Our vision is that healthcare decision-making throughout the world will be informed by high quality, timely research evidence.

The National Institute for Health Research (NIHR) is the largest single funder of the Cochrane Oral Health Group.
Anniversary celebrations

- The Cochrane Collaboration’s 20 years celebration takes place this year.

- 21st Colloquium in Quebec City, Canada, 19-23 September 2013.
Cochrane Reviews

- Widely recognised as the gold standard in assessing and reporting research to determine the effectiveness of different healthcare treatments and interventions.
- Not-for-profit, global network of approx. 28,000 contributors (of whom the majority are volunteers, with only 500 paid staff) across more than 120 countries.
Antioxidant supplements for prevention of mortality in healthy participants and patients with various diseases (Review)

Bjelakovic G, Nikolova D, Gluud LL, Simonetti RG, Gluud C
Vitamin pills ‘can increase the risk of early death’

Pope tells of his shame

I mean to continue, insists bruised Brown

Bad science Celebs decry evidence on vitamin pills

A nd so our ongoing project to learn about evidence through nonsense enters its sixth improbable year. This week the assembled celebrity community and vitamin pill industry will walk us through the pitfalls of reading through a systematic review and meta-analysis from the Cochrane Collaboration, an international not-for-profit organisation set up 20 years ago to create transparent, systematic, unbiased reviews of the medical literature on everything from drugs, through surgery, to community interventions.

Last week Cochrane produced a gold-standard review, looking at 61 trials describing the experiences

Ben Goldacre

Review said vitamin pills may increase risk of dying Photograph: Fiona Hanson/PA
Breadth of The Collaboration

- The Cochrane Collaboration was founded in 1993.
- There are:
  - 14 Centres, 17 Centre Branches,
  - 53 Review Groups, 15 Review Group Satellites,
  - 16 Methods Groups, and
  - 11 Fields including the Consumer Network in The Cochrane Collaboration
The Cochrane Collaboration
Working together to provide the best evidence for healthcare

Annual Colloquium
Cochrane contributors gathered in Quebec City, Canada, for the 2013 Colloquium, 19-23 September

Access Cochrane evidence

English | 简体中文 | Hrvatski | Français | Português | Español
We provide a full range of resources for healthcare decision making

New and noteworthy Cochrane Reviews

- Vitamins and minerals for female subfertility
- Comparison of two types of blood thinning drugs for preventing blood clots in people with atrial fibrillation
- Fluoride varnishes for preventing dental caries in children and adolescents
- Folic acid or folic acid for reducing side effects of methotrexate for people with rheumatoid arthritis
- Self-help for anxiety disorders
- Midwife-led continuity models versus other models of care for childbirthing women
- Mosquito larval source management for controlling malaria
- Multimedia programs for educating patients about medications
- New treatments versus established treatments in randomized trials
- Oral hygiene care for critically ill patients to prevent ventilator-associated pneumonia
- Are there any effective interventions to help individuals with depression quit smoking?
- Medications to help people stop smoking: an overview of reviews

Cochrane in the News

Studies: Linking doctors’ pay to performance is better for patients

Salon.com reports on the investigation into whether linking doctors’ pay to performance is better for patients citing relevant Cochrane evidence.

Salon.com reports on the investigation into whether linking doctors’ pay to performance is better for patients citing relevant Cochrane evidence.

Latest news

Editorial Assistant - Cochrane Wounds Group - York, UK
12 Sep 2013 - 11:21

Trials Search Coordinator (Information Specialist) - York, UK
12 Sep 2013 - 11:46

Blog

What is a good topic for a Cochrane Review? What is "real..."
12 Sep 2013 - 12:04

Impact Factors and tennis
13 Aug 2013 - 18:03

Is there value in making author contact when determining...
23 Jul 2013 - 10:56

Highlights

We support AllTrials.net!
Sign the petition
Scope

- Include all randomised controlled trials of oral health;

