

# SCENIHR Public Hearing

Luxemburg 04-12-2016

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Swedish Tanning Association

Member of TC 412 of EN16489 working group

# Type-3

Scandinavian countries are type-3 regulated

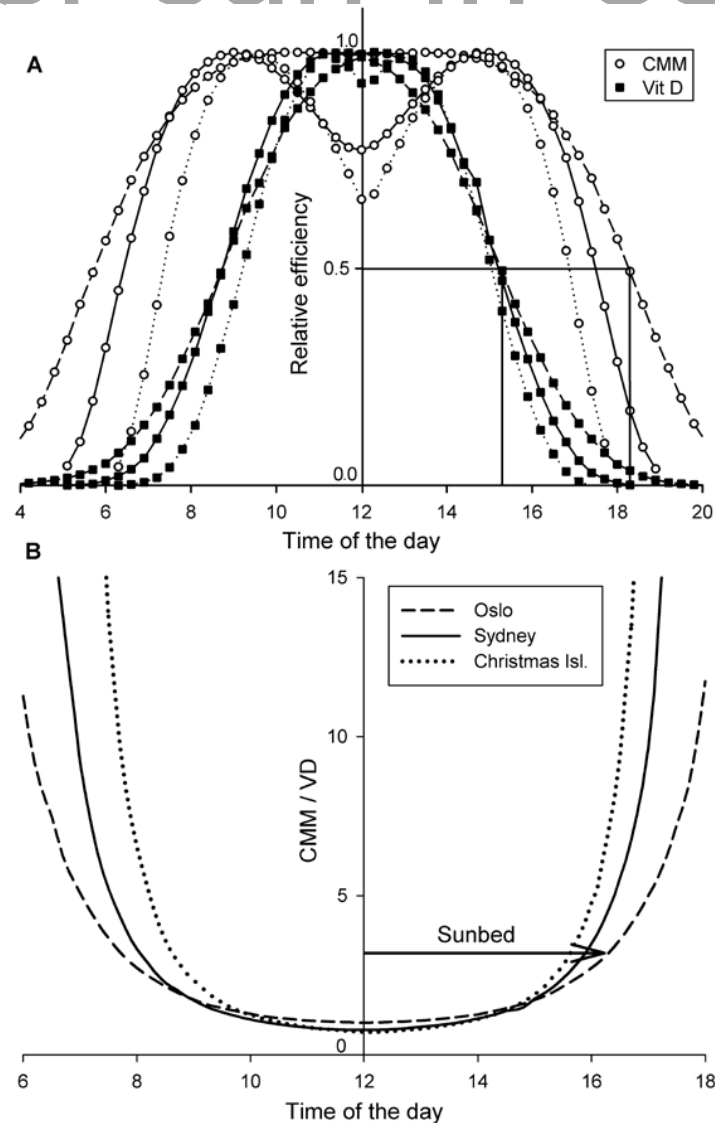
Described in EN 60335-2-27  
**“for home use by unskilled persons”**

# Type-3 sunbeds like summer sun in Oslo

UV-Radiation and Health - Optimal Time for Sun Exposure by Moan et al, 2013

UVB and UVA fluence rates of a commercial sunbed in our laboratory, (Solarium Super Plus 100 W tubes (Wolff system, Basel, Switzerland) showed that its fluence rate of UVB was similar to that in solar radiation at noon in the summer in Oslo and that the UVA to UVB ratio was similar to that of solar radiation at 4:30 p.m.

UV-Radiation and Health, Optimal Time for Sun Exposure, Moan et al 1Institute for Cancer Research, the Norwegian Radium Hospital, Oslo University Hospital, Department, of Radiation Biology, Oslo, Norway; 2Institute of Physics, University of Oslo, Oslo, Norway,



# Use of sunbeds in Scandinavia

	2007	2011	2015	Change
Sweden	25%	17%	15%	-40%
Denmark	26%	13%	11%	-58%
Norway	40%	36%	28%	-30%

Sources: Swedish Tanning Association  
Danish Cancer Association  
Norwegian Tanning Association

