Researchers give false legitimacy to alternative health products

Over the past 20 years, a Norwegian researcher has been paid to study alternative health products. He nearly always finds that they are effective. We have gone through his research in detail.

The phrase “scientifically documented” in advertisements gives alternative health products a legitimacy they might not otherwise have.

Whether it’s weight-loss products such as “30 days” or “Coffee Slender”, wrinkle creams such as “Nourella” or “Skingain”, or hair loss products such as “Nourkrin” and “Hairgain”, the imprimatur of scientific research provides some confidence that you will get what you paid for.

- Read the previous article from the investigation here: Evidence is slim for Coffee Slender’s claims

Yet when forskning.no journalists looked more carefully at the documentation behind some of these claims, they found reasons for concern.

The studies conducted by the researchers in support of these products lie in the grey area between research and marketing.

The researchers who have conducted the studies present themselves as having impressive academic titles and affiliations to research institutions that they do not actually have.

These researchers also have failed to disclose that the companies behind the products have paid for the research, or that they themselves may benefit financially from the sales of the products. The research also almost always concludes that the products work.

They conduct studies that may seem serious with legitimate scientific findings, yet under scrutiny, often fail to measure up. In one case, the study includes data tables that appear to have been copied from other studies. Still other studies claim that the research has been given ethical approval by public authorities, even though it has not.

Dubious academic credentials

When forskning.no examined a dietary supplement called Coffee Slender produced by Immitec, based in Tonsberg, the name Erling Thom kept cropping up.

Thom is the scientist behind a series of studies on alternative health products, including several of Immitec’s brands. When the forskning.no journalists examined more of Thom’s studies, they found a number of other scientists who were also frequently involved in the research projects. Grethe Støa Birketvedt, a Norwegian, and Jan Wadstein, a Swede, were among Thom’s most frequent collaborators.
All three have impressive academic titles, but their CVs are questionable.

Thom identifies himself in many studies as having a PhD, and in cases where he is presented as an expert, he is presented as having a doctorate from Stanford, a highly respected American university.

forskning.no contacted Stanford for confirmation that Erling Thom had been awarded his doctorate by the university, but university officials could find no record of Thom at all.

There is a record of Thom having taken written a thesis at a second-degree level at the University of Oslo in chemistry, but no record of a doctoral degree.

In a video on the Coffee Slender website, Thom introduces himself as a doctor and researcher. The video makes it easy to believe that he is a medical doctor. Thom’s CV from a 2005 conference on ageing also states that he studied medicine. But the forskning.no journalists could find no evidence that Thom is a medical doctor.

Nor were the journalists able to get an explanation about this from Thom. He has been presented with everything described in this article, but due to illness he did not want to comment on the specifics.

Other media have looked at Birketvedt and Wadstein’s credentials and found similar problems. In 2008, VG, a Norwegian national newspaper, found that Birketvedt had claimed to have an honorary doctorate from a Swiss university that does not exist. Birketvedt told the newspaper she may have been duped by the fake university.

VG also looked into Wadstein’s credentials in 2014 and found that although he claimed to be a professor at Lund University in Sweden, he had not been associated with the university for many years.

Colds, flu, obesity, wrinkles, hair loss and sex drive

Thom has published study results for at least three different cold and flu remedies, six obesity products, three wrinkle treatments, two hair loss products and one to boost sex drive. This is just a selection of studies examined by forskning.no.

Over the last decade Thom has been an independent researcher, but previously he was associated with a large company called Parexel, which conducts commissioned research under contract. But he has also been an inventor and applied for patents.

When the forskning.no journalists reviewed Thom’s research on health products, they found that collaborated with either Birketvedt or Wadstein in just under half of his health-related studies.

Suspicious similarities

The forskning.no review found that Thom’s studies of different products had a surprising number of similarities.

He almost always finds that the products work well, and he often recommends the substance or product. He rarely finds side effects. His studies are usually quite short term, no more than a few months at longest, and almost always involve just a few patients or study subjects.

The findings themselves are often based on simple measurements, such as skin thickness or weight, or the patient’s own subjective assessment. Blood tests or other more quantitative assessments are rarely included in the studies.
Sometimes the similarities in the studies extend to the actual data presented in the results. For example, in two separate studies on wrinkle treatments, both with Thom as the only author, the data tables are nearly exactly the same.

“This is very suspicious,” says Joran Hjelmesæth, head of the Centre for Morbid Obesity at Vestfold Hospital and a professor at the University of Oslo who helped the forskning.no journalists assess Thom’s studies.

Simen Gaure, a mathematician from the Frisch Centre, was asked by the forskning.no journalists to look at two data tables that show information measured over two different time intervals and a statistical measure called standard deviations. Gaure calculated the probability that the tables could be so similar to be as low as one in one hundred thousand.

This means that the table may have been copied from the Skingain study into DermaVite study, where some of the values were subsequently changed. It may have happened accidentally. Or it may have been intentional.

The tables are from two different surveys of two different wrinkle treatment products - Skingain (top) and DermaVite (below). The first study lasted for four months while the other lasted six months. Nevertheless, the figures in the tables are almost identical. Mouse over the columns to see the similarities.

Amazing that the studies were accepted

Hjelmesæth, who has studied obesity for years, has read a selection of Thom’s studies of diet products. He says they have serious deficiencies.

“The authors write that there are statistical differences between the groups that were given the treatment and those that were given a placebo, but they show no data documenting the difference,” Hjelmesæth says.

The articles also state that the products do not have side effects. But there is no description of how the researchers investigated side effects, such as by taking blood samples or with questionnaires, Hjelmesæth points out.

“The fact that none of the patients reported side effects is very suspect. That means they probably were not asked,” Hjelmesæth said. “It’s incredible that this was accepted in a scientific journal.”