- Broadly conceived to include the prevention, treatment and rehabilitation of oral, dental and craniofacial diseases and disorders.
<table>
<thead>
<tr>
<th>Date</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 1996</td>
<td>UK Base established</td>
</tr>
<tr>
<td>December 1996</td>
<td>Part-time Co-ordinator appointed</td>
</tr>
<tr>
<td>July 1997</td>
<td>Funding secured</td>
</tr>
<tr>
<td>February 1998</td>
<td>Official opening</td>
</tr>
<tr>
<td>May 2006</td>
<td>10 year symposium</td>
</tr>
<tr>
<td>March 2009</td>
<td>Secured funding until 2015</td>
</tr>
<tr>
<td>September 2010</td>
<td>Set up Global Alliance as additional funding stream</td>
</tr>
</tbody>
</table>
Oral Health Group

Editors

- Helen Worthington
- Jan Clarkson
- Anne-Marie Glenny
- Marco Esposito
- Bill Shaw
- Susan Furness
- Trevor Johnson
- Martin McCabe

- Philip Riley
- Ian Needleman
- Paul Coulthard
- Valeria Marinho
- Jayne Harrison
- Scott Deacon
- Tanya Walsh
- May Wong
Editorial base staff

- Co-ordinating Editors
- Managing Editor
- Trials Search Co-ordinator
- Research Fellow/Methodologist x 2
- Professor of Health Sciences Research
- Senior Lecturer in Dental Statistics
- Research/Editorial Support Co-ordinator
- Administrative Assistant
Achievements

- Worldwide network of over 1300 members, from more than 40 countries
- International panel of referees
- Set up COHG Trials Register (approx. 29,000 entries)
- Input into NICE, HTA, SIGN, vCOHI & ADA;
- NIDCR CDC awards
- Cochrane Incentive Scheme awards.
• Global Alliance
• Prioritisation of reviews
• Guideline Repository
• Core Outcomes for reviews
Funding

- Base-line salaries (NIHR)

- Global Alliance (donations from dental bodies)
  - British Orthodontic Society, UK
  - Royal College of Surgeons of Edinburgh, UK
  - New York University College of Dentistry, USA
  - British Society of Paediatric Dentistry, UK
  - National Center for Dental Hygiene Research & Practice, USA
  - Canadian Dental Hygienists Association, Canada
  - British Society of Periodontology, UK
  - British Society of Oral Surgeons, UK
  - Mayo Clinic, USA
Distribution of progress scores for all 23 UK-based CRGs

(Inc. those funded by CSO, Scotland and Health and Social Care R&D Northern Ireland)
The 2012 Impact Factor for CDSR is 5.703, which describes the ratio of the number of reviews published during 2010 and 2011 (8087) to the number of citations these reviews received in 2010-11 (1418).

Consequently, the CDSR is ranked 11 of 151 journals in the Medicine, General & Internal category of the Journal Citation Reports.
Challenges

- Maintain **topic relevance** and **high quality** of output
- Ensure the **infrastructure** supports the review process
- Identify and **reduce barriers to access**
- Encourage the **impact on practice**
- **Update** reviews

- **Little control** over what is done with the information:
  - **Misreporting** of results
  - How long it takes to **influence practice**
  - How it is implemented/what people do with it
## Trials and Participants

<table>
<thead>
<tr>
<th>Year</th>
<th>Trials</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>14</td>
<td>945</td>
</tr>
<tr>
<td>2002</td>
<td>52</td>
<td>3,594</td>
</tr>
<tr>
<td>2004</td>
<td>69</td>
<td>4,905</td>
</tr>
<tr>
<td>2006</td>
<td>71</td>
<td>5,217</td>
</tr>
<tr>
<td>2007</td>
<td>89</td>
<td>7,523</td>
</tr>
<tr>
<td>2010</td>
<td>120+</td>
<td>10,200+</td>
</tr>
</tbody>
</table>
Why broccoli and dental floss

Is flossing your teeth a waste of time?: Dentists nag us about it. Scientists insist it prevents heart disease. But now an expert says they've all got it wrong...

By LUCY ELKINS

Visits to the dentist are never pleasant. Not only do we have our pearly whites scraped, prodded and drilled, we then have to endure a telling-off for not having flossed.

Dentists insist it will keep our teeth sparkling and free from decay, as well as keeping our gums healthy. Regular flossing has even been said to protect us from heart disease.

Yet, for most of us who try wrestling with the tape, it only results in a cricked neck and bleeding gums.