# Use of sunbeds vs tanning in natural sun

In Sweden 17 % of the population ever use sunbed\*\*

Less than 0,001 % is registered to ever burn in sunbed\*

60 % of the entire population burn in the sun every year\*\*\*

\*Registered cases at Swedish Radiation Safety Authority, 2011

\*\*Poll survey Novus Opinion, Swedish Tanning Association, 2011

\*\*\*The National Board of Health and Welfare, Sweden

In Norway 28 % of the population ever use sunbed

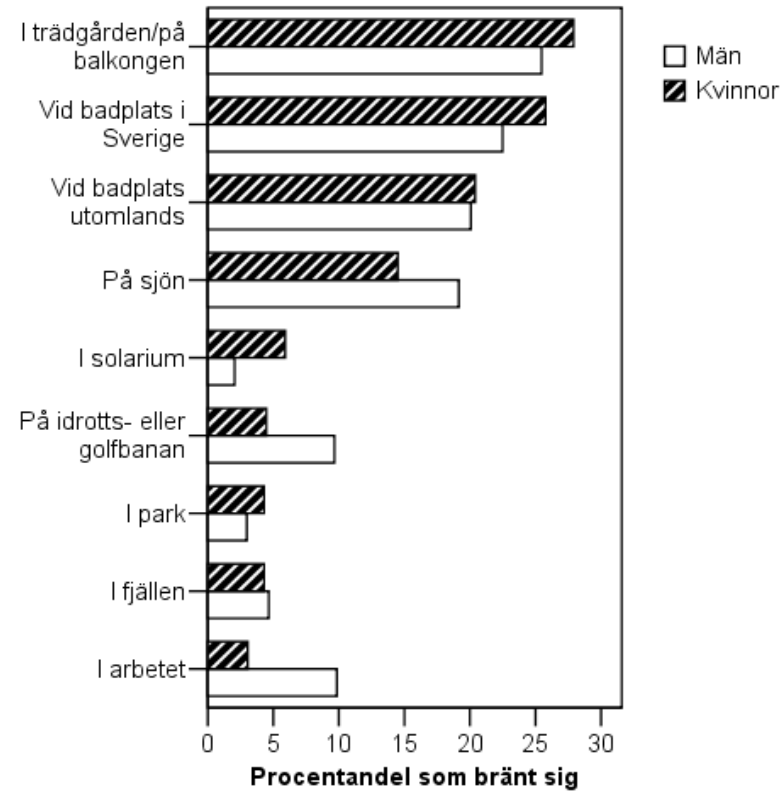
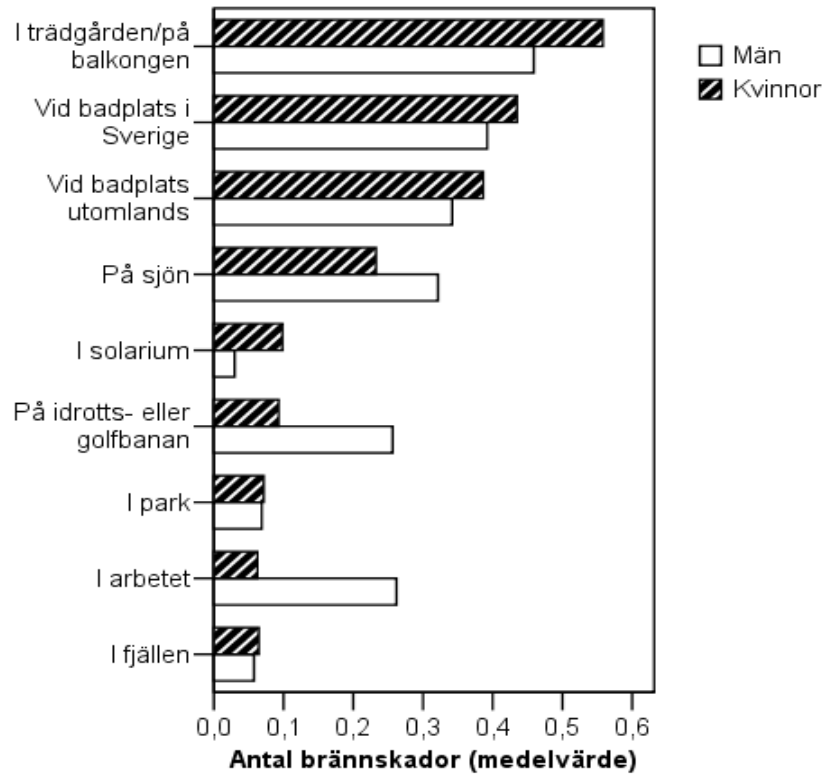
2 % of age group 15-24 ever burned in a sunbed

