

Swiss develop rapid infrared cocaine test

Autor(en): **[s.n.]**

Objekttyp: **Article**

Zeitschrift: **Helvetia : magazine of the Swiss Society of New Zealand**

Band (Jahr): **78 (2012)**

Heft [5]

PDF erstellt am: **02.05.2024**

Persistenter Link: <https://doi.org/10.5169/seals-944060>

Nutzungsbedingungen

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

Haftungsausschluss

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

Ein Dienst der *ETH-Bibliothek*

ETH Zürich, Rämistrasse 101, 8092 Zürich, Schweiz, www.library.ethz.ch

<http://www.e-periodica.ch>

Swiss develop rapid infrared cocaine test

Researchers at Zurich's Federal Institute of Technology (ETHZ) have helped create an infrared device that can detect tiny traces of cocaine in human saliva. The compact detector may be adopted by law enforcement agencies to test suspect drivers.

"Current rapid tests conducted by the police in the streets do not give the concentration of drugs consumed, just negative or preliminary positive results, which are sometimes wrong and not recognised by the courts," ETHZ physics professor Markus Sigrist said. "It takes time to take a suspect to hospital to give them a blood test. So obtaining a quantitative concentration in saliva samples would be a major step forwards."

The Zurich professor believes it is possible to detect cocaine levels as low as twenty nanogrammes per millilitre of liquid using the technique. If someone smokes cocaine, up to 500 micrograms per millilitre are still present in the saliva for a short time.

"Based on what we've obtained so far we need one year to refine the nanogramme per millilitre results, and another three years to create a suitable platform so an industrial partner can then market the product," said Sigrist.

The same method, using a different sensor, could also be used for heroin tests.

Under Swiss law, forensic medical tests are the only ones accepted as legal proof to sanction illegal drug use behind the wheel. If this kind of sensor were to be accepted by the courts, it would necessitate a change in the law.

Swiss police currently use two kinds of preliminary drug tests: saliva or urine, which can give positive or negative results for four substances: cocaine, heroin, marijuana and amphetamines. The second stage is to take the suspect to hospital to carry out a quantitative blood test, the only one recognised by the justice system.

Six out of ten drivers suspected of being under the influence of psychotropic drugs when involved in traffic accidents gave positive blood tests. Half of all positive tests were for alcohol and the other half for the use of various illegal drugs - often more than one - generally mixed with alcohol: 73 per cent cannabis, 38 per cent cocaine, ten per cent morphine, four per cent amphetamines, five per cent ecstasy and eight per cent methadone. In Switzerland it is assumed that five per cent of serious road accidents are caused by people using illegal drugs or medicines. The risk of accidents is up to 14 times higher when alcohol is mixed with other drugs, even in small amounts.

from swissinfo

27.9 per cent of soldiers are caries-free.

Researchers also said smokers had more tooth decay than their non-smoking colleagues. However, neither when nor how you brush your teeth seems to play a particular role.

from swissinfo



AVAILABLE NOW!

New Zealand's finest
Delicatessen Meats

Continental Frying/Boiling Sausages

- Specialty Meats • Meat Loaves
- Smoked Meats • Cold Cuts
- Salamis • Dried Meats



Visit our factory shop:
68-70 Greenmount Drive
East Tamaki, Auckland

Hours: Monday to Thursday 8am-4pm
Friday 8am-5pm • Saturday 8am-1pm

P 09 274 4455 F 09 274 1203 W www.swissdeli.co.nz
PO Box 51-520 Pakuranga Auckland 2140

"Taste the Differences"

SWISS KONDITOREI BERN

Bakery & Pastry

Do you feel like eating real Swiss/German breads, tasty and healthy?

German Sourdough, Butterzopf, Walliser Bread, Kibbled Rye, Walnut Bread, Tasty White Bread, Basler Bread, or chose from a wide range of rolls, inclusive Laugenrolls.

In the sweet range we offer Blackforest Cake, Bienenstich, Chocolate Truffle Cake, Quark Cheesecake, Fruit Flans, Patisserie, seasonal specialities and much more.

We are using local and often organic ingredients.

Retail sale at our bakery

Thursday, Friday and Saturday 7am-2pm
5/448 Rosebank Rd, Avondale, Auckland
Tel: (09) 828-5860 Fax: (09) 828-5861
www.swisskonditoreibern.co.nz