And now, according to a provocative new book, Kiss Your Dentist Goodbye, it seems that dedicated followers of flossing could actually be wasting their time.

Scroll down for video
### Summary of findings for the main comparison: Flossing plus toothbrushing for periodontal disease and dental caries

**Patient or population:**
Everyday self-care

**Settings:**
Everyday self-care

**Intervention:**
Flossing plus toothbrushing

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Illustrative comparative risks* (95% CI)</th>
<th>Relative effect (95% CI)</th>
<th>No of Participants (studies)</th>
<th>Quality of the evidence (GRADE)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Assumed risk</strong></td>
<td><strong>Corresponding risk</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>The mean gingivitis in the control group was 0.13 lower (0.02 to 0.23 lower)</td>
<td>The mean gingivitis in the intervention group was 0.67 points</td>
<td>489 (7 studies)</td>
<td><strong>very low</strong></td>
<td>The estimate is for the 1-month time point. Results are consistent in other observed time points (3- and 6-month)</td>
</tr>
<tr>
<td>Flossing plus toothbrushing</td>
<td>Not estimable</td>
<td>0</td>
<td>(0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interproximal caries</td>
<td>Not estimable</td>
<td>0</td>
<td>(0)</td>
<td></td>
<td>No included study assessed caries as an outcome</td>
</tr>
<tr>
<td>Harms and adverse effects</td>
<td>Not estimable</td>
<td>0</td>
<td>(0)</td>
<td></td>
<td>Adverse effects were assessed in five studies, but they used different outcome measures, so meta-analysis was not appropriate</td>
</tr>
<tr>
<td>Plaque</td>
<td>The mean plaque in the control group was 2.97 points</td>
<td>The mean plaque in the intervention group was 0.19 lower (0.42 lower to -0.05 lower)</td>
<td>416 (5 studies)</td>
<td><strong>very low</strong></td>
<td>The estimate is for the 1-month time point. Results consistent with 6-month outcome. 3-month outcome was statistically significant</td>
</tr>
<tr>
<td>Calculus</td>
<td>Not estimable</td>
<td>0</td>
<td>(0)</td>
<td></td>
<td>No included study assessed calculus as an outcome</td>
</tr>
<tr>
<td>Clinical attachment loss</td>
<td>Not estimable</td>
<td>0</td>
<td>(0)</td>
<td></td>
<td>No included study assessed clinical attachment loss as an outcome</td>
</tr>
<tr>
<td>Quality of life</td>
<td>Not estimable</td>
<td>0</td>
<td>(0)</td>
<td></td>
<td>No included study assessed quality of life as an outcome</td>
</tr>
</tbody>
</table>

*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

**GRADE Working Group grades of evidence**

- **High quality:** Further research is very unlikely to change our confidence in the estimate of effect.
- **Moderate quality:** Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.
- **Low quality:** Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.
- **Very low quality:** We are very uncertain about the estimate.
When To Start Flossing

When Should Children Begin Flossing?

You should start flossing your children’s teeth even when they have only their baby (primary) teeth. Once a child’s teeth start to fit closely together, usually between the ages of two and six, parents should start to get their children in the habit of flossing daily. As they develop dexterity, you can help them learn to floss. Children usually develop the ability to floss on their own around the age of 10.

To stress the importance of flossing, do it for them regularly until they’re able to do it themselves. This will help them develop a good habit of flossing while they still have their baby teeth so that when their permanent teeth come in, they already have flossing worked into their daily oral routine. Use floss that is soft and flexible so that it doesn’t hurt their teeth and is comfortable on their gums.

How Can I Help My Child Learn To Floss?

Try tying the floss into small circles on either end of the strand so that your child’s fingers can easily fit it. This will help them get a grip on the floss in the early stages before they learn how to hold it on their own. Next, have your child follow these basic flossing steps:

1. Take about 18 inches of floss and loosely wrap most of it around each middle finger leaving an inch of floss between.
2. Gently slide it down between your teeth with your thumb and index fingers holding the floss taut. Be careful not to steep it down on your gums.
3. Curve the floss around each tooth in a “C” shape and gently move it up and down the sides of each tooth, including the sides of the gums.