90 % of the age group 15-24 burn in the sun every year

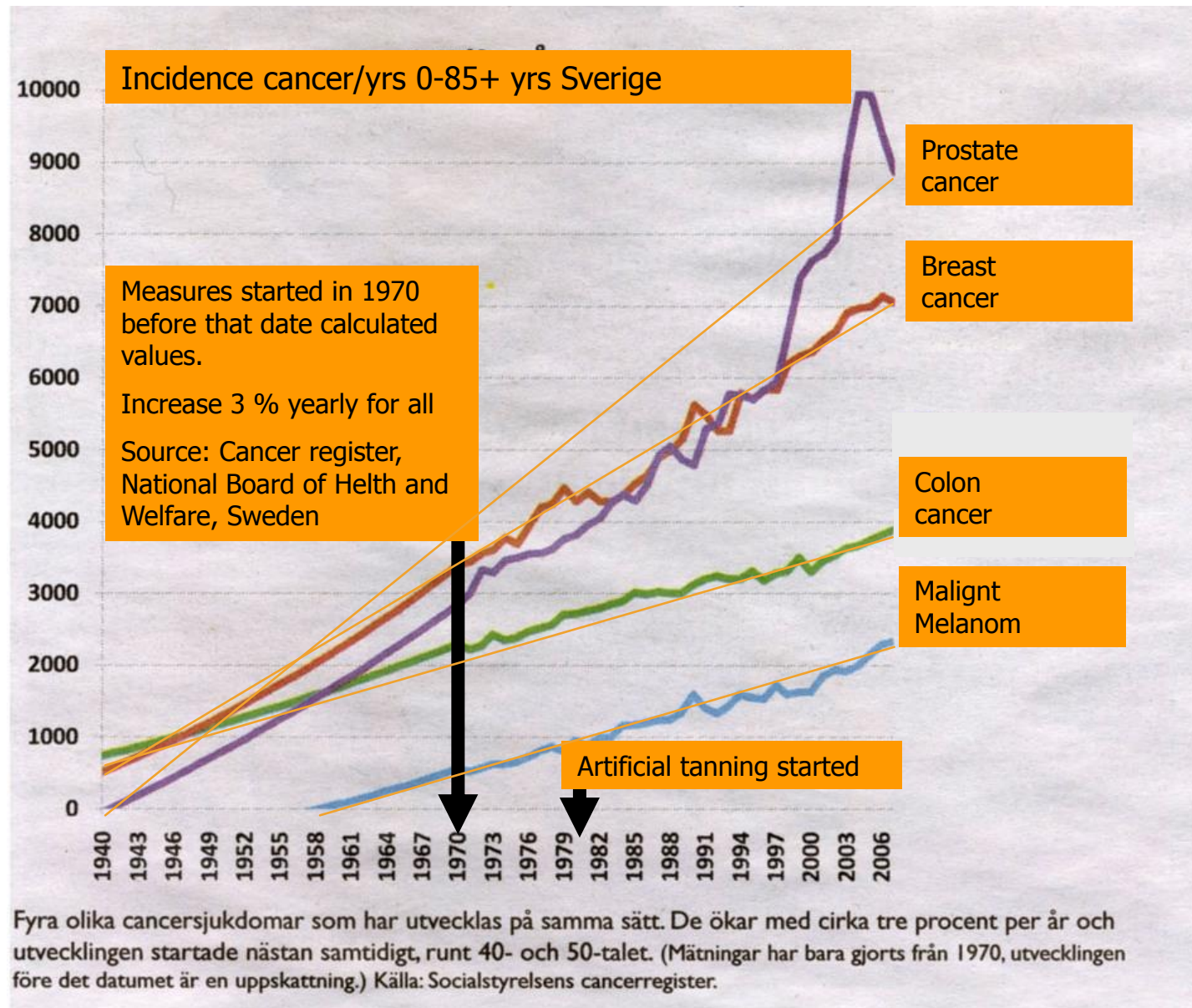
The Norwegian Cancer Society made a survey in 20014 among young people between 15-24 years of age.

