice

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German Federal Institute for Risk Assessment | BfR

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Supervisory Authority: German Federal Ministry of Agriculture, Food and Regional Identity (BMLEH)
Responsible according to the German Press Law: Dr Suzan Fiack
VAT ID No. DE 165 893 448

ISSN: 3053-9013 (Online) | 3053-9072 (Print)
DOI: 10.17590/20260914-122455-0

Status: July 2026

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Protecting Health**