Oral-B Products - Toothbrushes, Toothpaste, Dental Floss
www.oralb.com/products/
... including toothbrushes, mouthwash, toothpaste, and dental floss to help you ... designed specifically for the special needs for babies and kids ages 2-7 Years.
Oral-B Rechargeable Electric ... - Manual Toothbrushes - Replacement Brush Heads

Lacob Kid’s Floss Individually Wrapped Children’s Dental Flossers
www.amazon.com/Lacob-Kids-Floss...Childrens/dp/B001ETT77G6
Lacob Kid’s Floss dental flossers make flossing fun! Neon colored sparkly flossers and vibrant ecological themes make learning to floss, and learning about ...

Images for kids dental floss - Report in...

When should my child start flossing?
www.babycenter.com ... > Throat & Mouth
Pediatric dentist Joel Berg on the normal time for parents to start flossing their children’s teeth...

How to brush and floss children’s teeth - ... Book Website
www.webmd.books.com/oral-health/guide/brushing-flossing-child-teeth
Start flossing your child’s teeth once a day as soon as two teeth emerge that touch. Ask your dentist about your child’s fluoride needs. If your drinking water is not ...
Importance of our reviews asking relevant questions

Important reviews are kept up-to-date

Two international prioritisation exercises so far:

- Orthodontics and paediatric dentistry
Paediatric prioritisation exercise process

1. Invitation to all paediatric authors;

2. Invitation to international expert panel;

3. Two teleconferences;

4. Final list of reviews
Results of paediatric prioritisation exercise

- Prevention
  - Fluoride varnishes, gels, mouthrinses, toothpastes (8)
  - Sealants (2)
Results of paediatric prioritisation exercise

- Treatment
  - Different methods for treating and managing decay in primary and permanent dentition (6)
  - Pulp treatment (1)
  - Preoperative analgesics (1)
Results of paediatric prioritisation exercise

- Additional topics (with reviews)
  - Primary school-based behavioural interventions for preventing caries
  - Hypnosis for children undergoing dental treatment
  - Sedation of children undergoing dental treatment
Results of paediatric prioritisation exercise

- Additional topics (no reviews)
  - Complex interventions for preventing caries
  - Diagnosis of caries
  - Management of early caries lesions in children
Paediatric experts wanted to collaborate over guidelines

Not what we are here for, but we thought of an idea to help:

- Guideline repository
The purpose of the repository is to:

- help identify priority review topics that could inform guideline development
- identify areas of duplication/overlap, where evidence tables could be shared between Guideline Development Groups (GDG)
- increase stakeholder involvement in guideline development by widening dissemination.
International Oral Health Care Guideline Repository

COHG have established a Guideline Repository for all guidelines (proposed and in development) covering issues related to oral health.

The purpose of the repository is to:

- help identify priority review topics that could inform guideline development;
- identify areas of duplication/overlap, where evidence tables could be shared between Guideline Development Groups (GDG);
- increase stakeholder involvement in the guideline development by widening dissemination of those in process.

The repository will be prospective (no attempt will be made to identify previously published guidelines), although as soon as GDGs are aware that a guideline will be produced it can be added to the repository. GDGs are encouraged to submit brief details of their guidelines to the COHG for uploading to the repository.

The repository will not be restricted to guidelines that aim to include Cochrane Reviews; however, where it is likely that a guideline will cover questions that could be better covered by COHG reviews, we would hope to establish dialogue with the GDG to determine if it is feasible to complete/update reviews in line with the guideline schedule.

If you are aware of any additional unlisted guidelines currently in development, please notify the repository administrator via email to cohg@manchester.ac.uk

- For ease of searching for a particular term, we suggest using the Search facility in the sidebar, or alternatively holding CTRL and F to find key words within this page.