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# Sunbeds one of least likely places to sunburn



# Cancer incidence +3% yearly



# Use of sunbeds vs tanning in natural sun

Number of new CMM cancer cases 2014

Men	Women	Total	Age 65+
1 912	1 840	3 752	1 988

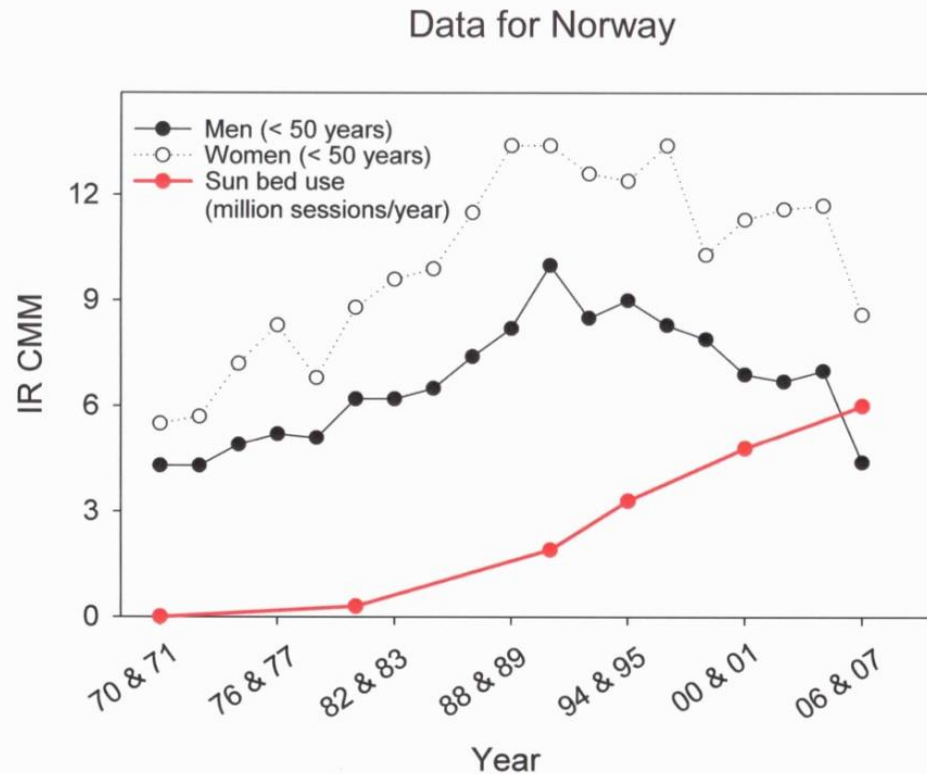
53 % of all incidences are age 65+

70% of all deaths are age 65+

None of them have ever used a sunbed before age 30



# Incidence in skin cancer has decreased in Norway while sunbed use increased



# ”No association between sunbed use and melanoma”

“ the results indicate that if an association between sunbed use and melanoma truly existed, then it must be marginal”

P Autier, et al 2002

”Our study confirmed the expected association between melanoma and fair skin but we did not find a significant association with exposure to the sun and/or sunbeds”

U Ringborg, V Bataille et al 2005

”In summary, we have found no evidence for sunbed use as a risk factor for melanoma in the UK; although we cannot exclude a small effect of ever sunbed use, nor risk for associated use with use in early life, we can exclude a large effect”

J A Newton-Bishop et al, 2011

# Veirød - Only 2 % ever used a sunbed

*Veierød et al. 2003,2010* study of women in Sweden and Norway; the following are stated;

”We had limited power to examine the association between the use of solarium during adolescence and melanoma risk because only 2 % of the women in the study reported having such exposure. “

A follow-up study from 1991-1992 through 1999, with women participating born 1943 to 1957. The women were 18 yrs old between 1961 and 1975 and 10 years between 1953 and 1967. This is long before tanning devices were introduced in Norway and Sweden, and therefore it can not be argued that use of a tanning device before the age of 18 years are associated with an increased risk of melanomas.