Pay to publish

But the forskning.no journalists found that the journals where Thom and his colleagues have published articles are somewhat suspect as well. For example, Thom publishes frequently in the Journal of Applied Cosmetology, often with Wadstein as a co-author.

This journal states that it is peer reviewed, which means that independent scientists review all of the articles submitted to determine if they should be published. But this journal does not have an impact factor, which is the most common measure by which the quality of a journal is assessed. There are a number of these types of poorer quality journals that charge researchers a price to publish their articles, regardless of the quality of the article.

Scimago Journal Rank — another common measure of quality — places this particular journal in the lowest
category. Nor is the journal registered in PubMed—the world's largest database of medical research. Other journals that published Thom’s work were similarly poorly ranked.

Conflict of interest

In one of the most recent articles by Thom and Birketvedt, the researchers describe two individual patients who have lost a great deal of weight through sound dietary advice, monitoring and the use of a diet pill. This diet pill has exactly the same ingredients as a substance that Birketvedt patented in 2009. However, the article does not describe this potential conflict of interest.

This was a recurring problem in many of the studies that were reviewed by the forskning.no journalists. Almost none of the articles contained any information about who paid for the study, or if any of the researchers have any financial interests related to the product being studied.

Many journals ask researchers to fill in a special form prepared by the International Committee of Medical Journal Editors. The form asks researchers to disclose who paid for the study and any financial or personal interest they might have in the research results.

But most of Thom’s studies reviewed by forskning.no did not include this information.

“It's quite bad that he has failed to state any potential conflicts of interest,” Hjelmesæth said.

Marketing products with minimal effect

The forskning.no journalists also documented cases where Thom and his colleagues were involved in marketing the very products they had studied, and that they stood to gain from financially.

These are products that consumers pay good money for in the belief that they will be effective, even though it is likely that the actual effects are minimal, the journalists concluded.

Erling Thoms published studies on alternative health products:

- Skin treatment with two different galenical formulations of retinyl palmitate in humans [7], 1993.
- Long-term effects after topical application of active retinyl palmitate [8], 1994.
- A comparative double-blind within subject study of the efficacy and tolerability of two different derivatives of vitamin a on skin thickness and elasticity: retinoic acid and conjugate retinyl palmitate [10], 1997.
- A comparative double-blind vehicle controlled within subject study of the efficacy and tolerability of a topical treatment of fat deposits and cellulitis on the thighs [12], 1998.
- Combination of diet, exercise and intermittent treatment of cimetidine on body weight and maintenance of weight loss. A 42 months follow-up study [14], 2000.
- Conjugated Linoleic Acid Reduces Body Fat Mass in Overweight and Obese Humans [16], 2000.
- Conjugated Linoleic Acid Reduces Body Fat in Healthy Exercising Humans [17], 2001.
• Efficacy and tolerability of Hairgain in individuals with hair loss: a placebo-controlled, double-blind study [18], 2001.
• The effect of a new skin ointment on skin thickness and elasticity [19], 2001.
• Chitosan Conjugated CLA Gel For Treatment of Stable Chronic Psoriasis Vulgaris [20], 2002.
• Randomized Study of the Efficacy and Safety of Oral Elderberry Extract in the Treatment of Influenza A and B Virus Infections [22], 2004.
• Experiences with three different fiber supplements in weight reduction [23], 2005.
• A Randomized, Double-blind, Placebo-controlled Study on the Clinical Efficacy of Oral Treatment with DermaVite™ on Ageing Symptoms of the Skin [24], 2005.
• Nourkrin®: Objective and Subjective Effects and Tolerability in Persons with Hair Loss [25], 2006.
• The effect of chlorogenic acid enriched coffee on glucose absorption in healthy volunteers and its effect on body mass when used long-term in overweight and obese people [26], 2007.
• The Effect of A Novel Food Supplement Containing a Mixture of Water Extracted Herbs and 1,3-1,6-β-Glucan on Body Composition and Weight in Females. The results from a randomized placebo-controlled double-blind study in female subjects [27], 2010.
• A Randomised, Placebo-Controlled Doubleblind Parallel Group Study in the treatment of aging symptoms of the skin using topical and oral treatments [28], 2012.
• Cosmetic Hair Treatments Improve Quality of Life in Women with Female Pattern Hair Loss [29], 2013.
• Treatment of hair thinning and hair aging with specific lectican and leucine proteoglycans [30], 2014.
• A case study: Obesity and the metabolic syndrome. A threepronged program, targeting education, close follow-up and a dietary supplement, significantly decrease body weight and body fat [31], 2016.
• A Dietary Supplement in Combination with an Education Plan and a LongTerm Follow-up Significantly Decrease Blood Pressure, Body Weight and Body Fat [32], 2016.
• Topical treatment of psoriasis with an ointment containing liver oil from ratfish (Chimerra Monstrosa). A pilot study [33], 2016.
• Stress and the Hair Growth Cycle: Cortisol-Induced Hair Growth Disruption [34], 2016.

This article is based on an investigation by journalists at www.forskning.no. You can read the Norwegian version of the article here[35].

Fact box

Products Erling Thom has studied, where the articles are available:

• Kanjang Mixture, Curamed and Sambukol flu and cold remedies.
• Sincera, Cimetidine, Tonalin CLA, CoffeeSlender, 30 days and Scuo-bloc, products for obesity.
• Skingain, Dermavite and Nourella, against aging skin.
• Hairgain and Nourkin against hairloss.
• Libido for lacking sex drive.
Evidence is slim for Coffee Slender’s claims [6] Researchers who endorse miracle cures [40]

Nancy Bazilchuk [41] based on an article by Ingrid Spilde and Nina Kristiansen [42]

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