<table>
<thead>
<tr>
<th>Guideline producer (Hyperlinked)</th>
<th>Guideline title (Hyperlinked where available) [Publication date]</th>
<th>Consultation deadline (Expected release date?)</th>
<th>Comments provided by GDG</th>
<th>Guideline contact person</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Dental Association (ADA)</td>
<td>Evidence-based clinical recommendations for topical fluoride for caries prevention</td>
<td>To be provided</td>
<td>Imminent publication expected</td>
<td><a href="mailto:tracys@ada.org">tracys@ada.org</a></td>
</tr>
<tr>
<td>American Dental Association (ADA)</td>
<td>Evidence-based clinical recommendations for non-surgical treatment of chronic periodontal disease</td>
<td>To be provided</td>
<td>Mid-project</td>
<td><a href="mailto:tracys@ada.org">tracys@ada.org</a></td>
</tr>
<tr>
<td>American Dental Association (ADA)</td>
<td>Evidence-based clinical recommendations for the use of pit-and-fissure sealants</td>
<td>To be provided</td>
<td>Update of 2008 recommendation begun</td>
<td><a href="mailto:tracys@ada.org">tracys@ada.org</a></td>
</tr>
</tbody>
</table>
We already liaise with NICE and SIGN to ensure we are prioritizing the reviews they need.

- **Fluoride varnish review**
  - Initial review published in 2002 (9 trials)
  - Update published July 2013 (22 trials)

- Some of the UK trials did not support the use of FV.
- **Original results:**
  - D(M)FS pooled prevented fraction = 46%

- **Updated review:**
  - Substantial increase in prevented fraction;
  - Substantial decrease in prevented fraction;
  - No change.
Fluoride varnish versus placebo/no treatment

- **D(M)FS increment (prevented fraction - nearest to 3 years)**

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Prevented Fraction</th>
<th>SE</th>
<th>Weight</th>
<th>Prevented Fraction</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koch 1975</td>
<td>0.775</td>
<td>0.1256</td>
<td>13.7%</td>
<td>0.78 [0.53, 1.02]</td>
<td>1975</td>
</tr>
<tr>
<td>Holm 1984</td>
<td>0.546</td>
<td>0.0779</td>
<td>16.4%</td>
<td>0.55 [0.39, 0.70]</td>
<td>1984</td>
</tr>
<tr>
<td>Modeer 1984</td>
<td>0.3</td>
<td>0.1542</td>
<td>12.0%</td>
<td>0.30 [-0.00, 0.60]</td>
<td>1984</td>
</tr>
<tr>
<td>Clark 1985</td>
<td>0.1961</td>
<td>0.0767</td>
<td>16.5%</td>
<td>0.20 [0.05, 0.35]</td>
<td>1985</td>
</tr>
<tr>
<td>Tewari 1990</td>
<td>0.7454</td>
<td>0.1235</td>
<td>13.8%</td>
<td>0.75 [0.50, 0.99]</td>
<td>1990</td>
</tr>
<tr>
<td>Borutta 1991</td>
<td>0.2862</td>
<td>0.1055</td>
<td>14.9%</td>
<td>0.29 [0.08, 0.49]</td>
<td>1991</td>
</tr>
<tr>
<td>Bravo 1997</td>
<td>0.4264</td>
<td>0.14126688</td>
<td>12.7%</td>
<td>0.43 [0.15, 0.70]</td>
<td>1997</td>
</tr>
</tbody>
</table>

**Total (95% CI)**

- **Prevented Fraction**: 100.0% 0.46 [0.29, 0.64]
- Heterogeneity: $\tau^2 = 0.04$; $\chi^2 = 28.14$, df = 6 ($P < 0.0001$); $I^2 = 79$
- Test for overall effect: $Z = 5.22$ ($P < 0.00001$)

- **D(M)FS pooled prevented fraction = 46% (95% CI, 30% to 63%; $P < 0.0001$).**
- Substantial heterogeneity ($P < 0.0001; I^2=79$)
“The review suggests a substantial caries-inhibiting effect of fluoride varnish in both the permanent and the deciduous dentitions based largely on trials with no treatment controls.”

“The confidence intervals are relatively wide, the variation among the results of the studies is substantial, there were relatively few trials included... making it difficult to rule out the possibility of an overestimation of treatment effects.”
Future vision

- Sustainable funding
- Increase capacity
- Main provider of synthesised evidence on oral health
- Prioritisation of reviews

- Independent, high quality, relevant, timely
Future vision

- Minimise waste
  - HTA trials
  - Guideline groups
  - International initiatives

- Increase patient involvement
Thank you

helen.worthington@manchester.ac.uk