# Change of Scandinavian lifestyle - a health risk

- From outdoor to indoor from 1950
- 5 weeks holiday (1978) (4 weeks 1963)
- Increasing economy
- Charter tourism started in 1960
- Massive advertising for and abusive use of sunscreens as a believed preventer of skin cancer

# Charter tourism increased 4 600 % in 60 years

- 1960      100 000 charter tourist nights
- 2012      4 640 000 charter tourist nights
- +27 % population in 52 years
- Charter nights 1,3 % of population in 1960
- Charter nights 48,6 % of population in 2012

# Change of Scandinavian lifestyle - a health risk

Two weeks holiday in Thailand equals  
5 years tanning in a type-3 sunbed for  
10 minutes every week

# Use of sunscreen products “an increased risk of skin cancer”

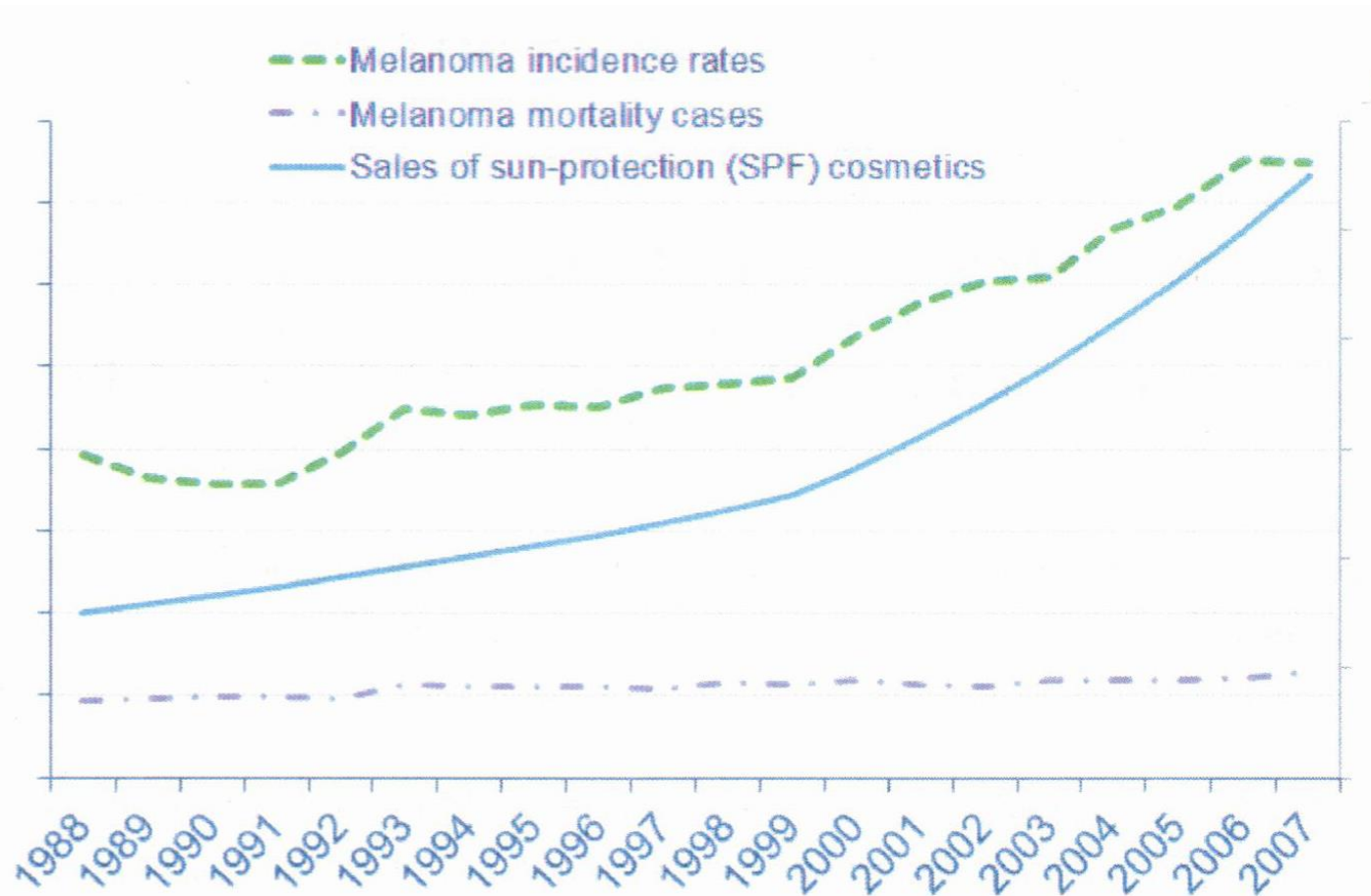
“When marketing and labeling bottles of sunscreen products the manufacturers of these should make sure of that information about an increased risk of skin cancer is labelled.”

