

Zeitschrift: Helvetia : magazine of the Swiss Society of New Zealand
Herausgeber: Swiss Society of New Zealand
Band: 75 (2009)
Heft: [2]

Artikel: Air pollution harms unborn babies
Autor: [s.n.]
DOI: <https://doi.org/10.5169/seals-944422>

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. [Siehe Rechtliche Hinweise.](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. [Voir Informations légales.](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. [See Legal notice.](#)

Download PDF: 30.01.2025

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

Air pollution harms unborn babies

Too many dust particles in the air can damage the development of a foetus' lungs. Until now it was thought that pollution did not affect children's breathing until they were of school age.

Philipp Latzin and colleagues from the Department of Paediatrics at Bern University measured the quality of the air breathed by 241 pregnant women, analysing the levels of ozone, nitrogen dioxide and dust particles smaller than ten micrometres, referred to as PM10.

In adults the harmful effects of inhaling dust particles - caused by diesel emissions from cars among other things - include asthma, lung cancer, cardiovascular issues and premature death.

The researchers also looked at how far the expectant mothers lived from main roads and, five weeks after the women gave birth, they measured the breathing of the newborns as they slept.

The study found that high levels of air pollution during pregnancy resulted in changes in breathing rate. Babies of mothers who lived near main roads breathed faster than those who didn't: 48 times a minute compared with 42.

This was a particular problem for those babies diagnosed with breathing problems anyway, according to the researchers.

In addition, babies of mothers who were exposed to pollution during the third trimester of pregnancy showed a tendency to develop inflamed respiratory passages.

The scientists said they could not yet fully explain the findings, but Latzin suspected the pollution damages the mother's lungs and then reduces the blood flow to the placenta.

The placenta transfers nutrients and oxygen from the mother to the foetus and waste products and carbon dioxide back from

the foetus to the mother. Less blood flow would mean fewer nutrients for the foetus.

Another theory is that the pollutants get into the foetus's blood and affect its breathing rate.

Latzin also said changes in the mother's metabolism could block growth factors and possibly damage the development of the child's pulmonary alveoli, the primary sites of gas exchange with the blood.

The researchers say the findings prove that the permitted levels of air pollution needed to be lowered.

Last year the National Air Pollution Monitoring Network said urgent action was required to significantly reduce emissions of nitrogen dioxide, volatile organic compounds (VOCs), respirable fine particles and carcinogenic diesel particles and ammonia.

High values of nitrogen dioxide were measured mostly along motorways near Switzerland's biggest cities. There were 11 days per year when concentrations were above 80 micrograms per cubic metre, nearly three times permitted levels (30ug/m³).

Urban areas were also affected by dangerous levels of fine particles. The average was between 23 and 28ug/m³, even though Switzerland's air pollution control policy sets the bar at 20ug/m³. And about every five or six days, concentrations were above 50ug/m³, going as high as 176ug/m³.

from swissinfo

Lösli Wisdom

*The trouble with being
in the rat race is
that even if you win
you're still a rat*

For all you people who have ordered Zwetschgen by the tonne, here is something else you can do with them apart from making Schnaps!

Grossmutter's Zwetschgenkuchen

Teig:

150g Mehl
50g Zucker
100g Butter, kalt
1 Ei
ca. 1TL kaltes Wasser, Menge anpassen

Belag:

600g Zwetschgen
60g Mehl
150ml Milch
3 Eigelb
1 Pk. Vanillezucker
1 TL Zucker
3 Eiweiss
Puderzucker

Für eine Springform von 26cm Durchmesser.

Zubereiten:

- Für den Teig Mehl in eine Schüssel sieben und mit dem Zucker mischen.
- Die Butter in Flocken dazuschneiden. Alles zwischen den Fingern bröselig reiben. Ei und Wasser verquirlen, beifügen und zu einem glatten Teig kneten.
- In Klarsichtfolie wickeln und eine Stunde kühl stellen.
- Den Teig zwischen Klarsichtfolie dünn auswellen. Eine 26 cm Springform damit auslegen und einen Rand von mindestens 3 cm hochziehen.
- Die Zwetschgen halbieren, entsteinen und in Viertel schneiden.
- Für den Belag Mehl und Milch glattrühren. Eigelb, Vanillezucker und Zucker beifügen.
- Die Eiweiss steif schlagen und unterziehen. Auf den Teigboden geben. Die Zwetschgen darübergeben.
- Den Kuchen im auf 180 Grad vorgeheizten Ofen auf der zweituntersten Rille ca. 60 Minuten backen. Mit Puderzucker bestäuben.

En quete!