

# THE MISREPRESENTATION OF JOINT SUPPLEMENTS IN POPULAR MEN'S PERIODICALS

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## BACKGROUND

- Popular mass media magazines are considered by many to be a trusted source for medial advice.
- Media constructs and frames issues as being important and worthy of dissemination; defining health problems and their potential solutions in either a dire or miraculous perspective.
- In 2005, \$188.1 million dollars were spent on oral over-the-counter (OTC) joint supplements.
- A 2006 *New England Journal of Medicine (NEJM)* study concluded that “glucosamine and chondroitin sulfate were not significantly better than placebo in reducing knee pain [with abnormal knee imaging]”.
- Earlier studies were deemed inconclusive.

## STUDY GOALS

- Determine how these OTC substances are portrayed in popular media compared to their depiction in scholarly, peer-reviewed medical literature.
- Explore the role of popular media in framing health issues.

## HYPOTHESIS

- Representation of efficacy of joint supplements in popular men's periodicals is commonly inaccurate, misleading, contributes to useless healthcare spending and may affect health outcomes.

## METHODS

- We searched the *Reader's Guide to Periodical Literature* from 2000 to 2008 and specific magazine websites using the following search terms:
  - “knee arthritis”
  - “knee pain”
  - “joint supplements”
  - “glucosamine”
  - “chondroitin”
- Selected articles met the following inclusion criteria:
  - (1) Published in one of *Magazine Publishers of America's* top 100 magazines for circulation
  - (2) Featured in a periodical geared towards men and improving their lifestyle and health
  - (3) Discusses the treatment or prevention of joint pain
  - (4) Available electronically via the Internet or in print through the Brown University library
- Themes were identified by literature review.
- Each article was read and evaluated for manifest and latent content by both authors.
- The content was assessed by a protocol established through collective agreement and adjudication between the authors.

Magazines surveyed:

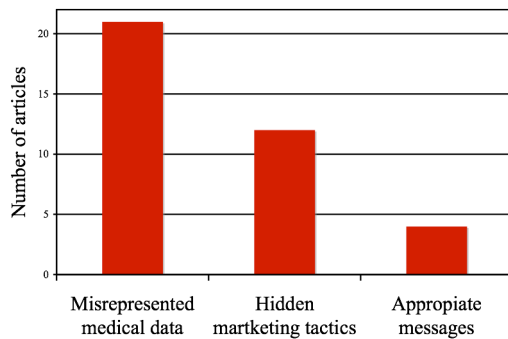
*Men's Health*  
*Esquire*  
*Men's Fitness*  
*Gentleman's Quarterly*  
*Sports Illustrated*  
*Runner's World*  
*Running Times*  
*Muscle and Fitness*  
*GOLF*  
*ESPN The Magazine*  
*Field and Stream*  
*Backpacker*  
*SKI*



“It's been used to treat racehorses for years.” -*Esquire*, Dec 2004

## RESULTS

- 22 articles fit the inclusion criteria.
- 82% directly depict glucosamine, chondroitin and/or methylsulfonylmethane (MSM) as a potential “cure” for joint pain



Of the 21 articles that misrepresented medical data:

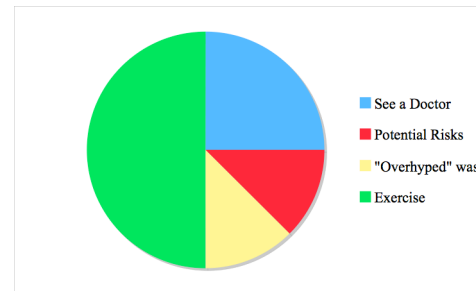
- 19 portrayed glucosamine, chondroitin and or MSM as a “cure”
- 3 misinterpreted peer-reviewed study results
- 4 recommended glucosamine and chondroitin to prevent joint deterioration in men <30
- 7 had wide variation between their recommended dosages

Of the 12 articles with “guerilla-type” marketing techniques:

- 4 had latent pro-athlete endorsements of glucosamine and chondroitin
- 8 had medical or research professional endorsements.

Of the 4 articles with appropriate messages/information:

- 4 recommend exercise, weight loss and/or therapy
- 2 recommend seeing a doctor if pain persisted
- 1 mentions potential risks associated with supplements
- 1 depicts supplements as an “overhyped” waste of money



The articles were loaded with inflammatory statements such as:

- “Best defense against post-game knee pain”
- “Supplements every guy needs”
- “But does it deliver? For sore joints it sure as hell does and literally overnight”
- “Though docs aren’t sure why it works, it’s accepted as the medical version of the Tin Man’s oilcan, treating and preventing creaks”

## CONCLUSIONS

- Popular media plays an important role in educating the public on health issues.
- Our data indicates men’s lifestyle magazines do not provide accurate, unbiased, research-supported information regarding joint health.
  - Dramatize the potential for pain relief while neglecting important aspects of healthcare such as rest, exercise, weight loss and seeing a doctor.
  - Dispense “sound bite” advice, i.e. → “supplements work for you ”
- Likely due to a conflict of interest.
- Article authors need to sell magazines and advertising space.
  - Provide a flashy, easy solution to readers’ problems.
  - Aimed at helping young men achieve the Adonis “hypermale” ideal.
- Do-it-yourself supplements provide an appealing option for treatment and/or prevention of joint pain.
- Magazines featuring these articles also ran advertisements for health-related supplements.
- These supplements are publicized as efficacious by popular media. Even though they:
  - Lack formal safety screening.
  - Are unregulated by the government .
  - Are protected from immediate discontinuation by the 1994 Dietary Supplement Health and Education Act.
- Leads patients away from proven forms of care
  - Wasting resources on dead-end attempts in treatment and prevention.
  - Playing into the legitimate patient-centered care movement.
- Physicians must confront this national issue.
  - Increase patient awareness of possible popular media misrepresentation, inaccuracies and harmful health messages.