

## Fascination and safety issues of alternative therapies for OA

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## Babylonic terminology

Alternative  
Complementary  
Integrative  
Unorthodox (Heterodox)  
Unconventional etc etc

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## The range of CAM

ACUPUNCTURE - (diagnosis)  
AROMATHERAPY  
CHIROPRACTIC - (diagnosis)  
HEALING (faith, spiritual, etc)  
HERBALISM (phytotherapy)  
HOMOEOPATHY - (diagnosis)  
IRIDODOLOGY - (diagnosis)  
KINESIOLOGY - (diagnosis)  
MASSAGE - (diagnosis)  
OSTEOPATHY - (diagnosis)  
REFLEXOLOGY - (diagnosis)

- physical
- pharmacological
- undefined "energies"

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## The fascination of CAM

- It's natural
- It's safe
- It's holistic/individual
- It's pleasant
- It's "anti-establishment"
- It's a status symbol ("you are worth it")
- It works (test of time)
- It's available

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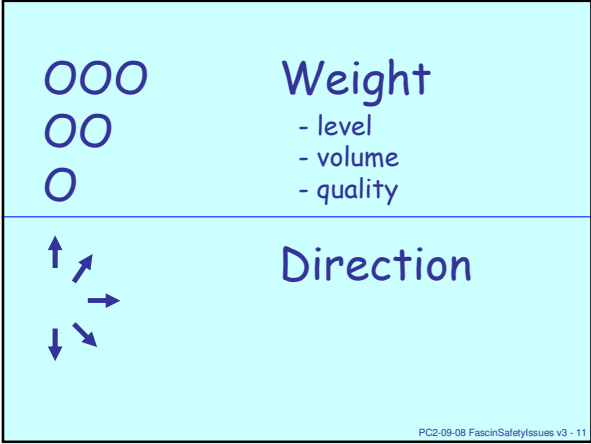
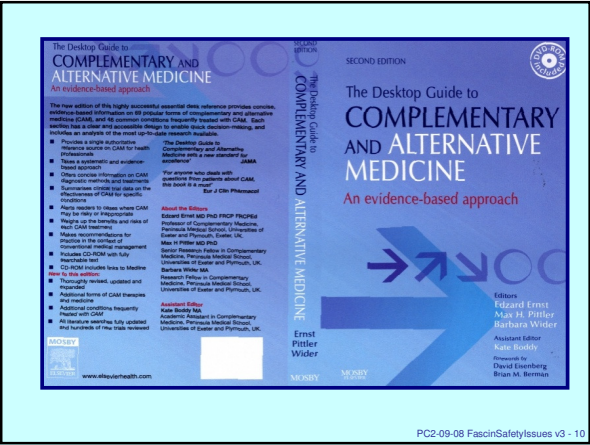
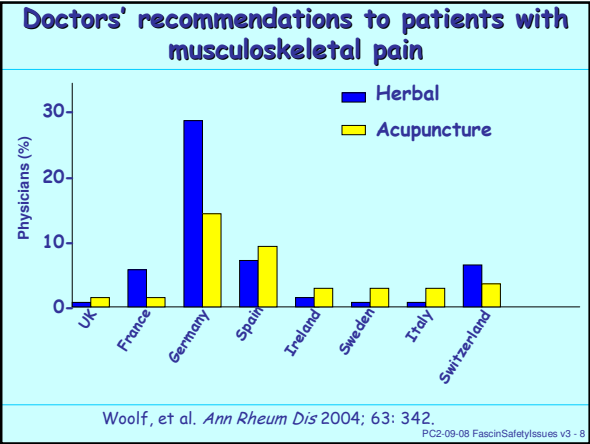
## US newspaper articles 2008 (1 Jan - 23 May 2008)

- |                        |      |
|------------------------|------|
| • Homeopathy           | 68   |
| • Herbal medicine      | 106  |
| • Chiropractic         | 1950 |
| • Acupuncture          | 834  |
| • Alternative medicine | 2358 |

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# Does it work for OA?

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## Herbal medicines for OA

Treatment	Weight of evidence	Direction of evidence
Avocado/soybean unsaponifiables	OO	↗
<i>Boswellia serrata</i>	OO	↕
Devil's claw	OO	↗
Duhuo Jisheng Wan	O	↕
Ezmoz	O	↖
Ginger	OO	↗
Gitadyl	O	↕
Herbomineral formulation	O	↗
Hyben Vital	O	↗
Phytodolor	OOO	↕
Reumalex	O	↗
SK1 306X	OO	↕
Stinging nettle	O	↕
Tipi	O	↘
Willow bark	OO	↕

Ernst E, et al. *Desktop Guide to Complementary Medicine*  
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## Supplements for OA