One day otherwise patients with skin cancer will be able to sue the producers for not warning of the risks, but instead made advertising that sunscreens are a safe way to get a nice tan in the sun“

Philip Autier, International Agency of Research on Cancer, Lyon, FR

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# Sunscreen use and melanoma incidence



Source: Cancer Research UK & Euromonitor



# Intermittent tanning is a health risk - chronic tanning without burning a health benefit

The benefits are at least thirty fold outweighing any risks

**“For every person who dies in skin cancer,  
30 more dies of lack of vitamin D.”**

Prof Edward Giovannucci, Harvard, 2005

”avoidance of sun exposure is a risk factor for death of a similar magnitude as smoking”

**Prospective study of 29 518 women age 25-64 followed 20 years in Southern Sweden**

“Women with active sun exposure habits were mainly at a lower risk of cardiovascular disease (CVD) and noncancer/non-CVD death as compared to those who avoided sun exposure.”

P. G. Lindqvist<sup>1</sup>, E. Epstein<sup>2</sup>, K. Nielsen<sup>3</sup>, M. Landin-Olsson<sup>4</sup>, C. Ingvar<sup>5</sup> & H. Olsson<sup>6</sup> From the <sup>1</sup>Clintec, Karolinska Institutet, Department of Obstetrics and gynecology, Karolinska University Hospital, Huddinge; <sup>2</sup>Department of Obstetrics and Gynecology, Mothers and Childrens Health, Karolinska University Hospital, Solna, Stockholm; <sup>3</sup>Department of Dermatology, Helsingborg Hospital, Clinical Sciences, Lund University; <sup>4</sup>Department of Endocrinology, Clinical Sciences, Lund University Hospital; <sup>5</sup>Department of Surgery, Clinical Sciences, University Hospital; and <sup>6</sup>Departments of Oncology and Cancer Epidemiology, Lund University Hospital, Lund, Sweden

# “UV exposure earlier in life was related to reduced overall and breast cancer risk”

Cohort study of UV exposure and cancer incidence among Swedish women, of 49 259 Swedish women age 30-49

**Conclusion:** We found no evidence of an association between any cumulative measure of UV exposure at ages 10 to 39 years and overall cancer risk.

Ling Yang, Marit B. Veierod, Marie Löf, et al. *Cancer Epidemiol Biomarkers Prev* Published OnlineFirst May 6, 1Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden, Clinical Trial Service Unit and Epidemiological Studies Unit, University of Oxford, Oxford, UK, Department of Genetic Epidemiology, Folkhälsan Research Center, Helsinki, Finland Department of Biostatistics, University of Oslo, Oslo, Norway, Department of Clinical and Experimental Medicine, University of Linköping, Linköping, Sweden, Department of Epidemiology, Harvard School of Public Health, Boston, MA, USA, Department of Etiological Research, Cancer Registry of Norway, Oslo, Norway, Department of Community Medicine, University of Tromsø, Norway

# “skin cancer as a marker associated with less death from any cause”

**Study of the entire Danish population above age 40 years from 1980 through 2006, comprising 4.4 million individuals.**

Skin cancer as a marker of sun exposure associates with myocardial infarction, hip fracture and death from any cause.

**Conclusions:** In this nationwide study, having a diagnosis of skin cancer was associated with less myocardial infarction, less hip fracture in those below age 90 years and “less death from any cause. Risk ratio was 0.52 (0.52-0.53) for death from any cause.”

Peter Brøndum-Jacobsen,<sup>1,3</sup> Børge G Nordestgaard,<sup>1,3</sup> Sune F Nielsen<sup>1</sup> and Marianne Benn<sup>2,3\*</sup>, Department of Clinical Biochemistry, Herlev Hospital, Herlev, Denmark, <sup>2</sup>Department of Clinical Biochemistry, Gentofte Hospital, Copenhagen, Denmark and <sup>3</sup>Copenhagen University Hospital and Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark

# CONCLUSION

- Mankind has lived 4 million years in the sun.
- Type-3 sunbeds are equal to midsummer sun in Scandinavia
- The benefits of chronic tanning below erythema level by at least 30 fold outweighs any possible risks of skin cancer.
- From an overall health aspect advice and education of benefits and possible risks of tanning are more efficient than regulations.

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