Treatment	Weight of evidence	Direction of evidence
Arthritis relief plus	O	↑
Capsaicin	OO	↑
Chondroitin	OOO	↑↔
Glucosamine	OOO	↑↔
Green-lipped mussel	O	↔↔
Micronutrient beverage	O	↑
S-adenosylmethionine (SAM-e)	OOO	↑
Soy	O	↔
Vitamin E	O	↔

Ernst E, et al. *Desktop Guide to Complementary Medicine*

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## Nice guidelines "osteoarthritis"

1. "Topical capsaicin should be considered as an adjunct to core treatment for knee or hand osteoarthritis"
2. Recommendation against chondroitin or glucosamine
3. No mention of SAME or Phytodolor

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## S-adenosylmethionine (SAMe) for OA

- Design:** Systematic review and meta-analysis
- Sample:** 11 RCTs
- Result:**
- Better than placebo for function (effect size = 0.31, 95% CI 0.1-0.5)
  - No significant effect on pain compared to placebo but equivalent to NSAIDs
- Conclusion:** "SAMe appears to be as effective as NSAIDs in reducing and improving functional limitations in patients with OA without the AEs often associated with NSAIDs."

Soeken KL, et al. *J Fam Pract* 2002;51:425

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## The recent document from ARC

### Assessment of 26 herbal/natural supplements

### Two additional compounds with promising evidence

- Rosehip (*Rosa canina*)
- Methylsulfonylmethane (MSM)

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## CAM for OA

Treatment	Weight of evidence	Direction of evidence
Acupuncture	OOO	↑
Balneotherapy	OO	↔
Homeopathy	O	↔
Magnets	OO	↔↔
Tai chi	OO	↑

Ernst E, et al. *Desktop Guide to Complementary Medicine*

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## Acupuncture for OA

- Design:** Systematic review and meta-analysis
- Sample:** 11 RCTs (9 datasets could be pooled)
- Result:**
- Compared with waiting list patients, significant short-term improvements in pain and function
  - Compared with sham, significant short-term improvements in pain and function but no clinically relevant long-term effects

Mannheimer, et al. *Ann Intern Med* 2007;146:868

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## Nice guidelines "osteoarthritis"

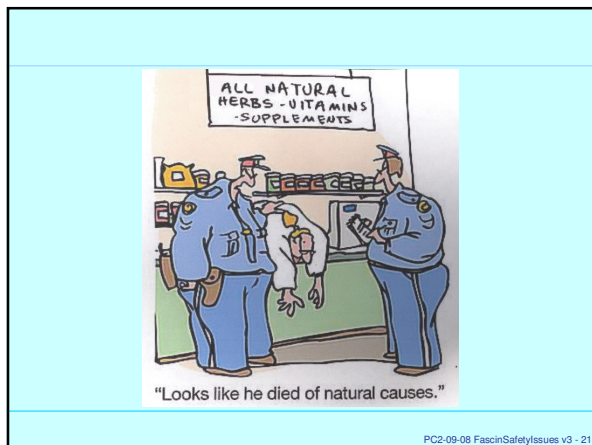
"Electroacupuncture should not be used to treat people with osteoarthritis"  
Explanation in footnote: "There is not enough consistent evidence of clinical or cost effectiveness to allow a firm recommendation on the use of acupuncture for the treatment of osteoarthritis"

February 2008

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# Safety

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## Facts to consider

- CAM practitioners are adverse to researching adverse effects
- Post-marketing surveillance does not exist or does not function well
- There are no funds to research this area

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# Herbal and other supplements

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## Potential issues

- Toxicity
- Interactions
- Contamination
- Adulteration

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# Acupuncture safety

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## Adverse effects of complementary therapies

Survey of large sample of British CM users

Therapy	reporting	adverse effects
Spinal manipulation	15.8 %	(~50%)
Acupuncture	12.5 %	(7-11%)
Homoeopathy	9.8 %	(~20%)
Herbal medicine	7.6 %	(depends)

Abbot, White, Ernst. *Nature* 1996; 381: 361

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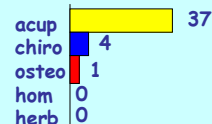
## CAM practitioners in the UK

**Design:** survey of all UK practitioners of 5 disciplines

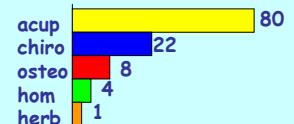
**Endpoints:** 5 "best practice criteria"

**Results:**

% fulfilling all



% fulfilling > 3



*The Times* 10 Jan 2004

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## Conclusions (I)

- Many forms of CAM for OA have been submitted to clinical trials
- Several forms of CAM offer great promise
- None is without risks

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## Conclusions (II)

"CAM, like conventional medicines, should be subject to careful evaluation of their effectiveness and safety. It is important that treatments...are properly tested and that patients do not receive misleading information ...NHS provision for CAM...should be confined to treatments that are supported by...evidence of both effectiveness and safety"

Royal Society 2006

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